

LIEFERPROGRAMM | *PRODUCT RANGE*



WIR VERBINDEN. SICHER!  
WE CONNECT. SECURELY!

2024



|                                                                               |          |
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#### **AVIT – EINE GUTE VERBINDUNG!**

Langfristige, sichere Verbindungen – dafür steht der Name AVIT-Hochdruck Rohrtechnik seit mehr als 60 Jahren. Als Familienunternehmen produzieren wir in dritter Generation hochwertige Rohrleitungskomponenten aus Stahl und Edelstahl für den Maschinen- und Anlagenbau mit hohem Sicherheitsbedürfnis.

1954 entwickelte Firmengründer Ing. August Wasmuth unter dem Firmennamen ATI GmbH (Autoteile und Industrietechnik) eine wegweisende Alternative zu herkömmlichen Schneidringssystemen: Den 24° Schweißkegel mit O-Ring-Abdichtung. Unter der Bezeichnung „ATI-Verschraubung“ wurde die heute international genormte 24° Dichtkegelverschraubung ein Synonym für eine einfache und sichere Rohrverbindung im schweren Maschinenbau. Ihre technischen Vorteile sind bis heute unschlagbar!

In unserem Betrieb schaffen wir mit rund 60 qualifizierten Mitarbeitern auf sehr hohem Qualitäts- und Fertigungsniveau täglich die Voraussetzungen für perfekte Rohrleitungskomponenten, die in Spezialbereichen der Fluidtechnik Verwendung finden.

Für Ihre vielfältigen Bedürfnisse haben wir uns auf die Produktion von folgenden Produkten aus Stahl und Edelstahl spezialisiert:

- 24° Rohrverschraubungen nach ISO 8434-1 (DIN 2353)
- Quadrat-, Rund- und Winkel-Hochdruckflansche nach ≈ ISO 6164
- SAE-Flansche nach ISO 6162-1 und ISO 6162-2
- Flanschverteiler, T-Stücke ≈ DIN 2615
- Rohrdrehgelenke und Mehrkanaldrehdurchführungen
- Einbaufertige Schlauchleitungen nach DIN 20066

Darüber hinaus bieten wir Ihnen sinnvolles Zubehör aus Stahl und Edelstahl an, welches Sie mit unseren Systemkomponenten ergänzen können.

- Präzisionsstahlrohre nach DIN EN 10305-4 (DIN 2391) und Stahlrohre nach DIN EN 10220 (DIN 2448)
- Rohrschellen nach DIN 3015-2 und Rohrbögen nach DIN EN 10253
- Schnellverschlusskupplungen, Blockkugelhähne und Absperrventile

#### **AVIT – A GOOD CONNECTION!**

Long-lasting, secure connections – what the name AVIT-Hochdruck Rohrtechnik has meant for more than 60 years. As a family-owned company, we are now the third generation producing high-quality steel and stainless steel pipeline components for machine and plant construction with high demands on safety.

Under the company name ATI GmbH (automotive parts and industrial technology), company founder Ing. August Wasmuth developed a pioneering alternative to conventional cutting ring systems in 1954: the 24° weld nipple with O-ring gasket.

The current internationally standard 24° conical seal screw connection has become synonymous with simple and secure pipe connection in heavy machine construction. Its technical advantages are still unbeatable!

With a staff of around 60 qualified employees producing at a very high quality and production level, our company has the necessary requirements for perfect pipeline components which are used in special areas of fluid technology.

We have specialised in the following steel and stainless steel products for your wide-ranging requirements:

- 24° pipe screw connection acc. ISO 8434-1 (DIN 2353)
- Square, round and high-pressure flanges acc. ≈ ISO 6164
- SAE-flanges acc. ISO 6162-1 and ISO 6162-2
- Flange distributors, T-pieces ≈ DIN 2615
- Pipe swivel joints and multi-channel swivel units
- Installation-ready hoses acc. DIN 20066

We also offer compatible steel and stainless steel accessories to supplement our system components.

- Seamless precision steel pipe acc. DIN EN 10305-4 (DIN 2391) and steel pipe acc. DIN EN 10220 (DIN 2448)
- Pipe clamps acc. DIN 3015 part 2 and thick-walled pipe elbows
- Quick connect couplings, block ball valves and shut-off valves



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#### **ZERTIFIZIERTE PRODUKTION – MIT KNOW HOW!**

Rund 20.000 verschiedene Produkte werden in unserer TÜV-zertifizierten Fertigung (nach AD 2000, Merkblatt WO) mit Maschinen der neuesten Generation gefertigt. Daraus können wir ca. 55.000 Produkte variabel für Ihre Bedürfnisse konfektionieren bis hin zum kompletten Verrohrungsmaterial für Ihr Projekt. Ihr Vorteil: Ein Partner, ein Termin!

Im technischen Büro werden unsere Produkte als 3D-Modell erstellt, wovon wir eine Zeichnung für die Fertigung ableiten. Am gleichen 3D-Modell wird die Fertigungsstrategie erstellt und anschließend auf CNC-Drehmaschinen umgesetzt. Das macht es uns möglich, Ihre Wünsche in kürzester Zeit zu realisieren. Teilen Sie uns Ihre Anforderung mit und wir fertigen Ihre passende Rohrverbindung – mit Hochdruck!

Wir stellen Ihnen eine umfangreiche CAD-Teile-Bibliothek im Internet zur Verfügung, damit Sie schnell und effizient mit 3D-CAD-Modellen konstruieren können (Direkteinfügemöglichkeiten in alle führenden CAD-Systeme).

#### **CERTIFIED PRODUCTION – WITH KNOW HOW!**

*Around 20.000 different products are manufactured in our TÜV-certified production (in accordance with AD 2000, bulletin WO) with state-of-the-art machinery. We can assemble approximately 50.000 products to meet your requirements and can provide all pipeline materials for your project. Your advantage: one partner, one appointment!*

*Our products are created as 3D models from which we derive a drawing for production in our technical office. Then the production strategy is created on the same 3D model, followed by production on CNC lathes. That enables us to fulfil your wishes in shortest time. Tell us your requirements and we produce the right pipe connection – with high-pressure!*

*We provide you with an extensive online CAD parts library so that you can quickly and efficiently design with 3D CAD models (direct loading in all leading CAD systems).*





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#### UMWELTFREUNDLICHE QUALITÄT – MIT VERANTWORTUNG!

AVIT produziert qualitativ hochwertige Produkte analog dem Qualitätsmanagementsystem DIN ISO 9001:2015. Die Fertigung ist nach AD 2000 Merkblatt WO/TRD vom TÜV Nord zertifiziert. Die Bauteilvorschriften der DIN 3859, wonach die Werkstoffauswahl, Prüfung, Abnahme und funktionsgerechte Montage gewährleistet sind, werden erfüllt.

Aufgrund von internen Material Compliance EU/Non-EU Richtlinien liegen sämtlichen Produkten zeugnisbelegte Qualitätswerkstoffe zugrunde, die im Rahmen des Qualitätssicherungssystems von fachkundigem Prüfungspersonal kontrolliert werden. Auf Ihren Wunsch hin werden die Produkte im Rahmen eines 3.1 Abnahmeprüfzeugnisses nach EN 10204 entsprechend dokumentiert.

Alle AVIT Produkte entsprechen den Anforderungen der REACH Verordnung (EG Nr. 1907/2006) und der RoHS-Richtlinie (2011/65/EU). In den von AVIT produzierten Produkten ist kein in der SVHC-Liste (Stand 07.2021) aufgeführter Stoff enthalten.

Die Produktionsabfälle von AVIT werden zu 100 % recycled. AVIT Produkte können nach der Nutzung dem Stahlrecycling zugeführt werden und sind somit ein wichtiger Beitrag zum Umweltschutz.

#### OPTIONALE SERVICELEISTUNGEN:

- 2.1 Werksbescheinigung
- 2.2 Werkszeugnis
- Konformitätsbescheinigung
- 3.2 Abnahmen gemäß EN 10204 durch DNV GL, LRS, BV usw.
- Werkstoffprüfungen
- Statische und dynamische Druckprüfungen

#### ENVIRONMENTALLY FRIENDLY QUALITY - WITH RESPONSIBILITY!

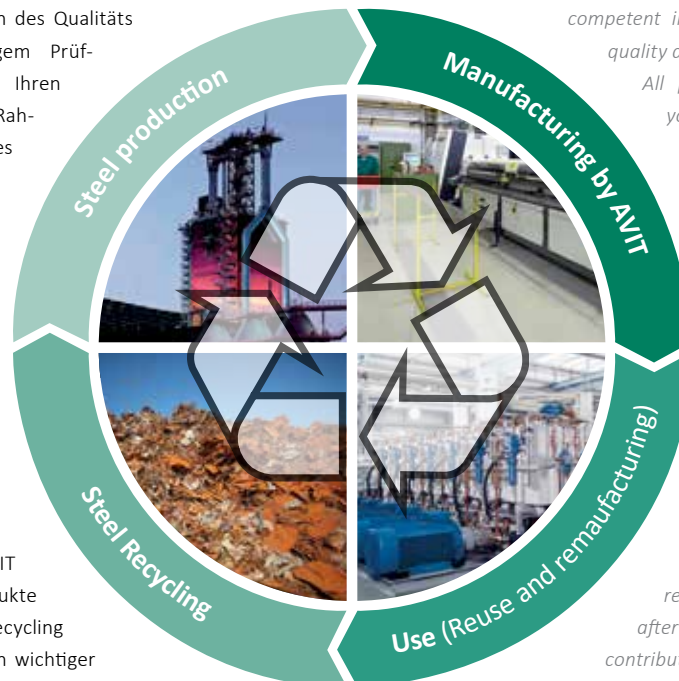
AVIT manufactures high quality products with a quality management system in accordance with ISO 9001:2015. The production is certified according to AD 2000 Bulletin WO/TRD. The component requirements of DIN 3859, according to which the material selection, testing, acceptance and functionally appropriate assembly are guaranteed, are fulfilled.

Due to internal material compliance EU/Non-EU rules, all products are based on certified quality materials that are inspected by competent inspection personnel in the scope of a quality assurance system.

All products are logged and certified at your request by order in the scope of an acceptance inspection certificate 3.1 in accordance with EN 10204.

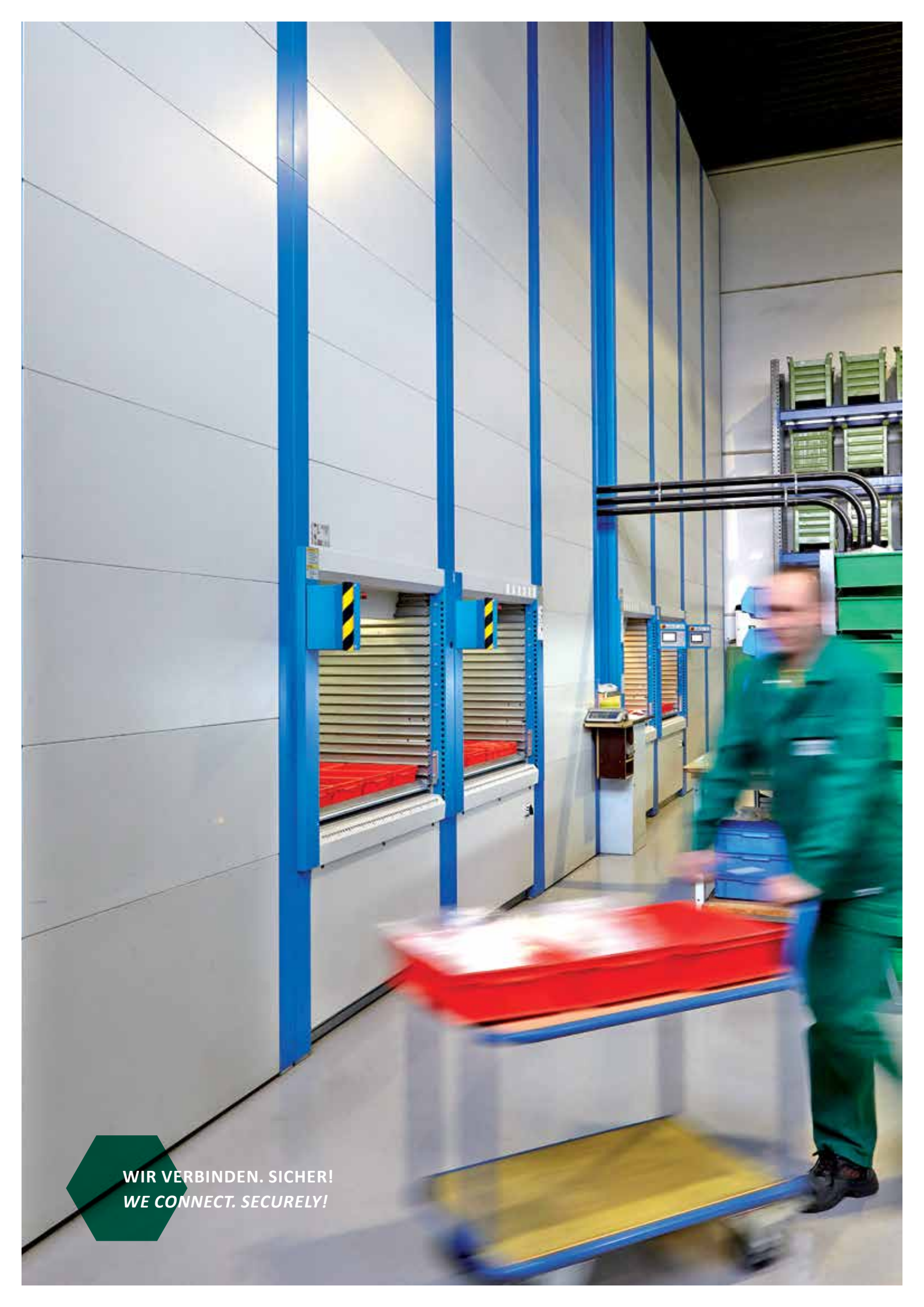
All AVIT products are in compliance with the requirements of the REACH Regulation (EC No. 1907/2006) and the RoHS Directive (2011/65/EU). The products manufactured by AVIT do not contain any substances included in the "Substances of Very High Concern" list as of 15.01.19.

AVIT's production waste is 100% recycled. AVIT products can be recycled after use and are therefore an important contribution to environmental protection.



#### ADDITIONAL SERVICES:

- 2.1 Declaration of compliance with order
- 2.2 Test report
- Certificate of conformity
- 3.2 Approvals in acc. with EN 10204 by DNV GL, LRS, BV etc.
- Material testing
- Static and dynamic pressure tests

A photograph of a warehouse interior. A worker in a green uniform is pushing a red and blue pallet jack. The jack is carrying a red pallet. The worker is moving from right to left. In the background, there are tall blue metal shelving units with white doors. Some doors are open, revealing red pallets inside. The floor is light-colored. The overall scene is brightly lit.

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#### **AUSGEFEILTE LOGISTIK – MIT EFFIZIENZ!**

Wir bieten Ihnen eine schnelle und flexible Auftragsbearbeitung und Lieferung Ihrer gewünschten Produkte. So sparen Sie hohe Lagerhaltungskosten und verschaffen sich erhebliche Marktvorteile.

Bestellungen für lagerhaltige Produkte können noch am selben Tag kommissioniert werden. Die Anlieferung erfolgt per Spedition, Paketdienst, oder wenn Sie es ganz besonders eilig haben, als Direktfahrt per Kurier. Selbstverständlich können Sie Ihre Sendung auch bei uns abholen.

Für Exportaufträge arrangieren wir den Versand auch per Luft- oder Seefracht mit dem von Ihnen bestimmten Spediteur. Unsere geographische Lage im Ruhrgebiet bietet hierfür beste Voraussetzungen.

So erhalten unsere Kunden Qualität „Made in Germany“ – und eine schnelle Lieferung der Produkte in alle Welt.

#### **REFINE LOGISTICS – WITH EFFICIENCY!**

*We offer quick and flexible order processing and delivery of your desired products. This saves high storage costs and gives you considerable market advantages.*

*Your orders for in stock products can be commissioned on the same day.*

*The delivery can be shipped by freight carrier, parcel service or courier.*

*Of course, you can also collect your consignment at our location.*

*For export orders we arrange shipment by air or sea freight with your designated freight forwarder. Our geographic location in the Ruhr area offers outstanding shipping possibilities in this respect.*

*So our customers receive quality ‚Made in Germany‘ – and rapid delivery of the products around the world.*

#### **SERVICELLEISTUNGEN**

- Komponenten einzelverpackt
- Einbaufertig vormontiert
- Teilekennzeichnungen
- Spezielle Exportverpackungen

#### **SERVICES**

- Individually packed components
- Pre-assembled ready to install
- Parts marking
- Special export packaging

#### **MODERNER STANDORT – MIT ZUKUNFT!**

Sie finden unseren Familienbetrieb im Herzen des Ruhrgebiets, einem der größten Ballungsräume Europas. In der Metropolregion Rhein-Ruhr leben rund elf Millionen Menschen auf knapp 10.000 km<sup>2</sup>. Durch die Lage der Stadt Essen und die gute Verkehrsanbindung zu Lande, zu Wasser und in der Luft, ist die Großstadt ein begehrter, moderner Industriestandort, sowie Entscheidungszentrum der deutschen Wirtschaft.

Diverse Konzernzentralen sind hier beheimatet und Essen gilt als Medien-, Handels-, und Dienstleistungszentrum sowie Hightech-Metropole in den Bereichen Medizin und Energie. In der Universitäts- und Messestadt wird der Wandel durch Kultur gefördert, so dass 2010 Essen stellvertretend für das gesamte Ruhrgebiet Kulturhauptstadt Europas war.

#### **MODERN PRODUCTION LOCATION – WITH A FUTURE!**

*Our company is located in the heart of the Ruhr region, one of the largest urban concentrations in Europe. Around 11 million people live in an area of just 10,000 km<sup>2</sup> in the Rhein-Ruhr metropolitan region. With the location of the city of Essen and the good traffic connection by land, water and in the air, the large city is a desired, modern industrial location and decision-making centre for the German industry.*

*Various corporate headquarters are situated here and Essen is a media, trade and service provision centre, as well as a high-tech metropolis in the fields of medicine and energy. Change in the university and trade fair city is promoted through culture, which made Essen the 2010 European Cultural Capital as the representative of the entire Ruhr area.*



**KUNDENINDIVIDUELLE  
LÖSUNGEN**

***CUSTOMISED  
SOLUTIONS***



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### KUNDENINDIVIDUELLE LÖSUNGEN – MIT LEIDENSCHAFT

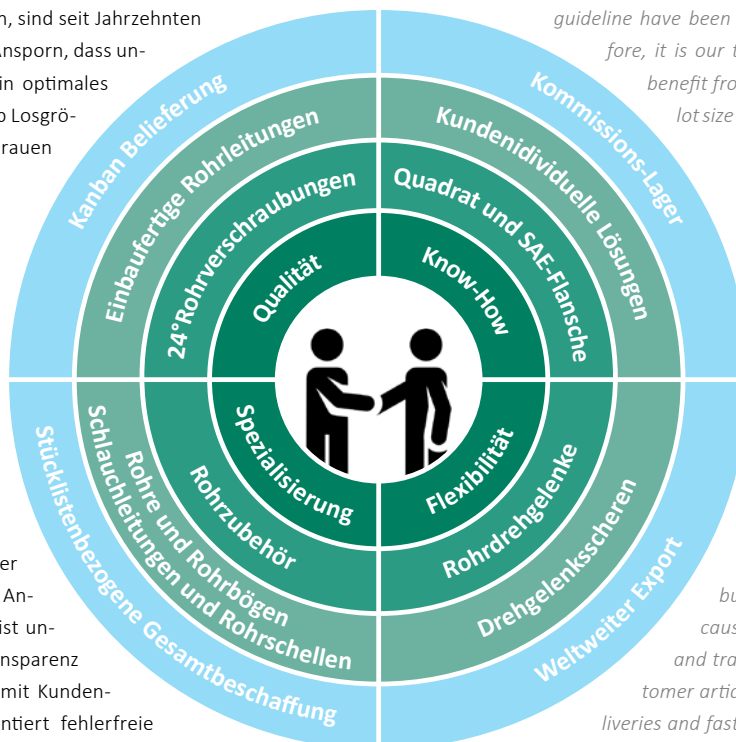
In unserem Unternehmen wird mit viel Herzblut ein umfangreiches Programm für nahezu alle Rohrsysteme hergestellt und mit Handelsartikeln ergänzt. Wir sind Ihr wichtiger strategischer Partner, um eine bedarfsgerechte Produktentwicklung - basierend auf Ihrer Idee und unserer Erfahrung - umzusetzen. Daher gab es schon immer unseren Leitsatz „mehr als die Norm“. Standard kann jeder. Aber eigene Ideen, Produktverbesserungen, Mut internationale Standards zu verlassen oder nur als Leitlinie zu betrachten, sind seit Jahrzehnten unsere Stärke. Daher ist es unser Ansporn, dass unsere Kunden letztendlich durch ein optimales Produkt profitieren - dies bereits ab Losgröße 1. Sprechen Sie uns an und vertrauen Sie unserem Know-How.

### 360° LIEFER- UND DIENSTLEISTUNGSKONZEPT

Bei uns dreht sich alles um unseren Kunden. Eine Partnerschaft auf Augenhöhe zwischen Kunde und Lieferant, welche auf einem soliden Fundament aus Qualität, Erfahrung, Spezialisierung und Flexibilität basiert.

Nicht der günstigste, sondern der beste Lieferant zu sein, der keinen Anlass zu Beanstandungen gibt, das ist unser Anspruch. Liefertreue und Transparenz (zum Beispiel durch Etikettierung mit Kundenartikelnnummern) sorgen für garantiert fehlerfreie Lieferungen und schnelle kundenseitige Prozesse.

Unser Motto "one face to the customer - ein Ansprechpartner" sichert Ihnen die bestmögliche Betreuung rund um Ihren Auftrag zu!



### 360° DELIVERY AND SERVICE CONCEPT

With us, everything focuses on our customers. A partnership at eye level between customer and supplier, based on a solid basis of quality, experience, specialisation and flexibility.

Our aim is not to be the cheapest, but to be the best supplier who gives no cause for complaint. Delivery reliability and transparency (e.g. by labelling with customer article numbers) guarantee error-free deliveries and fast customer processes. Our philosophy

"one face to the customer - one contact person" guarantees you the best possible support for your order!







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#### **SICHERE VERBINDUNGEN - MIT SYSTEM!**

Für uns ist es selbstverständlich, Verantwortung für die Qualität unserer Produkte zu übernehmen und für gute Beziehungen zu unseren Kunden, Partnern und Mitarbeitern zu sorgen. Daher werden unsere Produkte in speziellen Anwendungsgebieten eingesetzt, wie z.B.:

- Stahlerzeugung
- Hochleistungspressen
- Walzanlagen
- Schmieden
- Kraftwerke
- Schiffbau
- Chemieanlagen

#### **DIE LANGFRISTIGE QUALITÄTSLÖSUNG**

Mit AVIT Produkten erhöhen Sie die Sicherheit und Verfügbarkeit Ihrer Anlagen. Die hohe Qualität und Lebensdauer unserer Produkte reduziert Ihren möglichen Wartungsaufwand und minimiert Ihre Stillstandszeit.

Auf uns und unsere Produkte können Sie sich verlassen!

#### **SECURE CONNECTIONS – WITH SYSTEM!**

*For us it is a matter of course that we should assume our responsibility for the quality of our products and for positive relationships with our customers, partners and employees.*

*Therefore our products are used in special applications, such as:*

- *Steel production*
- *Heavy duty presses*
- *Rolling mills*
- *Forging presses*
- *Power plants*
- *Shipbuilding*
- *Chemical plants*

#### **THE LONG-LASTING QUALITY SOLUTION**

*With AVIT products you increase the safety and availability of your plants and machinery. The high quality and durability of our products reduces your maintenance efforts and minimizes your plants downtime.*

*You can rely on us and our products!*

**ROHRVERSCHRAUBUNGEN  
UND ZUBEHÖR**

***TUBE CONNECTIONS  
AND ACCESSORIES***

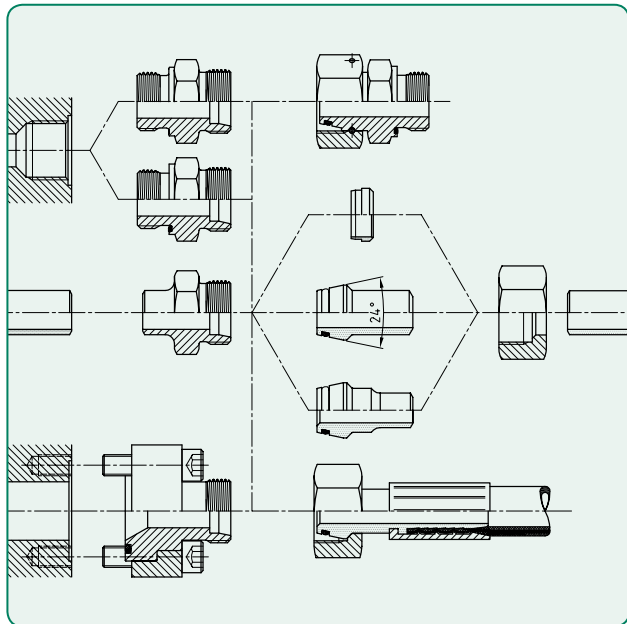
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## FUNKTIONSPRINZIP

AVIT Rohrverschraubungen mit O-Ring Dichtung beruhen auf dem bewährten und sicheren 24° Kegel-Konus-System (DKO) Bohrungsform W nach DIN 3861 und ISO 8434-1.

Die Leckagesicherheit beruht im Wesentlichen auf der zweifachen Abdichtung des Systems. Metallisch über den Kegel-Konus-Sitz und zusätzlich über einen O-Ring. Darüber hinaus sprechen folgende technische Gründe für diese Verbindung:

- Niedriges Setzverhalten der Schraubverbindung
- Hohe Langzeitdichtheit der Verbindung (5 Jahre Gewährleistung <sup>1</sup>)
- Beliebige Wiederholmontage durch optional versilberte Edelstahl-Überwurfmuttern. Keine Kaltverschweißung im Gewinde.
- Hohe Wirtschaftlichkeit, weil wartungsfrei
- Alle Bauteile sind international genormt
- Kein Einfluss durch Kerbwirkungen
- Kein Deformieren, nur elastische Verformung der einzelnen Bauteile <sup>1</sup>
- Einsatz hochwertiger Werkstoffe (1.4571, X6CrNiMoTi17-12-2; wärmebehandelte Stähle)



24° Kegel-Konus-Systemübersicht | 24° cone connector system

Über eine Stumpfnahse Schweißverbindung wird der AVIT 24° Dichtkegel ③ metallisch homogen mit dem Stahlrohrende (a) zu einer Einheit verbunden.

Mit der Schraubmontage werden die Bauteile ①+③ im 24° Kegel-Konus (d) zentriert und über das Anziehen der Überwurfmutter ② längskraftschlüssig miteinander verbunden.

Hierbei wird eine metallisch tangentielle Abdichtung im Kegel-Konus System (d) und eine zusätzliche elastische Dichtung (e) durch den O-Ring ④ erreicht. Über die 45° Schräge (c) des AVIT 24° Dichtkegels ist eine absolute Ausreißsicherung gewährleistet. Aus der Kopf- (c) und Gewinde- (f) des Systems sowie der Selbsthemmung des Gewindes und der Keilwirkung (b) resultiert die Langzeitdichtheit dieser bewährten Rohrverbindung.

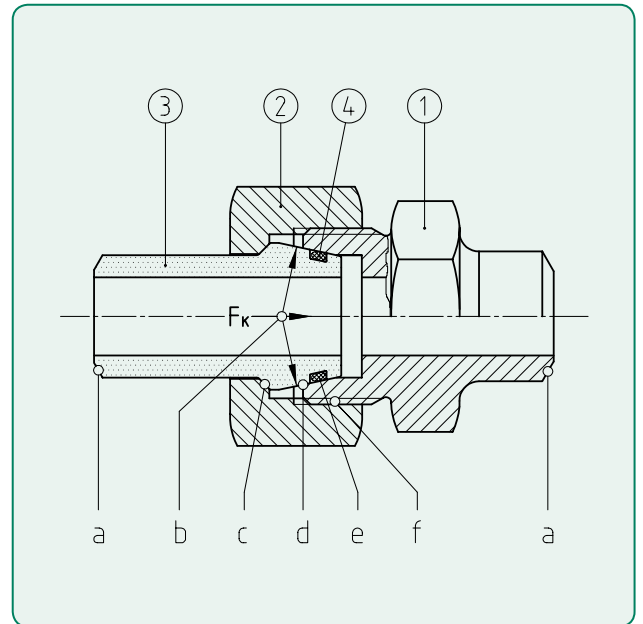
## FUNCTIONAL PRINCIPLE

AVIT tube connections with O-ring sealing are based on the tried and tested 24° cone connector system (referred to as DKO) bore form W according to DIN 3861 and ISO 8434-1.

The leakage protection is basically achieved by the double sealing integrated into the system: the seal provided by the metallic cone and the O-ring seal.

Further technical advantages of this connection are:

- Low setting behaviour of the screw connection
- Long-lasting seal of the connection (5 year guarantee <sup>1</sup>)
- Arbitrary repeat assembly with optional silver-plated stainless steel union nuts. No cold welding in the thread.
- Highly cost-effective because there is no maintenance
- All components are internationally standardised
- No influence by notch effects
- No deformation, only elastic distortion of the individual components <sup>1</sup>
- Use of high-quality materials (AISI 316Ti, heat-treated steels)



Funktionsprinzip 24° Kegel-Konus | Functional principle

The AVIT 24° welding cone ③ is connected to the end of the steel pipe by means of a butt-welded joint (a) in a metallurgically homogeneous manner, forming a single unit.

The parts ①+③ are centered when they are assembled by screwing, and they are connected to each other by longitudinal friction-coupling when the nut ② is tightened.

This creates a metallurgical tangential seal in the male/female cone system (d) and an additional elastic seal (e) through the O-ring ④.

The 45° shoulder of the AVIT 24° welding cone (c) is designed for absolute tear-off protection. The long-term leakproofness of this proven pipe coupling is due to the head friction (c) and the thread friction (f) of the system as well as the self locking of the thread and the wedge action (b).

<sup>1</sup> Nur bei Einhaltung unserer Montageanleitung. | Only by observance of the assembly instructions.



ROHRVERSCHRAUBUNGEN | TUBE CONNECTIONS

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 24° DOPPELKEGEL ..... DKS ..... 2.47  
24° DOUBLE CONE

 24° WINKEL-DOPPELKEGEL ..... WKS ..... 2.48  
24° ELBOW DOUBLE CONE

 GERADER DISTANZ- / REDUZIERADAPTER ..... GDA ..... 2.49  
STRAIGHT DISTANCE OR REDUCING ADAPTOR

 EINSTELLBARER STUTZEN MIT U-RING DICHTUNG . GUL ..... 2.51  
ADJUSTABLE STUD WITH U-RING SEALING

ZUBEHÖR | ACCESSORIES

|                                                                                     |                                                                                                           |                                                                                     |                                                                                                   |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|    | EINSTELLBARER STUTZEN MIT O-RING (ISO) . . . <b>GEL</b> 2.53<br>ADJUSTABLE STUD WITH O-RING SEALING (ISO) |    | MESSKUPPLUNG . . . . . <b>MK</b> 2.69<br>TEST COUPLING                                            |
|    | EINSTELLBARE WINKELVERSCHRAUBUNG . . . . <b>WS</b> 2.54<br>ADJUSTABLE SWIVEL ELBOW                        |    | DRUCKPRÜF- UND ENTLÜFTUNGSVERSCHR. . . <b>DEV</b> 2.70<br>PRESSURE TEST AND VENTILATION CONNECTOR |
|    | T-VERSCHRAUBUNG, ABGANG EINSTELLBAR . . <b>TS</b> 2.55<br>ADJUSTABLE BRANCH TEE                           |    | DRUCKPRÜF- UND ENTLÜFTUNGSADAPTER . . . <b>GDV</b> 2.71<br>PRESSURE TEST AND VENTILATION ADAPTER  |
|    | T-VERSCHRAUBUNG, DURCHGANG EINST. . . . <b>LS</b> 2.56<br>ADJUSTABLE RUN TEE                              |    | DICHTKEGELANSCHLUSS FÜR MESSKUPPLUNG <b>MAK</b> 2.72<br>SEAL CONE FOR TEST COUPLING               |
| <b>VERBINDER UND ADAPTER   CONNECTORS AND ADAPTERS</b>                              |                                                                                                           |    | MESSKUPPLUNGSSCHWEISSSTUTZEN . . . . . <b>MIS</b> 2.73<br>WELDING STUD FOR TEST COUPLING          |
|    | GERADE VERSCHRAUBUNG . . . . . <b>GV</b> 2.57<br>STRAIGHT UNION CONNECTOR                                 |    | MANOMETER-VERSCHRAUBUNG . . . . . <b>MAV</b> 2.74<br>GAUGE COUPLING                               |
|    | GERADE VERSCHRAUBUNG REDUZIERT . . . . . <b>GVR</b> 2.58<br>REDUCED STRAIGHT UNION CONNECTOR              |    | RÜCKSCHLAGVENTIL MIT 24° KONUS . . . . . <b>RV</b> 2.75<br>NON-RETURN VALVE WITH 24° CONUS        |
|   | GERADE AUFSCHEISSVERSCHRAUBUNG . . . . <b>AV</b> 2.59<br>WELD-ON STRAIGHT CONNECTOR                       |   | RÜCKSCHLAGVENTIL MIT O-RING DICHTUNG. . <b>RRV</b> 2.76<br>NON-RETURN VALVE WITH O-RING SEALING   |
|  | WINKEL AUFSCHEISSVERSCHRAUBUNG . . . . <b>WAV</b> 2.60<br>WELD-ON ELBOW CONNECTOR                         |  | RÜCKSCHLAGVENTIL MIT U-RING DICHTUNG. . <b>ERV</b> 2.77<br>NON-RETURN VALVE WITH U-RING SEALING   |
|  | GERADE SCHWEISSVERSCHRAUBUNG . . . . . <b>GAV</b> 2.61<br>STRAIGHT WELDING CONNECTOR                      |  | RÜCKSCHLAGVENTIL METALLISCH DICHTEND . <b>RVS</b> 2.78<br>NON-RETURN VALVE METAL-TO-METAL SEALING |
|  | WINKEL VERSCHRAUBUNG . . . . . <b>WV</b> 2.63<br>ELBOW UNION CONNECTOR                                    |  | BLOCKKUGELHAHN MIT 24° KONUS . . . . . <b>BKH</b> 2.79<br>BALL VALVE WITH 24° CONUS               |
|  | T-VERSCHRAUBUNG . . . . . <b>TV</b> 2.64<br>TEE UNION CONNECTOR                                           |  | HOCHDRUCK ABSPERRVENTIL . . . . . <b>HVAB</b> 2.80<br>HIGH PRESSURE SHUT-OFF VALVE                |
|  | KREUZ-VERSCHRAUBUNG . . . . . <b>KV</b> 2.65<br>CROSS UNION CONNECTOR                                     |  | SCHNELLVERSCHLUSS-KUPPLUNG MIT 24° KONUS <b>HK</b> 2.81<br>QUICK CONNECT COUPLING WITH 24° CONUS  |
|  | EINSCHWEISS SCHOTTVERSCHRAUBUNG . . . . <b>GESV</b> 2.66<br>WELD-IN BULKHEAD STRAIGHT CONNECTOR           |  | SCHNELLVERSCHLUSS-KUPPLUNG . . . . . <b>HKE</b> 2.82<br>QUICK CONNECT COUPLING WITH BSP THREAD    |
|  | GERADE SCHOTTVERSCHRAUBUNG . . . . . <b>GSV</b> 2.67<br>BULKHEAD STRAIGHT CONNECTOR                       |                                                                                     |                                                                                                   |
|  | WINKEL SCHOTTVERSCHRAUBUNG . . . . . <b>WSV</b> 2.68<br>BULKHEAD ELBOW COUPLING                           |                                                                                     |                                                                                                   |

## STANDARD LIEFERUMFANG

Wir liefern vormontierte 24° Rohrverschraubungen aus Stahl oder Edelstahl mit zylindrischem Whitworth Einschraubgewinde und Dichtungen aus NBR entsprechend den technischen Lieferbedingungen nach DIN 3859-1.

Die Oberflächen von **AVIT Stahl Verschraubungen** sind Cr(VI)-frei verzinkt (DIN EN ISO 19598-Fe//Zn8-12/Cn/T4) oder optional manganphosphatiert (DIN EN ISO 9717-Fe//Mnph/T4). Schweißteile aus S355J2C+N (1.0579+N) sind metallisch blank und mit einem Korrosionsschutzöl versehen. Bei **AVIT Edelstahl Verschraubungen** (1.4571) sind **alle** Oberflächen metallisch blank. Die Überwurfmutter sind **optional** versilbert, um optimale Montageergebnisse auch bei Wiederholmontagen zu erzielen.

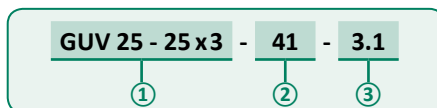
## BESTELLBEZEICHNUNG

Unser alphanumerischer Bestellcode ① definiert den **Typ**, Gewindeart und Größe. Die Nenngröße **NG** bestimmt den maximal möglichen Rohraußendurchmesser. Für komplette Verschraubungen ergänzen Sie bitte den Bestellcode mit der Rohrabmessung **daxs**. Einzelteile werden mit der Angabe der Positionsnummer aus der Stückliste bestellt.

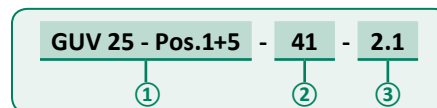
Die Werkstoff- und Elastomerkombination wird durch die Kennziffer ② festgelegt. Optionen werden durch Ihre Angabe ③ gesteuert.



Bestellbezeichnung | Order designation



Komplette Verschraubung | Complete coupling



Einzelteile | Single parts

### ① BESTELLCODE

|                                        |                    |
|----------------------------------------|--------------------|
| Verschraubungstyp, Nenngröße .....     | <b>TYP NG</b>      |
| Rohrabmessung bei Schweißenden .....   | <b>TYP NG daxs</b> |
| Reduzierte Nenn- / Gewindegröße .....  | <b>TYP R NG</b>    |
| Größere Nenn- / Gewindegröße .....     | <b>TYP G NG</b>    |
| Metrisches Gewinde (zylindrisch) ..... | <b>TYP M NG</b>    |
| NPTF-Gewinde .....                     | <b>TYP N NG</b>    |
| UNF-Gewinde .....                      | <b>TYP A NG</b>    |

### ② KENNZIFFER WERKSTOFF-KOMBINATION

|                                                          |                    |
|----------------------------------------------------------|--------------------|
| Stahl, verzinkt, NBR .....                               | <b>TYP NG - 01</b> |
| Stahl, verzinkt, FKM .....                               | <b>- 02</b>        |
| Stahl, phosphatiert, NBR .....                           | <b>- 04</b>        |
| Stahl, phosphatiert, FKM .....                           | <b>- 05</b>        |
| Edelstahl, Überwurfmutter versilbert (1.4571), NBR ..... | <b>- 41</b>        |
| Edelstahl, Überwurfmutter versilbert (1.4571), FKM ..... | <b>- 42</b>        |

### ③ OPTIONEN

|                                                                     |                    |
|---------------------------------------------------------------------|--------------------|
| Verschraubung mit Überwurfmutter und Schneidring .....              | <b>TYP NG - SR</b> |
| Verschraubung nur mit Überwurfmutter .....                          | <b>- A</b>         |
| Andere Ausführungen, Kombinationen sind selbstverständlich möglich. |                    |
| Bitte bei Bestellung entsprechend detailliert angeben.              |                    |

## ZEUGNISSE

|                                                                                                                                                                                                        |                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Druckführende Bauteile ab NG 50 und alle Schweißteile können kostenpflichtig mit entsprechenden Zeugnissen belegt und nachverfolgt werden. Die Bescheinigungsart muss bei Bestellung angegeben werden. |                     |
| Abnahmeprüfzeugnis 3.1 .....                                                                                                                                                                           | <b>TYP NG - 3.1</b> |
| Werkszeugnis .....                                                                                                                                                                                     | <b>- 2.2</b>        |
| Werksbescheinigung .....                                                                                                                                                                               | <b>- 2.1</b>        |
| Konformitätsbescheinigung .....                                                                                                                                                                        | <b>- KONFO</b>      |

## SCOPE OF DELIVERY

We deliver pre-assembled AVIT tube couplings made of steel and stainless steel with cylindrical BSP threaded stud ends and sealings made of NBR in accordance with the technical terms of supply for tube couplings DIN 3859-1.

The steel surfaces of the **AVIT steel couplings** are galvanised (CrVI-free) acc. DIN EN ISO 19598-Fe//Zn8-12/Cn/T4 or can be supplied manganese phosphatised acc. DIN EN ISO 9717 on request. Weldable parts made of S355J2C+N (1.0579+N) are metallic bright and coated with an oil film to protect against corrosion. All surfaces of **AVIT stainless steel couplings** (AISI 316Ti) are metallic bright. The union nuts are optional silver plated, for best assembly results also at any repeat assemblies.

## ORDER DESIGNATION

Our alphanumeric order code ① defines the **type**, thread type and size. The nominal size **NG** specifies the maximum possible outside diameter of the tubes or pipes.

For complete couplings, please add the pipe dimension **daxs** to the order code. Single parts are ordered with the item number from the parts list.

Materials and elastomers are specified by the reference number ②. Options have to be clearly specified ③ by your information.

### ① ORDER CODE

|                                      |                     |
|--------------------------------------|---------------------|
| Type, nominal size .....             | <b>TYPE NG</b>      |
| Pipe dimension .....                 | <b>TYPE NG daxs</b> |
| Reduced nominal- / thread size ..... | <b>TYPE R NG</b>    |
| Bigger nominal- / thread size .....  | <b>TYPE G NG</b>    |
| Metric Thread (cylindrical) .....    | <b>TYPE M NG</b>    |
| NPTF-Thread .....                    | <b>TYPE N NG</b>    |
| UNF-Thread .....                     | <b>TYPE A NG</b>    |

### ② MATERIAL REFERENCE NUMBER

|                                                        |                     |
|--------------------------------------------------------|---------------------|
| Steel, galvanised, NBR .....                           | <b>TYPE NG - 01</b> |
| Steel, galvanised, FKM .....                           | <b>- 02</b>         |
| Steel, phosphatised, NBR .....                         | <b>- 04</b>         |
| Steel, phosphatised, FKM .....                         | <b>- 05</b>         |
| Stainless steel, nut silver plated (1.4571), NBR ..... | <b>- 41</b>         |
| Stainless steel (1.4571), FKM .....                    | <b>- 42</b>         |

### ③ OPTIONS

|                                                           |                     |
|-----------------------------------------------------------|---------------------|
| Connector with union nut and cutting ring .....           | <b>TYPE NG - SR</b> |
| Connector only with union nut .....                       | <b>- A</b>          |
| Other designs and combinations are also possible.         |                     |
| When ordering, please specify detailed your requirements. |                     |

## CERTIFICATES

|                                                                                                                                                                                                                          |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Pressure retaining components from NG 50 on, and all weldable parts can be attested and traced regarding the raw material with additional costs. The type of certification has to be specified when the order is placed. |                      |
| Inspection certificate 3.1 .....                                                                                                                                                                                         | <b>TYPE NG - 3.1</b> |
| Test report .....                                                                                                                                                                                                        | <b>- 2.2</b>         |
| Declaration of compliance with order .....                                                                                                                                                                               | <b>- 2.1</b>         |
| Certificate of conformity .....                                                                                                                                                                                          | <b>- KONFO</b>       |



**NUR BEI VERWENDUNG VON KOMPLETTEN ORIGINAL AVIT ROHRVERSCHRAUBUNGEN WERDEN DIE GENANNTEN BETRIEBS-DRÜCKE MIT DER 4-FACHEN SICHERHEIT GEWÄHRLEISTET!**

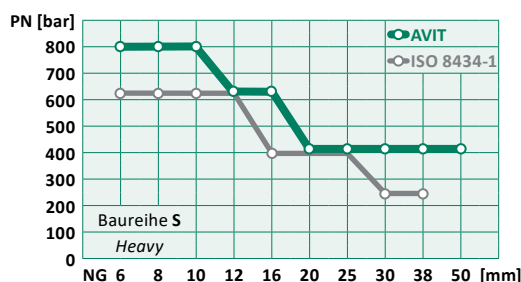
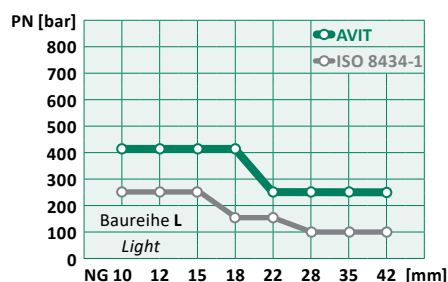


**THE STATED OPERATING PRESSURES WITH THE 4 TIMES SAFETY LEVEL CAN ONLY BE GUARANTEED WHERE COMPLETE ORIGINAL AVIT TUBE COUPLINGS ARE USED!**

## DRUCK, TEMPERATUREN

Die Druckangaben gelten für komplette AVIT 24° Rohrverschraubungen, sind aber vom tatsächlich eingesetzten Rohr abhängig.

Die Druckberechnung erfolgte nach DIN 2413, Geltungsbereich III für schwellende Beanspruchung, unter Zugrundelegung der entsprechenden Werkstoffe nur für die entsprechenden Rohre, weil die Wandstärken der Verschraubungskörper meist größer sind. Die Eingruppierung der Druckstufen erfolgte nach ISO 4399.



Betriebsdruck | Working pressures

Stahl Rohrverschraubungen haben einen zulässigen Betriebs-temperaturbereich von -40°C bis +100°C.

Edelstahl Rohrverschraubungen haben einen zulässigen Betriebs-temperaturbereich von -60°C bis +100°C.

Bitte beachten Sie die Druckabschläge von Edelstahl Rohrverschraubungen bei hohen Temperaturen!

von +50°C bis +100°C = -4 %

von +100°C bis +200°C = -11%

von +200°C bis +250°C = -20 %

von +250°C bis +400°C = -30 %

## PRESSURES AND TEMPERATURES

The pressures stated refer to complete AVIT 24° tube connections. They also depend on the tube actually used.

Therefore the pressure calculations are based on DIN 2413, case III for dynamic load, based on the relevant materials and appropriate pipe sizes. The wall sizes of the couplings are usually thicker than the calculated pipe size. The classification of the pressure groups was according to ISO 4399.

Steel tube connections have a permissible operating temperature range from -40°C to +100°C.

Stainless steel tube connections have a permissible operating temperature range from -60°C to +100°C.

Please pay attention to the pressure reductions of stainless steel tube connections due to high temperatures!

from +50°C to +100°C = -4 %

from +100°C to +200°C = -11%

from +200°C to +250°C = -20 %

from +250°C to +400°C = -30 %

## DICHTUNGEN

Bei der Auswahl der Dichtung sind die Temperaturgrenzen der jeweiligen Dichtungswerkstoffe zu beachten!

NBR (Acrylnitril-Butadien-Kautschuk) ..... -30°C bis +100°C

FKM (Fluor-Kautschuk) ..... -20°C bis +200°C

EPDM (Ethylen-Propylen Dien-Kautschuk) ..... -45°C bis +150°C

## SEALS

When selecting seals, the temperature limits for the sealing material must always be taken into consideration.

NBR (nitrile butadiene rubber) ..... -30°C to +100°C

FKM (fluoro rubber) ..... -20°C to +200°C

EPDM (ethylene propylene diene monomer) ..... -45°C to +150°C

## ABMESSUNGEN, GEWICHTE

Die Maßangaben l1, l2 und l3 sind ca. Abmessungen bei angezogener Überwurfmutter. Die Gewichtsangaben in diesem Kapitel beziehen sich immer auf den Grundkörper aus Stahl ggf. mit Zubehörteilen, jedoch ohne AKM. Basis: spezifisches Gewicht = 7,85 kg/dm<sup>3</sup>, bei Edelstahl: +2%.

## DIMENSIONS AND WEIGHTS

The dimensions l1, l2 and l3 are approximate dimensions at tightened nut. The weights specified in this chapter refer to the basic part made of carbon steel, with accessory parts where relevant, but without AKM. Basis: specific weight = 7,85 kg/dm<sup>3</sup>, for stainless steel: +2%.

## SONDERLÖSUNGEN

AVIT liefert für nahezu alle Rohrsysteme passende Systemkomponenten, welche Sie miteinander kombinieren können.

Sollte es vorkommen, dass Sie nicht die passenden Adapter finden, haben wir mit Sicherheit eine Lösung, um Ihren Wunsch zu realisieren.

Sprechen Sie uns an!

## SPECIAL SOLUTIONS

AVIT supplies suitable system components for almost all pipe systems, which can be combined as required.

Should you be unable to find the adapter you require, we are certain to have a solution to your particular requirement.

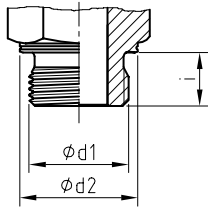
Just ask us!

Type B

AVIT TYP: GEV, DN ≈ ISO 1179-4

AVIT TYP: GEVM, DNM ≈ ISO 9974-3

Einschraubzapfen mit met. Dichtkante <sup>1</sup>  
Stud end with metal-to-metal sealing <sup>1</sup>

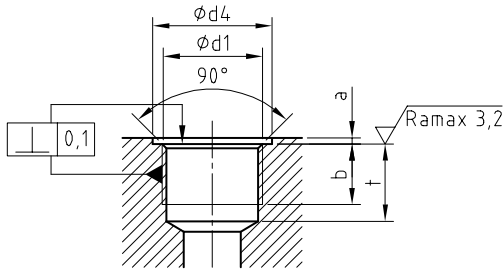
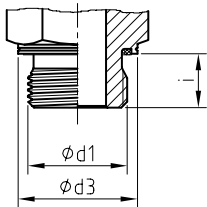


Type E

AVIT TYP: GUV, DU ≈ ISO 1179-2

AVIT TYP: GUV, DUM ≈ ISO 9974-2

Einschraubzapfen mit U-Ring Dichtung <sup>1</sup>  
Stud end with U-ring sealing <sup>1</sup>



TYPE N

BSP ≈ ISO 1179-1

MET. ≈ ISO 9974-1

Einschraubloch schmal <sup>2,3,4</sup>  
Port narrow <sup>2,3,4</sup>

ABMESSUNGEN [mm]

DIMENSIONS

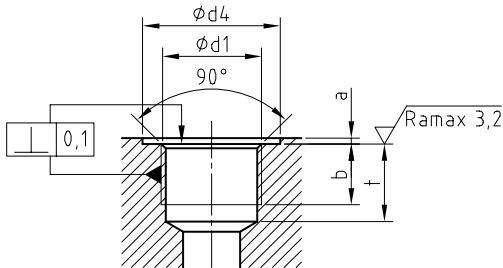
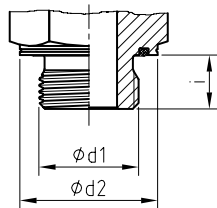
|                                               | d1        | d2 | d3   | d4 | a   | b  | i  | t  |
|-----------------------------------------------|-----------|----|------|----|-----|----|----|----|
| WHITWORTH ROHRGEWINDE<br>BSP THREAD ISO 228-1 | G 1/8 A   | 14 | 13,9 | 15 | 1,5 | 9  | 8  | 11 |
|                                               | G 1/4 A   | 18 | 18,9 | 20 | 1,5 | 13 | 12 | 16 |
|                                               | G 3/8 A   | 22 | 21,9 | 23 | 2   | 13 | 12 | 16 |
|                                               | G 1/2 A   | 26 | 26,9 | 28 | 2,5 | 15 | 14 | 19 |
|                                               | G 3/4 A   | 32 | 31,9 | 33 | 2,5 | 17 | 16 | 21 |
|                                               | G 1 A     | 39 | 39,9 | 41 | 2,5 | 19 | 18 | 24 |
|                                               | G 1 1/4 A | 49 | 49,9 | 51 | 2,5 | 22 | 20 | 27 |
|                                               | G 1 1/2 A | 55 | 54,9 | 56 | 2,5 | 23 | 22 | 28 |
| METRISCHES GEWINDE<br>METRIC THREAD ISO 261   | G 2 A     | 70 | 69,9 | 71 | 3,0 | 26 | 24 | 31 |
|                                               | M12x1,5   | 17 | 16,9 | 18 | 1,5 | 13 | 12 | 15 |
|                                               | M14x1,5   | 19 | 18,9 | 20 | 1,5 | 13 | 12 | 16 |
|                                               | M16x1,5   | 21 | 21,9 | 23 | 1,5 | 13 | 12 | 16 |
|                                               | M18x1,5   | 23 | 23,9 | 25 | 2,0 | 13 | 12 | 16 |
|                                               | M22x1,5   | 27 | 26,9 | 28 | 2,5 | 15 | 14 | 18 |
|                                               | M27x2,0   | 32 | 31,9 | 33 | 2,5 | 17 | 16 | 21 |
|                                               | M33x2,0   | 39 | 39,9 | 41 | 2,5 | 19 | 18 | 23 |
| METRISCHES GEWINDE<br>METRIC THREAD ISO 261   | M42x2,0   | 49 | 49,9 | 51 | 2,5 | 21 | 20 | 25 |
|                                               | M48x2,0   | 55 | 54,9 | 56 | 2,5 | 23 | 22 | 27 |
|                                               | M60x2,0   | 70 | 69,9 | 71 | 2,5 | 25 | 24 | 29 |

TYPE AVIT

AVIT TYP: GOV, DO, SV, SKV ≈ ISO 1179-2

AVIT TYP: GOVM, DOM, SVM ≈ ISO 9974-2

Einschraubzapfen mit O-Ring Dichtung <sup>1</sup>  
Stud end with O-ring sealing <sup>1</sup>



TYPE W

BSP ≈ ISO 1179-1

MET. ≈ DIN 3852-1

Einschraubloch breit <sup>2,3</sup>  
Port wide <sup>2,3</sup>

ABMESSUNGEN [mm]

DIMENSIONS

|                                               | d1        | d2 | d4 | a   | b  | i  | t  |
|-----------------------------------------------|-----------|----|----|-----|----|----|----|
| WHITWORTH ROHRGEWINDE<br>BSP THREAD ISO 228-1 | G 1/8 A   | 18 | 19 | 1,5 | 9  | 8  | 11 |
|                                               | G 1/4 A   | 22 | 23 | 1,5 | 13 | 12 | 15 |
|                                               | G 3/8 A   | 24 | 25 | 2   | 13 | 12 | 16 |
|                                               | G 1/2 A   | 30 | 31 | 2,5 | 15 | 14 | 18 |
|                                               | G 3/4 A   | 40 | 41 | 2,5 | 17 | 16 | 20 |
|                                               | G 1 A     | 46 | 47 | 2,5 | 19 | 18 | 23 |
|                                               | G 1 1/4 A | 54 | 55 | 2,5 | 21 | 20 | 25 |
|                                               | G 1 1/2 A | 60 | 61 | 2,5 | 23 | 22 | 27 |
| METRISCHES GEWINDE<br>METRIC THREAD ISO 261   | G 2 A     | 75 | 76 | 3,0 | 25 | 24 | 29 |
|                                               | M12x1,5   | 20 | 21 | 1,5 | 13 | 12 | 15 |
|                                               | M14x1,5   | 22 | 23 | 1,5 | 13 | 12 | 16 |
|                                               | M16x1,5   | 24 | 25 | 1,5 | 13 | 12 | 16 |
|                                               | M18x1,5   | 24 | 25 | 2,0 | 13 | 12 | 16 |
|                                               | M22x1,5   | 30 | 31 | 2,5 | 15 | 14 | 18 |
|                                               | M27x2,0   | 40 | 41 | 2,5 | 17 | 16 | 21 |
|                                               | M33x2,0   | 46 | 47 | 2,5 | 19 | 18 | 23 |
| METRISCHES GEWINDE<br>METRIC THREAD ISO 261   | M42x2,0   | 54 | 55 | 2,5 | 21 | 20 | 25 |
|                                               | M48x2,0   | 60 | 61 | 2,5 | 23 | 22 | 27 |
|                                               | M60x2,0   | 75 | 76 | 2,5 | 25 | 24 | 29 |

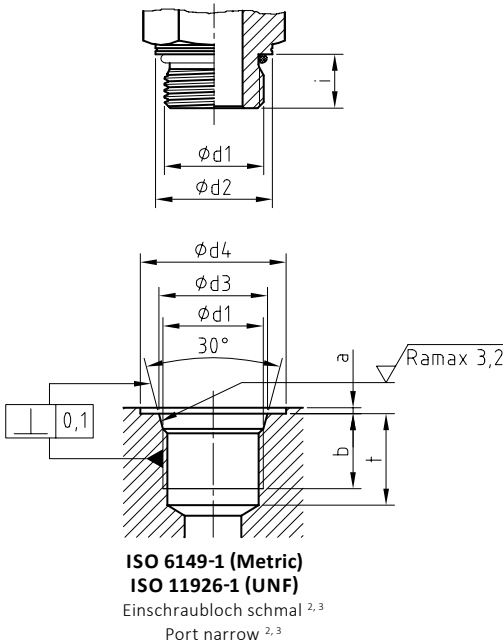
1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

2 Metrische Einschraublöcher sollten zur Identifikation mit einem „M“ gekennzeichnet werden! | Each port shall be identified by a permanently marking “M” next to the port.

3 Gemäß der Druckstufe muss das Material der Einschraublöcher eine entsprechende Festigkeit haben! | The port machining material must have a rigidity which corresponds to the pressure range!

4 AVIT Werksstandard bei Einschraublöchern. | AVIT factory standard for ports.

**TYPE F**  
**AVIT TYP: GEAM, GELM ≈ ISO 6149-2 (Metric)**  
**AVIT TYP: GEVA, GELA ≈ ISO 11926-2 (UNF)**  
Einschraubzapfen mit O-Ring Dichtung <sup>1</sup>  
Stud end with O-ring sealing <sup>1</sup>

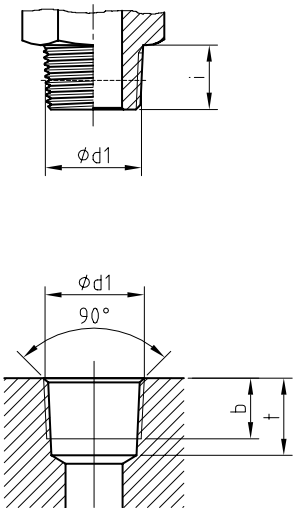


**ISO 6149-1 (Metric)**  
**ISO 11926-1 (UNF)**  
Einschraubloch schmal <sup>2,3</sup>  
Port narrow <sup>2,3</sup>

**ABMESSUNGEN [mm]**  
**DIMENSIONS**

|                                                           | d1            | d2   | d3    | d4 | a   | b    | i    | t    |
|-----------------------------------------------------------|---------------|------|-------|----|-----|------|------|------|
| <b>METRISCHES GEWINDE</b><br><b>METRIC THREAD ISO 261</b> | M12x1,5       | 16,8 | 13,8  | 19 | 1,5 | 11,5 | 11   | 14   |
|                                                           | M14x1,5       | 18,8 | 15,8  | 21 | 1,5 | 11,5 | 11   | 14   |
|                                                           | M16x1,5       | 21,8 | 17,8  | 24 | 1,5 | 13   | 12,5 | 15,5 |
|                                                           | M18x1,5       | 23,8 | 19,8  | 26 | 2,0 | 14,5 | 14   | 17   |
|                                                           | M22x1,5       | 26,8 | 23,8  | 29 | 2,0 | 15,5 | 15   | 18   |
|                                                           | M27x2,0       | 31,8 | 29,4  | 34 | 2,0 | 19   | 18,5 | 22   |
|                                                           | M33x2,0       | 40,8 | 35,4  | 43 | 2,5 | 19   | 18,5 | 22   |
|                                                           | M42x2,0       | 49,8 | 44,4  | 52 | 2,5 | 19,5 | 19   | 22,5 |
|                                                           | M48x2,0       | 54,8 | 50,4  | 57 | 2,5 | 22   | 21,5 | 25   |
|                                                           | M60x2,0       | 64,8 | 62,4  | 67 | 2,5 | 24,5 | 24   | 27,5 |
| <b>UNF GEWINDE</b><br><b>UNF THREAD ISO 725</b>           | 1/8 - 18 UNF  | 16,8 | 15,7  | 20 | 1,6 | 13   | 12   | 16   |
|                                                           | 1/4 - 16 UNF  | 21,8 | 20,65 | 25 | 2,4 | 15   | 14   | 18   |
|                                                           | 3/8 - 14 UNF  | 26,8 | 24    | 30 | 2,4 | 17   | 16   | 20   |
|                                                           | 1/2 - 12 UN   | 31,8 | 29,2  | 35 | 2,4 | 20   | 19   | 24   |
|                                                           | 3/4 - 12 UN   | 40,8 | 35,55 | 44 | 3,2 | 20   | 19   | 24   |
|                                                           | 1 1/4 - 12 UN | 49,8 | 43,55 | 53 | 3,2 | 20   | 19   | 24   |
|                                                           | 1 3/4 - 12 UN | 54,8 | 49,9  | 58 | 3,2 | 20   | 19   | 24   |
|                                                           | 2 - 12 UN     | 69,8 | 65,75 | 78 | 3,2 | 23   | 22   | 24   |
|                                                           |               |      |       |    |     |      |      |      |

**NPTF**  
**ANSI 1.201**  
**AVIT TYP: GEVN, GERN, GEGN**  
Einschraubzapfen selbstdichtendes kegelförmiges Gewinde (ohne Dichtmittel)  
Stud end with sealing by conical thread (without sealants)



**NPTF**  
**ANSI 1.201**  
Einschraubloch kegelförmiges Gewinde <sup>3</sup>  
Port conical thread <sup>3</sup>

**ABMESSUNGEN [mm]**  
**DIMENSIONS**

|                                                               | d1         | b  | i    | t  |
|---------------------------------------------------------------|------------|----|------|----|
| <b>NPTF ROHRGEWINDE</b><br><b>NPTF PIPE THREAD ANSI 1.201</b> | 1/8 NPTF   | 9  | 10,5 | 12 |
|                                                               | 1/4 NPTF   | 12 | 15,1 | 16 |
|                                                               | 3/8 NPTF   | 13 | 15,2 | 17 |
|                                                               | 1/2 NPTF   | 16 | 19,8 | 22 |
|                                                               | 3/4 NPTF   | 17 | 20,1 | 23 |
|                                                               | 1 NPTF     | 20 | 24,0 | 24 |
|                                                               | 1 1/4 NPTF | 21 | 25,6 | 25 |
|                                                               | 1 1/2 NPTF | 22 | 26,0 | 26 |
|                                                               | 2 NPTF     | 23 | 26,9 | 27 |

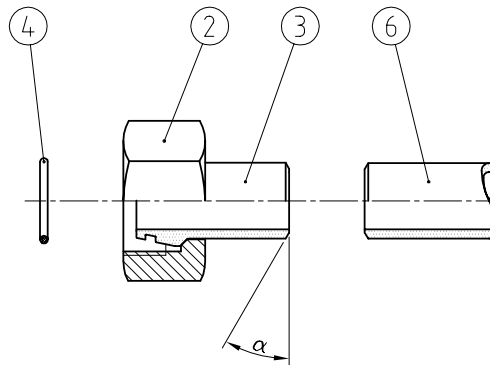
1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.  
2 Metrische Einschraublöcher sollten zur Identifikation mit einem „M“ gekennzeichnet werden. | Each port shall be identified by a permanently marking “M” next to the port.  
3 Gemäß der Druckstufe muss das Material der Einschraublöcher eine entsprechende Festigkeit haben! | The port machining material must have a rigidity which corresponds to the pressure range!



**DIE HOHE ZUVERLÄSSIGKEIT EINER AVIT 24° ROHRVERSCHRAUBUNG SETZT EINE FACHGERECHTE VERSCHWEISSUNG VORAUS! VOR DER MONTAGE MÜSSEN ALLE BAUTEILE SAUBER UND BESCHÄDIGUNGSFREI SEIN.**



**THE HIGH RELIABILITY OF THE AVIT 24° TUBE CONNECTION REQUIRES A PROFESSIONAL WELDING! BEFORE MOUNTING ALL COMPONENTS HAVE TO BE CLEAN AND UNDAMAGED.**



Rohr (6) rechtwinklig zur Rohrachse abtrennen und mit einer Schweißfase nach DIN 2559-2 / DIN EN ISO 9692-1 vorbereiten. Der Schweißfasenwinkel  $\alpha$  beträgt 45° bis zur Wandstärke 2 mm und 30° bei größeren Wandstärken.

Die Überwurfmutter (2) über den Schweißkegel (3) schieben. Schweißkegel ohne O-Ring (4) mit dem Rohr (6) gemäß DIN EN ISO 5817 verschweißen.

Bei Hydraulikrohrleitungen sollten nur Vollanschlussnähte mit Wurzelschweißung hergestellt werden. Wenn die Wanddicke es zulässt, sollte die Naht immer mehrlagig geschweißt werden. Es ist zu beachten, dass beim Verschweißen kein Schweißgut oder Schweißperlen in das Rohrinnere gelangen. Um Zunderbildung zu vermeiden, empfehlen wir das Wolfram-Inertgasschweißen (WIG) unter Schutz- und Formiergas zu verwenden. Auf das Formieren der Wurzellage kann nur dann verzichtet werden, wenn die Schweißnahtwurzel zum Schleifen zugänglich ist. Danach werden Füll- und Decklagen der Verbindung aufgetragen. Schweißstellen säubern und falls notwendig, beischleifen.

Bei Verschraubungen aus 1.4571 ist zusätzlich zu beachten, dass Anlauffarben in jedem Fall mit Beizpaste zu entfernen sind, weil sonst Korrosionsgefahr besteht. AVIT Edelstahl-Überwurfmutter (2) können optional versilbert werden. Eine mögliche Kaltverschweißung (Fressen) der Gewinde bei der Montage wird verhindert und ein Fetten der Gewinde ist nicht mehr notwendig.

Nach dem Abkühlen und Säubern der Bauteile den O-Ring (4) in die saubere Nut des Schweißkegels (3) einlegen. Vor dem Verschrauben das Gewinde kontrollieren. Das Gewinde darf nicht beschädigt sein. Deshalb die Gewindeschutzkappen erst unmittelbar vor der Montage entfernen.

Es ist darauf zu achten, dass die Rohrleitungen entsprechend befestigt sind und das Rohr mit der angeschweißten Komponente gerade und spannungsfrei verschraubt wird (siehe Rohrschellenabstand Seite 5.16).

The tube (6) must be cut off at an angle of 90° and has to be prepared with a welding bevel according to DIN 2559-2 / DIN EN ISO 9692-1. The weld bevel angle  $\alpha$  is 45° up to a wall thickness of 2 mm and 30° for greater wall thicknesses.

Push the nut (2) on the welding cone (3). Weld the welding cone without O-ring (4) according to DIN EN ISO 5817 to the tube (6).

Only full-length connection seams with root welding should be used to produce hydraulic pipelines. If the wall thickness allows it, the seam should always be welded in multiple layers.

Take into account that no weld residue gets into the inside of the tube. In order to prevent scaling, we recommend using tungsten inert gas welding (TIG) with protective and forming gas. The forming of the root position can only be omitted if the weld seam root is accessible for grinding. Then filling and cover layers are applied to the connection. Clean the weld location and grind as necessary.

Additional instructions for material 1.4571:

Oxidation tints must be removed with pickling paste, otherwise there is a risk of corrosion. AVIT stainless steel union nuts (2) can be optionally silver-plated to prevent any possible cold welding (seizing) occurring in the thread. A greasing of the threads isn't necessary any longer.

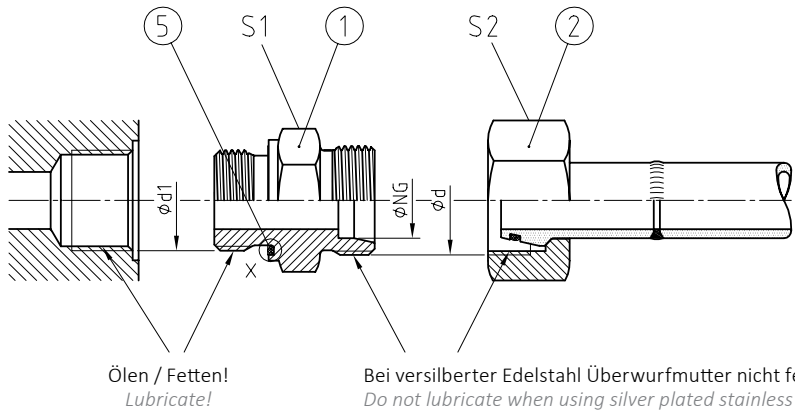
The joint between cone and nut must be free of dirt and nicks. Place the O-ring (4) in clean groove of the welding cone (3). Before screwing, control the thread which must not be damaged. Therefore the protection caps of the thread should be removed directly before assembly.

It must be considered that the pipe lines are correspondingly tightened and the pipe with the welding cone will be screwed straightly and without tension. See recommended distance for the clamps on page 5.16.

DIE FUNKTIONSSICHERHEIT UND WIEDERHOLMONTAGEMÖGLICHKEIT WIRD NUR ÜBER EIN ANZUGSDREHMOMENT GEWÄHRLEISTET. EIN DREHWINKEL IST KEIN GEEIGNETER WERT FÜR EINE SICHERE MONTAGE!



THE FUNCTIONAL SAFETY AND POSSIBILITY OF REPEATED ASSEMBLY ARE ONLY ASSURED WITH AN ASSEMBLY TORQUE. A TURNING ANGLE IS NO APPROPRIATE VALUE FOR A SAFE ASSEMBLY!

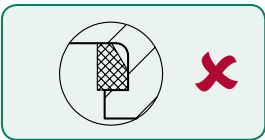


Ölen / Fetten!  
Lubricate!

Bei versilberter Edelstahl Überwurfmutter nicht fetten!  
Do not lubricate when using silver plated stainless steel union nuts!

Vor dem Einschrauben überprüfen Sie die richtige Lage der U-Ring Dichtung (5) und ölen Sie das Gewinde des Einschraubzapfens (1) leicht ein.

Before screwing in, please check the right position (Detail X) of the U-ring sealing (5) and lubricate the thread of the stud (1).



Einzelheit X - Lage der U-Ring Dichtung | Detail X - Position of the U-ring sealing

Nach handfestem Anziehen der Überwurfmutter (2) und des Stutzens (1) mit dem entsprechenden Drehmoment montieren (Tabelle). So erhalten die Bauteile der Verschraubungen eine Vorspannung lediglich im Bereich der elastischen Verformung des Werkstoffes. Daher ist eine Langzeitdichtheit der Rohrverschraubung auch nach einer beliebigen Anzahl von Wiederholmontagen gewährleistet.

After hand-tightening of the nut (2) and the stud (1) assemble with the appropriate assembly torque (Table). This guarantees that the components of the coupling are only pre-stressed within the range of elastic deformation of the material. This ensures a long-term sealing of the coupling which is also given after a number of repeat assemblies.

BEI FERTIGMONTAGE MUSS DER VERSCHRAUBUNGSSTUTZEN (1) IMMER MIT EINEM MAULSCHLÜSSEL GEGENGEGHALTEN WERDEN.



FOR THE FINAL ASSEMBLY, THE SCREW SOCKET (1) MUST ALWAYS BE HELD IN PLACE WITH AN OPEN END WRENCH.

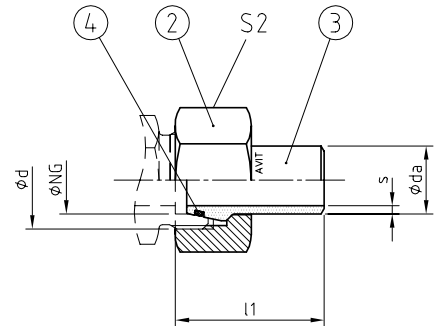
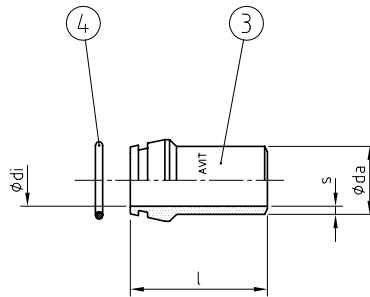
| EINSCHRAUBSTUTZEN Ø d1<br>MALE STUD CONNECTOR |                         |                           |      |                |                              | ÜBERWURFMUTTER Ø d<br>UNION NUT |      |                |                              |
|-----------------------------------------------|-------------------------|---------------------------|------|----------------|------------------------------|---------------------------------|------|----------------|------------------------------|
| NG                                            | WHITWORTH<br>BSP THREAD | METRISCH<br>METRIC THREAD | S1   | STAHL<br>STEEL | EDELSTAHL<br>STAINLESS STEEL | GEWINDE<br>THREAD               | S2   | STAHL<br>STEEL | EDELSTAHL<br>STAINLESS STEEL |
| [mm]                                          | [inch]                  | [mm]                      | [mm] | [Nm]           | [Nm]                         | [mm]                            | [mm] | [Nm]           | [Nm] <sup>1</sup>            |
| 8                                             | G 1/4                   | M14x1,5                   | 19   | 60             | 75                           | M16x1,5                         | 19   | 20             | 40                           |
| 10                                            | G 3/8                   | M16x1,5                   | 22   | 90             | 135                          | M18x1,5                         | 22   | 25             | 55                           |
| 12                                            | G 3/8                   | M18x1,5                   | 22   | 90             | 135                          | M20x1,5                         | 24   | 30             | 55                           |
| 16                                            | G 1/2                   | M22x1,5                   | 27   | 130            | 205                          | M24x1,5                         | 30   | 35             | 60                           |
| 20                                            | G 3/4                   | M27x2,0                   | 32   | 200            | 385                          | M30x2,0                         | 36   | 70             | 95                           |
| 25                                            | G 1                     | M33x2,0                   | 41   | 350            | 460                          | M36x2,0                         | 46   | 95             | 140                          |
| 30                                            | G 1 1/4                 | M42x2,0                   | 50   | 500            | 720                          | M42x2,0                         | 50   | 140            | 175                          |
| 38                                            | G 1 1/2                 | M48x2,0                   | 55   | 600            | 960                          | M52x2,0                         | 60   | 210            | 330                          |
| 50                                            | G 2                     | M60x2,0                   | 70   | 680            | 1000                         | M68x2,0                         | 80   | 400            | 600                          |

Tabelle - Anzugsdrehmomente | Table - Assembly torque

1 Gilt nur für versilberte Gewinde bei Edelstahl Überwurfmutter! | Only for silver plated stainless steel union nuts!

AK [Pos. 3+4]

AKM [Pos. 2-4]


**AVIT, ISO 8434-1 – WDNP (DIN 3865)**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Der robuste und sichere Rohranschluss für Rohre nach EN 10305-4 (DIN 2391), DIN EN 10220 (DIN 2448) und ANSI B36.10. Orbitalausführung (-OF).

The robust and safe standard for tubes acc. EN 10305-4, DIN EN 10220 and ANSI B36.10.  
Also available for orbital welding system (-OF).

**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface                 | TYP NG - daxis - **   |
|-----------------------------------------------------------|-----------------------|
| Stahl, Mutter verzinkt / Steel, nut galvanised; NBR       | AK/AKM 25 - 25x3 - 01 |
| Stahl, Mutter verzinkt / Steel, nut galvanised; FKM       | AK/AKM 25 - 25x3 - 02 |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; NBR | - /AKM 25 - 25x3 - 04 |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; FKM | - /AKM 25 - 25x3 - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR        | AK/AKM 25 - 25x3 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM        | AK/AKM 25 - 25x3 - 42 |

**BESTELLBEISPIEL**  
**ORDER EXAMPLE**
**STÜCKLISTE**  
**PARTS LIST**

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG   | NPS    | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |         |      |      | O-RING |          | GEWICHT<br>WEIGHT |          | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-------|------|--------|--------------------------------|-----------------|---------|------|------|--------|----------|-------------------|----------|---------------------------|------------|
|                 | [bar] | [mm] | [inch] | daxs                           | di <sup>1</sup> | d       | l    | l1   | S2     | Pos. 4   | AK [kg]           | AKM [kg] | Pos. 3+4                  | Pos. 2-4   |
| L               | 100   | 15   | -      | 15x1,5                         | 10              | M22x1,5 | 35,5 | 36,5 | 27     | 12,0x2,0 | 0,027             | 0,067    | AK 15x1,5                 | AKM 15x1,5 |
|                 | 160   |      |        | 15x2,0                         | 10              |         |      |      |        |          | 0,026             | 0,066    | AK 15x2                   | AKM 15x2   |
|                 | 100   | 18   | -      | 18x1,5                         | 13              | M26x1,5 | 37   | 38,5 | 32     | 15,0x2,0 | 0,039             | 0,099    | AK 18x1,5                 | AKM 18x1,5 |
|                 | 160   |      |        | 18x2,0                         | 13              |         |      |      |        |          | 0,040             | 0,100    | AK 18x2                   | AKM 18x2   |
|                 | 160   |      |        | 18x2,5                         | 13              |         |      |      |        |          | 0,041             | 0,101    | AK 18x2,5                 | AKM 18x2,5 |
|                 | 160   |      |        | 18x3,0                         | 12              |         |      |      |        |          | 0,046             | 0,106    | AK 18x3                   | AKM 18x3   |
|                 | 100   | 22   | -      | 22x2,0                         | 17              | M30x2,0 | 37,5 | 39   | 36     | 20,0x2,0 | 0,048             | 0,128    | AK 22x2                   | AKM 22x2   |
|                 | 160   |      |        | 22x2,5                         | 17              |         |      |      |        |          | 0,048             | 0,128    | AK 22x2,5                 | AKM 22x2,5 |
|                 | 160   |      |        | 22x3,0                         | 16              |         |      |      |        |          | 0,056             | 0,136    | AK 22x3                   | AKM 22x3   |
|                 | 160   |      |        | 22x4,0                         | 14              |         |      |      |        |          | 0,068             | 0,148    | AK 22x4                   | AKM 22x4   |
|                 | 100   | 28   | -      | 28x2,0                         | 23              | M36x2,0 | 41,5 | 43   | 41     | 26,0x2,0 | 0,071             | 0,166    | AK 28x2                   | AKM 28x2   |
|                 | 100   |      |        | 28x2,5                         | 23              |         |      |      |        |          | 0,072             | 0,167    | AK 28x2,5                 | AKM 28x2,5 |
|                 | 100   |      |        | 28x3,0                         | 22              |         |      |      |        |          | 0,084             | 0,179    | AK 28x3                   | AKM 28x3   |
|                 | 160   |      |        | 28x4,0                         | 20              |         |      |      |        |          | 0,104             | 0,199    | AK 28x4                   | AKM 28x4   |
|                 | 100   | 35   | -      | 35x3,0                         | 29              | M45x2,0 | 48,5 | 51   | 50     | 32,0x2,5 | 0,129             | 0,267    | AK 35x3                   | AKM 35x3   |
|                 | 160   |      |        | 35x4,0                         | 27              |         |      |      |        |          | 0,161             | 0,299    | AK 35x4                   | AKM 35x4   |
|                 | 100   | 42   | -      | 42x3,0                         | 36              | M52x2,0 | 48   | 51   | 60     | 38,0x2,5 | 0,157             | 0,376    | AK 42x3                   | AKM 42x3   |
|                 | 160   |      |        | 42x4,0                         | 34              |         |      |      |        |          | 0,197             | 0,416    | AK 42x4                   | AKM 42x4   |
| S               | 420   | 6    | -      | 6x1,5                          | 2,5             | M14x1,5 | 28,5 | 30   | 17     | 5,0x1,5  | 0,006             | 0,023    | AK 06x1,5                 | AKM 06x1,5 |
|                 | 420   | 8    | -      | 8x2,0                          | 4               | M16x1,5 | 29   | 31   | 19     | 6,0x1,5  | 0,010             | 0,029    | AK 08x2                   | AKM 08x2   |
|                 | 160   | 10   | -      | 10x1,0                         | 6               | M18x1,5 | 32   | 34   | 22     | 7,5x1,5  | 0,014             | 0,042    | AK 10x1                   | AKM 10x1   |
|                 | 250   |      |        | 10x1,5                         | 6               |         |      |      |        |          | 0,014             | 0,042    | AK 10x1,5                 | AKM 10x1,5 |
|                 | 420   |      |        | 10x2,0                         | 6               |         |      |      |        |          | 0,015             | 0,043    | AK 10x2                   | AKM 10x2   |
|                 | 630   |      |        | 10x2,5                         | 5               |         |      |      |        |          | 0,018             | 0,046    | AK 10x2,5                 | AKM 10x2,5 |

1 Maß di beschreibt den kleinsten Innendurchmesser. | Dimension di describes the minimum inside diameter.

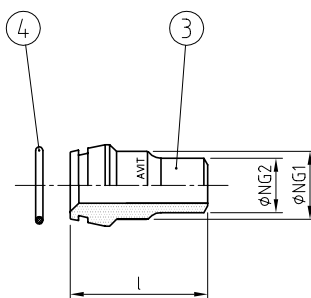


| REIHE<br>SERIES | PN    | NG   | NPS    | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |         |      |      | O-RING |          | GEWICHT<br>WEIGHT |          | BESTELLCODE<br>ORDER CODE |                 |
|-----------------|-------|------|--------|--------------------------------|-----------------|---------|------|------|--------|----------|-------------------|----------|---------------------------|-----------------|
|                 | [bar] | [mm] | [inch] | daxs                           | di <sup>1</sup> | d       | l    | l1   | S2     | Pos. 4   | AK [kg]           | AKM [kg] | Pos. 3+4                  | Pos. 2-4        |
| S               | 160   | 12   | -      | 12x1,5                         | 8               | M20x1,5 | 32,5 | 34,5 | 24     | 9,0x1,5  | 0,018             | 0,051    | AK 12x1,5                 | AKM 12x1,5      |
|                 | 315   |      | -      | 12x2,0                         | 8               |         |      |      |        |          | 0,019             | 0,052    | AK 12x2                   | AKM 12x2        |
|                 | 420   |      | -      | 12x2,5                         | 7               |         |      |      |        |          | 0,022             | 0,055    | AK 12x2,5                 | AKM 12x2,5      |
|                 | 630   |      | -      | 12x3,0                         | 6               |         |      |      |        |          | 0,024             | 0,057    | AK 12x3                   | AKM 12x3        |
|                 | 250   | 16   | ¼"     | 13,5x1,8                       | 9,9             | M24x1,5 | 39,5 | 42,5 | 30     | 12,0x2,0 | 0,039             | 0,104    | AK 16>13,5x1,8            | AKM 16>13,5x1,8 |
|                 | 315   |      | ¼"     | 13,5x2,6                       | 8,3             |         |      |      |        |          | 0,046             | 0,111    | AK 16>13,5x2,6            | AKM 16>13,5x2,6 |
|                 | 250   |      | ¼"     | 13,7x2,2                       | 9,3             |         |      |      |        |          | 0,042             | 0,107    | AK 16>13,7x2,2            | AKM 16>13,7x2,2 |
|                 | 315   |      | ¼"     | 13,7x3,0                       | 7,7             |         |      |      |        |          | 0,048             | 0,113    | AK 16>13,7x3              | AKM 16>13,7x3   |
|                 | 160   |      | -      | 16x1,5                         | 11              |         |      |      |        |          | 0,035             | 0,100    | AK 16x1,5                 | AKM 16x1,5      |
|                 | 250   |      | -      | 16x2,0                         | 11              |         |      |      |        |          | 0,036             | 0,101    | AK 16x2                   | AKM 16x2        |
|                 | 315   |      | -      | 16x2,5                         | 11              |         |      |      |        |          | 0,037             | 0,102    | AK 16x2,5                 | AKM 16x2,5      |
|                 | 420   |      | -      | 16x3,0                         | 10              |         |      |      |        |          | 0,042             | 0,107    | AK 16x3                   | AKM 16x3        |
|                 | 160   | 20   | ¾"     | 17,2x2,0                       | 13,2            | M30x2,0 | 43,5 | 47   | 36     | 16,3x2,4 | 0,062             | 0,162    | AK 20>17,2x2              | AKM 20>17,2x2   |
|                 | 250   |      | ¾"     | 17,2x2,3                       | 12,6            |         |      |      |        |          | 0,067             | 0,167    | AK 20>17,2x2,3            | AKM 20>17,2x2,3 |
|                 | 315   |      | ¾"     | 17,2x2,6                       | 12              |         |      |      |        |          | 0,070             | 0,170    | AK 20>17,2x2,6            | AKM 20>17,2x2,6 |
|                 | 420   |      | ¾"     | 17,2x3,2                       | 10,8            |         |      |      |        |          | 0,077             | 0,177    | AK 20>17,2x3,2            | AKM 20>17,2x3,2 |
|                 | 160   |      | -      | 20x2,0                         | 14              |         |      |      |        |          | 0,060             | 0,160    | AK 20x2                   | AKM 20x2        |
|                 | 250   |      | -      | 20x2,5                         | 14              |         |      |      |        |          | 0,062             | 0,162    | AK 20x2,5                 | AKM 20x2,5      |
|                 | 315   |      | -      | 20x3,0                         | 14              |         |      |      |        |          | 0,062             | 0,162    | AK 20x3                   | AKM 20x3        |
|                 | 420   |      | -      | 20x4,0                         | 12              |         |      |      |        |          | 0,075             | 0,175    | AK 20x4                   | AKM 20x4        |
|                 | 160   | 25   | ½"     | 21,3x2,0                       | 17,3            | M36x2,0 | 50,5 | 54,5 | 46     | 20,3x2,4 | 0,097             | 0,294    | AK 25>21,3x2              | AKM 25>21,3x2   |
|                 | 250   |      | ½"     | 21,3x2,6                       | 16,1            |         |      |      |        |          | 0,111             | 0,308    | AK 25>21,3x2,6            | AKM 25>21,3x2,6 |
|                 | 250   |      | ½"     | 21,3x2,9                       | 15,5            |         |      |      |        |          | 0,114             | 0,311    | AK 25>21,3x2,9            | AKM 25>21,3x2,9 |
|                 | 315   |      | ½"     | 21,3x3,7                       | 13,9            |         |      |      |        |          | 0,127             | 0,324    | AK 25>21,3x3,7            | AKM 25>21,3x3,7 |
|                 | 160   |      | -      | 25x2,5                         | 19              |         |      |      |        |          | 0,090             | 0,287    | AK 25x2,5                 | AKM 25x2,5      |
|                 | 250   |      | -      | 25x3,0                         | 19              |         |      |      |        |          | 0,090             | 0,287    | AK 25x3                   | AKM 25x3        |
|                 | 315   |      | -      | 25x4,0                         | 17              |         |      |      |        |          | 0,112             | 0,309    | AK 25x4                   | AKM 25x4        |
|                 | 420   |      | -      | 25x5,0                         | 15              |         |      |      |        |          | 0,130             | 0,327    | AK 25x5                   | AKM 25x5        |
|                 | 160   | 30   | ¾"     | 26,7x2,9                       | 20,9            | M42x2,0 | 52,5 | 58   | 50     | 25,3x2,4 | 0,145             | 0,360    | AK 30>26,7x2,9            | AKM 30>26,7x2,9 |
|                 | 315   |      | ¾"     | 26,7x3,9                       | 18,9            |         |      |      |        |          | 0,169             | 0,384    | AK 30>26,7x3,9            | AKM 30>26,7x3,9 |
|                 | 160   |      | ¾"     | 26,9x 2,3                      | 22,3            |         |      |      |        |          | 0,128             | 0,343    | AK 30>26,9x2,3            | AKM 30>26,9x2,3 |
|                 | 250   |      | ¾"     | 26,9x3,2                       | 20,5            |         |      |      |        |          | 0,151             | 0,366    | AK 30>26,9x3,2            | AKM 30>26,9x3,2 |
|                 | 160   |      | -      | 30x3,0                         | 24              |         |      |      |        |          | 0,114             | 0,329    | AK 30x3                   | AKM 30x3        |
|                 | 250   |      | -      | 30x4,0                         | 22              |         |      |      |        |          | 0,142             | 0,357    | AK 30x4                   | AKM 30x4        |
|                 | 315   |      | -      | 30x5,0                         | 20              |         |      |      |        |          | 0,168             | 0,383    | AK 30x5                   | AKM 30x5        |
|                 | 420   |      | -      | 30x6,0                         | 18              |         |      |      |        |          | 0,189             | 0,404    | AK 30x6                   | AKM 30x6        |
|                 | 160   | 38   | 1"     | 33,4x2,6                       | 28,2            | M52x2,0 | 57   | 65   | 60     | 33,3x2,4 | 0,217             | 0,533    | AK 38>33,4x2,6            | AKM 38>33,4x2,6 |
|                 | 250   |      | 1"     | 33,4x4,0                       | 25,4            |         |      |      |        |          | 0,267             | 0,583    | AK 38>33,4x4              | AKM 38>33,4x4   |
|                 | 160   |      | 1"     | 33,7x2,6                       | 28,5            |         |      |      |        |          | 0,213             | 0,529    | AK 38>33,7x2,6            | AKM 38>33,7x2,6 |
|                 | 250   |      | 1"     | 33,7x4,0                       | 25,7            |         |      |      |        |          | 0,263             | 0,579    | AK 38>33,7x4              | AKM 38>33,7x4   |
|                 | 160   |      | -      | 38x4,0                         | 30              |         |      |      |        |          | 0,207             | 0,523    | AK 38x4                   | AKM 38x4        |
|                 | 250   |      | -      | 38x5,0                         | 28              |         |      |      |        |          | 0,246             | 0,562    | AK 38x5                   | AKM 38x5        |
|                 | 315   |      | -      | 38x6,0                         | 26              |         |      |      |        |          | 0,281             | 0,597    | AK 38x6                   | AKM 38x6        |
|                 | 420   |      | -      | 38x8,0                         | 22              |         |      |      |        |          | 0,344             | 0,660    | AK 38x8                   | AKM 38x8        |
|                 | 160   | 50   | 1½"    | 48,3x2,6                       | 40              | M68x2,0 | 60,5 | 68,5 | 80     | 46,0x3,0 | 0,335             | 1,089    | AK 50>48,3x2,6            | AKM 50>48,3x2,6 |
|                 | 160   |      | 1½"    | 48,3x4,0                       | 40              |         |      |      |        |          | 0,350             | 1,104    | AK 50>48,3x4              | AKM 50>48,3x4   |
|                 | 250   |      | 1½"    | 48,3x6,3                       | 35,7            |         |      |      |        |          | 0,465             | 1,219    | AK 50>48,3x6,3            | AKM 50>48,3x6,3 |
|                 | 315   |      | 1½"    | 48,3x8,0                       | 32,3            |         |      |      |        |          | 0,541             | 1,295    | AK 50>48,3x8              | AKM 50>48,3x8   |
|                 | 160   |      | -      | 50x5,0                         | 40              |         |      |      |        |          | 0,360             | 1,114    | AK 50x5                   | AKM 50x5        |
|                 | 250   |      | -      | 50x6,0                         | 38              |         |      |      |        |          | 0,415             | 1,169    | AK 50x6                   | AKM 50x6        |
|                 | 315   |      | -      | 50x8,0                         | 34              |         |      |      |        |          | 0,515             | 1,269    | AK 50x8                   | AKM 50x8        |
|                 | 420   |      | -      | 50x10,0                        | 30              |         |      |      |        |          | 0,595             | 1,349    | AK 50x10                  | AKM 50x10       |

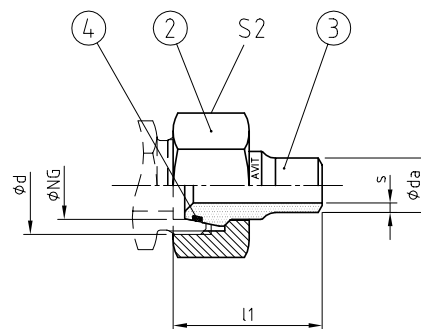
1 Maß di beschreibt den kleinsten Innendurchmesser. | Dimension di describes the minimum inside diameter.



ARK [Pos. 3+4]



ARKM [Pos. 2-4]

**AVIT, ISO 8434-1 – WDRE (DIN 3865)**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Die einfache Lösung, um z.B. Standard Stutzen-  
abgänge zu reduzieren.

*The easiest solution to reduce branch connection stud  
ends.*

**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface                 | TYP NG1 - NG2 - **  |
|-----------------------------------------------------------|---------------------|
| Stahl, Mutter verzinkt / Steel, nut galvanised; NBR       | ARK/ARKM 25>20 - 01 |
| Stahl, Mutter verzinkt / Steel, nut galvanised; FKM       | ARK/ARKM 25>20 - 02 |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; NBR | - /ARKM 25>20 - 04  |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; FKM | - /ARKM 25>20 - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR        | ARK/ARKM 25>20 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM        | ARK/ARKM 25>20 - 42 |

**BESTELLBEISPIEL**  
**ORDER EXAMPLE****STÜCKLISTE**  
**PARTS LIST**

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN  | NG1 | NG2 | ABMESSUNGEN [mm]<br>DIMENSIONS |         |      |      | O-RING | Pos. 4   | GEWICHT<br>WEIGHT |          | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-----|-----|-----|--------------------------------|---------|------|------|--------|----------|-------------------|----------|---------------------------|------------|
|                 |     |     |     | daxs                           | d       | l    | l1   |        |          | ARK [kg]          | ARKM[kg] | Pos. 3+4                  | Pos. 2-4   |
| L               | 160 | 18  | 15  | 15x2,0                         | M26x1,5 | 37   | 38,5 | 32     | 15,0x2,0 | 0,047             | 0,107    | ARK 18>15                 | ARKM 18>15 |
|                 |     |     | 15  | 15x2,0                         | M30x2,0 | 37,5 | 39   | 36     | 20,0x2,0 | 0,068             | 0,148    | ARK 22>15                 | ARKM 22>15 |
|                 | 160 | 22  | 18  | 18x2,0                         | M30x2,0 | 37,5 | 39   | 36     | 20,0x2,0 | 0,058             | 0,138    | ARK 22>18                 | ARKM 22>18 |
|                 |     |     | 15  | 15x2,0                         | M36x2,0 | 41,5 | 43   | 41     | 26,0x2,0 | 0,124             | 0,219    | ARK 28>15                 | ARKM 28>15 |
|                 | 100 | 28  | 18  | 18x2,0                         | M36x2,0 | 41,5 | 43   | 41     | 26,0x2,0 | 0,112             | 0,207    | ARK 28>18                 | ARKM 28>18 |
|                 |     |     | 22  | 22x2,5                         | M36x2,0 | 41,5 | 43   | 41     | 26,0x2,0 | 0,105             | 0,200    | ARK 28>22                 | ARKM 28>22 |
|                 | 100 | 35  | 15  | 15x2,0                         | M45x2,0 | 48,5 | 51   | 50     | 32,0x2,5 | 0,231             | 0,369    | ARK 35>15                 | ARKM 35>15 |
|                 |     |     | 18  | 18x2,0                         | M45x2,0 | 48,5 | 51   | 50     | 32,0x2,5 | 0,223             | 0,361    | ARK 35>18                 | ARKM 35>18 |
|                 |     |     | 22  | 22x2,5                         | M45x2,0 | 48,5 | 51   | 50     | 32,0x2,5 | 0,213             | 0,351    | ARK 35>22                 | ARKM 35>22 |
|                 |     |     | 28  | 28x3,0                         | M45x2,0 | 48,5 | 51   | 50     | 32,0x2,5 | 0,186             | 0,324    | ARK 35>28                 | ARKM 35>28 |
|                 | 100 | 42  | 15  | 15x2,0                         | M52x2,0 | 48   | 51   | 60     | 38,0x2,5 | 0,320             | 0,539    | ARK 42>15                 | ARKM 42>15 |
|                 |     |     | 18  | 18x2,0                         | M52x2,0 | 48   | 51   | 60     | 38,0x2,5 | 0,307             | 0,526    | ARK 42>18                 | ARKM 42>18 |
|                 |     |     | 22  | 22x2,5                         | M52x2,0 | 48   | 51   | 60     | 38,0x2,5 | 0,305             | 0,524    | ARK 42>22                 | ARKM 42>22 |
|                 |     |     | 28  | 28x3,0                         | M52x2,0 | 48   | 51   | 60     | 38,0x2,5 | 0,289             | 0,508    | ARK 42>28                 | ARKM 42>28 |
|                 |     |     | 35  | 35x3,0                         | M52x2,0 | 48   | 51   | 60     | 38,0x2,5 | 0,232             | 0,451    | ARK 42>35                 | ARKM 42>35 |

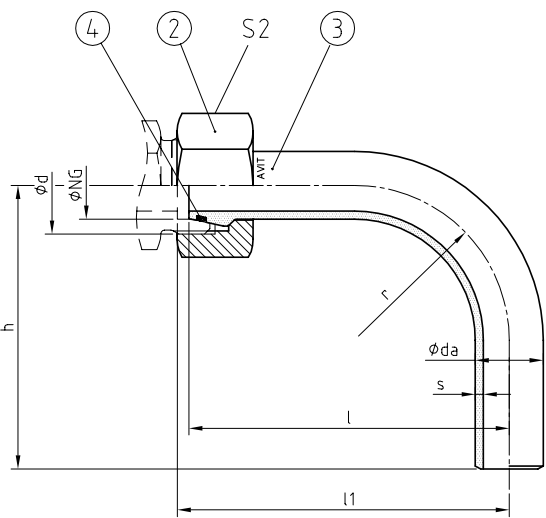
Fortsetzung nächste Seite | Continued on next page

| REIHE<br>SERIES | PN    | NG1  | NG2  | ABMESSUNGEN [mm]<br>DIMENSIONS |         |      |      | O-RING |          | GEWICHT<br>WEIGHT |           | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-------|------|------|--------------------------------|---------|------|------|--------|----------|-------------------|-----------|---------------------------|------------|
|                 | [bar] | [mm] | [mm] | daxs                           | d       | l    | l1   | S2     | Pos. 4   | ARK [kg]          | ARKM [kg] | Pos. 3+4                  | Pos. 2-4   |
| S               | 420   | 10   | 6    | 6x1,5                          | M18x1,5 | 32   | 34   | 22     | 7,5x1,5  | 0,016             | 0,044     | ARK 10>06                 | ARKM 10>06 |
|                 |       |      | 8    | 8x1,5                          |         |      |      |        |          | 0,018             | 0,046     | ARK 10>08                 | ARKM 10>08 |
|                 | 420   | 12   | 6    | 6x1,5                          | M20x1,5 | 32,5 | 34,5 | 24     | 9,0x1,5  | 0,021             | 0,054     | ARK 12>06                 | ARKM 12>06 |
|                 |       |      | 8    | 8x1,5                          |         |      |      |        |          | 0,021             | 0,054     | ARK 12>08                 | ARKM 12>08 |
|                 | 315   | 16   | 10   | 10x2,0                         | M24x1,5 | 39,5 | 42,5 | 30     | 12,0x2,0 | 0,024             | 0,057     | ARK 12>10                 | ARKM 12>10 |
|                 |       |      | 8    | 8x1,5                          |         |      |      |        |          | 0,037             | 0,102     | ARK 16>08                 | ARKM 16>08 |
|                 | 315   | 20   | 10   | 10x2,0                         | M30x2,0 | 43,5 | 47   | 36     | 16,3x2,4 | 0,038             | 0,103     | ARK 16>10                 | ARKM 16>10 |
|                 |       |      | 12   | 12x2,5                         |         |      |      |        |          | 0,040             | 0,105     | ARK 16>12                 | ARKM 16>12 |
|                 | 315   | 25   | 16   | 16x3,0                         | M36x2,0 | 50,5 | 54,5 | 46     | 20,3x2,4 | 0,060             | 0,160     | ARK 20>10                 | ARKM 20>10 |
|                 |       |      | 12   | 12x2,5                         |         |      |      |        |          | 0,060             | 0,160     | ARK 20>12                 | ARKM 20>12 |
|                 | 315   | 30   | 16   | 16x3,0                         | M42x2,0 | 52,5 | 58   | 50     | 25,3x2,4 | 0,063             | 0,163     | ARK 20>16                 | ARKM 20>16 |
|                 |       |      | 20   | 20x3,0                         |         |      |      |        |          | 0,161             | 0,376     | ARK 30>10                 | ARKM 30>10 |
|                 | 315   | 38   | 20   | 20x3,0                         | M52x2,0 | 57   | 65   | 60     | 33,3x2,4 | 0,165             | 0,380     | ARK 30>12                 | ARKM 30>12 |
|                 |       |      | 25   | 25x4,0                         |         |      |      |        |          | 0,166             | 0,381     | ARK 30>16                 | ARKM 30>16 |
|                 | 315   | 50   | 20   | 20x3,0                         | M68x2,0 | 60,5 | 68,5 | 80     | 46,0x3,0 | 0,165             | 0,380     | ARK 30>20                 | ARKM 30>20 |
|                 |       |      | 25   | 25x4,0                         |         |      |      |        |          | 0,167             | 0,382     | ARK 30>25                 | ARKM 30>25 |
|                 | 315   | 38   | 30   | 30x5,0                         | M52x2,0 | 57   | 65   | 60     | 33,3x2,4 | 0,285             | 0,601     | ARK 38>10                 | ARKM 38>10 |
|                 |       |      | 10   | 10x2,0                         |         |      |      |        |          | 0,290             | 0,606     | ARK 38>12                 | ARKM 38>12 |
|                 | 315   | 38   | 12   | 12x2,5                         | M52x2,0 | 57   | 65   | 60     | 33,3x2,4 | 0,290             | 0,606     | ARK 38>16                 | ARKM 38>16 |
|                 |       |      | 16   | 16x3,0                         |         |      |      |        |          | 0,297             | 0,613     | ARK 38>20                 | ARKM 38>20 |
|                 | 315   | 38   | 20   | 20x3,0                         | M52x2,0 | 57   | 65   | 60     | 33,3x2,4 | 0,294             | 0,610     | ARK 38>25                 | ARKM 38>25 |
|                 |       |      | 25   | 25x4,0                         |         |      |      |        |          | 0,328             | 0,644     | ARK 38>30                 | ARKM 38>30 |
|                 | 315   | 50   | 30   | 30x5,0                         | M68x2,0 | 60,5 | 68,5 | 80     | 46,0x3,0 | 0,564             | 1,318     | ARK 50>10                 | ARKM 50>10 |
|                 |       |      | 10   | 10x2,0                         |         |      |      |        |          | 0,571             | 1,325     | ARK 50>12                 | ARKM 50>12 |
|                 | 315   | 50   | 12   | 12x2,5                         | M68x2,0 | 60,5 | 68,5 | 80     | 46,0x3,0 | 0,580             | 1,334     | ARK 50>16                 | ARKM 50>16 |
|                 |       |      | 16   | 16x3,0                         |         |      |      |        |          | 0,580             | 1,334     | ARK 50>20                 | ARKM 50>20 |
|                 | 315   | 50   | 20   | 20x3,0                         | M68x2,0 | 60,5 | 68,5 | 80     | 46,0x3,0 | 0,573             | 1,327     | ARK 50>25                 | ARKM 50>25 |
|                 |       |      | 25   | 25x4,0                         |         |      |      |        |          | 0,576             | 1,330     | ARK 50>30                 | ARKM 50>30 |
|                 | 315   | 50   | 30   | 30x5,0                         | M68x2,0 | 60,5 | 68,5 | 80     | 46,0x3,0 | 0,548             | 1,302     | ARK 50>38                 | ARKM 50>38 |
|                 |       |      | 38   | 38x6,0                         |         |      |      |        |          |                   |           |                           |            |

Die Wandstärken (s) der Schweißreduzierkegel entsprechen der Druckstufe PN 315 und sind somit zu allen Rohrdimensionen kompatibel.  
Für die Verwendung in der Druckstufe PN 420 müssen Druckabschläge berücksichtigt werden.

The wall thicknesses (s) of the welding reducing cones correspond to pressure stage PN 315 and are therefore compatible with all pipe dimensions.  
For use in pressure stage PN 420, pressure reductions must be taken into account.





- AVIT ≈ ISO 8434-1  
BAUREIHE / SERIES: S = HEAVY
- Geringer Strömungsverlust
  - Auch für Orbitalschweißverfahren lieferbar (-OF)
  - Minimal flow loss
  - Also available for orbital welding system (-OF)

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

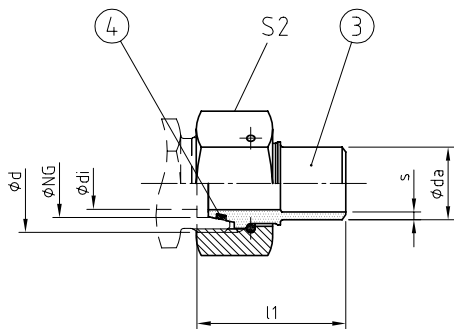
| Werkstoff, Oberfläche / Material, Surface                 | TYP daxs - **  |
|-----------------------------------------------------------|----------------|
| Stahl, Mutter verzinkt / Steel, nut galvanised; NBR       | ASKB 25x3 - 01 |
| Stahl, Mutter verzinkt / Steel, nut galvanised; FKM       | ASKB 25x3 - 02 |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; NBR | ASKB 25x3 - 04 |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; FKM | ASKB 25x3 - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR        | ASKB 25x3 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM        | ASKB 25x3 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                             |
|------|-------------------------------------------------------|
| 2    | Überwurfmutter / Union nut                            |
| 3    | 24° Schweißkegel Rohrbogen / 24° elbow weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing                      |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |     |       |       |    |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|---------|-----|-------|-------|----|----|----------|-------------------|---------------------------|
|                 | [bar] | [mm] | daxs                           | d       | h   | l     | l1    | r  | S2 | Pos. 4   | [kg]              | TYP daxs (Pos. 2-4)       |
| S               | 350   | 10   | 10x1,5                         | M18x1,5 | 57  | 68    | 70    | 20 | 22 | 7,5x1,5  | 0,068             | ASKB 10x1,5               |
|                 | 420   |      | 10x2,0                         |         |     |       |       |    |    |          | 0,076             | ASKB 10x2                 |
|                 | 315   | 12   | 12x2,0                         | M20x1,5 | 60  | 68    | 70    | 30 | 24 | 9,0x1,5  | 0,093             | ASKB 12x2                 |
|                 | 250   |      | 16x2,0                         |         |     |       |       |    |    |          | 0,147             | ASKB 16x2                 |
|                 | 315   | 16   | 16x2,5                         | M24x1,5 | 61  | 65,5  | 68    | 32 | 30 | 12,0x2,0 | 0,163             | ASKB 16x2,5               |
|                 | 420   |      | 16x3,0                         |         |     |       |       |    |    |          | 0,177             | ASKB 16x3                 |
|                 | 160   | 20   | 20x2,0                         |         |     |       |       |    |    |          | 0,275             | ASKB 20x2                 |
|                 | 250   |      | 20x2,5                         |         |     |       |       |    |    |          | 0,280             | ASKB 20x2,5               |
|                 | 315   |      | 20x3,0                         | M30x2,0 | 87  | 89    | 92,5  | 45 | 36 | 16,3x2,4 | 0,304             | ASKB 20x3                 |
|                 | 420   |      | 20x4,0                         |         |     |       |       |    |    |          | 0,350             | ASKB 20x4                 |
|                 | 250   | 25   | 25x3,0                         |         |     |       |       |    |    |          | 0,485             | ASKB 25x3                 |
|                 | 315   |      | 25x4,0                         | M36x2,0 | 102 | 94    | 98    | 57 | 46 | 20,3x2,4 | 0,560             | ASKB 25x4                 |
|                 | 420   |      | 25x5,0                         |         |     |       |       |    |    |          | 0,625             | ASKB 25x5                 |
|                 | 250   | 30   | 30x4,0                         |         |     |       |       |    |    |          | 0,790             | ASKB 30x4                 |
|                 | 315   |      | 30x5,0                         | M42x2,0 | 132 | 120   | 125,5 | 72 | 50 | 25,3x2,4 | 0,900             | ASKB 30x5                 |
|                 | 420   |      | 30x6,0                         |         |     |       |       |    |    |          | 0,999             | ASKB 30x6                 |
|                 | 160   | 38   | 38x4,0                         |         |     |       |       |    |    |          | 1,176             | ASKB 38x4                 |
|                 | 250   |      | 38x5,0                         | M52x2,0 | 172 | 146,5 | 154,5 | 90 | 60 | 33,3x2,4 | 1,356             | ASKB 38x5                 |
|                 | 315   |      | 38x6,0                         |         |     |       |       |    |    |          | 1,516             | ASKB 38x6                 |



AVIT ≈ ISO 8434-1 – WDNP  
BAUREIHE / SERIES: S = HEAVY

- Mit montierter Drahtstiftnutter
- Größere zöllige Rohrabmessungen als NG
- With assembled wire nail nut
- Bigger pipe dimensions than the nominal size (NG)

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - ** |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AKS 25 - daxis - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | AKS 25 - daxis - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | AKS 25 - daxis - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | AKS 25 - daxis - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AKS 25 - daxis - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AKS 25 - daxis - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

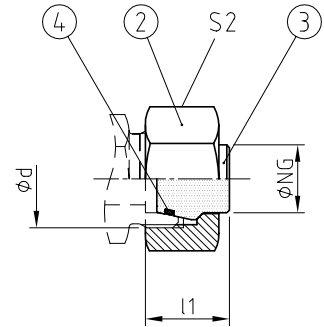
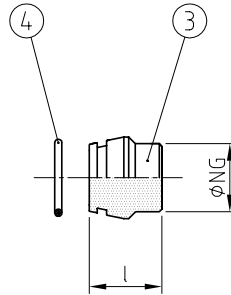
| Pos. | Bezeichnung / Description                                                 |
|------|---------------------------------------------------------------------------|
| 3    | 24° Schweißkegel mit Drahtstiftnutter / Weld-on nipple with wire nail nut |
| 4    | O-Ring Dichtung / O-ring sealing                                          |

| REIHE<br>SERIES | PN <sup>1</sup> | NG   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|------|--------|--------------------------------|---------|----|------|----|----------|-------------------|---------------------------|
|                 | [bar]           | [mm] | [inch] | daxs                           | d       | di | l1   | S2 | Pos. 4   | [kg]              | TYP NG daxs               |
| S               | 250             | 12   | ¼"     | 13,5x1,8                       | M20x1,5 | 8  | 34,5 | 24 | 9,0x1,5  | 0,060             | AKS 12<13,5x1,8           |
|                 | 315             |      |        | 13,5x2,6                       |         |    |      |    |          | 0,063             | AKS 12<13,5x2,6           |
|                 | 160             |      |        | 13,7x2,2                       |         |    |      |    |          | 0,061             | AKS 12<13,7x2,2           |
|                 | 250             |      |        | 13,7x3,0                       |         |    |      |    |          | 0,064             | AKS 12<13,7x3             |
|                 | 160             | 16   | ⅜"     | 17,2x2,0                       | M24x1,5 | 11 | 42,5 | 30 | 12,0x2,0 | 0,106             | AKS 16<17,2x2             |
|                 | 250             |      |        | 17,2x2,3                       |         |    |      |    |          | 0,107             | AKS 16<17,2x2,3           |
|                 | 315             |      |        | 17,2x2,6                       |         |    |      |    |          | 0,108             | AKS 16<17,2x2,6           |
|                 | 420             |      |        | 17,2x3,2                       |         |    |      |    |          | 0,110             | AKS 16<17,2x3,2           |
|                 | 160             | 20   | ½"     | 21,3x2,0                       | M30x2,0 | 14 | 47   | 36 | 16,3x2,4 | 0,163             | AKS 20<21,3x2             |
|                 | 250             |      |        | 21,3x2,6                       |         |    |      |    |          | 0,168             | AKS 20<21,3x2,6           |
|                 | 250             |      |        | 21,3x2,9                       |         |    |      |    |          | 0,170             | AKS 20<21,3x2,9           |
|                 | 315             |      |        | 21,3x3,7                       |         |    |      |    |          | 0,175             | AKS 20<21,3x3,7           |
|                 | 160             | 25   | ¾"     | 26,7x2,9                       | M36x2,0 | 18 | 54,5 | 46 | 20,3x2,4 | 0,302             | AKS 25<26,7x2,9           |
|                 | 315             |      |        | 26,7x3,9                       |         |    |      |    |          | 0,305             | AKS 25<26,7x3,9           |
|                 | 160             |      |        | 26,9x2,3                       |         |    |      |    |          | 0,286             | AKS 25<26,9x2,3           |
|                 | 250             |      |        | 26,9x3,2                       |         |    |      |    |          | 0,297             | AKS 25<26,9x3,2           |
|                 | 160             | 30   | 1"     | 33,4x2,6                       | M42x2,0 | 23 | 58   | 50 | 25,3x2,4 | 0,334             | AKS 30<33,4x2,6           |
|                 | 250             |      |        | 33,4x4,0                       |         |    |      |    |          | 0,385             | AKS 30<33,4x4             |
|                 | 160             |      |        | 33,7x2,6                       |         |    |      |    |          | 0,338             | AKS 30<33,7x2,6           |
|                 | 250             |      |        | 33,7x4,0                       |         |    |      |    |          | 0,377             | AKS 30<33,7x4             |
|                 | 160             | 38   | 1¼"    | 42,2x4,8                       | M52x2,0 | 30 | 65   | 60 | 33,3x2,4 | 0,533             | AKS 38<42,2x4,8           |
|                 | 250             |      |        | 42,2x5,0                       |         |    |      |    |          | 0,537             | AKS 38<42,2x5             |
|                 | 315             |      |        | 42,2x6,3                       |         |    |      |    |          | 0,571             | AKS 38<42,2x6,3           |
|                 | 160             |      |        | 42,4x3,6                       |         |    |      |    |          | 0,505             | AKS 38<42,4x3,6           |
|                 | 160             | 50   | 2"     | 60,3x2,9                       | M68x2,0 | 40 | 88   | 80 | 46,0x3,0 | 1,379             | AKS 50<60,3x2,9           |

1 Druckeinschränkung wegen Drahtstiftnutter! | Pressure restrictions due to wire nail nut!

VK [Pos. 3+4]

VKM [Pos. 2-4]

**AVIT, ISO 8434-1 – PL**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Auch mit Messanschluss G 1/4" lieferbar (Typ MAK siehe Seite 2.72).

Also available with diagnostic port thread G 1/4" (Type MAK see on page 2.72).

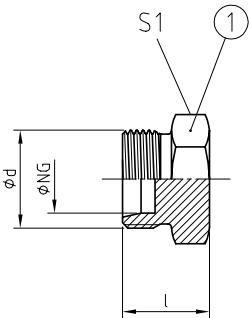
**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - **    |
|----------------------------------------------------|----------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | VK/VKM 25 - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | VK/VKM 25 - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | VK/VKM 25 - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | VK/VKM 25 - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | VK/VKM 25 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | VK/VKM 25 - 42 |

**BESTELLBEISPIEL**  
**ORDER EXAMPLE****STÜCKLISTE**  
**PARTS LIST**

| Pos. | Bezeichnung / Description           |
|------|-------------------------------------|
| 2    | Überwurfmutter / Union nut          |
| 3    | 24° Verschlusskegel / 24° plug cone |
| 4    | O-Ring Dichtung / O-ring sealing    |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |    | O-RING   | GEWICHT<br>WEIGHT |          | BESTELLCODE<br>ORDER CODE |          |
|-----------------|-------|------|--------------------------------|----|------|----|----------|-------------------|----------|---------------------------|----------|
|                 | [bar] | [mm] | d                              | l  | l1   | S2 | Pos. 4   | VK [kg]           | VKM [kg] | Pos. 3+4                  | Pos. 2-4 |
| L               | 500   | 10   | M16x1,5                        | 18 | 20   | 19 | 7,5x1,5  | 0,014             | 0,032    | VK 10 L                   | VKM 10 L |
|                 | 250   | 12   | M18x1,5                        | 19 | 21   | 22 | 9,0x1,5  | 0,021             | 0,048    | VK 12 L                   | VKM 12 L |
|                 | 420   | 15   | M22x1,5                        | 20 | 21   | 27 | 12,0x2,0 | 0,032             | 0,072    | VK 15                     | VKM 15   |
|                 | 420   | 18   | M26x1,5                        | 20 | 22   | 32 | 15,0x2,0 | 0,046             | 0,112    | VK 18                     | VKM 18   |
|                 | 250   | 22   | M30x2,0                        | 20 | 22   | 36 | 20,0x2,0 | 0,064             | 0,144    | VK 22                     | VKM 22   |
|                 | 250   | 28   | M36x2,0                        | 21 | 22,5 | 41 | 26,0x2,0 | 0,113             | 0,208    | VK 28                     | VKM 28   |
|                 | 250   | 35   | M45x2,0                        | 24 | 26,5 | 50 | 32,0x2,5 | 0,221             | 0,359    | VK 35                     | VKM 35   |
|                 | 250   | 42   | M52x2,0                        | 24 | 27   | 60 | 38,0x2,5 | 0,321             | 0,540    | VK 42                     | VKM 42   |
| S               | 800   | 6    | M14x1,5                        | 15 | 17   | 17 | 5,0x1,5  | 0,004             | 0,021    | VK 06                     | VKM 06   |
|                 | 800   | 8    | M16x1,5                        | 15 | 17   | 19 | 6,0x1,5  | 0,007             | 0,026    | VK 08                     | VKM 08   |
|                 | 800   | 10   | M18x1,5                        | 18 | 20   | 22 | 7,5x1,5  | 0,014             | 0,042    | VK 10                     | VKM 10   |
|                 | 630   | 12   | M20x1,5                        | 19 | 21   | 24 | 9,0x1,5  | 0,020             | 0,053    | VK 12                     | VKM 12   |
|                 | 630   | 16   | M24x1,5                        | 20 | 23   | 30 | 12,0x2,0 | 0,036             | 0,101    | VK 16                     | VKM 16   |
|                 | 420   | 20   | M30x2,0                        | 23 | 26,5 | 36 | 16,3x2,4 | 0,064             | 0,164    | VK 20                     | VKM 20   |
|                 | 420   | 25   | M36x2,0                        | 26 | 30   | 46 | 20,3x2,4 | 0,102             | 0,299    | VK 25                     | VKM 25   |
|                 | 420   | 30   | M42x2,0                        | 26 | 31,5 | 50 | 25,3x2,4 | 0,156             | 0,371    | VK 30                     | VKM 30   |
|                 | 420   | 38   | M52x2,0                        | 27 | 35   | 60 | 33,3x2,4 | 0,262             | 0,578    | VK 38                     | VKM 38   |
|                 | 420   | 50   | M68x2,0                        | 34 | 42   | 80 | 46,0x3,0 | 0,492             | 1,246    | VK 50                     | VKM 50   |



AVIT ≈ ISO 8434-1  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Drucksicheres Verschließen von 24° Dichtkegelanschlüssen nach ISO 8434-1.

Pressure-proof closing of 24° seal cones acc. ISO 8434-1.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface     | TYP NG - ** |
|-----------------------------------------------|-------------|
| Stahl, verzinkt / Steel, galvanised           | VSK 25 - 01 |
| Stahl, phosphatiert / Steel, phosphatised     | VSK 25 - 04 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti | VSK 25 - 41 |

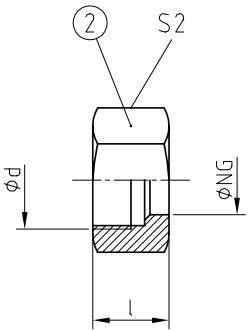
BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                      |
|------|------------------------------------------------|
| 1    | 24° Dichtkegelverschluss / 24° seal conus plug |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|----|----|-------------------|---------------------------|
|                 | [bar] | [mm] | d                              | l  | S1 | [kg]              | TYP NG                    |
| L               | 315   | 10   | M16x1,5                        | 18 | 17 | 0,024             | VSK 10 L                  |
|                 | 315   | 12   | M18x1,5                        | 19 | 19 | 0,030             | VSK 12 L                  |
|                 | 315   | 15   | M22x1,5                        | 20 | 24 | 0,050             | VSK 15                    |
|                 | 315   | 18   | M26x1,5                        | 22 | 27 | 0,070             | VSK 18                    |
|                 | 160   | 22   | M30x2,0                        | 25 | 32 | 0,110             | VSK 22                    |
|                 | 160   | 28   | M36x2,0                        | 26 | 41 | 0,190             | VSK 28                    |
|                 | 160   | 35   | M45x2,0                        | 30 | 46 | 0,272             | VSK 35                    |
|                 | 160   | 42   | M52x2,0                        | 30 | 55 | 0,358             | VSK 42                    |
| S               | 630   | 6    | M14x1,5                        | 18 | 14 | 0,018             | VSK 06                    |
|                 | 630   | 8    | M16x1,5                        | 20 | 19 | 0,028             | VSK 08                    |
|                 | 630   | 10   | M18x1,5                        | 20 | 19 | 0,035             | VSK 10                    |
|                 | 630   | 12   | M20x1,5                        | 22 | 22 | 0,051             | VSK 12                    |
|                 | 420   | 16   | M24x1,5                        | 24 | 27 | 0,080             | VSK 16                    |
|                 | 420   | 20   | M30x2,0                        | 28 | 32 | 0,135             | VSK 20                    |
|                 | 420   | 25   | M36x2,0                        | 32 | 41 | 0,235             | VSK 25                    |
|                 | 420   | 30   | M42x2,0                        | 36 | 46 | 0,385             | VSK 30                    |
|                 | 420   | 38   | M52x2,0                        | 39 | 55 | 0,530             | VSK 38                    |
|                 | 420   | 50   | M68x2,0                        | 46 | 70 | 1,061             | VSK 50                    |





ROHRVERSCHRAUBUNGEN • EINZELTEILE  
TUBE CONNECTIONS • SINGLE COMPONENTS

2

**AVIT, ISO 8434-1 – N**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Beste Montageergebnisse durch **optionale** Versilberung bei Edelstahl-Überwurfmutter. Kein Fetten, kein „Fressen“ auch bei Wiederholmontagen.

*Best assembly results by **optional** silver-plated stainless steel union nuts. No greasing, no cold welding in the thread even after a number of repeat assemblies.*

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION                            |  | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST       |
|--------------------------------------------------------------------------|--|----------------------------------|--------------------------------|
| Werkstoff, Oberfläche / Material, Surface                                |  | TYP NG - **                      | Pos. Bezeichnung / Description |
| Stahl, verzinkt / Steel, galvanised                                      |  | M 25 - 01                        | 2 Überwurfmutter / Union nut   |
| Stahl, phosphatiert / Steel, phosphatised                                |  | M 25 - 04                        |                                |
| Edelstahl 1.4571, versilbert / Stainless steel AISI 316Ti, silver plated |  | M 25 - 41                        |                                |
| Edelstahl 1.4571, blank / Stainless steel AISI 316Ti, met. bright        |  | M 25 - 61                        |                                |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|------|----|-------------------|---------------------------|
|                 | [bar] | [mm] | d                              | l    | S2 | [kg]              | Pos. 2                    |
| L               | 250   | 10   | M16x1,5                        | 15,5 | 19 | 0,017             | M 10 L                    |
|                 | 250   | 12   | M18x1,5                        | 15,5 | 22 | 0,025             | M 12 L                    |
|                 | 250   | 15   | M22x1,5                        | 17,5 | 27 | 0,040             | M 15                      |
|                 | 160   | 18   | M26x1,5                        | 18   | 32 | 0,060             | M 18                      |
|                 | 160   | 22   | M30x2,0                        | 20,5 | 36 | 0,080             | M 22                      |
|                 | 100   | 28   | M36x2,0                        | 21   | 41 | 0,095             | M 28                      |
|                 | 100   | 35   | M45x2,0                        | 24   | 50 | 0,138             | M 35                      |
|                 | 100   | 42   | M52x2,0                        | 24   | 60 | 0,219             | M 42                      |
| S               | 800   | 6    | M14x1,5                        | 17   | 17 | 0,017             | M 06                      |
|                 | 800   | 8    | M16x1,5                        | 18   | 19 | 0,019             | M 08                      |
|                 | 800   | 10   | M18x1,5                        | 18   | 22 | 0,028             | M 10                      |
|                 | 630   | 12   | M20x1,5                        | 18,5 | 24 | 0,033             | M 12                      |
|                 | 420   | 16   | M24x1,5                        | 21   | 30 | 0,065             | M 16                      |
|                 | 420   | 20   | M30x2,0                        | 24   | 36 | 0,100             | M 20                      |
|                 | 420   | 25   | M36x2,0                        | 27   | 46 | 0,197             | M 25                      |
|                 | 420   | 30   | M42x2,0                        | 29   | 50 | 0,215             | M 30                      |
|                 | 420   | 38   | M52x2,0                        | 32,5 | 60 | 0,316             | M 38                      |
|                 | 420   | 50   | M68x2,0                        | 41   | 80 | 0,754             | M 50                      |

**STANDARD LIEFERUMFANG**

Alle Oberflächen sind bei AVIT Edelstahl Rohrverschraubungen metallisch blank (Kennzeichen 61). Das Gewinde muss bei der Montage mit einer weißen Fettpaste gefettet werden.

Komplette Rohrverschraubungen sind bereits durch uns vorgefettet.

Versilberte Überwurfmutter sind optional erhältlich (Kennzeichen 41).

**SCOPE OF DELIVERY**

All surfaces of AVIT stainless steel pipe fittings are metallically bright (code 61). The thread must be greased with a white grease paste during assembly.

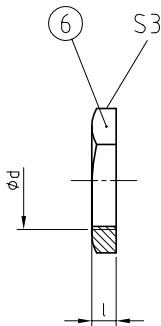
For complete tube fittings, we have already pre-greased them.

Silver-plated union nuts are optionally available (code 41).

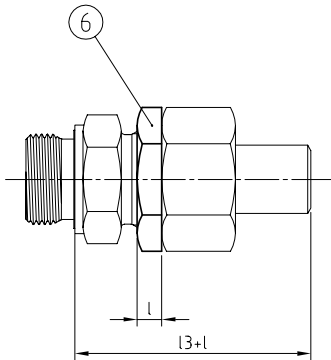


AVIT, ISO 8434-1 – LN  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

KOM [Pos. 6]



Beispiel: GUV-KO



| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION                     | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST       |
|-------------------------------------------------------------------|----------------------------------|--------------------------------|
| Werkstoff, Oberfläche / Material, Surface                         | TYP NG - **                      | Pos. Bezeichnung / Description |
| Stahl, verzinkt / Steel, galvanised                               | KOM 25 - 01                      | 6 Kontermutter / Locknut       |
| Edelstahl 1.4571, blank / Stainless steel AISI 316Ti, met. bright | KOM 25 - 41                      |                                |

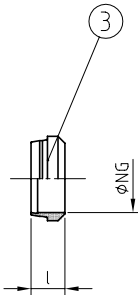
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|----|----|-------------------|---------------------------|
|                 | [bar] | [mm] | d                              | l  | S3 | [kg]              | TYP NG (Pos. 6)           |
| L               | 250   | 15   | M22x1,5                        | 7  | 30 | 0,015             | KOM 15                    |
|                 | 160   | 18   | M26x1,5                        | 8  | 36 | 0,032             | KOM 18                    |
|                 | 160   | 22   | M30x2,0                        | 8  | 41 | 0,048             | KOM 20                    |
|                 | 100   | 28   | M36x2,0                        | 9  | 46 | 0,059             | KOM 25                    |
|                 | 100   | 35   | M45x2,0                        | 9  | 55 | 0,096             | KOM 35                    |
|                 | 100   | 42   | M52x2,0                        | 10 | 65 | 0,119             | KOM 38                    |
| S               | 800   | 10   | M18x1,5                        | 6  | 24 | 0,012             | KOM 10                    |
|                 | 630   | 12   | M20x1,5                        | 6  | 27 | 0,015             | KOM 12                    |
|                 | 420   | 16   | M24x1,5                        | 7  | 32 | 0,024             | KOM 16                    |
|                 | 420   | 20   | M30x2,0                        | 8  | 41 | 0,048             | KOM 20                    |
|                 | 420   | 25   | M36x2,0                        | 9  | 46 | 0,059             | KOM 25                    |
|                 | 420   | 30   | M42x2,0                        | 9  | 50 | 0,096             | KOM 30                    |
|                 | 420   | 38   | M52x2,0                        | 10 | 65 | 0,119             | KOM 38                    |
|                 | 420   | 50   | M68x2,0                        | 12 | 80 | 0,172             | KOM 50                    |

Die KOM wird bei Schottverschraubungen Typ GSV und WSV eingesetzt. Bei Leitungen mit extremen Vibrationen sind unsere verlängerten Verschraubungen (GUV-KO, GAV-KO, usw.) mit Kontermutter eine besonders robuste Lösung, welche ein selbstständiges Lösen der Verbindung sicher verhindert. Die Stützenmehrlänge (l) ist jeweils zu berücksichtigen.

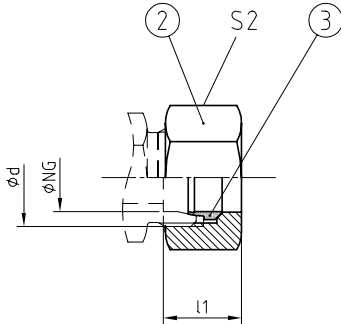
The KOM is used in the bulkhead couplings GSV and WSV. On pipelines with strong vibrations, our extended couplings (GUV-KO, GAV-KO, etc.) with locknut are a particular solution which prevents a self loosening of the connection. The extra length (l) is to be considered.



SR [Pos. 3]



SRM [Pos. 2+3]



2

ROHRVERSCHRAUBUNGEN • EINZELTEILE  
TUBE CONNECTIONS • SINGLE COMPONENTS

**ISO 8434-1 – CR (DIN 3861)**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Standard Verbindungselement für Rohre nach EN 10305-4 (DIN 2391).

Standard connection element for tubes acc. EN 10305-4 (DIN 2391).

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION        | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST       |
|------------------------------------------------------|----------------------------------|--------------------------------|
| Werkstoff, Oberfläche / Material, Surface            | TYP NG - **                      | Pos. Bezeichnung / Description |
| Stahl, Mutter verzinkt / Steel, nut galvanised       | SR/SRM 25 - 01                   | 2 Überwurfmutter / Union nut   |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised | SR/SRM 25 - 04                   | 3 Schneidring / Cutting ring   |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti        | SR/SRM 25 - 41                   |                                |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |                 |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|------|-----------------|----|-------------------|---------------------------|-------------------|---------------------------|
|                 | [bar] | [mm] | d                              | l    | l1 <sup>1</sup> | S2 | [kg]              | TYP NG (Pos. 3)           | [kg]              | TYP NG (Pos.2+3)          |
| L               | 250   | 10   | M16x1,5                        | 10   | 15              | 19 | 0,0033            | SR 10                     | 0,0207            | SRM 10 L                  |
|                 | 250   | 12   | M18x1,5                        | 10   | 15              | 22 | 0,0043            | SR 12                     | 0,0291            | SRM 12 L                  |
|                 | 250   | 15   | M22x1,5                        | 10   | 15              | 27 | 0,0051            | SR 15                     | 0,0458            | SRM 15                    |
|                 | 160   | 18   | M26x1,5                        | 10   | 16              | 32 | 0,0071            | SR 18                     | 0,0692            | SRM 18                    |
|                 | 160   | 22   | M30x2,0                        | 11   | 16              | 36 | 0,0098            | SR 22                     | 0,0899            | SRM 22                    |
|                 | 100   | 28   | M36x2,0                        | 11   | 16              | 41 | 0,0121            | SR 28                     | 0,1038            | SRM 28                    |
|                 | 100   | 35   | M45x2,0                        | 13,5 | 22              | 50 | 0,0225            | SR 35                     | 0,1610            | SRM 35                    |
|                 | 100   | 42   | M52x2,0                        | 13,5 | 23              | 60 | 0,0265            | SR 42                     | 0,2470            | SRM 42                    |
| S               | 800   | 6    | M14x1,5                        | 9,5  | 15              | 17 | 0,0014            | SR 6                      | 0,0202            | SRM 6                     |
|                 | 800   | 8    | M16x1,5                        | 9,5  | 15              | 19 | 0,0018            | SR 8                      | 0,0231            | SRM 8                     |
|                 | 800   | 10   | M18x1,5                        | 10   | 17              | 22 | 0,0033            | SR 10                     | 0,0332            | SRM 10                    |
|                 | 630   | 12   | M20x1,5                        | 10   | 17              | 24 | 0,0043            | SR 12                     | 0,0379            | SRM 12                    |
|                 | 420   | 16   | M24x1,5                        | 10,5 | 19              | 30 | 0,0068            | SR 16                     | 0,0723            | SRM 16                    |
|                 | 420   | 20   | M30x2,0                        | 11,5 | 22              | 36 | 0,0122            | SR 20                     | 0,1136            | SRM 20                    |
|                 | 420   | 25   | M36x2,0                        | 12,5 | 24              | 46 | 0,0151            | SR 25                     | 0,2125            | SRM 25                    |
|                 | 420   | 30   | M42x2,0                        | 12,5 | 27              | 50 | 0,0203            | SR 30                     | 0,2349            | SRM 30                    |
|                 | 420   | 38   | M52x2,0                        | 13,5 | 31              | 60 | 0,0251            | SR 38                     | 0,3382            | SRM 38                    |
|                 | 250   | 50   | M68x2,0                        | -    | -               | 80 | 0,0721            | KR 50                     | 0,8262            | KRM 50                    |
|                 |       |      |                                |      |                 |    |                   |                           |                   |                           |

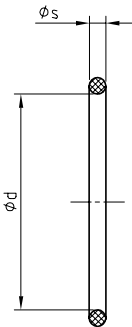
Unser Keil-Schlitzring KR 50 erweitert sinnvoll diese schweißlose Verbindung. Einsetzbar in der Druckstufe PN 250. Es muss allerdings ein besonderer Stutzen mit Mutter verwendet werden. Bitte informieren Sie sich hierzu separat.

Our self lock ring KR 50 expands this welding-free connection. It can be used in the pressure range PN 250. However, a special stud and nut must be used. Please inform yourself about this separately.

<sup>1</sup> Maß l1 nach der Montage gemessen. | Dimension l1 measured after assembly.



OR [Pos. 4]



**ISO 8434-1 – O (DIN 3861)**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Für 24° Dichtkegel (DKO) nach 8434-1.  
Standard NBR, FKM(Viton) EPDM auf Wunsch möglich.

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For 24° sealing cone (DKO) acc. 8434-1.  
Standard NBR, FKM(Viton) EPDM possible on request.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|-----------------------------------------------|----------------------------------|
| Werkstoff / Material                          | TYP NG                           |
| NBR                                           | OR 25                            |
| FKM                                           | OV 25                            |
| EPDM                                          | OE 25                            |

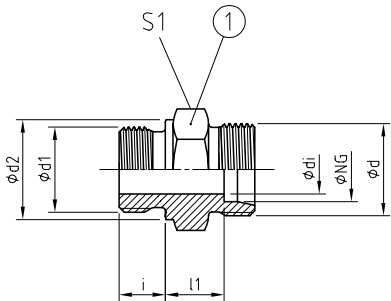
| STÜCKLISTE<br>PARTS LIST |                           |
|--------------------------|---------------------------|
| Pos.                     | Bezeichnung / Description |
| 4                        | O-Ring / O-ring           |

| REIHE<br>SERIES | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |     | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|---------------------------|
|                 | [mm] | d                              | s   | TYP NG                    |
| L               | 10   | 7,5                            | 1,5 | OR 10                     |
|                 | 12   | 9                              | 1,5 | OR 12                     |
|                 | 15   | 12                             | 2   | OR 16                     |
|                 | 18   | 15                             | 2   | OR 18                     |
|                 | 22   | 20                             | 2   | OR 22                     |
|                 | 28   | 26                             | 2   | OR 28                     |
|                 | 35   | 32                             | 2,5 | OR 35                     |
|                 | 42   | 38                             | 2,5 | OR 42                     |
| S               | 6    | 5                              | 1,5 | OR 6                      |
|                 | 8    | 6                              | 1,5 | OR 8                      |
|                 | 10   | 7,5                            | 1,5 | OR 10                     |
|                 | 12   | 9                              | 1,5 | OR 12                     |
|                 | 16   | 12                             | 2   | OR 16                     |
|                 | 20   | 16,3                           | 2,4 | OR 20                     |
|                 | 25   | 20,3                           | 2,4 | OR 25                     |
|                 | 30   | 25,3                           | 2,4 | OR 30                     |
|                 | 38   | 33,3                           | 2,4 | OR 38                     |
|                 | 50   | 46                             | 3   | OR 50                     |

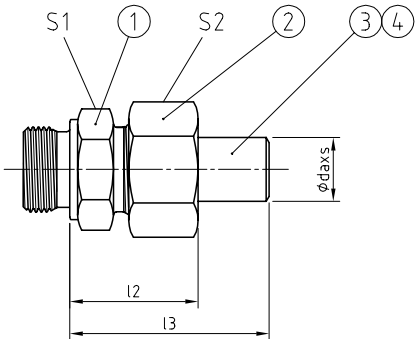




GE. [Pos. 1]



GE. [Pos. 1-4]



AVIT, ISO 8434-1 – SDS TYP B  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Einschraubzapfen mit metallischer Dichtkante und  
zylindrischem Whitworth Rohrgewinde nach  
ISO 1179-4.

Stud end with metal to metal sealing with cylindrical  
BSP thread acc. ISO 1179-4.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - ** |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GEV 25 - daxis - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GEV 25 - daxis - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GEV 25 - daxis - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GEV 25 - daxis - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GEV 25 - daxis - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GEV 25 - daxis - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

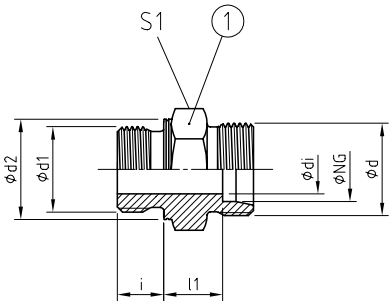
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |         |    |    |      |      |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|-----------------|-------|------|--------------------------------|----|---------|----|----|------|------|------|----|----|-------------------|---------------------------|---------------|
|                 | [bar] | [mm] | d1                             | d2 | d       | di | i  | l1   | l2   | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4      |
| L               | 420   | 15   | G 3/8 A                        | 22 | M22x1,5 | 9  | 12 | 15   | 32,5 | 51,5 | 24 |    | 0,062             | GER 15                    | GER 15 daxis  |
|                 |       |      | G 1/2 A                        | 26 |         | 11 | 14 | 14   | 31,5 | 50,5 | 27 | 27 | 0,074             | GEV 15                    | GEV 15 daxis  |
|                 |       |      | G 3/4 A                        | 32 |         | 11 | 16 | 17   | 34,5 | 53,5 | 32 |    | 0,140             | GEG 15                    | GEG 15 daxis  |
|                 | 420   | 18   | G 3/8 A                        | 22 | M26x1,5 | 11 | 12 | 15,5 | 34,5 | 54,5 | 27 |    | 0,075             | GER 18                    | GER 18 daxis  |
|                 |       |      | G 1/2 A                        | 26 |         | 14 | 14 | 14,5 | 33,5 | 53,5 | 27 | 32 | 0,076             | GEV 18                    | GEV 18 daxis  |
|                 |       |      | G 3/4 A                        | 32 |         | 15 | 16 | 16,5 | 35,5 | 55,5 | 32 |    | 0,128             | GEG 18                    | GEG 18 daxis  |
|                 | 250   | 22   | G 1/2 A                        | 26 | M30x2,0 | 14 | 14 | 17,5 | 36   | 57   | 32 |    | 0,107             | GER 22                    | GER 22 daxis  |
|                 |       |      | G 3/4 A                        | 32 |         | 18 | 16 | 16,5 | 35   | 56   | 32 | 36 | 0,111             | GEV 22                    | GEV 22 daxis  |
|                 |       |      | G 1 A                          | 39 |         | 19 | 18 | 18,5 | 37   | 58   | 41 |    | 0,205             | GEG 22                    | GEG 22 daxis  |
|                 | 250   | 28   | G 3/4 A                        | 32 | M36x2,0 | 18 | 16 | 18,5 | 38   | 61,5 | 41 |    | 0,194             | GER 28                    | GER 28 daxis  |
|                 |       |      | G 1 A                          | 39 |         | 23 | 18 | 17,5 | 37   | 60,5 | 41 | 41 | 0,177             | GEV 28                    | GEV 28 daxis  |
|                 |       |      | G 1 1/4 A                      | 49 |         | 24 | 20 | 20,5 | 40   | 63,5 | 50 |    | 0,351             | GEG 28                    | GEG 28 daxis  |
|                 | 250   | 35   | G 1 A                          | 39 | M45x2,0 | 23 | 18 | 19,5 | 44   | 70,5 | 46 |    | 0,271             | GER 35                    | GER 35 daxis  |
|                 |       |      | G 1 1/4 A                      | 49 |         | 30 | 20 | 17,5 | 42   | 68,5 | 50 | 50 | 0,291             | GEV 35                    | GEV 35 daxis  |
|                 |       |      | G 1 1/2 A                      | 55 |         | 30 | 22 | 21,5 | 46   | 72,5 | 55 |    | 0,475             | GEG 35                    | GEG 35 daxis  |
|                 | 250   | 42   | G 1 A                          | 39 | M52x2,0 | 23 | 18 | 21   | 45,5 | 72   | 55 |    | 0,386             | GER 421                   | GER 421 daxis |
|                 |       |      | G 1 1/4 A                      | 49 |         | 30 | 20 | 19   | 45,5 | 72   | 55 | 60 | 0,406             | GER 42                    | GER 42 daxis  |
|                 |       |      | G 1 1/2 A                      | 55 |         | 36 | 22 | 19   | 43,5 | 70   | 55 |    | 0,372             | GEV 42                    | GEV 42 daxis  |

Fortsetzung nächste Seite | Continued on next page

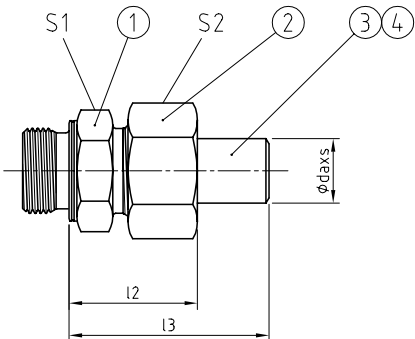
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |         |    |    |      |      |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-----------------|-------|------|--------------------------------|----|---------|----|----|------|------|------|----|----|-------------------|---------------------------|--------------|
|                 | [bar] | [mm] | d1                             | d2 | d       | di | i  | l1   | l2   | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4     |
| S               | 800   | 10   | G 1/4 A                        | 18 | M18x1,5 | 5  | 12 | 15   | 32,5 | 48,5 | 19 | 22 | 0,046             | GER 10                    | GER 10 daxx  |
|                 |       |      | G 3/8 A                        | 22 |         | 7  | 12 | 15,5 | 32,5 | 49   | 22 |    | 0,056             | GEV 10                    | GEV 10 daxx  |
|                 |       |      | G 1/2 A                        | 26 |         | 7  | 12 | 17,5 | 35   | 49,5 | 27 |    | 0,089             | GEG 10                    | GEG 10 daxx  |
|                 | 630   | 12   | G 1/4 A                        | 18 | M20x1,5 | 5  | 12 | 15   | 32,5 | 49   | 22 | 24 | 0,057             | GER 12                    | GER 12 daxx  |
|                 |       |      | G 3/8 A                        | 22 |         | 8  | 12 | 17   | 35   | 51,5 | 22 |    | 0,064             | GEV 12                    | GEV 12 daxx  |
|                 |       |      | G 1/2 A                        | 26 |         | 8  | 14 | 17,5 | 35,5 | 51,5 | 27 |    | 0,090             | GEG 12                    | GEG 12 daxx  |
|                 | 630   | 16   | G 1/4 A                        | 18 | M24x1,5 | 5  | 12 | 17,5 | 38   | 59,5 | 27 | 30 | 0,082             | GER 161                   | GER 161 daxx |
|                 |       |      | G 3/8 A                        | 22 |         | 8  | 12 | 18   | 38,5 | 60,5 | 27 |    | 0,088             | GER 16                    | GER 16 daxx  |
|                 |       |      | G 1/2 A                        | 26 |         | 12 | 14 | 18,5 | 39   | 60,5 | 27 |    | 0,097             | GEV 16                    | GEV 16 daxx  |
|                 |       |      | G 3/4 A                        | 32 |         | 12 | 16 | 20,5 | 41   | 62,5 | 32 |    | 0,151             | GEG 16                    | GEG 16 daxx  |
|                 |       |      | G 1 A                          | 39 |         | 12 | 18 | 22,5 | 43   | 64,5 | 41 |    | 0,257             | GEG 161                   | GEG 161 daxx |
|                 | 420   | 20   | G 3/8 A                        | 22 | M30x2,0 | 8  | 12 | 20   | 44   | 66,5 | 32 | 36 | 0,138             | GER 201                   | GER 201 daxx |
|                 |       |      | G 1/2 A                        | 26 |         | 12 | 14 | 20,5 | 44,5 | 67   | 32 |    | 0,150             | GER 20                    | GER 20 daxx  |
|                 |       |      | G 3/4 A                        | 32 |         | 15 | 16 | 20,5 | 44,5 | 67   | 32 |    | 0,167             | GEV 20                    | GEV 20 daxx  |
|                 |       |      | G 1 A                          | 39 |         | 15 | 18 | 22,5 | 46,5 | 69   | 41 |    | 0,293             | GEG 20                    | GEG 20 daxx  |
|                 |       |      | G 1 1/4 A                      | 49 |         | 15 | 20 | 24,5 | 48,5 | 71   | 50 |    | 0,500             | GEG 201                   | GEG 201 daxx |
|                 | 420   | 25   | G 1/2 A                        | 26 | M36x2,0 | 12 | 14 | 23   | 50   | 77,5 | 41 | 46 | 0,254             | GER 251                   | GER 251 daxx |
|                 |       |      | G 3/4 A                        | 32 |         | 15 | 16 | 23   | 50   | 77,5 | 41 |    | 0,270             | GER 25                    | GER 25 daxx  |
|                 |       |      | G 1 A                          | 39 |         | 19 | 18 | 23   | 50   | 77,5 | 41 |    | 0,291             | GEV 25                    | GEV 25 daxx  |
|                 |       |      | G 1 1/4 A                      | 49 |         | 19 | 20 | 25   | 52   | 79,5 | 50 |    | 0,490             | GEG 25                    | GEG 25 daxx  |
|                 |       |      | G 1 1/2 A                      | 55 |         | 19 | 22 | 26   | 53   | 80,5 | 55 |    | 0,575             | GEG 251                   | GEG 251 daxx |
|                 | 420   | 30   | G 3/4 A                        | 32 | M42x2,0 | 15 | 16 | 24,5 | 53   | 81,5 | 46 | 50 | 0,362             | GER 301                   | GER 301 daxx |
|                 |       |      | G 1 A                          | 39 |         | 19 | 18 | 24,5 | 53   | 81,5 | 46 |    | 0,382             | GER 30                    | GER 30 daxx  |
|                 |       |      | G 1 1/4 A                      | 49 |         | 24 | 20 | 24,5 | 52   | 81,5 | 50 |    | 0,455             | GEV 30                    | GEV 30 daxx  |
|                 |       |      | G 1 1/2 A                      | 55 |         | 24 | 22 | 26,5 | 55   | 84,5 | 55 |    | 0,640             | GEG 30                    | GEG 30 daxx  |
|                 |       |      | G 2 A                          | 70 |         | 24 | 24 | 30,5 | 59   | 88,5 | 70 |    | 0,987             | GEG 301                   | GEG 301 daxx |
|                 | 420   | 38   | G 1 A                          | 39 | M52x2,0 | 19 | 18 | 26   | 58,5 | 91   | 55 | 60 | 0,581             | GER 381                   | GER 381 daxx |
|                 |       |      | G 1 1/4 A                      | 49 |         | 24 | 20 | 26   | 58,5 | 91   | 55 |    | 0,630             | GER 38                    | GER 38 daxx  |
|                 |       |      | G 1 1/2 A                      | 55 |         | 30 | 22 | 26   | 58,5 | 91   | 55 |    | 0,634             | GEV 38                    | GEV 38 daxx  |
|                 |       |      | G 1 3/4 A                      | 60 |         | 30 | 24 | 27   | 59,5 | 92,5 | 60 |    | 0,820             | GEG 38                    | GEG 38 daxx  |
|                 |       |      | G 2 A                          | 70 |         | 30 | 24 | 30   | 62,5 | 95   | 70 |    | 1,030             | GEG 381                   | GEG 381 daxx |
|                 | 420   | 50   | G 1 1/4 A                      | 49 | M68x2,0 | 24 | 20 | 32   | 71,5 | 101  | 70 | 80 | 1,115             | GER 501                   | GER 501 daxx |
|                 |       |      | G 1 1/2 A                      | 55 |         | 30 | 22 | 32   | 71,5 | 101  | 70 |    | 1,157             | GER 50                    | GER 50 daxx  |
|                 |       |      | G 2 A                          | 70 |         | 40 | 24 | 32   | 71,5 | 101  | 70 |    | 1,158             | GEV 50                    | GEV 50 daxx  |



GE.M [Pos. 1]



GE.M [Pos. 1-4]



**AVIT, ISO 8434-1 – SDS TYP B**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**  
Einschraubzapfen<sup>1</sup> mit metallischer Dichtkante und metrischem Gewinde nach ISO 9974-3.  
  
Stud end<sup>1</sup> with metal to metal sealing with metric thread acc. ISO 9974-3.

**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface          | TYP NG-daxs-**-     |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GEVM 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GEVM 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GEVM 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GEVM 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GEVM 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GEVM 25 - daxs - 42 |

**BESTELLBEISPIEL**  
**ORDER EXAMPLE**

**STÜCKLISTE**  
**PARTS LIST**

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |         |    |    |      |      |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|-----------------|-------|------|--------------------------------|----|---------|----|----|------|------|------|----|----|-------------------|---------------------------|---------------|
|                 | [bar] | [mm] | d1                             | d2 | d       | di | i  | l1   | l2   | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4      |
| L               | 420   | 15   | M16x1,5                        | 21 | M22x1,5 | 9  | 12 | 15   | 32,5 | 51,5 | 24 | 27 | 0,058             | GERM 15                   | GERM 15 daxs  |
|                 |       |      | M18x1,5                        | 23 |         | 11 | 12 | 14   | 31,5 | 50,5 | 24 |    | 0,056             | GEVM 15                   | GEVM 15 daxs  |
|                 |       |      | M22x1,5                        | 27 |         | 12 | 14 | 16   | 33,5 | 52,5 | 27 |    | 0,083             | GEGM 15                   | GEGM 15 daxs  |
|                 | 420   | 18   | M18x1,5                        | 23 | M26x1,5 | 9  | 12 | 15   | 34   | 54   | 27 | 32 | 0,077             | GERM 18                   | GERM 18 daxs  |
|                 |       |      | M22x1,5                        | 27 |         | 14 | 14 | 14,5 | 33,5 | 53,5 | 27 |    | 0,080             | GEVM 18                   | GEVM 18 daxs  |
|                 |       |      | M26x1,5                        | 31 |         | 15 | 16 | 16,5 | 35,5 | 55,5 | 32 |    | 0,122             | GEGM 18                   | GEGM 18 daxs  |
|                 | 250   | 22   | M22x1,5                        | 27 | M30x2,0 | 14 | 14 | 18,5 | 36,5 | 57,5 | 32 | 36 | 0,115             | GERM 22                   | GERM 22 daxs  |
|                 |       |      | M26x1,5                        | 31 |         | 18 | 16 | 16,5 | 35   | 55,5 | 32 |    | 0,105             | GEVM 22                   | GEVM 22 daxs  |
|                 |       |      | M33x2,0                        | 39 |         | 19 | 18 | 19,5 | 38   | 59   | 41 |    | 0,212             | GEGM 22                   | GEGM 22 daxs  |
|                 | 250   | 28   | M26x1,5                        | 31 | M36x2,0 | 18 | 16 | 19,5 | 39   | 62,5 | 41 | 41 | 0,180             | GERM 28                   | GERM 28 daxs  |
|                 |       |      | M33x2,0                        | 39 |         | 23 | 18 | 17,5 | 37   | 60,5 | 41 |    | 0,177             | GEVM 28                   | GEVM 28 daxs  |
|                 |       |      | M42x2,0                        | 49 |         | 24 | 20 | 21,5 | 41   | 64,5 | 50 |    | 0,365             | GEGM 28                   | GEGM 28 daxs  |
|                 | 250   | 35   | M33x2,0                        | 39 | M45x2,0 | 23 | 18 | 19,5 | 44   | 70,5 | 46 | 50 | 0,270             | GERM 35                   | GERM 35 daxs  |
|                 |       |      | M42x2,0                        | 49 |         | 30 | 20 | 17,5 | 42   | 68,5 | 50 |    | 0,292             | GEVM 35                   | GEVM 35 daxs  |
|                 |       |      | M48x2,0                        | 55 |         | 30 | 22 | 21,5 | 46   | 72,5 | 55 |    | 0,476             | GEGM 35                   | GEGM 35 daxs  |
|                 | 250   | 42   | M33x2,0                        | 39 | M52x2,0 | 23 | 18 | 21   | 45,5 | 72   | 55 | 60 | 0,386             | GERM 421                  | GERM 421 daxs |
|                 |       |      | M42x2,0                        | 49 |         | 30 | 20 | 21   | 45,5 | 72   | 55 |    | 0,405             | GERM 42                   | GERM 42 daxs  |
|                 |       |      | M48x2,0                        | 55 |         | 36 | 22 | 19   | 43,5 | 70   | 55 |    | 0,376             | GEVM 42                   | GEVM 42 daxs  |

Fortsetzung nächste Seite | Continued on next page

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

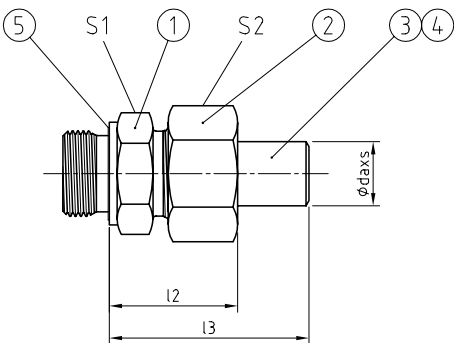
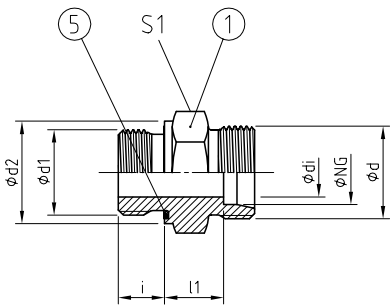
| REIHE<br>SERIES | PN  | NG | ABMESSUNGEN [mm]<br>DIMENSIONS |    |         |    |    |      |      |       |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|-----------------|-----|----|--------------------------------|----|---------|----|----|------|------|-------|----|----|-------------------|---------------------------|---------------|
|                 |     |    | d1                             | d2 | d       | di | i  | l1   | l2   | l3    | S1 | S2 |                   | Pos. 1                    | Pos. 1-4      |
| S               | 800 | 10 | M14x1,5                        | 19 | M18x1,5 | 5  | 12 | 15   | 32,5 | 48,5  | 19 |    | 0,048             | GERM 10                   | GERM 10 daxs  |
|                 |     |    | M16x1,5                        | 21 |         | 7  | 12 | 15   | 32,5 | 48,5  | 22 | 22 | 0,056             | GEVM 10                   | GEVM 10 daxs  |
|                 |     |    | M18x1,5                        | 23 |         | 7  | 12 | 16   | 33,5 | 49,5  | 24 |    | 0,059             | GEGM 10                   | GEGM 10 daxs  |
|                 | 630 | 12 | M16x1,5                        | 21 | M20x1,5 | 7  | 12 | 14,5 | 32,5 | 48,5  | 22 |    | 0,059             | GERM 12                   | GERM 12 daxs  |
|                 |     |    | M18x1,5                        | 23 |         | 8  | 12 | 17   | 35   | 51,5  | 24 | 24 | 0,075             | GEVM 12                   | GEVM 12 daxs  |
|                 |     |    | M22x1,5                        | 27 |         | 8  | 14 | 17,5 | 35,5 | 51,5  | 27 |    | 0,095             | GEGM 12                   | GEGM 12 daxs  |
|                 | 630 | 16 | M16x1,5                        | 21 | M24x1,5 | 7  | 12 | 17,5 | 38   | 59,5  | 27 |    | 0,086             | GERM 161                  | GERM 161 daxs |
|                 |     |    | M18x1,5                        | 23 |         | 8  | 12 | 18   | 38,5 | 60,5  | 27 |    | 0,105             | GERM 16                   | GERM 16 daxs  |
|                 |     |    | M22x1,5                        | 27 |         | 12 | 14 | 18,5 | 39   | 60,5  | 27 | 30 | 0,102             | GEVM 16                   | GEVM 16 daxs  |
|                 |     |    | M27x2,0                        | 32 |         | 12 | 16 | 20,5 | 41   | 62,5  | 32 |    | 0,151             | GEGM 16                   | GEGM 16 daxs  |
|                 |     |    | M33x2,0                        | 39 |         | 12 | 18 | 22,5 | 43   | 64,5  | 41 |    | 0,252             | GEGM 161                  | GEGM 161 daxs |
|                 | 420 | 20 | M18x1,5                        | 23 | M30x2,0 | 8  | 12 | 20   | 44   | 66,5  | 32 |    | 0,150             | GERM 201                  | GERM 201 daxs |
|                 |     |    | M22x1,5                        | 27 |         | 12 | 14 | 20,5 | 44,5 | 67    | 32 |    | 0,155             | GERM 20                   | GERM 20 daxs  |
|                 |     |    | M27x2,0                        | 32 |         | 15 | 16 | 20,5 | 44,5 | 67    | 32 | 36 | 0,167             | GEVM 20                   | GEVM 20 daxs  |
|                 |     |    | M33x2,0                        | 39 |         | 15 | 18 | 22,5 | 46,5 | 69    | 41 |    | 0,269             | GEGM 20                   | GEGM 20 daxs  |
|                 |     |    | M42x2,0                        | 49 |         | 15 | 20 | 24,5 | 48,5 | 71,5  | 50 |    | 0,440             | GEGM 201                  | GEGM 201 daxs |
|                 | 420 | 25 | M22x1,5                        | 27 | M36x2,0 | 12 | 14 | 23   | 50   | 77,5  | 41 |    | 0,260             | GERM 251                  | GERM 251 daxs |
|                 |     |    | M27x2,0                        | 32 |         | 15 | 16 | 23   | 50   | 77,5  | 41 |    | 0,272             | GERM 25                   | GERM 25 daxs  |
|                 |     |    | M33x2,0                        | 39 |         | 19 | 18 | 23   | 50   | 77,5  | 41 | 46 | 0,291             | GEVM 25                   | GEVM 25 daxs  |
|                 |     |    | M42x2,0                        | 49 |         | 19 | 20 | 25   | 52   | 79,5  | 50 |    | 0,500             | GEGM 25                   | GEGM 25 daxs  |
|                 |     |    | M48x2,0                        | 55 |         | 19 | 22 | 26   | 53   | 80,5  | 55 |    | 0,572             | GEGM 251                  | GEGM 251 daxs |
|                 | 420 | 30 | M27x2,0                        | 32 | M42x2,0 | 15 | 16 | 24,5 | 53   | 82,5  | 46 |    | 0,362             | GERM 301                  | GERM 301 daxs |
|                 |     |    | M33x2,0                        | 39 |         | 19 | 18 | 24,5 | 53   | 82,5  | 46 |    | 0,382             | GERM 30                   | GERM 30 daxs  |
|                 |     |    | M42x2,0                        | 49 |         | 24 | 20 | 24,5 | 52   | 81,5  | 50 | 50 | 0,455             | GEVM 30                   | GEVM 30 daxs  |
|                 |     |    | M48x2,0                        | 55 |         | 24 | 22 | 26,5 | 55   | 84,5  | 55 |    | 0,640             | GEGM 30                   | GEGM 30 daxs  |
|                 |     |    | M60x2,0                        | 70 |         | 24 | 24 | 30,5 | 59   | 88,5  | 70 |    | 0,977             | GEGM 301                  | GEGM 301 daxs |
|                 | 420 | 38 | M33x2,0                        | 39 | M52x2,0 | 19 | 18 | 26   | 58,5 | 91    | 55 |    | 0,581             | GERM 381                  | GERM 381 daxs |
|                 |     |    | M42x2,0                        | 49 |         | 24 | 20 | 26   | 58,5 | 91    | 55 |    | 0,630             | GERM 38                   | GERM 38 daxs  |
|                 |     |    | M48x2,0                        | 55 |         | 30 | 22 | 26   | 58,5 | 91    | 55 | 60 | 0,634             | GEVM 38                   | GEVM 38 daxs  |
|                 |     |    | M50x2,0                        | 60 |         | 30 | 24 | 27,5 | 60   | 92,5  | 60 |    | 0,780             | GEGM 38                   | GEGM 38 daxs  |
|                 |     |    | M60x2,0                        | 70 |         | 30 | 24 | 30   | 62,5 | 95    | 70 |    | 1,025             | GEGM 381                  | GEGM 381 daxs |
|                 | 420 | 50 | M48x2,0                        | 55 | M68x2,0 | 30 | 22 | 31   | 70,5 | 99,5  | 70 |    | 1,130             | GERM 501                  | GERM 501 daxs |
|                 |     |    | M50x2,0                        | 60 |         | 33 | 22 | 31,5 | 71   | 100   | 70 | 80 | 1,135             | GERM 50                   | GERM 50 daxs  |
|                 |     |    | M60x2,0                        | 70 |         | 40 | 24 | 32   | 71,5 | 100,5 | 70 |    | 1,160             | GEVM 50                   | GEVM 50 daxs  |





GU. [Pos. 1+5]

GU. [Pos. 1-5]



AVIT, ISO 8434-1 – SDS TYP E  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Einschraubzapfen mit U-Ring Dichtung (ED) und zylindrischem Whitworth Rohrgewinde nach ISO 1179-2.

Stud end with U-ring sealing (ED) and cylindrical BSP thread acc. ISO 1179-2.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GUV 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GUV 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GUV 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GUV 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GUV 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GUV 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | U-Ring Dichtung / U-ring sealing      |

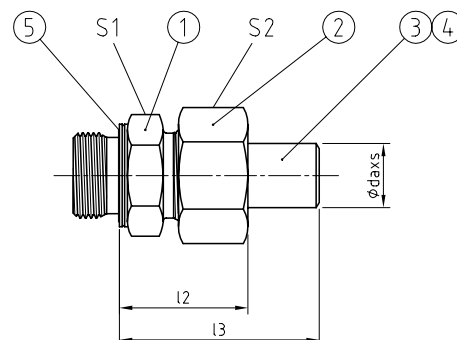
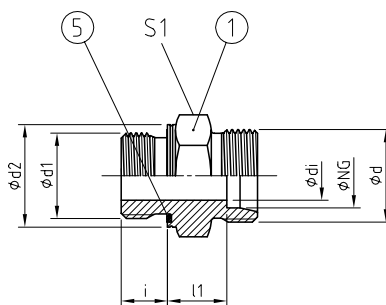
| REIHE<br>SERIES | PN<br>[bar] | NG<br>[mm] | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |    |      |      |      |    |    | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-----------------|-------------|------------|--------------------------------|------|---------|----|----|------|------|------|----|----|---------------|-------------------|---------------------------|--------------|
| L               | 420         | 15         | G 3/8 A                        | 21,9 |         | 9  | 12 | 15   | 32,5 | 51,5 | 24 |    | 14,7x18,9x1,5 | 0,061             | GUR 15                    | GUR 15 daxs  |
|                 |             |            | G 1/2 A                        | 26,9 | M22x1,5 | 11 | 14 | 14   | 31,5 | 50,5 | 27 | 27 | 18,5x23,9x1,5 | 0,075             | GUV 15                    | GUV 15 daxs  |
|                 |             |            | G 3/4 A                        | 31,9 |         | 11 | 16 | 17   | 34,5 | 53,5 | 32 |    | 23,9x29,2x1,5 | 0,128             | GUG 15                    | GUG 15 daxs  |
|                 | 420         | 18         | G 3/8 A                        | 21,9 |         | 11 | 12 | 15,5 | 34,5 | 54,5 | 27 |    | 14,7x18,9x1,5 | 0,073             | GUR 18                    | GUR 18 daxs  |
|                 |             |            | G 1/2 A                        | 26,9 | M26x1,5 | 14 | 14 | 14,5 | 33,5 | 53,5 | 27 | 32 | 18,5x23,9x1,5 | 0,075             | GUV 18                    | GUV 18 daxs  |
|                 |             |            | G 3/4 A                        | 31,9 |         | 15 | 16 | 16,5 | 35,5 | 55,5 | 32 |    | 23,9x29,2x1,5 | 0,117             | GUG 18                    | GUG 18 daxs  |
|                 | 250         | 22         | G 1/2 A                        | 26,9 |         | 14 | 14 | 17,5 | 36   | 57   | 32 |    | 18,5x23,9x1,5 | 0,112             | GUR 22                    | GUR 22 daxs  |
|                 |             |            | G 3/4 A                        | 31,9 | M30x2,0 | 18 | 16 | 16,5 | 35   | 56   | 32 | 36 | 23,9x29,2x1,5 | 0,110             | GUV 22                    | GUV 22 daxs  |
|                 |             |            | G 1 A                          | 39,9 |         | 19 | 18 | 18,5 | 37   | 58   | 41 |    | 29,7x35,7x2,0 | 0,184             | GUG 22                    | GUG 22 daxs  |
|                 | 250         | 28         | G 3/4 A                        | 31,9 |         | 18 | 16 | 18,5 | 38   | 61,5 | 41 |    | 23,9x29,2x1,5 | 0,175             | GUR 28                    | GUR 28 daxs  |
|                 |             |            | G 1 A                          | 39,9 | M36x2,0 | 23 | 18 | 17,5 | 37   | 60,5 | 41 | 41 | 29,7x35,7x2,0 | 0,174             | GUV 28                    | GUV 28 daxs  |
|                 |             |            | G 1 1/4 A                      | 49,9 |         | 24 | 20 | 20,5 | 40   | 63,5 | 50 |    | 38,8x45,8x2,0 | 0,308             | GUG 28                    | GUG 28 daxs  |
|                 | 250         | 35         | G 1 A                          | 39,9 |         | 23 | 18 | 19,5 | 44   | 70,5 | 46 |    | 29,7x35,7x2,0 | 0,269             | GUR 35                    | GUR 35 daxs  |
|                 |             |            | G 1 1/4 A                      | 49,9 | M45x2,0 | 30 | 20 | 17,5 | 42   | 68,5 | 50 | 50 | 38,8x45,8x2,0 | 0,289             | GUV 35                    | GUV 35 daxs  |
|                 |             |            | G 1 1/2 A                      | 54,9 |         | 30 | 22 | 21,5 | 46   | 72,5 | 55 |    | 44,7x50,7x2,0 | 0,400             | GUG 35                    | GUG 35 daxs  |
|                 | 250         | 42         | G 1 A                          | 39,9 |         | 23 | 18 | 21   | 45,5 | 72   | 55 |    | 29,7x35,7x2,0 | 0,384             | GUR 421                   | GUR 421 daxs |
|                 |             |            | G 1 1/4 A                      | 49,9 | M52x2,0 | 30 | 20 | 21   | 45,5 | 72   | 55 | 60 | 38,8x45,8x2,0 | 0,402             | GUR 42                    | GUR 42 daxs  |
|                 |             |            | G 1 1/2 A                      | 54,9 |         | 36 | 22 | 19   | 43,5 | 70   | 55 |    | 44,7x50,7x2,0 | 0,467             | GUG 42                    | GUG 42 daxs  |

Fortsetzung nächste Seite | Continued on next page

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |    |      |      |       |    |    | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-----------------|-------|------|--------------------------------|------|---------|----|----|------|------|-------|----|----|---------------|-------------------|---------------------------|--------------|
|                 | [bar] | [mm] | d1                             | d2   | d       | di | i  | l1   | l2   | l3    | S1 | S2 | Pos. 5        | [kg]              | Pos. 1+5                  | Pos. 1-5     |
| S               | 800   | 10   | G 1/4 A                        | 18,9 | M18x1,5 | 5  | 12 | 15   | 32,5 | 48,5  | 19 |    | 11,6x16,5x1,5 | 0,048             | GUR 10                    | GUR 10 daxx  |
|                 |       |      | G 3/8 A                        | 21,9 |         | 7  | 12 | 15,5 | 33   | 49    | 22 | 22 | 14,7x18,9x1,5 | 0,056             | GUV 10                    | GUV 10 daxx  |
|                 |       |      | G 1/2 A                        | 26,9 |         | 7  | 12 | 17,5 | 35,5 | 51,5  | 27 |    | 18,5x23,9x1,5 | 0,087             | GUG 10                    | GUG 10 daxx  |
|                 | 630   | 12   | G 1/4 A                        | 18,9 | M20x1,5 | 5  | 12 | 15   | 33   | 49    | 22 |    | 11,6x16,5x1,5 | 0,059             | GUR 12                    | GUR 12 daxx  |
|                 |       |      | G 3/8 A                        | 21,9 |         | 8  | 12 | 17   | 35   | 51,5  | 22 | 24 | 14,7x18,9x1,5 | 0,075             | GUV 12                    | GUV 12 daxx  |
|                 |       |      | G 1/2 A                        | 26,9 |         | 8  | 14 | 17,5 | 35,5 | 51,5  | 27 |    | 18,5x23,9x1,5 | 0,094             | GUG 12                    | GUG 12 daxx  |
|                 | 630   | 16   | G 1/4 A                        | 18,9 | M24x1,5 | 5  | 12 | 17,5 | 38   | 59,5  | 27 |    | 11,6x16,5x1,5 | 0,090             | GUR 161                   | GUR 161 daxx |
|                 |       |      | G 3/8 A                        | 21,9 |         | 8  | 12 | 18   | 38,5 | 60    | 27 |    | 14,7x18,9x1,5 | 0,096             | GUR 16                    | GUR 16 daxx  |
|                 |       |      | G 1/2 A                        | 26,9 |         | 12 | 14 | 18,5 | 39   | 60,5  | 27 | 30 | 18,5x23,9x1,5 | 0,101             | GUV 16                    | GUV 16 daxx  |
|                 |       |      | G 3/4 A                        | 31,9 |         | 12 | 16 | 20,5 | 41   | 62,5  | 32 |    | 23,9x29,2x1,5 | 0,150             | GUG 16                    | GUG 16 daxx  |
|                 |       |      | G 1 A                          | 39,9 |         | 12 | 18 | 22,5 | 43   | 64,5  | 41 |    | 29,7x35,7x2,0 | 0,251             | GUG 161                   | GUG 161 daxx |
|                 | 420   | 20   | G 3/8 A                        | 21,9 | M30x2,0 | 8  | 12 | 20   | 44   | 66,5  | 32 |    | 14,7x18,9x1,5 | 0,149             | GUR 201                   | GUR 201 daxx |
|                 |       |      | G 1/2 A                        | 26,9 |         | 12 | 14 | 20,5 | 44,5 | 67    | 32 |    | 18,5x23,9x1,5 | 0,154             | GUR 20                    | GUR 20 daxx  |
|                 |       |      | G 3/4 A                        | 31,9 |         | 15 | 16 | 20,5 | 44,5 | 67    | 32 | 36 | 23,9x29,2x1,5 | 0,166             | GUV 20                    | GUV 20 daxx  |
|                 |       |      | G 1 A                          | 39,9 |         | 15 | 18 | 22,5 | 46,5 | 69    | 41 |    | 29,7x35,7x2,0 | 0,267             | GUG 20                    | GUG 20 daxx  |
|                 |       |      | G 1 1/4 A                      | 49,9 |         | 15 | 20 | 24,5 | 48   | 71    | 50 |    | 38,8x45,8x2,0 | 0,415             | GUG 201                   | GUG 201 daxx |
|                 | 420   | 25   | G 1/2 A                        | 26,9 | M36x2,0 | 12 | 14 | 23   | 50   | 77,5  | 41 |    | 18,5x23,9x1,5 | 0,258             | GUR 251                   | GUR 251 daxx |
|                 |       |      | G 3/4 A                        | 31,9 |         | 15 | 16 | 23   | 50   | 77,5  | 41 |    | 23,9x29,2x1,5 | 0,270             | GUR 25                    | GUR 25 daxx  |
|                 |       |      | G 1 A                          | 39,9 |         | 19 | 18 | 23   | 50   | 77,5  | 41 | 46 | 29,7x35,7x2,0 | 0,288             | GUV 25                    | GUV 25 daxx  |
|                 |       |      | G 1 1/4 A                      | 49,9 |         | 19 | 20 | 25   | 52   | 79,5  | 50 |    | 38,8x45,8x2,0 | 0,490             | GUG 25                    | GUG 25 daxx  |
|                 |       |      | G 1 1/2 A                      | 54,9 |         | 19 | 22 | 26   | 53   | 80,5  | 55 |    | 44,7x50,7x2,0 | 0,560             | GUG 251                   | GUG 251 daxx |
|                 | 420   | 30   | G 3/4 A                        | 31,9 | M42x2,0 | 15 | 16 | 24,5 | 53   | 82,5  | 46 |    | 23,9x29,2x1,5 | 0,360             | GUR 301                   | GUR 301 daxx |
|                 |       |      | G 1 A                          | 39,9 |         | 19 | 18 | 24,5 | 53   | 82,5  | 46 |    | 29,7x35,7x2,0 | 0,380             | GUR 30                    | GUR 30 daxx  |
|                 |       |      | G 1 1/4 A                      | 49,9 |         | 24 | 20 | 23,5 | 52   | 81,5  | 50 | 50 | 38,8x45,8x2,0 | 0,452             | GUV 30                    | GUV 30 daxx  |
|                 |       |      | G 1 1/2 A                      | 54,9 |         | 24 | 22 | 26,5 | 55   | 84,5  | 55 |    | 44,7x50,7x2,0 | 0,640             | GUG 30                    | GUG 30 daxx  |
|                 |       |      | G 2 A                          | 69,9 |         | 24 | 24 | 30,5 | 59   | 88,5  | 70 |    | 56,1x62,7x2,5 | 0,971             | GUG 301                   | GUG 301 daxx |
|                 | 420   | 38   | G 1 A                          | 39,9 | M52x2,0 | 19 | 18 | 26   | 58,5 | 91    | 55 |    | 29,7x35,7x2,0 | 0,578             | GUR 381                   | GUR 381 daxx |
|                 |       |      | G 1 1/4 A                      | 49,9 |         | 24 | 20 | 26   | 58,5 | 91    | 55 |    | 38,8x45,8x2,0 | 0,626             | GUR 38                    | GUR 38 daxx  |
|                 |       |      | G 1 1/2 A                      | 54,9 |         | 30 | 22 | 26   | 58,5 | 91    | 55 | 60 | 44,7x50,7x2,0 | 0,632             | GUV 38                    | GUV 38 daxx  |
|                 |       |      | G 1 3/4 A                      | 59,9 |         | 30 | 24 | 27   | 59,5 | 92    | 60 |    | 50,4x56,7x2,5 | 0,815             | GUG 38                    | GUG 38 daxx  |
|                 |       |      | G 2 A                          | 69,9 |         | 30 | 24 | 30   | 62,5 | 95    | 70 |    | 56,1x62,7x2,5 | 1,020             | GUG 381                   | GUG 381 daxx |
|                 | 420   | 50   | G 1 1/4 A                      | 49,9 | M68x2,0 | 24 | 20 | 31   | 70,5 | 99,5  | 70 |    | 38,8x45,8x2,0 | 1,130             | GUR 501                   | GUR 501 daxx |
|                 |       |      | G 1 1/2 A                      | 54,9 |         | 30 | 22 | 31   | 70,5 | 99,5  | 70 | 80 | 44,7x50,7x2,0 | 1,130             | GUR 50                    | GUR 50 daxx  |
|                 |       |      | G 2 A                          | 69,9 |         | 40 | 24 | 32   | 71,5 | 100,5 | 70 |    | 56,1x62,7x2,5 | 1,155             | GUV 50                    | GUV 50 daxx  |

GU.M [Pos. 1+5]

GU.M [Pos. 1-5]



## AVIT, ISO 8434-1 – SDS TYP E

## BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Einschraubzapfen<sup>1</sup> mit U-Ring Dichtung (ED) und metrischem Gewinde nach ISO 9974-2.Stud end<sup>1</sup> with U-ring sealing (ED) and metric thread acc. ISO 9974-2.WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - **   |
|----------------------------------------------------|----------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GUV M 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GUV M 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GUV M 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GUV M 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GUV M 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GUV M 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | U-Ring Dichtung / U-ring sealing      |

| REIHE<br>SERIES | PN  | NG | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |    |      |      |      |    |    | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                |
|-----------------|-----|----|--------------------------------|------|---------|----|----|------|------|------|----|----|---------------|-------------------|---------------------------|----------------|
|                 |     |    | d1                             | d2   | d       | di | i  | l1   | l2   | l3   | S1 | S2 |               |                   | Pos. 1+5                  | Pos. 1-5       |
| L               | 420 | 15 | M16x1,5                        | 21,9 |         | 9  | 12 | 15   | 32,5 | 51,5 | 24 |    | 13,8x18,9x1,5 | 0,060             | GUR M 15                  | GUR M 15 daxs  |
|                 |     |    | M18x1,5                        | 23,9 | M22x1,5 | 11 | 12 | 14   | 31,5 | 50,5 | 24 | 27 | 15,7x20,9x1,5 | 0,054             | GUV M 15                  | GUV M 15 daxs  |
|                 |     |    | M22x1,5                        | 26,9 |         | 12 | 14 | 16   | 33,5 | 52,5 | 27 |    | 19,6x24,3x1,5 | 0,085             | GUG M 15                  | GUG M 15 daxs  |
|                 | 420 | 18 | M18x1,5                        | 23,9 |         | 9  | 12 | 15   | 34   | 54   | 27 |    | 15,7x20,9x1,5 | 0,076             | GUR M 18                  | GUR M 18 daxs  |
|                 |     |    | M22x1,5                        | 26,9 | M26x1,5 | 14 | 14 | 14,5 | 33,5 | 53,5 | 27 | 32 | 19,6x24,3x1,5 | 0,079             | GUV M 18                  | GUV M 18 daxs  |
|                 |     |    | M26x1,5                        | 31,9 |         | 15 | 16 | 16,5 | 35,5 | 55,5 | 32 |    | 23,9x29,2x1,5 | 0,121             | GUG M 18                  | GUG M 18 daxs  |
|                 | 250 | 22 | M22x1,5                        | 26,9 |         | 14 | 14 | 18,5 | 36,5 | 57,5 | 32 |    | 19,6x24,3x1,5 | 0,116             | GUR M 22                  | GUR M 22 daxs  |
|                 |     |    | M26x1,5                        | 31,9 | M30x2,0 | 18 | 16 | 16,5 | 35   | 55,5 | 32 | 36 | 23,9x29,2x1,5 | 0,110             | GUV M 22                  | GUV M 22 daxs  |
|                 |     |    | M33x2,0                        | 39,9 |         | 19 | 18 | 19,5 | 38   | 59   | 41 |    | 29,7x35,7x2,0 | 0,212             | GUG M 22                  | GUG M 22 daxs  |
|                 | 250 | 28 | M26x1,5                        | 31,9 |         | 18 | 16 | 19,5 | 39   | 62,5 | 41 |    | 23,9x29,2x1,5 | 0,184             | GUR M 28                  | GUR M 28 daxs  |
|                 |     |    | M33x2,0                        | 39,9 | M36x2,0 | 23 | 18 | 17,5 | 37   | 60,5 | 41 | 41 | 29,7x35,7x2,0 | 0,175             | GUV M 28                  | GUV M 28 daxs  |
|                 |     |    | M42x2,0                        | 49,9 |         | 24 | 20 | 21,5 | 41   | 64,5 | 50 |    | 38,8x45,8x2,0 | 0,365             | GUG M 28                  | GUG M 28 daxs  |
|                 | 250 | 35 | M33x2,0                        | 39,9 |         | 23 | 18 | 19,5 | 44   | 70,5 | 46 |    | 29,7x35,7x2,0 | 0,269             | GUR M 35                  | GUR M 35 daxs  |
|                 |     |    | M42x2,0                        | 49,9 | M45x2,0 | 30 | 20 | 17,5 | 42   | 68,5 | 50 | 50 | 38,8x45,8x2,0 | 0,290             | GUV M 35                  | GUV M 35 daxs  |
|                 |     |    | M48x2,0                        | 54,9 |         | 30 | 22 | 21,5 | 46   | 72,5 | 55 |    | 44,7x50,7x2,0 | 0,472             | GUG M 35                  | GUG M 35 daxs  |
|                 | 250 | 42 | M33x2,0                        | 39,9 |         | 23 | 18 | 21   | 45,5 | 72   | 55 |    | 29,7x35,7x2,0 | 0,384             | GUR M 421                 | GUR M 421 daxs |
|                 |     |    | M42x2,0                        | 49,9 | M52x2,0 | 30 | 20 | 21   | 45,5 | 72   | 55 | 60 | 38,8x45,8x2,0 | 0,403             | GUR M 42                  | GUR M 42 daxs  |
|                 |     |    | M48x2,0                        | 54,9 |         | 36 | 22 | 19   | 43,5 | 70   | 55 |    | 44,7x50,7x2,0 | 0,373             | GUV M 42                  | GUV M 42 daxs  |

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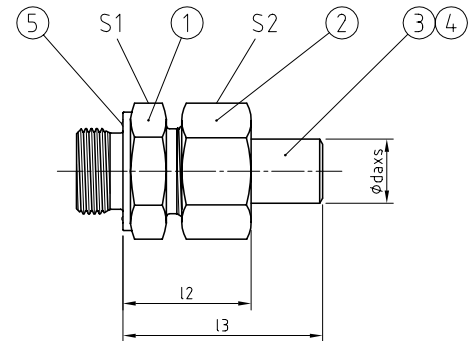
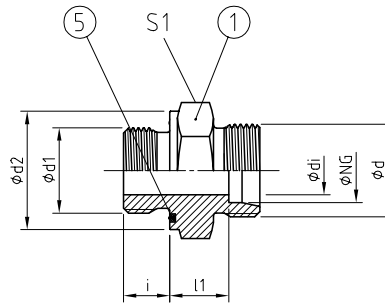
1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |    |      |      |       |    |    | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|-----------------|-------|------|--------------------------------|------|---------|----|----|------|------|-------|----|----|---------------|-------------------|---------------------------|---------------|
|                 | [bar] | [mm] | d1                             | d2   | d       | di | i  | l1   | l2   | l3    | S1 | S2 | Pos. 5        | [kg]              | Pos. 1+5                  | Pos. 1-5      |
| S               | 800   | 10   | M14x1,5                        | 18,9 | M18x1,5 | 5  | 12 | 15   | 32,5 | 48,5  | 19 |    | 11,6x16,5x1,5 | 0,048             | GURM 10                   | GURM 10 daxx  |
|                 |       |      | M16x1,5                        | 21,9 |         | 7  | 12 | 15   | 32,5 | 48,5  | 22 | 22 | 13,8x18,9x1,5 | 0,056             | GUVM 10                   | GUVM 10 daxx  |
|                 |       |      | M18x1,5                        | 23,9 |         | 7  | 12 | 16   | 33,5 | 49,5  | 24 |    | 15,7x20,9x1,5 | 0,069             | GUGM 10                   | GUGM 10 daxx  |
|                 | 630   | 12   | M16x1,5                        | 21,9 | M20x1,5 | 7  | 12 | 14,5 | 32,5 | 48,5  | 22 |    | 13,8x18,9x1,5 | 0,059             | GURM 12                   | GURM 12 daxx  |
|                 |       |      | M18x1,5                        | 23,9 |         | 8  | 12 | 17   | 35   | 51,5  | 24 | 24 | 15,7x20,9x1,5 | 0,075             | GUVM 12                   | GUVM 12 daxx  |
|                 |       |      | M22x1,5                        | 26,9 |         | 8  | 14 | 17,5 | 35,5 | 51,5  | 27 |    | 19,6x24,3x1,5 | 0,094             | GUGM 12                   | GUGM 12 daxx  |
|                 | 630   | 16   | M16x1,5                        | 21,9 | M24x1,5 | 7  | 12 | 17,5 | 38   | 59,5  | 27 |    | 13,8x18,9x1,5 | 0,090             | GURM 161                  | GURM 161 daxx |
|                 |       |      | M18x1,5                        | 23,9 |         | 8  | 12 | 18   | 38,5 | 60,5  | 27 |    | 15,7x20,9x1,5 | 0,096             | GURM 16                   | GURM 16 daxx  |
|                 |       |      | M22x1,5                        | 26,9 |         | 12 | 14 | 18,5 | 39   | 60,5  | 27 | 30 | 19,6x24,3x1,5 | 0,101             | GUVM 16                   | GUVM 16 daxx  |
|                 |       |      | M27x2,0                        | 31,9 |         | 12 | 16 | 20,5 | 41   | 62,5  | 32 |    | 23,9x29,2x1,5 | 0,150             | GUGM 16                   | GUGM 16 daxx  |
|                 |       |      | M33x2,0                        | 39,9 |         | 12 | 18 | 22,5 | 43   | 64,5  | 41 |    | 29,7x35,7x2,0 | 0,251             | GUGM 161                  | GUGM 161 daxx |
|                 | 420   | 20   | M18x1,5                        | 23,9 | M30x2,0 | 8  | 12 | 20   | 44   | 66,5  | 32 |    | 15,7x20,9x1,5 | 0,149             | GURM 201                  | GURM 201 daxx |
|                 |       |      | M22x1,5                        | 26,9 |         | 12 | 14 | 20,5 | 44,5 | 67    | 32 |    | 19,6x24,3x1,5 | 0,154             | GURM 20                   | GURM 20 daxx  |
|                 |       |      | M27x2,0                        | 31,9 |         | 15 | 16 | 20,5 | 44,5 | 67    | 32 | 36 | 23,9x29,2x1,5 | 0,166             | GUVM 20                   | GUVM 20 daxx  |
|                 |       |      | M33x2,0                        | 39,9 |         | 15 | 18 | 22,5 | 46,5 | 69    | 41 |    | 29,7x35,7x2,0 | 0,267             | GUGM 20                   | GUGM 20 daxx  |
|                 |       |      | M42x2,0                        | 49,9 |         | 15 | 20 | 24,5 | 48,5 | 71,5  | 50 |    | 38,8x45,8x2,0 | 0,435             | GUGM 201                  | GUGM 201 daxx |
|                 | 420   | 25   | M22x1,5                        | 26,9 | M36x2,0 | 12 | 14 | 23   | 50   | 77,5  | 41 |    | 19,6x24,3x1,5 | 0,258             | GURM 251                  | GURM 251 daxx |
|                 |       |      | M27x2,0                        | 31,9 |         | 15 | 16 | 23   | 50   | 77,5  | 41 |    | 23,9x29,2x1,5 | 0,270             | GURM 25                   | GURM 25 daxx  |
|                 |       |      | M33x2,0                        | 39,9 |         | 19 | 18 | 23   | 50   | 77,5  | 41 | 46 | 29,7x35,7x2,0 | 0,288             | GUVM 25                   | GUVM 25 daxx  |
|                 |       |      | M42x2,0                        | 49,9 |         | 19 | 20 | 25   | 52   | 79,5  | 50 |    | 38,8x45,8x2,0 | 0,495             | GUGM 25                   | GUGM 25 daxx  |
|                 |       |      | M48x2,0                        | 54,9 |         | 19 | 22 | 26   | 53   | 80,5  | 55 |    | 44,7x50,7x2,0 | 0,560             | GUGM 251                  | GUGM 251 daxx |
|                 | 420   | 30   | M27x2,0                        | 31,9 | M42x2,0 | 15 | 16 | 24,5 | 53   | 82,5  | 46 |    | 23,9x29,2x1,5 | 0,360             | GURM 301                  | GURM 301 daxx |
|                 |       |      | M33x2,0                        | 39,9 |         | 19 | 18 | 24,5 | 53   | 82,5  | 46 |    | 29,7x35,7x2,0 | 0,380             | GURM 30                   | GURM 30 daxx  |
|                 |       |      | M42x2,0                        | 49,9 |         | 24 | 20 | 23,5 | 52   | 81,5  | 50 | 50 | 38,8x45,8x2,0 | 0,452             | GUVM 30                   | GUVM 30 daxx  |
|                 |       |      | M48x2,0                        | 54,9 |         | 24 | 22 | 26,5 | 55   | 84,5  | 55 |    | 44,7x50,7x2,0 | 0,645             | GUGM 30                   | GUGM 30 daxx  |
|                 |       |      | M60x2,0                        | 69,9 |         | 24 | 24 | 30,5 | 59   | 88,5  | 70 |    | 56,1x62,7x2,5 | 0,971             | GUGM 301                  | GUGM 301 daxx |
|                 | 420   | 38   | M33x2,0                        | 39,9 | M52x2,0 | 19 | 18 | 26   | 58,5 | 91    | 55 |    | 29,7x35,7x2,0 | 0,578             | GURM 381                  | GURM 381 daxx |
|                 |       |      | M42x2,0                        | 49,9 |         | 24 | 20 | 26   | 58,5 | 91    | 55 |    | 38,8x45,8x2,0 | 0,626             | GURM 38                   | GURM 38 daxx  |
|                 |       |      | M48x2,0                        | 54,9 |         | 30 | 22 | 26   | 58,5 | 91    | 55 | 60 | 44,7x50,7x2,0 | 0,632             | GUVM 38                   | GUVM 38 daxx  |
|                 |       |      | M50x2,0                        | 59,9 |         | 30 | 24 | 27,5 | 60   | 92,5  | 60 |    | 50,4x56,7x2,5 | 0,771             | GUGM 38                   | GUGM 38 daxx  |
|                 |       |      | M60x2,0                        | 69,9 |         | 30 | 24 | 30   | 62,5 | 95    | 70 |    | 56,1x62,7x2,5 | 1,02              | GUGM 381                  | GUGM 381 daxx |
|                 | 420   | 50   | M48x2,0                        | 54,9 | M68x2,0 | 30 | 22 | 31   | 70,5 | 99,5  | 70 |    | 44,7x50,7x2,0 | 1,13              | GURM 501                  | GURM 501 daxx |
|                 |       |      | M50x2,0                        | 59,9 |         | 33 | 22 | 31,5 | 71   | 100   | 70 | 80 | 50,4x56,7x2,5 | 1,13              | GURM 50                   | GURM 50 daxx  |
|                 |       |      | M60x2,0                        | 69,9 |         | 40 | 24 | 32   | 71,5 | 100,5 | 70 |    | 56,1x62,7x2,5 | 1,15              | GUVM 50                   | GUVM 50 daxx  |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

GO. [Pos. 1+5]

GO. [Pos. 1-5]



## AVIT, BAUREIHE / SERIES: S = HEAVY

- Einschraubzapfen <sup>1</sup> mit O-Ring Dichtung mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1 oder metrischem Gewinde nach ISO 261
- Gewindezapfen mit 24° Konus nach ISO 8434-1
- Stud end <sup>1</sup> with O-ring sealing with cylindrical BSP thread ISO 228-1 or metric thread ISO 261
- Screwed end with 24° conus acc. ISO 8434-1

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GOV 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GOV 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GOV 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GOV 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GOV 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GOV 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | O-Ring Dichtung / O-ring sealing      |

| TYPE                                | PN  | NG | ABMESSUNGEN [mm]<br>DIMENSIONS |    |         |    |    |      |      |      |    |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-------------------------------------|-----|----|--------------------------------|----|---------|----|----|------|------|------|----|----|----------|-------------------|---------------------------|--------------|
|                                     |     |    | d1                             | d2 | d       | di | i  | l1   | l2   | l3   | S1 | S2 |          |                   | Pos. 1+5                  | Pos. 1-5     |
| WHITWORTH ROHRGEWINDE<br>BSP THREAD | 800 | 10 | G 1/4 A                        | 22 | M18x1,5 | 5  | 12 | 15   | 32   | 48   | 22 |    | 15,0x2,0 | 0,053             | GOR 10                    | GOR 10 daxs  |
|                                     |     |    | G 3/8 A                        | 24 |         | 7  | 12 | 16   | 33,5 | 50   | 24 | 22 | 17,0x1,5 | 0,059             | GOV 10                    | GOV 10 daxs  |
|                                     |     |    | G 1/2 A                        | 30 |         | 7  | 14 | 19,5 | 37   | 53   | 32 |    | 22,0x2,0 | 0,071             | GOG 10                    | GOG 10 daxs  |
|                                     | 630 | 12 | G 1/4 A                        | 22 | M20x1,5 | 5  | 12 | 15   | 33   | 49   | 22 |    | 15,0x2,0 | 0,057             | GOR 12                    | GOR 12 daxs  |
|                                     |     |    | G 3/8 A                        | 24 |         | 8  | 12 | 16   | 34   | 50,5 | 24 | 24 | 17,0x1,5 | 0,073             | GOV 12                    | GOV 12 daxs  |
|                                     |     |    | G 1/2 A                        | 30 |         | 8  | 14 | 19,5 | 37,5 | 53,5 | 32 |    | 22,0x2,0 | 0,097             | GOG 12                    | GOG 12 daxs  |
|                                     | 630 | 16 | G 1/4 A                        | 22 | M24x1,5 | 5  | 12 | 17,5 | 38   | 59,5 | 27 |    | 15,0x2,0 | 0,087             | GOR 161                   | GOR 161 daxs |
|                                     |     |    | G 3/8 A                        | 24 |         | 8  | 12 | 18   | 38,5 | 60   | 27 |    | 17,0x1,5 | 0,093             | GOR 16                    | GOR 16 daxs  |
|                                     |     |    | G 1/2 A                        | 30 |         | 12 | 14 | 20,5 | 41   | 62,5 | 32 | 30 | 22,0x2,0 | 0,111             | GOV 16                    | GOV 16 daxs  |
|                                     |     |    | G 3/4 A                        | 40 |         | 12 | 16 | 22,5 | 43   | 64,5 | 41 |    | 29,8x2,6 | 0,155             | GOG 16                    | GOG 16 daxs  |
|                                     |     |    | G 1 A                          | 46 |         | 12 | 18 | 23,5 | 44   | 65,5 | 46 |    | 34,5x2,6 | 0,260             | GOG 161                   | GOG 161 daxs |
|                                     | 420 | 20 | G 3/8 A                        | 24 | M30x2,0 | 8  | 12 | 20   | 44   | 67   | 32 |    | 17,0x1,5 | 0,136             | GOR 201                   | GOR 201 daxs |
|                                     |     |    | G 1/2 A                        | 30 |         | 12 | 14 | 20,5 | 44,5 | 67,5 | 32 |    | 22,0x2,0 | 0,146             | GOR 20                    | GOR 20 daxs  |
|                                     |     |    | G 3/4 A                        | 40 |         | 15 | 16 | 22,5 | 46,5 | 70   | 41 | 36 | 29,8x2,6 | 0,225             | GOV 20                    | GOV 20 daxs  |
|                                     |     |    | G 1 A                          | 46 |         | 15 | 18 | 23,5 | 47,5 | 70,5 | 46 |    | 34,5x2,6 | 0,274             | GOG 20                    | GOG 20 daxs  |
|                                     |     |    | G 1 1/4 A                      | 54 |         | 15 | 20 | 25,5 | 49,5 | 72,5 | 55 |    | 43,0x3,0 | 0,431             | GOG 201                   | GOG 201 daxs |
|                                     | 420 | 25 | G 1/2 A                        | 30 | M36x2,0 | 12 | 14 | 23   | 50   | 77,5 | 41 |    | 22,0x2,0 | 0,255             | GOR 251                   | GOR 251 daxs |
|                                     |     |    | G 3/4 A                        | 40 |         | 15 | 16 | 23   | 50   | 77,5 | 41 |    | 29,8x2,6 | 0,265             | GOR 25                    | GOR 25 daxs  |
|                                     |     |    | G 1 A                          | 46 |         | 19 | 18 | 24   | 51   | 78,5 | 46 | 46 | 34,5x2,6 | 0,354             | GOV 25                    | GOV 25 daxs  |
|                                     |     |    | G 1 1/4 A                      | 54 |         | 19 | 20 | 26   | 53   | 80,5 | 55 |    | 43,0x3,0 | 0,511             | GOG 25                    | GOG 25 daxs  |
|                                     |     |    | G 1 1/2 A                      | 60 |         | 19 | 22 | 27   | 54   | 81,5 | 60 |    | 49,0x3,0 | 0,580             | GOG 251                   | GOG 251 daxs |

Fortsetzung nächste Seite | Continued on next page

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

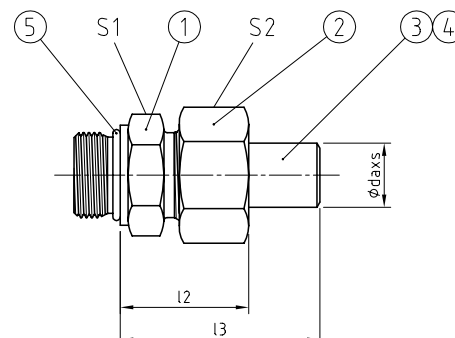
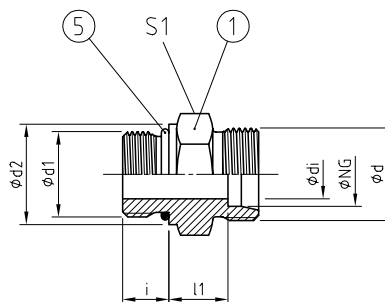


| TYPE                                  | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |         |    |    |      |      |      |    |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|---------------------------------------|-------|------|--------------------------------|----|---------|----|----|------|------|------|----|----|----------|-------------------|---------------------------|---------------|
|                                       | [bar] | [mm] | d1                             | d2 | d       | di | i  | l1   | l2   | l3   | S1 | S2 | Pos. 5   | [kg]              | Pos. 1+5                  | Pos. 1-5      |
| WHITWORTH ROHRGEWINDE<br>BSP THREAD   | 420   | 30   | G 3/4 A                        | 40 | M42x2,0 | 15 | 16 | 24,5 | 53   | 82,5 | 46 |    | 29,8x2,6 | 0,363             | GOR 301                   | GOR 301 daxs  |
|                                       |       |      | G 1 A                          | 46 |         | 19 | 18 | 24,5 | 53   | 82,5 | 46 |    | 34,5x2,6 | 0,385             | GOR 30                    | GOR 30 daxs   |
|                                       |       |      | G 1 1/4 A                      | 54 |         | 24 | 20 | 26,5 | 55   | 84,5 | 55 | 50 | 43,0x3,0 | 0,530             | GOV 30                    | GOV 30 daxs   |
|                                       |       |      | G 1 1/2 A                      | 60 |         | 24 | 22 | 26   | 53   | 80,5 | 60 |    | 49,0x3,0 | 0,670             | GOG 30                    | GOG 30 daxs   |
|                                       |       |      | G 2 A                          | 75 |         | 24 | 24 | 27   | 54   | 81,5 | 75 |    | 61,0x3,5 | 1,16              | GOG 301                   | GOG 301 daxs  |
|                                       | 420   | 38   | G 1 A                          | 46 | M52x2,0 | 19 | 18 | 26   | 58,5 | 91   | 55 |    | 34,5x2,6 | 0,558             | GOR 381                   | GOR 381 daxs  |
|                                       |       |      | G 1 1/4 A                      | 54 |         | 24 | 20 | 26   | 58,5 | 91   | 55 |    | 43,0x3,0 | 0,630             | GOR 38                    | GOR 38 daxs   |
|                                       |       |      | G 1 1/2 A                      | 60 |         | 30 | 22 | 27   | 59,5 | 92   | 60 | 60 | 49,0x3,0 | 0,714             | GOV 38                    | GOV 38 daxs   |
|                                       |       |      | G 1 3/4 A                      | 68 |         | 30 | 24 | 27,5 | 56   | 85,5 | 70 |    | 55,0x3,0 | 0,851             | GOG 38                    | GOG 38 daxs   |
|                                       |       |      | G 2 A                          | 75 |         | 30 | 24 | 31   | 59,5 | 89,5 | 75 |    | 61,0x3,5 | 1,07              | GOG 381                   | GOG 381 daxs  |
|                                       | 420   | 50   | G 1 1/4 A                      | 54 | M68x2,0 | 24 | 20 | 31   | 70,5 | 99,5 | 70 |    | 43,0x3,0 | 1,06              | GOR 501                   | GOR 501 daxs  |
|                                       |       |      | G 1 1/2 A                      | 60 |         | 30 | 22 | 31   | 70,5 | 99,5 | 70 | 80 | 49,0x3,0 | 1,07              | GOR 50                    | GOR 50 daxs   |
|                                       |       |      | G 1 3/4 A                      | 68 |         | 38 | 24 | 31,5 | 71   | 100  | 70 |    | 55,0x3,0 | 1,10              | GOV 501                   | GOV 501 daxs  |
|                                       |       |      | G 2 A                          | 75 |         | 40 | 24 | 32,5 | 72   | 101  | 75 |    | 61,0x3,5 | 1,26              | GOV 50                    | GOV 50 daxs   |
| METRISCHES GEWINDE 1<br>METRIC THREAD | 800   | 10   | M14x1,5                        | 22 | M18x1,5 | 5  | 12 | 15   | 32   | 48   | 22 |    | 15,0x2,0 | 0,056             | GORM 10                   | GORM 10 daxs  |
|                                       |       |      | M16x1,5                        | 24 |         | 7  | 12 | 15,5 | 32,5 | 48,5 | 24 | 22 | 17,0x1,5 | 0,063             | GOVM 10                   | GOVM 10 daxs  |
|                                       |       |      | M18x1,5                        | 24 |         | 7  | 12 | 16   | 33,5 | 49,5 | 24 |    | 18,0x1,5 | 0,072             | GOGM 10                   | GOGM 10 daxs  |
|                                       | 630   | 12   | M16x1,5                        | 24 | M20x1,5 | 7  | 12 | 15   | 33   | 49   | 24 |    | 17,0x1,5 | 0,060             | GORM 12                   | GORM 12 daxs  |
|                                       |       |      | M18x1,5                        | 24 |         | 8  | 12 | 16   | 34   | 50   | 24 | 24 | 18,0x1,5 | 0,075             | GOVM 12                   | GOVM 12 daxs  |
|                                       |       |      | M22x1,5                        | 30 |         | 8  | 14 | 19,5 | 37,5 | 53,5 | 32 |    | 22,0x2,0 | 0,099             | GOGM 12                   | GOGM 12 daxs  |
|                                       | 630   | 16   | M16x1,5                        | 24 | M24x1,5 | 7  | 12 | 17,5 | 38   | 59,5 | 27 |    | 17,0x1,5 | 0,092             | GORM 161                  | GORM 161 daxs |
|                                       |       |      | M18x1,5                        | 24 |         | 8  | 12 | 18   | 38,5 | 60   | 27 |    | 18,0x1,5 | 0,098             | GORM 16                   | GORM 16 daxs  |
|                                       |       |      | M22x1,5                        | 30 |         | 12 | 14 | 21,5 | 42   | 63,5 | 32 | 30 | 22,0x2,0 | 0,121             | GOVM 16                   | GOVM 16 daxs  |
|                                       |       |      | M27x2,0                        | 40 |         | 12 | 16 | 22,5 | 43   | 64,5 | 41 |    | 29,8x2,6 | 0,158             | GOGM 16                   | GOGM 16 daxs  |
|                                       |       |      | M33x2,0                        | 46 |         | 12 | 18 | 23,5 | 44   | 65,5 | 46 |    | 34,5x2,6 | 0,264             | GOGM 161                  | GOGM 161 daxs |
|                                       | 420   | 20   | M18x1,5                        | 24 | M30x2,0 | 8  | 12 | 20   | 44   | 67   | 32 |    | 18,0x1,5 | 0,152             | GORM 201                  | GORM 201 daxs |
|                                       |       |      | M22x1,5                        | 30 |         | 12 | 14 | 20,5 | 44,5 | 67,5 | 32 |    | 22,0x2,0 | 0,157             | GORM 20                   | GORM 20 daxs  |
|                                       |       |      | M27x2,0                        | 40 |         | 15 | 16 | 22,5 | 46,5 | 69,5 | 41 | 36 | 29,8x2,6 | 0,237             | GOVM 20                   | GOVM 20 daxs  |
|                                       |       |      | M33x2,0                        | 46 |         | 15 | 18 | 23,5 | 47,5 | 70,5 | 46 |    | 34,5x2,6 | 0,280             | GOGM 20                   | GOGM 20 daxs  |
|                                       |       |      | M42x2,0                        | 54 |         | 15 | 20 | 25,5 | 49,5 | 72,5 | 55 |    | 43,0x3,0 | 0,485             | GOGM 201                  | GOGM 201 daxs |
|                                       | 420   | 25   | M22x1,5                        | 30 | M36x2,0 | 12 | 14 | 23   | 50   | 77,5 | 41 |    | 22,0x2,0 | 0,263             | GORM 251                  | GORM 251 daxs |
|                                       |       |      | M27x2,0                        | 40 |         | 15 | 16 | 23   | 50   | 77,5 | 41 |    | 29,8x2,6 | 0,275             | GORM 25                   | GORM 25 daxs  |
|                                       |       |      | M33x2,0                        | 46 |         | 19 | 18 | 24   | 60   | 78,5 | 46 | 46 | 34,5x2,6 | 0,338             | GOVM 25                   | GOVM 25 daxs  |
|                                       |       |      | M42x2,0                        | 54 |         | 19 | 20 | 26   | 53   | 80,5 | 55 |    | 43,0x3,0 | 0,525             | GOGM 25                   | GOGM 25 daxs  |
|                                       |       |      | M48x2,0                        | 60 |         | 19 | 22 | 27   | 54   | 81,5 | 60 |    | 49,0x3,0 | 0,591             | GOGM 251                  | GOGM 251 daxs |
|                                       | 420   | 30   | M27x2,0                        | 40 | M42x2,0 | 15 | 16 | 24,5 | 53   | 82,5 | 46 |    | 29,8x2,6 | 0,367             | GORM 301                  | GORM 301 daxs |
|                                       |       |      | M33x2,0                        | 46 |         | 19 | 18 | 24,5 | 53   | 82,5 | 46 |    | 34,5x2,6 | 0,388             | GORM 30                   | GORM 30 daxs  |
|                                       |       |      | M42x2,0                        | 54 |         | 24 | 20 | 26,5 | 55   | 84,5 | 55 | 55 | 43,0x3,0 | 0,558             | GOVM 30                   | GOVM 30 daxs  |
|                                       |       |      | M48x2,0                        | 60 |         | 24 | 22 | 27,5 | 56   | 85,5 | 60 |    | 49,0x3,0 | 0,682             | GOGM 30                   | GOGM 30 daxs  |
|                                       |       |      | M60x2,0                        | 75 |         | 24 | 24 | 31   | 59,5 | 89   | 75 |    | 61,0x3,5 | 1,03              | GOGM 301                  | GOGM 301 daxs |
|                                       | 420   | 38   | M33x2,0                        | 46 | M52x2,0 | 19 | 18 | 26   | 58,5 | 91   | 55 |    | 34,5x2,6 | 0,590             | GORM 381                  | GORM 381 daxs |
|                                       |       |      | M42x2,0                        | 54 |         | 24 | 20 | 26   | 58,5 | 91   | 55 |    | 43,0x3,0 | 0,639             | GORM 38                   | GORM 38 daxs  |
|                                       |       |      | M48x2,0                        | 60 |         | 30 | 22 | 27   | 59,5 | 92   | 60 | 60 | 49,0x3,0 | 0,672             | GOVM 38                   | GOVM 38 daxs  |
|                                       |       |      | M50x2,0                        | 68 |         | 30 | 24 | 29,5 | 62   | 94,5 | 70 |    | 55,0x3,0 | 0,860             | GOGM 38                   | GOGM 38 daxs  |
|                                       |       |      | M60x2,0                        | 75 |         | 30 | 24 | 30,5 | 63   | 95,5 | 75 |    | 61,0x3,5 | 1,08              | GOGM 381                  | GOGM 381 daxs |
|                                       | 420   | 50   | M48x2,0                        | 60 | M68x2,0 | 30 | 22 | 31   | 70,5 | 99,5 | 70 |    | 49,0x3,0 | 1,14              | GORM 501                  | GORM 501 daxs |
|                                       |       |      | M50x2,0                        | 68 |         | 38 | 24 | 31,5 | 71   | 100  | 70 | 80 | 55,0x3,0 | 1,15              | GORM 50                   | GORM 50 daxs  |
|                                       |       |      | M60x2,0                        | 75 |         | 40 | 24 | 32,5 | 72   | 101  | 75 |    | 61,0x3,5 | 1,18              | GOVM 50                   | GOVM 50 daxs  |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

GE.A [Pos. 1+5]

GE.A [Pos. 1-5]

**AVIT, ISO 8434-1 – SDS TYP F  
BAUREIHE / SERIES: S = HEAVY**

Einschraubzapfen<sup>1</sup> mit O-Ring Dichtung mit metrischem Gewinde nach ISO 6149-2 oder mit amerikanischem UNF Feingewinde nach ISO 11926-2.

Stud end<sup>1</sup> with O-ring sealing with metric thread acc. ISO 6149-2 or with American national fine thread acc. ISO 11926-2.

**WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - **  |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GEMA 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GEMA 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GEMA 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GEMA 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GEMA 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GEMA 25 - daxs - 42 |

**BESTELLBEISPIEL  
ORDER EXAMPLE****STÜCKLISTE  
PARTS LIST**

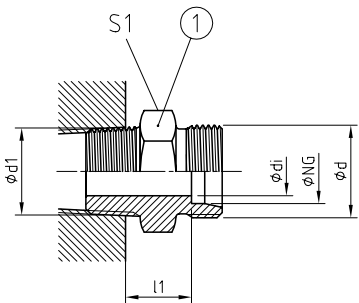
| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | O-Ring Dichtung / O-ring sealing      |

| TYPE                                | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |      |      |      |      |    |    | O-RING     | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-------------------------------------|-------|------|--------------------------------|------|---------|----|------|------|------|------|----|----|------------|-------------------|---------------------------|--------------|
|                                     | [bar] | [mm] | d1                             | d2   | d       | di | i    | l1   | l2   | l3   | S1 | S2 | Pos. 5     | [kg]              | Pos. 1+5                  | Pos. 1-5     |
| METRISCHES GEWINDE<br>METRIC THREAD | 420   | 10   | M16x1,5                        | 21,8 | M18x1,5 | 7  | 12,5 | 15   | 32,5 | 49   | 19 | 22 | 13,4x2,2   | 0,053             | GEMA 10                   | GEMA 10 daxs |
|                                     | 420   | 12   | M18x1,5                        | 23,8 | M20x1,5 | 8  | 14   | 17   | 35   | 51,5 | 22 | 24 | 15,4x2,1   | 0,074             | GEMA 12                   | GEMA 12 daxs |
|                                     | 420   | 16   | M22x1,5                        | 26,8 | M24x1,5 | 12 | 15   | 18,5 | 39   | 60,5 | 27 | 30 | 19,4x2,1   | 0,093             | GEMA 16                   | GEMA 16 daxs |
|                                     | 315   | 20   | M27x2,0                        | 31,8 | M30x2,0 | 15 | 18,5 | 20,5 | 44,5 | 67   | 32 | 36 | 23,6x2,9   | 0,159             | GEMA 20                   | GEMA 20 daxs |
|                                     | 315   | 25   | M33x2,0                        | 40,8 | M36x2,0 | 20 | 18,5 | 23   | 50   | 77,5 | 41 | 46 | 29,6x2,9   | 0,271             | GEMA 25                   | GEMA 25 daxs |
|                                     | 250   | 30   | M42x2,0                        | 49,8 | M42x2,0 | 26 | 19   | 23,5 | 52   | 81,5 | 50 | 50 | 38,6x2,9   | 0,420             | GEMA 30                   | GEMA 30 daxs |
|                                     | 250   | 38   | M48x2,0                        | 54,8 | M52x2,0 | 32 | 21,5 | 26   | 58,5 | 91   | 55 | 60 | 44,6x2,9   | 0,605             | GEMA 38                   | GEMA 38 daxs |
|                                     | 250   | 50   | M60x2,0                        | 64,8 | M68x2,0 | 40 | 24   | 34   | 74   | 103  | 70 | 80 | 56,6x2,9   | 1,060             | GEMA 50                   | GEMA 50 daxs |
| UNF GEWINDE<br>UNF THREAD ANSI B1.1 | 420   | 10   | ¾ - 18 UNF                     | 16,8 | M18x1,5 | 7  | 12   | 15   | 32,5 | 49   | 19 | 22 | 11,89x1,98 | 0,087             | GEVA 10                   | GEVA 10 daxs |
|                                     | 420   | 12   | ¾ - 16 UNF                     | 21,8 | M20x1,5 | 8  | 14   | 17   | 35   | 51,5 | 22 | 24 | 16,36x2,20 | 0,077             | GEVA 12                   | GEVA 12 daxs |
|                                     | 420   | 16   | ¾ - 14 UNF                     | 26,8 | M24x1,5 | 12 | 16   | 18,5 | 39   | 60,5 | 27 | 30 | 19,18x2,46 | 0,095             | GEVA 16                   | GEVA 16 daxs |
|                                     | 315   | 20   | 1 ¼ - 12 UN                    | 31,8 | M30x2,0 | 15 | 19   | 20,5 | 44,5 | 67   | 32 | 36 | 23,47x2,95 | 0,152             | GEVA 20                   | GEVA 20 daxs |
|                                     | 315   | 25   | 1 ¼ - 12 UN                    | 40,8 | M36x2,0 | 19 | 19   | 23   | 50   | 77,5 | 41 | 46 | 29,74x2,95 | 0,218             | GEVA 25                   | GEVA 25 daxs |
|                                     | 250   | 30   | 1 ½ - 12 UN                    | 49,8 | M42x2,0 | 24 | 19   | 23,5 | 52   | 81,5 | 50 | 50 | 37,46x3,00 | 0,400             | GEVA 30                   | GEVA 30 daxs |
|                                     | 250   | 38   | 1 ½ - 12 UN                    | 54,8 | M52x2,0 | 30 | 19   | 26   | 58,5 | 91   | 55 | 60 | 43,69x3,00 | 0,572             | GEVA 38                   | GEVA 38 daxs |
|                                     | 250   | 50   | 2 ½ - 12 UN                    | 69,8 | M68x2,0 | 38 | 22   | 34   | 74   | 103  | 70 | 80 | 59,00x3,00 | 1,140             | GEVA 50                   | GEVA 50 daxs |

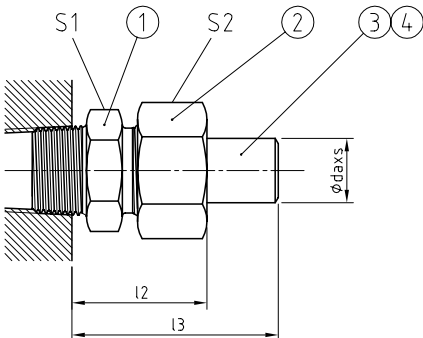
<sup>1</sup> Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.



GE.N [Pos. 1]



GE.N [Pos. 1-4]



AVIT, ISO 8434-1

BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen mit kegeligem selbstdichtendem NPTF Gewinde nach ANSI 1.201.

Stud end with tapered self-sealing national pipe thread fine (NPTF acc. ANSI 1.201).

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

Werkstoff, Oberfläche / Material, Surface

Stahl, verzinkt / Steel, galvanised; NBR

Stahl, verzinkt / Steel, galvanised; FKM

Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR

Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM

BESTELLBEISPIEL  
ORDER EXAMPLE

TYP NG - daxs - \*\*

GEVN 25 - daxs - 01

GEVN 25 - daxs - 02

GEVN 25 - daxs - 41

GEVN 25 - daxs - 42

STÜCKLISTE  
PARTS LIST

Pos. Bezeichnung / Description

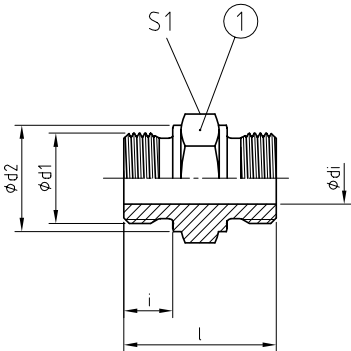
1 Einschraubstutzen / Stud connector

2 Überwurfmutter / Union nut

3 24° Schweißkegel / 24° weld-on nipple

4 O-Ring Dichtung / O-ring sealing

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |      |       |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|-----------------|-------|------|--------------------------------|---------|----|------|------|-------|----|----|-------------------|---------------------------|---------------|
|                 | [bar] | [mm] | d1                             | d       | di | l1   | l2   | l3    | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4      |
| S               | 800   | 10   | 1/4 NPTF                       | M18x1,5 | 5  | 17,5 | 35   | 51    | 19 |    | 0,044             | GERN 10                   | GERN 10 daxs  |
|                 |       |      | 3/8 NPTF                       |         | 7  | 17   | 34,5 | 50,5  | 22 | 22 | 0,051             | GEVN 10                   | GEVN 10 daxs  |
|                 |       |      | 1/2 NPTF                       |         | 7  | 21   | 38,5 | 54,5  | 22 |    | 0,080             | GEGN 10                   | GEGN 10 daxs  |
|                 | 630   | 12   | 1/4 NPTF                       | M20x1,5 | 5  | 18,5 | 36,5 | 52,5  | 22 |    | 0,056             | GERN 12                   | GERN 12 daxs  |
|                 |       |      | 3/8 NPTF                       |         | 8  | 18   | 36   | 52    | 22 | 24 | 0,060             | GEVN 12                   | GEVN 12 daxs  |
|                 |       |      | 1/2 NPTF                       |         | 8  | 22   | 40   | 56    | 22 |    | 0,086             | GEGN 12                   | GEGN 12 daxs  |
|                 | 630   | 16   | 1/4 NPTF                       | M24x1,5 | 5  | 21,5 | 42   | 63,5  | 27 |    | 0,084             | GERN 161                  | GERN 161 daxs |
|                 |       |      | 3/8 NPTF                       |         | 8  | 22   | 42,5 | 64    | 27 |    | 0,093             | GERN 16                   | GERN 16 daxs  |
|                 |       |      | 1/2 NPTF                       |         | 12 | 24   | 44,5 | 66    | 27 | 30 | 0,104             | GEVN 16                   | GEVN 16 daxs  |
|                 |       |      | 3/4 NPTF                       |         | 12 | 25,5 | 46   | 67,5  | 32 |    | 0,152             | GEGN 16                   | GEGN 16 daxs  |
|                 |       |      | 1 NPTF                         |         | 12 | 28,5 | 49   | 70,5  | 36 |    | 0,274             | GEGN 161                  | GEGN 161 daxs |
|                 | 420   | 20   | 3/8 NPTF                       | M30x2,0 | 8  | 23   | 47   | 70    | 32 |    | 0,136             | GERN 201                  | GERN 201 daxs |
|                 |       |      | 1/2 NPTF                       |         | 12 | 26   | 50   | 73    | 32 |    | 0,152             | GERN 20                   | GERN 20 daxs  |
|                 |       |      | 3/4 NPTF                       |         | 15 | 25,5 | 49   | 72,5  | 32 | 36 | 0,169             | GEVN 20                   | GEVN 20 daxs  |
|                 |       |      | 1 NPTF                         |         | 15 | 28,5 | 52,5 | 75,5  | 36 |    | 0,286             | GEGN 20                   | GEGN 20 daxs  |
|                 |       |      | 1 1/4 NPTF                     |         | 15 | 31   | 55   | 78    | 46 |    | 0,417             | GEGN 201                  | GEGN 201 daxs |
|                 | 420   | 25   | 1/2 NPTF                       | M36x2,0 | 12 | 24,5 | 51,5 | 79    | 41 |    | 0,262             | GERN 251                  | GERN 251 daxs |
|                 |       |      | 3/4 NPTF                       |         | 15 | 29   | 56   | 83,5  | 41 |    | 0,282             | GERN 25                   | GERN 25 daxs  |
|                 |       |      | 1 NPTF                         |         | 19 | 29   | 56   | 83,5  | 41 | 46 | 0,309             | GEVN 25                   | GEVN 25 daxs  |
|                 |       |      | 1 1/4 NPTF                     |         | 19 | 31,5 | 58,5 | 86    | 46 |    | 0,488             | GEGN 25                   | GEGN 25 daxs  |
|                 |       |      | 1 1/2 NPTF                     |         | 19 | 33,5 | 60,5 | 88    | 50 |    | 0,567             | GEGN 251                  | GEGN 251 daxs |
|                 | 420   | 30   | 3/4 NPTF                       | M42x2,0 | 15 | 29,5 | 58   | 87,5  | 46 |    | 0,362             | GERN 301                  | GERN 301 daxs |
|                 |       |      | 1 NPTF                         |         | 19 | 31,5 | 60   | 89    | 46 | 50 | 0,412             | GERN 30                   | GERN 30 daxs  |
|                 |       |      | 1 1/4 NPTF                     |         | 24 | 32   | 60,5 | 90    | 46 |    | 0,456             | GEVN 30                   | GEVN 30 daxs  |
|                 | 420   | 38   | 1 NPTF                         | M52x2,0 | 19 | 32   | 64,5 | 97    | 55 |    | 0,589             | GERN 381                  | GERN 381 daxs |
|                 |       |      | 1 1/4 NPTF                     |         | 24 | 32,5 | 65   | 97,5  | 55 | 60 | 0,639             | GERN 38                   | GERN 38 daxs  |
|                 |       |      | 1 1/2 NPTF                     |         | 30 | 33,5 | 66   | 98,5  | 55 |    | 0,601             | GEVN 38                   | GEVN 38 daxs  |
|                 | 420   | 50   | 1 1/4 NPTF                     | M68x2,0 | 24 | 38,5 | 78   | 107   | 70 |    | 1,153             | GERN 501                  | GERN 501 daxs |
|                 |       |      | 1 1/2 NPTF                     |         | 30 | 38,5 | 78   | 107   | 70 | 80 | 1,101             | GERN 50                   | GERN 50 daxs  |
|                 |       |      | 2 NPTF                         |         | 38 | 44   | 83   | 112,5 | 70 |    | 1,201             | GEVN 50                   | GEVN 50 daxs  |



AVIT, BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen <sup>1</sup> mit metallischer Dichtkante und zylindrischem Whitworth Rohrgewinde nach ISO 1179-4 oder mit metrischem Gewinde nach ISO 9974-3.

Stud end <sup>1</sup> with metal to metal sealing with cylindrical BSP thread acc. ISO 1179-4 or with metric thread acc. ISO 9974-3.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

Werkstoff, Oberfläche / Material, Surface

Stahl, verzinkt / Steel, galvanised

Stahl, phosphatiert / Steel, phosphatised

Edelstahl 1.4571 / Stainless steel AISI 316Ti

BESTELLBEISPIEL  
ORDER EXAMPLE

TYP NG - \*\*

DN 25 - 01

DN 25 - 04

DN 25 - 41

STÜCKLISTE  
PARTS LIST

Pos. Bezeichnung / Description

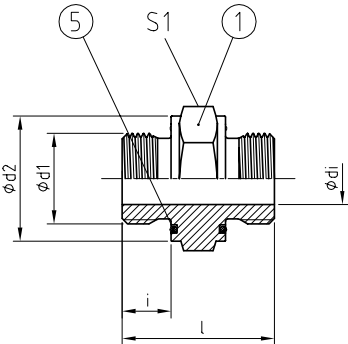
1 Einschraubstutzen / Stud connector

| TYPE                                | PN    | NG   | ABMESSUNGEN [mm] |    |    |    |      |    | GEWICHT | BESTELLCODE |
|-------------------------------------|-------|------|------------------|----|----|----|------|----|---------|-------------|
|                                     |       |      | DIMENSIONS       |    |    |    |      |    | WEIGHT  | ORDER CODE  |
|                                     | [bar] | [mm] | d1               | d2 | di | i  | l    | S1 | [kg]    | TYP NG      |
| WHITWORTH ROHRGEWINDE<br>BSP THREAD | 800   | 10   | G 1/4 A          | 18 | 5  | 12 | 36,5 | 19 | 0,045   | DN 10       |
|                                     | 630   | 12   | G 3/8 A          | 22 | 8  | 12 | 37,5 | 22 | 0,064   | DN 12       |
|                                     | 630   | 16   | G 1/2 A          | 26 | 12 | 14 | 44   | 27 | 0,101   | DN 16       |
|                                     | 420   | 20   | G 3/4 A          | 33 | 15 | 16 | 50   | 32 | 0,178   | DN 20       |
|                                     | 420   | 25   | G 1 A            | 39 | 19 | 18 | 56   | 41 | 0,312   | DN 25       |
|                                     | 420   | 30   | G 1 1/4 A        | 49 | 24 | 20 | 62   | 50 | 0,542   | DN 30       |
|                                     | 420   | 38   | G 1 1/2 A        | 55 | 30 | 22 | 67   | 55 | 0,673   | DN 38       |
|                                     | 420   | 50   | G 2 A            | 70 | 40 | 24 | 75   | 70 | 1,134   | DN 50       |
| METRISCHES GEWINDE<br>METRIC THREAD | 800   | 8    | M14x1,5          | 18 | 5  | 12 | 36,5 | 19 | 0,048   | DNM 8       |
|                                     | 800   | 10   | M16x1,5          | 22 | 7  | 12 | 37,5 | 22 | 0,064   | DNM 10      |
|                                     | 630   | 12   | M18x1,5          | 23 | 8  | 12 | 39   | 24 | 0,081   | DNM 12      |
|                                     | 630   | 16   | M22x1,5          | 27 | 12 | 14 | 44   | 27 | 0,112   | DNM 16      |
|                                     | 420   | 20   | M27x2,0          | 32 | 15 | 16 | 50   | 32 | 0,179   | DNM 20      |
|                                     | 420   | 25   | M33x2,0          | 39 | 19 | 18 | 56   | 41 | 0,311   | DNM 25      |
|                                     | 420   | 30   | M42x2,0          | 49 | 24 | 20 | 62   | 50 | 0,550   | DNM 30      |
|                                     | 420   | 38   | M48x2,0          | 55 | 30 | 22 | 67   | 55 | 0,680   | DNM 38      |
|                                     | 420   | 50   | M60x2,0          | 70 | 40 | 24 | 75   | 70 | 1,142   | DNM 50      |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.







AVIT, BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen<sup>1</sup> mit O-Ring Dichtung mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1 oder metrischem Gewinde nach ISO 261.  
Auch mit reduziertem Gewinde lieferbar.

Stud end<sup>1</sup> with O-ring sealing with cylindrical BSP thread acc. ISO 228-1 or metric thread acc. ISO 261.  
Also available with a reduced thread.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - ** |
|----------------------------------------------------|-------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | DO 25 - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | DO 25 - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | DO 25 - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | DO 25 - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | DO 25 - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | DO 25 - 42  |

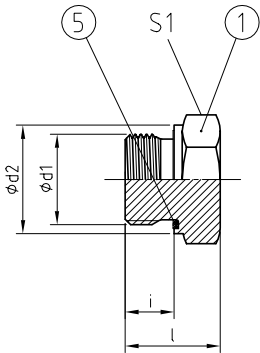
BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description          |
|------|------------------------------------|
| 1    | Einschraubstutzen / Stud connector |
| 5    | O-Ring Dichtung / O-ring sealing   |

| TYPE                                | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |    |      |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------------------|-------|------|--------------------------------|----|----|----|------|----|----------|-------------------|---------------------------|
|                                     |       |      | d1                             | d2 | di | i  | l    | S1 |          |                   |                           |
| WHITWORTH ROHRGEWINDE<br>BSP THREAD | [bar] | [mm] |                                |    |    |    |      |    | Pos. 5   | [kg]              | TYP NG                    |
|                                     | 800   | 10   | G 1/4 A                        | 22 | 5  | 12 | 37,5 | 22 | 15,0x2,0 | 0,056             | DO 10                     |
|                                     | 630   | 12   | G 3/8 A                        | 24 | 8  | 12 | 39   | 24 | 17,0x1,5 | 0,076             | DO 12                     |
|                                     | 630   | 16   | G 1/2 A                        | 30 | 12 | 14 | 46   | 30 | 22,0x2,0 | 0,128             | DO 16                     |
|                                     | 420   | 20   | G 3/4 A                        | 40 | 15 | 16 | 52   | 41 | 29,8x2,6 | 0,262             | DO 20                     |
|                                     | 420   | 25   | G 1 A                          | 46 | 19 | 18 | 57   | 46 | 34,5x2,6 | 0,376             | DO 25                     |
|                                     | 420   | 30   | G 1 1/4 A                      | 54 | 24 | 20 | 63   | 55 | 43,0x3,0 | 0,610             | DO 30                     |
|                                     | 420   | 38   | G 1 1/2 A                      | 60 | 30 | 22 | 68   | 60 | 49,0x3,0 | 0,755             | DO 38                     |
| METRISCHES GEWINDE<br>METRIC THREAD | 800   | 8    | M14x1,5                        | 22 | 5  | 12 | 36,5 | 22 | 15,0x2,0 | 0,055             | DOM 8                     |
|                                     | 800   | 10   | M16x1,5                        | 24 | 7  | 12 | 39   | 24 | 17,0x1,5 | 0,079             | DOM 10                    |
|                                     | 630   | 12   | M18x1,5                        | 24 | 8  | 12 | 39   | 24 | 18,0x1,5 | 0,081             | DOM 12                    |
|                                     | 630   | 16   | M22x1,5                        | 30 | 12 | 14 | 46   | 32 | 22,0x2,0 | 0,147             | DOM 16                    |
|                                     | 420   | 20   | M27x2,0                        | 40 | 15 | 16 | 52   | 41 | 29,8x2,6 | 0,264             | DOM 20                    |
|                                     | 420   | 25   | M33x2,0                        | 46 | 19 | 18 | 57   | 46 | 34,5x2,6 | 0,390             | DOM 25                    |
|                                     | 420   | 30   | M42x2,0                        | 54 | 24 | 20 | 63   | 55 | 43,0x3,0 | 0,624             | DOM 30                    |
|                                     | 420   | 38   | M48x2,0                        | 60 | 30 | 22 | 68   | 60 | 49,0x3,0 | 0,730             | DOM 38                    |
|                                     | 420   | 50   | M60x2,0                        | 75 | 40 | 24 | 76   | 75 | 61,0x3,5 | 1,267             | DOM 50                    |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.



AVIT, BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen mit U-Ring Dichtung (ED) und zylindrischem Whitworth Rohrgewinde nach ISO 1179-2.

Stud end with U-ring sealing (ED) and cylindrical BSP thread acc. ISO 1179-2.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - ** |
|----------------------------------------------------|-------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | VSU 25 - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | VSU 25 - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | VSU 25 - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | VSU 25 - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | VSU 25 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | VSU 25 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description          |
|------|------------------------------------|
| 1    | Einschraubstutzen / Stud connector |
| 5    | U-Ring Dichtung / U-ring sealing   |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |    |    |        | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|------|----|----|--------|---------------|-------------------|---------------------------|
|                 | [bar] | [mm] | d1                             | d2   | i  | l  | S1     | Pos. 5        | [kg]              | TYP NG                    |
| S               | 630   | 6    | G 1/8 A                        | 13,9 | 8  | 17 | 19 (!) | 8,4x11,9x1,0  | 0,023             | VSU 6                     |
|                 | 800   | 10   | G 1/4 A                        | 18,9 | 12 | 20 | 19     | 11,6x16,5x1,5 | 0,033             | VSU 10                    |
|                 | 630   | 12   | G 3/8 A                        | 21,9 | 12 | 22 | 22     | 14,7x18,9x1,5 | 0,048             | VSU 12                    |
|                 | 630   | 16   | G 1/2 A                        | 26,9 | 14 | 27 | 27     | 18,5x23,9x1,5 | 0,092             | VSU 16                    |
|                 | 420   | 20   | G 3/4 A                        | 31,9 | 16 | 31 | 32     | 23,9x29,2x1,5 | 0,162             | VSU 20                    |
|                 | 420   | 25   | G 1 A                          | 39,9 | 18 | 35 | 41     | 29,7x35,7x2,0 | 0,292             | VSU 25                    |
|                 | 420   | 30   | G 1 1/4 A                      | 49,9 | 20 | 38 | 50     | 38,8x45,8x2,0 | 0,480             | VSU 30                    |
|                 | 420   | 38   | G 1 1/2 A                      | 54,9 | 22 | 42 | 55     | 44,7x50,7x2,0 | 0,695             | VSU 38                    |
|                 | 420   | 50   | G 2 A                          | 69,9 | 24 | 48 | 70     | 56,1x62,7x2,5 | 1,252             | VSU 50                    |

HINWEIS

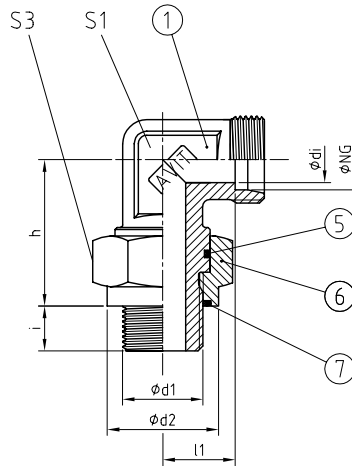
Bitte beachten Sie, dass gemäß der Druckstufe das Material des Einschraubloches eine entsprechende Festigkeit haben muss!

INFORMATION

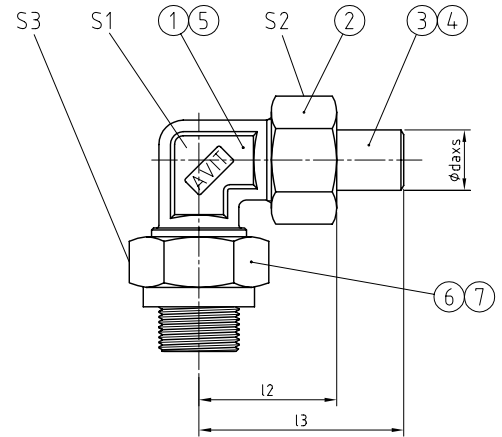
Please note that the port machining material must have a rigidity which corresponds to the pressure range!



SV [Pos. 1+5-7]



SV [Pos. 1-7]



## AVIT, BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen<sup>1</sup> mit O-Ring Dichtung mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1 oder metrischem Gewinde nach ISO 261.

Stud end<sup>1</sup> with O-ring sealing with cylindrical BSP thread acc. ISO 228-1 or metric thread acc. ISO 261

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxx - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | SV 25 - daxx - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | SV 25 - daxx - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | SV 25 - daxx - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | SV 25 - daxx - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | SV 25 - daxx - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | SV 25 - daxx - 42  |

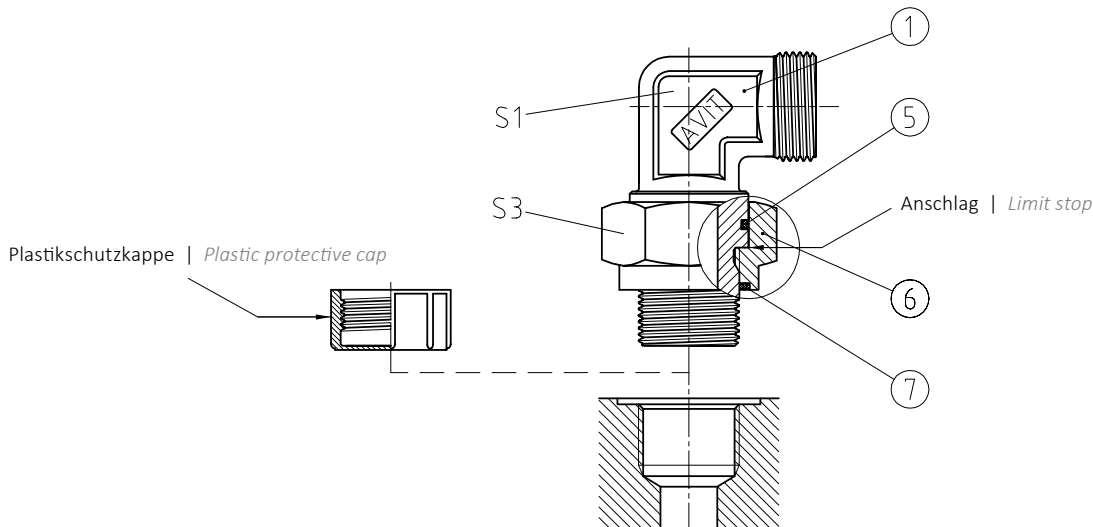
BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Einschraubstutzen / Stud connector    |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | O-Ring Dichtung / O-ring sealing      |
| 6    | Feststellmutter / Locking nut         |
| 7    | O-Ring Dichtung / O-ring sealing      |

ABMESSUNGEN [mm]  
DIMENSIONSO-RING  
WEIGHTBESTELLCODE  
ORDER CODE

|                                     | [bar] | [mm] | d1        | d2 | di | h    | i  | l1   | l2    | l3    | S1 | S2 | S3 | Pos. 5/7 | [kg]  | Pos. 1+5-7 | Pos. 1-7      |
|-------------------------------------|-------|------|-----------|----|----|------|----|------|-------|-------|----|----|----|----------|-------|------------|---------------|
| WHITWORTH ROHRGEWINDE<br>BSP-THREAD | 800   | 10   | G 1/4 A   | 22 | 5  | 36,5 | 12 | 17,5 | 35    | 51    | 19 | 22 | 24 | 14,0x2,0 | 0,165 | SV 101     | SV 101 daxis  |
|                                     | 800   | 10   | G 3/8 A   | 24 | 7  | 36,5 | 12 | 17,5 | 35    | 51    | 19 | 22 | 27 | 17,0x1,5 | 0,170 | SV 102     | SV 102 daxis  |
|                                     | 630   | 12   | G 3/8 A   | 24 | 8  | 38   | 12 | 21,5 | 39,5  | 55,5  | 19 | 24 | 27 | 17,0x1,5 | 0,185 | SV 12      | SV 12 daxis   |
|                                     | 630   | 16   | G 1/2 A   | 30 | 12 | 41   | 14 | 24,5 | 45    | 66,5  | 24 | 30 | 32 | 22,0x2,0 | 0,281 | SV 16      | SV 16 daxis   |
|                                     | 420   | 20   | G 3/4 A   | 40 | 15 | 51   | 16 | 26,5 | 50    | 73    | 27 | 36 | 41 | 26,6x2,6 | 0,458 | SV 20      | SV 20 daxis   |
|                                     | 420   | 25   | G 1 A     | 46 | 19 | 61   | 18 | 30   | 57    | 85,5  | 36 | 46 | 50 | 34,5x2,6 | 0,808 | SV 25      | SV 25 daxis   |
|                                     | 420   | 30   | G 1 1/4 A | 54 | 24 | 66   | 20 | 36,5 | 64    | 93,5  | 41 | 50 | 60 | 43,0x3,0 | 1,207 | SV 30      | SV 30 daxis   |
|                                     | 420   | 38   | G 1 1/2 A | 60 | 30 | 72   | 22 | 41   | 73,5  | 106   | 50 | 60 | 65 | 48,0x3,0 | 1,850 | SV 38      | SV 38 daxis   |
|                                     | 160   | 50   | G 2 A     | 75 | 40 | 90   | 24 | 67   | 106,5 | 135,5 | 80 | 80 | 80 | 61,0x3,5 | 5,500 | SV 50      | SV 50 daxis   |
| METRISCHES GEWINDE<br>METRIC THREAD | 800   | 10   | M14x1,5   | 22 | 7  | 36,5 | 12 | 17,5 | 35    | 51    | 19 | 22 | 24 | 14,0x2,0 | 0,165 | SVM 101    | SVM 101 daxis |
|                                     | 800   | 10   | M16x1,5   | 24 | 7  | 36,5 | 12 | 17,5 | 35    | 51    | 19 | 22 | 27 | 17,0x1,5 | 0,168 | SVM 102    | SVM 102 daxis |
|                                     | 630   | 12   | M18x1,5   | 24 | 8  | 38   | 12 | 21,5 | 39    | 55,5  | 19 | 24 | 27 | 18,0x1,5 | 0,183 | SVM 12     | SVM 12 daxis  |
|                                     | 630   | 16   | M22x1,5   | 30 | 12 | 41   | 14 | 24,5 | 45    | 67    | 24 | 30 | 32 | 22,0x2,0 | 0,277 | SVM 16     | SVM 16 daxis  |
|                                     | 420   | 20   | M27x2,0   | 40 | 15 | 51   | 16 | 26,5 | 50    | 73    | 27 | 36 | 41 | 26,6x2,6 | 0,452 | SVM 20     | SVM 20 daxis  |
|                                     | 420   | 25   | M33x2,0   | 46 | 19 | 61   | 18 | 30   | 57    | 85    | 36 | 46 | 50 | 34,5x2,6 | 0,830 | SVM 25     | SVM 25 daxis  |
|                                     | 420   | 30   | M42x2,0   | 54 | 24 | 66   | 20 | 35,5 | 64    | 93,5  | 41 | 50 | 60 | 43,0x3,0 | 1,123 | SVM 30     | SVM 30 daxis  |
|                                     | 420   | 38   | M48x2,0   | 60 | 30 | 72   | 22 | 41   | 73,5  | 106   | 50 | 60 | 65 | 48,0x3,0 | 1,870 | SVM 38     | SVM 38 daxis  |
|                                     | 160   | 50   | M60x2,0   | 75 | 40 | 90   | 24 | 67   | 106,5 | 135,5 | 80 | 80 | 80 | 61,0x3,5 | 5,500 | SVM 50     | SVM 50 daxis  |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.  
Bitte beachten Sie die Montageanleitung für einstellbare Winkel-Einschraubverschraubungen! | Please note the assembly instruction for adjustable elbow male stud connections!



**DIE HOHE ZUVERLÄSSIGKEIT DIESER AVIT ROHRVERSCHRAUBUNG SETZT EINE SORGFÄLTIGE SCHRAUBMONTAGE VORAUS. HIERZU IST DIE EINHALTUNG NACHSTEHENDER ARBEITSGÄNGE UNBEDINGT ERFORDERLICH!**

Stellen Sie vor der Montage sicher, dass das Einschraubloch nach ISO 1179-1 TYPE W (breit) die entsprechende Mindestgewindetiefe hat. (Maße siehe Seite 2.07)

AVIT einstellbare Winkel-Einschraubverschraubungen werden werkseitig mit einer vormontierten Feststellmutter ⑥ und eingelegtem O-Ring ⑤ geliefert. Der durch die Feststellmutter gekammerte O-Ring ⑦ wird durch eine Plastikschutzkappe gegen Abfallen bzw. Verlieren gesichert.

Überprüfen Sie vor dem Einschrauben, ob die Feststellmutter ⑥ vollständig bis zum Anschlag zurückgedreht ist und ölen Sie das Gewinde des Einschraubzapfens ① leicht ein. Schrauben Sie den Verschraubungskörper ① mit Feststellmutter ⑥ und O-Ring ⑦ bis zum spürbaren Druckpunkt handfest ein.

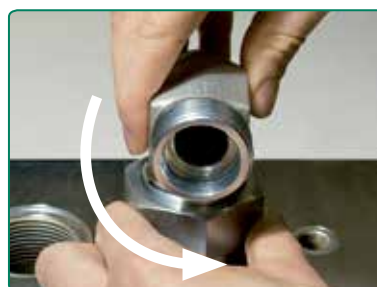
Richten Sie den Verschraubungskörper in einem beliebigen Winkel von max. 360° durch Zurückdrehen entsprechend Ihrer Rohrleitung aus und ziehen Sie die Feststellmutter ⑥ mit dem entsprechenden Drehmoment fest. (siehe Seite 2.10, Tabelle - Anzugsdrehmomente, Einschraubstutzen Ø d1) Anschließend können Sie die Rohrleitung gemäß der Montageanleitung fertigmontieren. (Seite 2.10) Bei einer erneuten Montage sind die Dichtungen auf Beschädigungen zu überprüfen und ggf. zu ersetzen.



1. Feststellmutter bis zum Anschlag drehen  
*Turn the locking nut to the limit stop*



2. Bis zum Druckpunkt einschrauben  
*Screw up to the stop point*



3. Ausrichten durch max. 360° Zurückdrehen  
*Adjust by turning back (max. 360°)*

**THE HIGH RELIABILITY OF THIS AVIT PIPE SCREW CONNECTION REQUIRES CAREFUL SCREW ASSEMBLY. FOR THIS REASON, THE FOLLOWING WORK STEPS MUST BE FOLLOWED!**

Before assembly, ensure that the threaded bore according to ISO 1179-1 TYPE W (wide) has the appropriate minimum thread depth. (See page 2.07 for dimensions)

Adjustable AVIT elbow screw connections are delivered with a pre-assembled locking nut ⑥ and installed O-ring ⑤. The O-ring ⑦ chambered by the locking nut is secured by a plastic protective cap to prevent drop or lose.

Before screwing it in place, check whether the locking nut ⑥ is completely unscrewed to the mechanical stop and lightly oil the thread of the threaded port connection ①.

Screw in the screw connection element ① with locking nut ⑥ and O-ring ⑦ by hand to the perceptible pressure point.

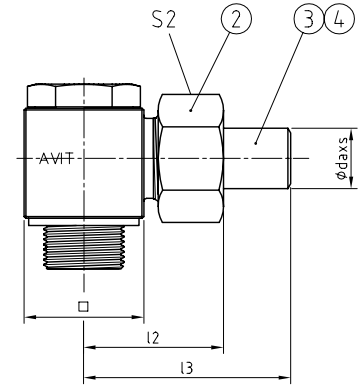
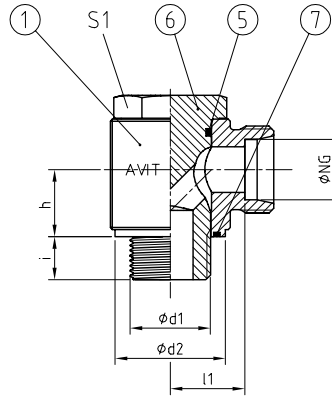
Align the screw connection element at the desired angle to fit your pipeline by turning it back for max. 360° and tighten the locking nut ⑥ to the appropriate torque. (see page 2.10, Table - Assembly torques, male stud connector Ø d1)

Then you can finish assembly of the pipeline according to the assembly instructions. (Page 2.10). If making a reassembly, inspect the seals for damage and replace them if necessary.



SKV [Pos. 1+5-7]

SKV [Pos. 1-7]



## AVIT, BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen <sup>1</sup> mit O-Ring Dichtung mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1 oder metrischem Gewinde nach ISO 261.

Stud end <sup>1</sup> with O-ring sealing with cylindrical BSP thread acc. ISO 228-1 or metric thread acc. ISO 261.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxx - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | SKV 25 - daxx - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | SKV 25 - daxx - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | SKV 25 - daxx - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | SKV 25 - daxx - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | SKV 25 - daxx - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | SKV 25 - daxx - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Schwenkkörper / Swivel body           |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | O-Ring Dichtung / O-ring sealing      |
| 6    | Hohlschraube / Hollow screw           |
| 7    | O-Ring Dichtung / O-ring sealing      |

| TYPE                                       | PN <sup>2</sup> | NG   | ABMESSUNGEN [mm] |    |      |    |      |      |       |     |    |    | O-RING   |          | GEWICHT | BESTELLCODE |               |
|--------------------------------------------|-----------------|------|------------------|----|------|----|------|------|-------|-----|----|----|----------|----------|---------|-------------|---------------|
|                                            | [bar]           | [mm] | d1               | d2 | h    | i  | l1   | l2   | l3    | □   | S1 | S2 | Pos. 5   | Pos. 7   | [kg]    | Pos. 1+5-7  | Pos. 1-7      |
| WHITWORTH ROHRGEWINDE<br><i>BSP THREAD</i> | 500             | 10   | G 1/4 A          | 22 | 14   | 12 | 17   | 34,5 | 51    | 25  | 19 | 22 | 9,5x2,0  | 16,0x1,5 | 0,134   | SKV 101     | SKV 101 daxe  |
|                                            | 500             | 10   | G 3/8 A          | 24 | 18   | 12 | 19,5 | 37   | 53    | 30  | 24 | 22 | 14,0x2,0 | 18,0x1,5 | 0,223   | SKV 102     | SKV 102 daxe  |
|                                            | 420             | 12   | G 3/8 A          | 24 | 18   | 12 | 19,5 | 37,5 | 53,5  | 30  | 24 | 24 | 14,0x2,0 | 18,0x1,5 | 0,222   | SKV 12      | SKV 12 daxe   |
|                                            | 420             | 16   | G 1/2 A          | 30 | 22   | 14 | 25,5 | 46   | 67,5  | 40  | 30 | 30 | 18,0x2,2 | 23,0x2,0 | 0,489   | SKV 16      | SKV 16 daxe   |
|                                            | 315             | 20   | G 3/4 A          | 40 | 24,5 | 16 | 28   | 52   | 75    | 45  | 36 | 36 | 25,3x2,4 | 31,0x2,5 | 0,688   | SKV 20      | SKV 20 daxe   |
|                                            | 250             | 25   | G 1 A            | 46 | 28   | 18 | 31   | 58   | 85,5  | 50  | 41 | 46 | 29,8x2,6 | 37,0x2,5 | 0,969   | SKV 25      | SKV 25 daxe   |
|                                            | 250             | 30   | G 1 1/4 A        | 54 | 36   | 20 | 36,5 | 65   | 94,5  | 60  | 50 | 50 | 38,0x2,5 | 45,0x2,5 | 1,637   | SKV 30      | SKV 30 daxe   |
|                                            | 250             | 38   | G 1 1/2 A        | 60 | 40   | 22 | 43,5 | 76   | 108,5 | 75  | 60 | 60 | 43,0x3,0 | 51,0x3,0 | 2,893   | SKV 38      | SKV 38 daxe   |
|                                            | 250             | 50   | G 2 A            | 75 | 54,5 | 24 | 58   | 97,5 | 126,5 | 100 | 70 | 80 | 55,0x3,0 | 64,0x3,0 | 6,990   | SKV 50      | SKV 50 daxe   |
| METRISCHES GEWINDE<br><i>METRIC THREAD</i> | 500             | 10   | M14x1,5          | 22 | 14   | 12 | 17   | 34,5 | 51    | 30  | 24 | 22 | 14,0x2,0 | 16,0x1,5 | 0,167   | SKVM 101    | SKVM 101 daxe |
|                                            | 500             | 10   | M16x1,5          | 24 | 18   | 12 | 19,5 | 37   | 53    | 30  | 24 | 22 | 14,0x2,0 | 18,0x1,5 | 0,220   | SKVM 102    | SKVM 102 daxe |
|                                            | 420             | 12   | M18x1,5          | 24 | 18   | 12 | 19,5 | 37,5 | 53,5  | 30  | 24 | 24 | 14,0x2,0 | 18,0x1,5 | 0,233   | SKVM 12     | SKVM 12 daxe  |
|                                            | 420             | 16   | M22x1,5          | 30 | 22   | 14 | 25,5 | 46   | 67,5  | 40  | 30 | 30 | 18,0x2,2 | 24,0x1,5 | 0,477   | SKVM 16     | SKVM 16 daxe  |
|                                            | 315             | 20   | M27x2,0          | 40 | 24,5 | 16 | 28   | 52   | 75    | 45  | 36 | 36 | 25,3x2,4 | 31,0x2,5 | 0,696   | SKVM 20     | SKVM 20 daxe  |
|                                            | 250             | 25   | M33x2,0          | 46 | 28   | 18 | 31   | 58   | 85,5  | 50  | 41 | 46 | 29,8x2,6 | 37,0x2,5 | 0,969   | SKVM 25     | SKVM 25 daxe  |
|                                            | 250             | 30   | M42x2,0          | 54 | 36   | 20 | 36,5 | 65   | 94,5  | 60  | 50 | 50 | 38,0x2,5 | 45,0x2,5 | 1,639   | SKVM 30     | SKVM 30 daxe  |
|                                            | 250             | 38   | M48x2,0          | 60 | 40   | 22 | 43,5 | 76   | 108,5 | 75  | 60 | 60 | 43,0x3,0 | 51,0x3,0 | 2,887   | SKVM 38     | SKVM 38 daxe  |
|                                            | 250             | 50   | M60x2,0          | 75 | 54,5 | 24 | 58   | 97,5 | 126,5 | 100 | 70 | 80 | 55,0x3,0 | 64,0x3,0 | 6,990   | SKVM 50     | SKVM 50 daxe  |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.

2 Betriebsdruck ist mit 2,5-facher Sicherheit ausgelegt. | Designed with a safety factor of 2.5 on the permissible operating pressure.

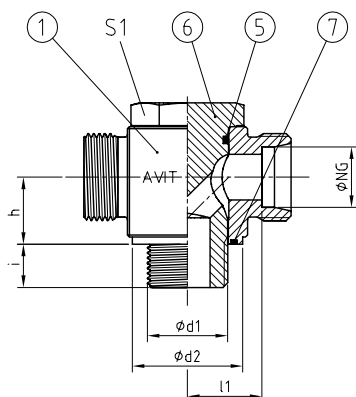


**AVIT, BAUREIHE / SERIES: S = HEAVY**

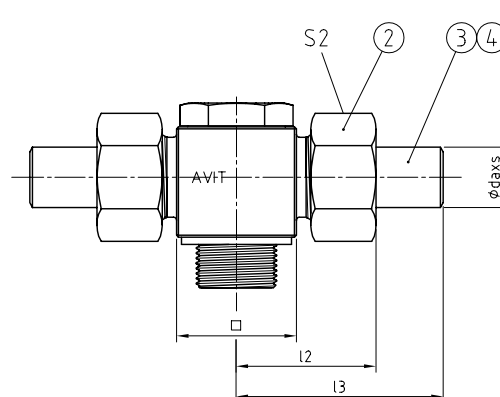
Einschraubzapfen <sup>1</sup> mit O-Ring Dichtung mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1 oder metrischem Gewinde nach ISO 261.

Stud end <sup>1</sup> with O-ring sealing with cylindrical BSP thread acc. ISO 228-1 or metric thread acc. ISO 261.

TSKV [Pos. 1+5-7]



TSKV [Pos. 1-7]

**WERKSTOFF-KOMBINATION**  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - **  |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | TSKV 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | TSKV 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | TSKV 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | TSKV 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | TSKV 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | TSKV 25 - daxs - 42 |

**BESTELLBEISPIEL**  
ORDER EXAMPLE**STÜCKLISTE**  
PARTS LIST

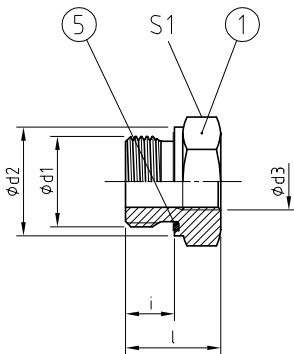
| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Schwenkkörper / Swivel body           |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | O-Ring Dichtung / O-ring sealing      |
| 6    | Hohlschraube / Hollow screw           |
| 7    | O-Ring Dichtung / O-ring sealing      |

| TYPE                                       | PN <sup>2</sup> | NG    | ABMESSUNGEN [mm] |      |      |    |      |       |       |     |    |          | O-RING   |          | GEWICHT | BESTELLCODE  |               |
|--------------------------------------------|-----------------|-------|------------------|------|------|----|------|-------|-------|-----|----|----------|----------|----------|---------|--------------|---------------|
|                                            |                 |       | DIMENSIONS       |      |      |    |      |       |       |     |    |          |          |          | WEIGHT  | ORDER CODE   |               |
| WHITWORTH-GEWINDE<br><i>BSP-THREAD</i>     | [bar]           | [mm]  | d1               | d2   | h    | i  | l1   | l2    | l3    | □   | S1 | S2       | Pos. 5   | Pos. 7   | [kg]    | Pos. 1+5-7   | Pos. 1-7      |
|                                            | 420             | 10    | G 1/4 A          | 22   | 14   | 12 | 17   | 34,5  | 51    | 25  | 19 | 22       | 9,5x2,0  | 16,0x1,5 | 0,175   | TSKV 101     | TSKV 101 daxs |
|                                            | 420             | 10    | G 3/8 A          | 24   | 18   | 12 | 19,5 | 37    | 53    | 30  | 24 | 22       | 14,0x2,0 | 18,0x1,5 | 0,258   | TSKV 102     | TSKV 102 daxs |
|                                            | 420             | 12    | G 3/8 A          | 24   | 18   | 12 | 19,5 | 37,5  | 53,5  | 30  | 24 | 24       | 14,0x2,0 | 18,0x1,5 | 0,235   | TSKV 12      | TSKV 12 daxs  |
|                                            | 420             | 16    | G 1/2 A          | 30   | 22   | 14 | 25,5 | 46    | 67,5  | 40  | 30 | 30       | 18,0x2,2 | 23,0x2,0 | 0,507   | TSKV 16      | TSKV 16 daxs  |
|                                            | 315             | 20    | G 3/4 A          | 40   | 24,5 | 16 | 28   | 52    | 75    | 45  | 36 | 36       | 25,3x2,4 | 31,0x2,5 | 0,820   | TSKV 20      | TSKV 20 daxs  |
|                                            | 250             | 25    | G 1 A            | 46   | 28   | 18 | 31   | 58    | 85,5  | 50  | 41 | 46       | 29,8x2,6 | 37,0x2,5 | 1,180   | TSKV 25      | TSKV 25 daxs  |
|                                            | 250             | 30    | G 1 1/4 A        | 54   | 36   | 20 | 36,5 | 65    | 94,5  | 60  | 50 | 50       | 38,0x2,5 | 45,0x2,5 | 1,940   | TSKV 30      | TSKV 30 daxs  |
|                                            | 250             | 38    | G 1 1/2 A        | 60   | 40   | 22 | 43,5 | 76    | 108,5 | 75  | 60 | 60       | 43,0x3,0 | 51,0x3,0 | 3,007   | TSKV 38      | TSKV 38 daxs  |
| 250                                        | 50              | G 2 A | 75               | 54,5 | 24   | 58 | 97,5 | 126,5 | 100   | 70  | 80 | 55,0x3,0 | 64,0x3,0 | 7,150    | TSKV 50 | TSKV 50 daxs |               |
| METRISCHES GEWINDE<br><i>METRIC THREAD</i> | 420             | 10    | M14x1,5          | 22   | 14   | 12 | 17   | 34,5  | 51    | 30  | 24 | 22       | 14,0x2,0 | 16,0x1,5 | 0,175   | TSKVM 101    | TSKVM 101daxs |
|                                            | 420             | 10    | M16x1,5          | 24   | 18   | 12 | 19,5 | 37    | 53    | 30  | 24 | 22       | 14,0x2,0 | 18,0x1,5 | 0,258   | TSKVM 102    | TSKVM 102daxs |
|                                            | 420             | 12    | M18x1,5          | 24   | 18   | 12 | 19,5 | 37,5  | 53,5  | 30  | 24 | 24       | 14,0x2,0 | 18,0x1,5 | 0,267   | TSKVM 12     | TSKVM 12 daxs |
|                                            | 420             | 16    | M22x1,5          | 30   | 22   | 14 | 25,5 | 46    | 67,5  | 40  | 30 | 30       | 18,0x2,2 | 24,0x1,5 | 0,570   | TSKVM 16     | TSKVM 16 daxs |
|                                            | 315             | 20    | M27x2,0          | 40   | 24,5 | 16 | 28   | 52    | 75    | 45  | 36 | 36       | 25,3x2,4 | 31,0x2,5 | 0,820   | TSKVM 20     | TSKVM 20 daxs |
|                                            | 250             | 25    | M33x2,0          | 46   | 28   | 18 | 31   | 58    | 85,5  | 50  | 41 | 46       | 29,8x2,6 | 37,0x2,5 | 1,180   | TSKVM 25     | TSKVM 25 daxs |
|                                            | 250             | 30    | M42x2,0          | 54   | 36   | 20 | 36,5 | 65    | 94,5  | 60  | 50 | 50       | 38,0x2,5 | 45,0x2,5 | 1,940   | TSKVM 30     | TSKVM 30 daxs |
|                                            | 250             | 38    | M48x2,0          | 60   | 40   | 22 | 43,5 | 76    | 108,5 | 75  | 60 | 60       | 43,0x3,0 | 51,0x3,0 | 3,450   | TSKVM 38     | TSKVM 38 daxs |
|                                            | 250             | 50    | M60x2,0          | 75   | 54,5 | 24 | 58   | 97,5  | 126,5 | 100 | 70 | 80       | 55,0x3,0 | 64,0x3,0 | 8,500   | TSKVM 50     | TSKVM 50 daxs |

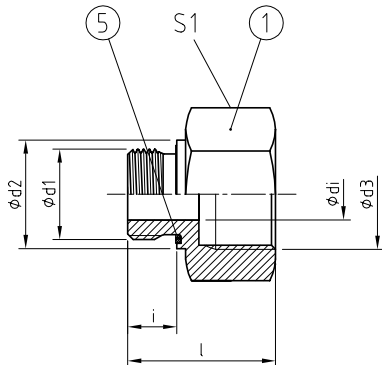
1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.  
2 Betriebsdruck ist mit 2,5-facher Sicherheit ausgelegt. | Designed with a safety factor of 2.5 on the permissible operating pressure.



Form K



Form G



**AVIT**

Einschraubzapfen mit U-Ring Dichtung (ED) und zylindrischem Whitworth Rohrgewinde nach ISO 1179-2. Auch mit metrischem Gewinde lieferbar (RIM).

*Stud end with U-ring sealing (ED) and cylindrical BSP thread acc. ISO 1179-2.*

*Also available with metric thread (RIM).*

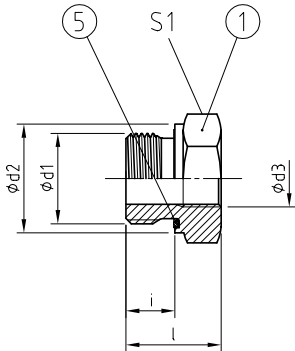
| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST             |
|----------------------------------------------------|----------------------------------|--------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP d1 - d3 - **                 | Pos. Bezeichnung / Description       |
| Stahl, verzinkt / Steel, galvanised; NBR           | RI 1 - 3/4 - 01                  | 1 Einschraubstutzen / Stud connector |
| Stahl, verzinkt / Steel, galvanised; FKM           | RI 1 - 3/4 - 02                  | 5 U-Ring Dichtung / U-ring sealing   |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | RI 1 - 3/4 - 04                  |                                      |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | RI 1 - 3/4 - 05                  |                                      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | RI 1 - 3/4 - 41                  |                                      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | RI 1 - 3/4 - 42                  |                                      |

| PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |    |    |    |      | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------|------|--------------------------------|---------|----|------|----|----|----|------|---------------|-------------------|---------------------------|
| [bar] | [mm] | d1                             | d3      | di | d2   | i  | l  | S1 | Form | Pos. 5        | [kg]              | TYP d1 - d3               |
| 800   | 6    | G 1/8 A                        | G 1/4   | 4  | 13,9 | 8  | 31 | 19 | G    | 8,4x11,9x1,0  | 0,041             | RI 1/8 - 1/4              |
|       |      |                                | G 3/8   | 4  |      |    | 32 | 24 | G    |               | 0,065             | RI 1/8 - 3/8              |
| 800   | 10   | G 1/4 A                        | G 1/8   | 5  | 18,9 | 12 | 29 | 19 | G    | 11,6x16,5x1,5 | 0,043             | RI 1/4 - 1/8              |
|       |      |                                | G 3/8   | 5  |      |    | 36 | 24 | G    |               | 0,072             | RI 1/4 - 3/8              |
|       |      |                                | G 1/2   | 5  |      |    | 40 | 30 | G    |               | 0,124             | RI 1/4 - 1/2              |
|       |      |                                | G 3/4   | 5  |      |    | 43 | 36 | G    |               | 0,181             | RI 1/4 - 3/4              |
| 630   | 12   | G 3/8 A                        | G 1/8   | -  | 21,9 | 12 | 22 | 22 | K    | 14,7x18,9x1,5 | 0,039             | RI 3/8 - 1/8              |
|       |      |                                | G 1/4   | 8  |      |    | 36 | 22 | G    |               | 0,074             | RI 3/8 - 1/4              |
|       |      |                                | G 1/2   | 8  |      |    | 41 | 30 | G    |               | 0,133             | RI 3/8 - 1/2              |
|       |      |                                | G 3/4   | 8  |      |    | 44 | 36 | G    |               | 0,189             | RI 3/8 - 3/4              |
| 630   | 16   | G 1/2 A                        | G 1     | 8  | 26,9 | 14 | 49 | 41 | G    | 18,5x23,9x1,5 | 0,259             | RI 3/8 - 1                |
|       |      |                                | G 1/4   | -  |      |    | 27 | 27 | K    |               | 0,072             | RI 1/2 - 1/4              |
|       |      |                                | G 3/8   | 12 |      |    | 36 | 27 | G    |               | 0,098             | RI 1/2 - 3/8              |
|       |      |                                | G 3/4   | 12 |      |    | 46 | 36 | G    |               | 0,198             | RI 1/2 - 3/4              |
| 420   | 20   | G 3/4 A                        | G 1     | 12 | 31,9 | 16 | 49 | 41 | G    | 23,9x29,2x1,5 | 0,248             | RI 1/2 - 1                |
|       |      |                                | G 1 1/4 | 12 |      |    | 53 | 55 | G    |               | 0,509             | RI 1/2 - 1 1/4            |
|       |      |                                | G 1/4   | -  |      |    | 31 | 32 | K    |               | 0,137             | RI 3/4 - 1/4              |
|       |      |                                | G 3/8   | -  |      |    | 31 | 32 | K    |               | 0,120             | RI 3/4 - 3/8              |
|       |      |                                | G 1/2   | 15 |      |    | 41 | 32 | G    |               | 0,160             | RI 3/4 - 1/2              |
|       |      |                                | G 1     | 15 |      |    | 51 | 41 | G    |               | 0,267             | RI 3/4 - 1                |
|       |      |                                | G 1 1/4 | 15 |      |    | 55 | 55 | G    |               | 0,528             | RI 3/4 - 1 1/4            |
|       |      |                                | G 1 1/2 | 15 |      |    | 57 | 60 | G    |               | 0,671             | RI 3/4 - 1 1/2            |

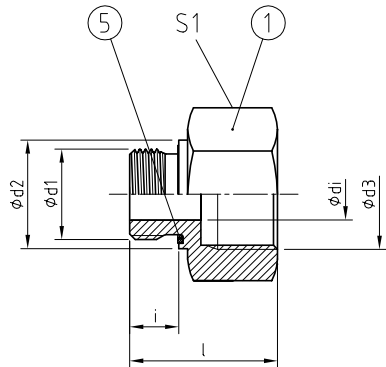
Fortsetzung nächste Seite | Continued on next page



Form K



Form G



AVIT

Einschraubzapfen mit U-Ring Dichtung (ED) und zylindrischem Whitworth Rohrgewinde nach ISO 1179-2. Auch mit metrischem Gewinde lieferbar (RIM).

Stud end with U-ring sealing (ED) and cylindrical BSP thread acc. ISO 1179-2.  
Also available with metric thread (RIM).

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP d1 - d3 - ** |
|----------------------------------------------------|------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | RI 1 - 3/4 - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | RI 1 - 3/4 - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | RI 1 - 3/4 - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | RI 1 - 3/4 - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | RI 1 - 3/4 - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | RI 1 - 3/4 - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description          |
|------|------------------------------------|
| 1    | Einschraubstutzen / Stud connector |
| 5    | U-Ring Dichtung / U-ring sealing   |

| PN    |    | NG        |         | ABMESSUNGEN [mm]<br>DIMENSIONS |      |    |    |   | U-RING |    | GEWICHT<br>WEIGHT |               | BESTELLCODE<br>ORDER CODE |                  |
|-------|----|-----------|---------|--------------------------------|------|----|----|---|--------|----|-------------------|---------------|---------------------------|------------------|
| [bar] |    | [mm]      |         | d1                             | d3   | di | d2 | i | l      | S1 | Form              | Pos. 5        | [kg]                      | TYP d1 - d3      |
| 420   | 25 | G 1 A     | G 1/4   | -                              | 39,9 | 18 |    |   | 35     | 41 | K                 | 29,7x35,7x2,0 | 0,266                     | RI 1 - 1/4       |
|       |    |           | G 3/8   | -                              |      |    |    |   | 35     | 41 | K                 |               | 0,246                     | RI 1 - 3/8       |
|       |    |           | G 1/2   | -                              |      |    |    |   | 35     | 41 | K                 |               | 0,219                     | RI 1 - 1/2       |
|       |    |           | G 3/4   | 19                             |      |    |    |   | 47     | 41 | G                 |               | 0,296                     | RI 1 - 3/4       |
|       |    |           | G 1 1/4 | 19                             |      |    |    |   | 57     | 55 | G                 |               | 0,549                     | RI 1 - 1 1/4     |
|       |    |           | G 1 1/2 | 19                             |      |    |    |   | 60     | 60 | G                 |               | 0,660                     | RI 1 - 1 1/2     |
| 420   | 30 | G 1 1/4 A | G 1/4   | -                              | 49,9 | 20 |    |   | 38     | 50 | K                 | 38,8x45,8x2,0 | 0,464                     | RI 1 1/4 - 1/4   |
|       |    |           | G 3/8   | -                              |      |    |    |   | 38     | 50 | K                 |               | 0,442                     | RI 1 1/4 - 3/8   |
|       |    |           | G 1/2   | -                              |      |    |    |   | 38     | 50 | K                 |               | 0,413                     | RI 1 1/4 - 1/2   |
|       |    |           | G 3/4   | -                              |      |    |    |   | 38     | 50 | K                 |               | 0,358                     | RI 1 1/4 - 3/4   |
|       |    |           | G 1     | 24                             |      |    |    |   | 52     | 50 | G                 |               | 0,491                     | RI 1 1/4 - 1     |
|       |    |           | G 1 1/2 | 24                             |      |    |    |   | 60     | 60 | G                 |               | 0,594                     | RI 1 1/4 - 1 1/2 |
| 420   | 38 | G 1 1/2 A | G 1/2   | -                              | 54,9 | 22 |    |   | 42     | 55 | K                 | 44,7x50,7x2,0 | 0,596                     | RI 1 1/2 - 1/2   |
|       |    |           | G 3/4   | -                              |      |    |    |   | 42     | 55 | K                 |               | 0,539                     | RI 1 1/2 - 3/4   |
|       |    |           | G 1     | -                              |      |    |    |   | 42     | 55 | K                 |               | 0,448                     | RI 1 1/2 - 1     |
|       |    |           | G 1 1/4 | 30                             |      |    |    |   | 58     | 55 | G                 |               | 0,590                     | RI 1 1/2 - 1 1/4 |
| 420   | 50 | G 2 A     | G 3/4   | -                              | 69,9 | 24 |    |   | 48     | 70 | K                 | 56,1x62,7x2,5 | 1,103                     | RI 2 - 3/4       |
|       |    |           | G 1     | -                              |      |    |    |   | 48     | 70 | K                 |               | 1,002                     | RI 2 - 1         |
|       |    |           | G 1 1/4 | -                              |      |    |    |   | 48     | 70 | K                 |               | 0,821                     | RI 2 - 1 1/4     |
|       |    |           | G 1 1/2 | 40                             |      |    |    |   | 62     | 70 | G                 |               | 1,057                     | RI 2 - 1 1/2     |

BESTELLCODE VARIANTEN

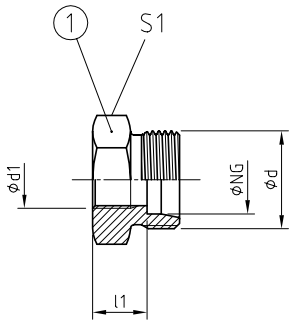
mit metrischem Gewinde.....RIM  
mit NPTF Gewinde.....RIN

ORDER CODE OPTIONS

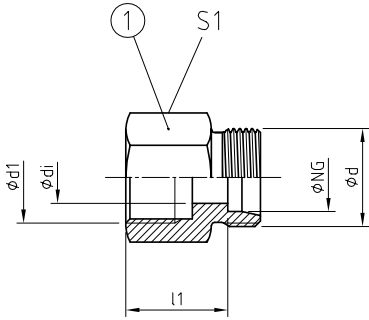
with metric thread.....RIM  
with NPTF thread.....RIN



Form K



Form G



**AVIT**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**  
Stutzen mit Whitworth Innengewinde nach ISO 1179-1.  
24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.  
  
Stud end with BSP thread acc. ISO 1179-1.  
24° cone end with metric thread acc. to ISO 8434-1.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|-----------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface     | TYP NG - **                      |
| Stahl, verzinkt / Steel, galvanised           | GEI 25 - 01                      |
| Stahl, phosphatiert / Steel, phosphatised     | GEI 25 - 04                      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti | GEI 25 - 41                      |

| STÜCKLISTE<br>PARTS LIST |                              |
|--------------------------|------------------------------|
| Pos.                     | Bezeichnung / Description    |
| 1                        | Gewindestutzen / Female body |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |    |      | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|---------|----|------|----|------|-------------------|---------------------------|
|                 | [bar] | [mm] | d                              | d1      | di | l1   | S1 | Form | [kg]              | TYP NG                    |
| L               | 315   | 15   | M22x1,5                        | G 1/4   | -  | 15   | 24 | K    | 0,048             | GEI 152                   |
|                 |       |      |                                | G 3/8   | 12 | 26   | 24 | G    | 0,071             | GEI 151                   |
|                 |       |      |                                | G 1/2   | 12 | 29   | 32 | G    | 0,136             | GEI 15                    |
|                 | 315   | 18   | M26x1,5                        | G 1/4   | -  | 14,5 | 27 | K    | 0,067             | GEI 182                   |
|                 |       |      |                                | G 3/8   | -  | 14,5 | 27 | K    | 0,058             | GEI 181                   |
|                 |       |      |                                | G 1/2   | 15 | 30,5 | 32 | G    | 0,152             | GEI 18                    |
|                 | 160   | 22   | M30x2,0                        | G 1/4   | -  | 18,5 | 32 | K    | 0,113             | GEI 223                   |
|                 |       |      |                                | G 3/8   | -  | 18,5 | 32 | K    | 0,103             | GEI 222                   |
|                 |       |      |                                | G 1/2   | -  | 18,5 | 32 | K    | 0,088             | GEI 221                   |
|                 |       |      |                                | G 3/4   | 19 | 35,5 | 36 | G    | 0,190             | GEI 22                    |
|                 | 160   | 28   | M36x2,0                        | G 3/8   | -  | 18,5 | 41 | K    | 0,174             | GEI 283                   |
|                 |       |      |                                | G 1/2   | -  | 18,5 | 41 | K    | 0,160             | GEI 282                   |
|                 |       |      |                                | G 3/4   | -  | 18,5 | 41 | K    | 0,133             | GEI 281                   |
|                 |       |      |                                | G 1     | 24 | 35,5 | 41 | G    | 0,215             | GEI 28                    |
|                 | 160   | 35   | M45x2,0                        | G 1/2   | -  | 19,5 | 46 | K    | 0,261             | GEI 353                   |
|                 |       |      |                                | G 3/4   | -  | 19,5 | 46 | K    | 0,233             | GEI 352                   |
|                 |       |      |                                | G 1     | -  | 19,5 | 46 | K    | 0,192             | GEI 351                   |
|                 |       |      |                                | G 1 1/4 | 30 | 41   | 55 | G    | 0,500             | GEI 35                    |
|                 | 160   | 42   | M52x2,0                        | G 3/4   | -  | 19   | 55 | K    | 0,343             | GEI 423                   |
|                 |       |      |                                | G 1     | -  | 19   | 55 | K    | 0,304             | GEI 422                   |
|                 |       |      |                                | G 1 1/4 | 36 | 36   | 55 | G    | 0,436             | GEI 421                   |
|                 |       |      |                                | G 1 1/2 | 36 | 40   | 60 | G    | 0,532             | GEI 42                    |

Fortsetzung nächste Seite | Continued on next page

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |    |      | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|------|--------------------------------|---------|----|------|----|------|-------------------|---------------------------|
|                 | [bar] | [mm] | d                              | d1      | di | l1   | S1 | Form | [kg]              | TYP NG                    |
| S               | 800   | 10   | M18x1,5                        | G 1/4   | 7  | 25,5 | 22 | G    | 0,068             | GEI 101                   |
|                 |       |      |                                | G 3/8   | 7  | 25,5 | 24 | G    | 0,071             | GEI 10                    |
|                 | 630   | 12   | M20x1,5                        | G 1/4   | 8  | 25,5 | 22 | G    | 0,070             | GEI 121                   |
|                 |       |      |                                | G 3/8   | 8  | 25,5 | 24 | G    | 0,074             | GEI 12                    |
|                 | 420   | 16   | M24x1,5                        | G 1/4   | -  | 15,5 | 27 | K    | 0,067             | GEI 162                   |
|                 |       |      |                                | G 3/8   | 12 | 27,5 | 27 | G    | 0,107             | GEI 161                   |
|                 |       |      |                                | G 1/2   | 12 | 30,5 | 30 | G    | 0,131             | GEI 16                    |
|                 | 420   | 20   | M30x2,0                        | G 1/4   | -  | 17,5 | 32 | K    | 0,121             | GEI 203                   |
|                 |       |      |                                | G 3/8   | -  | 17,5 | 32 | K    | 0,111             | GEI 202                   |
|                 |       |      |                                | G 1/2   | 15 | 32,5 | 32 | G    | 0,179             | GEI 201                   |
|                 |       |      |                                | G 3/4   | 15 | 34,5 | 36 | G    | 0,210             | GEI 20                    |
|                 | 420   | 25   | M36x2,0                        | G 1/4   | -  | 20   | 41 | K    | 0,227             | GEI 254                   |
|                 |       |      |                                | G 3/8   | -  | 20   | 41 | K    | 0,216             | GEI 253                   |
|                 |       |      |                                | G 1/2   | -  | 20   | 41 | K    | 0,200             | GEI 252                   |
|                 |       |      |                                | G 3/4   | 19 | 35   | 41 | G    | 0,306             | GEI 251                   |
|                 |       |      |                                | G 1     | 19 | 37,5 | 41 | G    | 0,269             | GEI 25                    |
|                 | 420   | 30   | M42x2,0                        | G 1/4   | -  | 20,5 | 46 | K    | 0,310             | GEI 305                   |
|                 |       |      |                                | G 3/8   | -  | 20,5 | 46 | K    | 0,298             | GEI 304                   |
|                 |       |      |                                | G 1/2   | -  | 20,5 | 46 | K    | 0,282             | GEI 303                   |
|                 |       |      |                                | G 3/4   | -  | 20,5 | 46 | K    | 0,252             | GEI 302                   |
|                 |       |      |                                | G 1     | 24 | 39,5 | 46 | G    | 0,407             | GEI 301                   |
|                 |       |      |                                | G 1 1/4 | 24 | 42   | 55 | G    | 0,549             | GEI 30                    |
|                 | 420   | 38   | M52x2,0                        | G 1/4   | -  | 23   | 55 | K    | 0,532             | GEI 386                   |
|                 |       |      |                                | G 3/8   | -  | 23   | 55 | K    | 0,519             | GEI 385                   |
|                 |       |      |                                | G 1/2   | -  | 23   | 55 | K    | 0,501             | GEI 384                   |
|                 |       |      |                                | G 3/4   | -  | 23   | 55 | K    | 0,467             | GEI 383                   |
|                 |       |      |                                | G 1     | -  | 23   | 55 | K    | 0,420             | GEI 382                   |
|                 |       |      |                                | G 1 1/4 | 30 | 41   | 55 | G    | 0,591             | GEI 381                   |
|                 |       |      |                                | G 1 1/2 | 30 | 43   | 60 | G    | 0,670             | GEI 38                    |
|                 | 420   | 50   | M68x2,0                        | G 1/4   | -  | 28   | 70 | K    | 1,065             | GEI 507                   |
|                 |       |      |                                | G 3/8   | -  | 28   | 70 | K    | 1,049             | GEI 506                   |
|                 |       |      |                                | G 1/2   | -  | 28   | 70 | K    | 1,027             | GEI 505                   |
|                 |       |      |                                | G 3/4   | -  | 28   | 70 | K    | 0,986             | GEI 504                   |
|                 |       |      |                                | G 1     | -  | 28   | 70 | K    | 0,928             | GEI 503                   |
|                 |       |      |                                | G 1 1/4 | -  | 28   | 70 | K    | 0,824             | GEI 502                   |
|                 |       |      |                                | G 1 1/2 | 40 | 44   | 70 | G    | 1,112             | GEI 501                   |
|                 |       |      |                                | G 2     | 40 | 47   | 75 | G    | 1,350             | GEI 50                    |

Ergänzen Sie bitte den Bestellcode für die gewünschte Variante.

BESTELLCODE VARIANTEN

mit metrischem Innengewinde.....GEIM  
mit NPTF Innengewinde.....GEIN

Please, complete the order code for the requested delivery option.

ORDER CODE OPTIONS

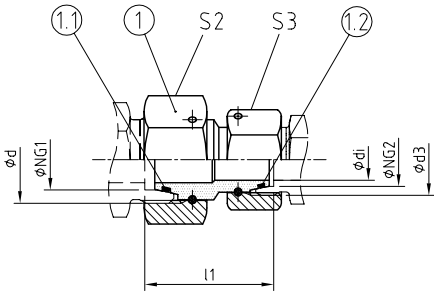
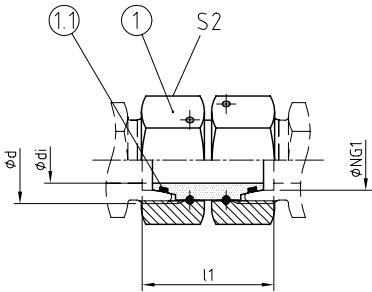
with metric thread.....GEIM  
with NPTF thread.....GEIN





DKS (L, S)

DKS (S>L)



AVIT

BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Beidseitiger 24° Dichtkegelanschluss (DKO) mit aufgezogenem O-Ring (FKM) nach ISO 8434-1 und montierter Drahtstiftmutter.

24° seal cone end (DKO) on both sides with mounted O-ring (FKM) according to ISO 8434-1 and assembled wire nail nut.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - ** |
|----------------------------------------------------|-------------|
| Stahl, verzinkt / Steel, galvanised; FKM           | DKS 25 - 02 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | DKS 25 - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | DKS 25 - 42 |

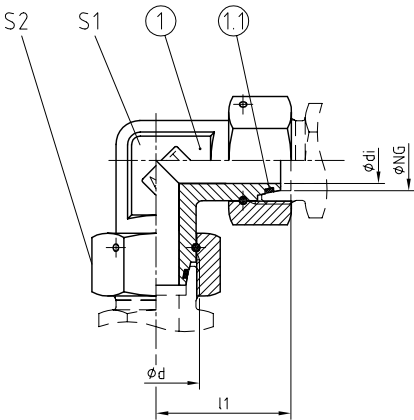
BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                                 |
|------|---------------------------------------------------------------------------|
| 1    | 24° Doppelkegel mit Drahtstiftmutter / 24° double cone with wire nail nut |
| 1.1  | O-Ring Dichtung / O-ring sealing; FKM                                     |
| 1.2  | O-Ring Dichtung / O-ring sealing; FKM                                     |

| REIHE<br>SERIES | PN <sup>1</sup> | NG1  | NG2  | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |    |    | O-RING   |          | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|------|------|--------------------------------|---------|----|------|----|----|----------|----------|-------------------|---------------------------|
|                 | [bar]           | [mm] | [mm] | d                              | d3      | di | l1   | S2 | S3 | Pos. 1.1 | Pos. 1.2 | [kg]              | TYP NG                    |
| L               | 250             | 15   | -    | M22x1,5                        | -       | 10 | 40,5 | 27 | -  | 12,0x2,0 | -        | 0,132             | DKS 15                    |
|                 | 160             | 18   | -    | M26x1,5                        | -       | 13 | 39,5 | 32 | -  | 15,0x2,0 | -        | 0,182             | DKS 18                    |
|                 | 160             | 22   | -    | M30x2,0                        | -       | 17 | 45,5 | 36 | -  | 20,0x2,0 | -        | 0,269             | DKS 22                    |
|                 | 100             | 28   | -    | M36x2,0                        | -       | 22 | 49   | 46 | -  | 26,0x2,0 | -        | 0,480             | DKS 28                    |
|                 | 100             | 35   | -    | M45x2,0                        | -       | 28 | 55   | 50 | -  | 32,0x2,5 | -        | 0,485             | DKS 35                    |
|                 | 100             | 42   | -    | M52x2,0                        | -       | 34 | 60   | 60 | -  | 38,0x2,5 | -        | 0,733             | DKS 42                    |
| S>L             | 250             | 16   | 15   | M24x1,5                        | M22x1,5 | 10 | 41   | 30 | 27 | 12,0x2,0 | 12,0x2,0 | 0,152             | DKS 16>15                 |
|                 | 160             | 20   | 18   | M30x2,0                        | M26x1,5 | 13 | 46,5 | 36 | 32 | 16,3x2,4 | 15,0x2,0 | 0,238             | DKS 20>18                 |
|                 | 160             | 25   | 22   | M36x2,0                        | M30x2,0 | 17 | 53   | 46 | 36 | 20,3x2,4 | 20,0x2,0 | 0,451             | DKS 25>22                 |
|                 | 100             | 30   | 28   | M42x2,0                        | M36x2,0 | 22 | 54   | 50 | 46 | 25,3x2,4 | 26,0x2,0 | 0,590             | DKS 30>28                 |
|                 | 100             | 38   | 35   | M52x2,0                        | M45x2,0 | 28 | 58,5 | 60 | 50 | 33,3x2,4 | 32,0x2,5 | 0,760             | DKS 38>35                 |
|                 | 100             | 50   | 42   | M68x2,0                        | M52x2,0 | 34 | 72,5 | 80 | 60 | 46,0x3,0 | 38,0x2,5 | 1,618             | DKS 50>42                 |
| S               | 630             | 10   | -    | M18x1,5                        | -       | 6  | 37   | 22 | -  | 7,5x1,5  | -        | 0,086             | DKS 10                    |
|                 | 630             | 12   | -    | M20x1,5                        | -       | 8  | 40   | 24 | -  | 9,0x1,5  | -        | 0,105             | DKS 12                    |
|                 | 420             | 16   | 12   | M24x1,5                        | M20x1,5 | 8  | 43,5 | 30 | 24 | 12,0x2,0 | 9,0x1,5  | 0,161             | DKS 16>12                 |
|                 | 420             | -    | -    | -                              | -       | 11 | 44,5 | -  | -  | -        | -        | 0,177             | DKS 16                    |
|                 | 315             | 20   | 16   | M30x2,0                        | M24x1,5 | 11 | 50   | 36 | 30 | 16,3x2,4 | 12,0x2,0 | 0,262             | DKS 20>16                 |
|                 | 315             | -    | -    | -                              | -       | 14 | 51   | -  | -  | -        | -        | 0,327             | DKS 20                    |
|                 | 315             | 25   | 20   | M36x2,0                        | M30x2,0 | 14 | 56,5 | 46 | 36 | 20,3x2,4 | 16,3x2,4 | 0,286             | DKS 25>20                 |
|                 | 315             | -    | -    | -                              | -       | 18 | 54,5 | -  | -  | -        | -        | 0,616             | DKS 25                    |
|                 | 250             | 30   | 25   | M42x2,0                        | M36x2,0 | 18 | 60   | 50 | 46 | 25,3x2,4 | 20,3x2,4 | 0,675             | DKS 30>25                 |
|                 | 250             | -    | -    | -                              | -       | 23 | 63   | -  | -  | -        | -        | 0,729             | DKS 30                    |
|                 | 250             | 38   | -    | M52x2,0                        | -       | 30 | 68   | 60 | -  | 33,3x2,4 | -        | 1,086             | DKS 38                    |
|                 | 250             | 50   | -    | M68x2,0                        | -       | 40 | 86,5 | 80 | -  | 46,0x3,0 | -        | 2,488             | DKS 50                    |

1 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!



AVIT, BAUREIHE / SERIES: S = HEAVY

Beidseitiger 24° Dichtkegelanschluss (DKO) mit aufgezogenem O-Ring (FKM) nach ISO 8434-1 und montierter Drahtstiftmutter.

24° seal cone end (DKO) on both sides with mounted O-ring (FKM) according to ISO 8434-1 and assembled wire nail nut.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|----------------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG - **                      |
| Stahl, verzinkt / Steel, galvanised; FKM           | WKS 25 - 02                      |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | WKS 25 - 05                      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | WKS 25 - 42                      |

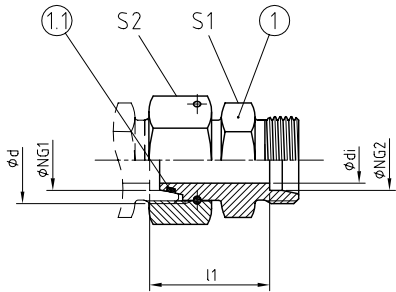
| STÜCKLISTE |                                                                           |
|------------|---------------------------------------------------------------------------|
| PARTS LIST |                                                                           |
| Pos.       | Bezeichnung / Description                                                 |
| 1          | 24° Doppelkegel mit Drahtstiftmutter / 24° double cone with wire nail nut |
| 1.1        | O-Ring Dichtung / O-ring sealing; FKM                                     |

| REIHE<br>SERIES | PN <sup>1</sup> | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |    |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|------|--------------------------------|----|------|----|----|----------|-------------------|---------------------------|
|                 | [bar]           | [mm] | d                              | di | l1   | S1 | S2 | Pos. 1.1 | [kg]              | TYP NG                    |
| L               | 250             | 15   | M22x1,5                        | 10 | 31   | 19 | 27 | 12,0x2,0 | 0,165             | WKS 15                    |
|                 | 160             | 18   | M26x1,5                        | 13 | 35,5 | 24 | 32 | 15,0x2,0 | 0,248             | WKS 18                    |
|                 | 160             | 22   | M30x2,0                        | 17 | 40,5 | 27 | 36 | 20,0x2,0 | 0,370             | WKS 22                    |
|                 | 100             | 28   | M36x2,0                        | 22 | 41,5 | 36 | 46 | 26,0x2,0 | 0,680             | WKS 28                    |
|                 | 100             | 35   | M45x2,0                        | 28 | 51   | 41 | 50 | 32,0x2,5 | 0,750             | WKS 35                    |
|                 | 100             | 42   | M52x2,0                        | 34 | 56   | 50 | 60 | 38,0x2,5 | 1,300             | WKS 42                    |
| S               | 630             | 10   | M18x1,5                        | 6  | 29   | 19 | 22 | 7,5x1,5  | 0,135             | WKS 10                    |
|                 | 630             | 12   | M20x1,5                        | 8  | 31   | 19 | 24 | 9,0x1,5  | 0,153             | WKS 12                    |
|                 | 420             | 16   | M24x1,5                        | 11 | 36,5 | 24 | 30 | 12,0x2,0 | 0,255             | WKS 16                    |
|                 | 315             | 20   | M30x2,0                        | 14 | 43   | 27 | 36 | 16,3x2,4 | 0,410             | WKS 20                    |
|                 | 315             | 25   | M36x2,0                        | 18 | 48   | 36 | 46 | 20,3x2,4 | 0,760             | WKS 25                    |
|                 | 250             | 30   | M42x2,0                        | 23 | 55   | 41 | 50 | 25,3x2,4 | 0,930             | WKS 30                    |
|                 | 250             | 38   | M52x2,0                        | 30 | 63   | 50 | 60 | 33,3x2,4 | 1,460             | WKS 38                    |
|                 | 250             | 50   | M68x2,0                        | 40 | 94   | 70 | 80 | 46,0x3,0 | 4,240             | WKS 50                    |

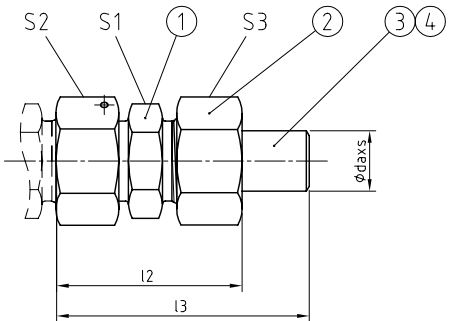
1 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!



GDA [Pos. 1]



GDA [Pos. 1-4]



**AVIT, ISO 8434-1 – RDSW**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Mit dem geraden 24° Konus Adapter reduzieren Sie den Konusstützen oder können auch defekte Schneidringanschlüsse instandsetzen.

With the straight 24° cone adapter you can reduce the cone connection or repair damaged cutting ring connections.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                 |
|----------------------------------------------------|----------------------------------|----------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG1-NG2-daxs-*               | Pos. Bezeichnung / Description                           |
| Stahl, verzinkt / Steel, galvanised; NBR           | GDA 25 - daxs - 01               | 1 Stützen mit Drahtstiftmutter / Stud with wire nail nut |
| Stahl, verzinkt / Steel, galvanised; FKM           | GDA 25 - daxs - 02               | 1.1 O-Ring Dichtung / O-ring sealing; FKM                |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GDA 25 - daxs - 04               | 2 Überwurfmutter / Union nut                             |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GDA 25 - daxs - 05               | 3 24° Schweißkegel / 24° weld-on nipple                  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GDA 25 - daxs - 41               | 4 O-Ring Dichtung / O-ring sealing                       |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GDA 25 - daxs - 42               |                                                          |

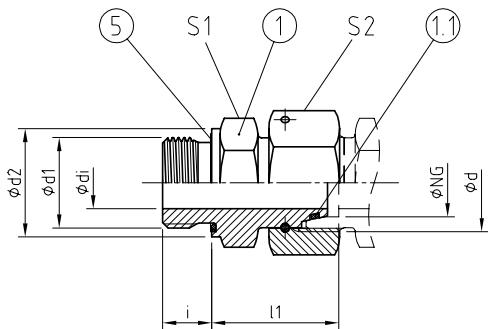
| REIHE<br>SERIES | PN <sup>1</sup> | NG1  | NG2  | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |      |      |    |    |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                |
|-----------------|-----------------|------|------|--------------------------------|----|------|------|------|----|----|----|----------|-------------------|---------------------------|----------------|
|                 | [bar]           | [mm] | [mm] | d                              | d1 | l1   | l2   | l3   | S1 | S2 | S3 | Pos. 1.1 | [kg]              | Pos. 1                    | Pos. 1-4       |
| L               | 250             | 18   | 15   | M26x1,5                        | 12 | 33,5 | 50,5 | 70   | 24 |    | 27 | 15,0x2,0 | 0,151             | GDA 18>15                 | GDA 18>15 daxs |
|                 |                 |      | 18   |                                | 13 | 33   | 52   | 73   | 27 |    | 32 |          | 0,146             | GDA 18                    | GDA 18 daxs    |
|                 |                 | 22   | 15   |                                | 12 | 40   | 57   | 76,5 | 27 |    | 27 | 20,0x2,0 | 0,246             | GDA 22>15                 | GDA 22>15 daxs |
|                 |                 |      | 18   | M30x2,0                        | 15 | 39,5 | 59   | 79   | 27 | 36 | 32 |          | 0,232             | GDA 22>18                 | GDA 22>18 daxs |
|                 | 160             | 22   | 18   |                                | 17 | 41,5 | 59,5 | 80,5 | 32 |    | 36 | 26,0x2,0 | 0,222             | GDA 22                    | GDA 22 daxs    |
|                 |                 |      | 22   |                                |    |      |      |      |    |    |    |          |                   |                           |                |
|                 |                 | 28   | 15   |                                | 12 | 40,5 | 58   | 77   | 36 |    | 27 | 26,0x2,0 | 0,313             | GDA 28>15                 | GDA 28>15 daxs |
|                 |                 |      | 18   | M36x2,0                        | 15 | 40   | 59,5 | 80   | 36 | 46 | 32 |          | 0,300             | GDA 28>18                 | GDA 28>18 daxs |
|                 | 100             | 28   | 22   |                                | 19 | 42   | 60,5 | 81,5 | 36 |    | 36 | 32,0x2,5 | 0,291             | GDA 28>22                 | GDA 28>22 daxs |
|                 |                 |      | 28   |                                | 22 | 43   | 62,5 | 86   | 41 |    | 41 |          | 0,388             | GDA 28                    | GDA 28 daxs    |
|                 |                 | 35   | 15   |                                | 12 | 40,5 | 64   | 83   | 46 |    | 27 | 32,0x2,5 | 0,600             | GDA 35>15                 | GDA 35>15 daxs |
|                 |                 |      | 18   |                                | 15 | 46   | 65,5 | 86,5 | 46 |    | 32 |          | 0,588             | GDA 35>18                 | GDA 35>18 daxs |
|                 | 100             | 35   | 22   | M45x2,0                        | 19 | 48   | 66,5 | 87,5 | 46 | 50 | 36 | 38,0x2,5 | 0,570             | GDA 35>22                 | GDA 35>22 daxs |
|                 |                 |      | 28   |                                | 24 | 48   | 67,5 | 91   | 46 |    | 41 |          | 0,534             | GDA 35>28                 | GDA 35>28 daxs |
|                 |                 | 42   | 28   |                                | 28 | 47,5 | 71,5 | 99   | 50 |    | 50 | 38,0x2,5 | 0,560             | GDA 35                    | GDA 35 daxs    |
|                 |                 |      | 35   |                                |    |      |      |      |    |    |    |          |                   |                           |                |
|                 | 100             | 42   | 15   |                                | 12 | 48,5 | 65,5 | 85   | 50 |    | 27 | 38,0x2,5 | 0,786             | GDA 42>15                 | GDA 42>15 daxs |
|                 |                 |      | 18   |                                | 15 | 48   | 67   | 87   | 50 |    | 32 |          | 0,782             | GDA 42>18                 | GDA 42>18 daxs |
|                 |                 | 42   | 22   | M52x2,0                        | 19 | 49,5 | 68   | 89,5 | 50 | 60 | 36 | 38,0x2,5 | 0,765             | GDA 42>22                 | GDA 42>22 daxs |
|                 |                 |      | 28   |                                | 24 | 49,5 | 69   | 93   | 50 |    | 41 |          | 0,732             | GDA 42>28                 | GDA 42>28 daxs |
|                 |                 |      | 35   |                                | 30 | 48   | 73   | 100  | 50 |    | 50 |          | 0,695             | GDA 42>35                 | GDA 42>35 daxs |
|                 |                 |      | 42   |                                | 34 | 48,5 | 73,5 | 99,5 | 55 |    | 60 |          | 0,650             | GDA 42                    | GDA 42 daxs    |

Fortsetzung nächste Seite | Continued on next page

1 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!

| REIHE<br>SERIES | PN <sup>1</sup> | NG1  | NG2  | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |       |       |    |    |    | O-RING   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                |
|-----------------|-----------------|------|------|--------------------------------|----|------|-------|-------|----|----|----|----------|-------------------|---------------------------|----------------|
|                 | [bar]           | [mm] | [mm] | d                              | di | l1   | l2    | l3    | S1 | S2 | S3 | Pos. 1.1 | [kg]              | Pos. 1                    | Pos. 1-4       |
| S               | 630             | 10   | 08   | M18x1,5                        | 5  | 33,5 | 48    | 64,5  | 19 | 22 | 19 | 7,5x1,5  | 0,079             | GDA 10>08                 | GDA 10>08 daxs |
|                 |                 |      | 10   |                                | 6  | 33   | 50,5  | 67    | 22 |    |    |          | 0,086             | GDA 10                    | GDA 10 daxs    |
|                 | 630             | 12   | 10   | M20x1,5                        | 7  | 33,5 | 51    | 67    | 22 | 24 | 22 | 9,0x1,5  | 0,095             | GDA 12>10                 | GDA 12>10 daxs |
|                 |                 |      | 12   |                                | 8  | 33,5 | 51,5  | 67,5  | 22 |    |    |          | 0,096             | GDA 12                    | GDA 12 daxs    |
|                 | 420             | 16   | 10   | M24x1,5                        | 7  | 36,5 | 54    | 70    | 24 | 30 | 22 | 12,0x2,0 | 0,157             | GDA 16>10                 | GDA 16>10 daxs |
|                 |                 |      | 12   |                                | 8  | 35,5 | 53    | 69,5  | 24 |    |    |          | 0,157             | GDA 16>12                 | GDA 16>12 daxs |
|                 | 315             | 20   | 16   | M30x2,0                        | 11 | 37,5 | 58    | 79,5  | 27 | 30 | 22 | 16,3x2,4 | 0,152             | GDA 16                    | GDA 16 daxs    |
|                 |                 |      | 10   |                                | 7  | 42   | 60,5  | 76,5  | 30 |    |    |          | 0,243             | GDA 20>10                 | GDA 20>10 daxs |
|                 |                 |      | 12   |                                | 8  | 42   | 61    | 77    | 30 |    |    |          | 0,244             | GDA 20>12                 | GDA 20>12 daxs |
|                 |                 |      | 16   |                                | 12 | 43   | 64,5  | 86    | 30 |    |    |          | 0,230             | GDA 20>16                 | GDA 20>16 daxs |
|                 | 315             | 25   | 20   | M36x2,0                        | 14 | 44   | 68    | 90,5  | 32 | 36 | 22 | 20,3x2,4 | 0,253             | GDA 20                    | GDA 20         |
|                 |                 |      | 10   |                                | 7  | 46   | 64    | 80,5  | 36 |    |    |          | 0,420             | GDA 25>10                 | GDA 25>10 daxs |
|                 |                 |      | 12   |                                | 8  | 46   | 64    | 81    | 36 |    |    |          | 0,421             | GDA 25>12                 | GDA 25>12 daxs |
|                 |                 |      | 16   |                                | 12 | 47   | 68    | 89,5  | 36 |    |    |          | 0,413             | GDA 25>16                 | GDA 25>16 daxs |
|                 |                 |      | 20   |                                | 15 | 47   | 71,5  | 94,5  | 36 |    |    |          | 0,415             | GDA 25>20                 | GDA 25>20 daxs |
|                 | 250             | 30   | 25   | M42x2,0                        | 19 | 48   | 75    | 102,5 | 41 | 46 | 22 | 25,3x2,4 | 0,454             | GDA 25                    | GDA 25 daxs    |
|                 |                 |      | 10   |                                | 7  | 48   | 65,5  | 81,5  | 41 |    |    |          | 0,517             | GDA 30>10                 | GDA 30>10 daxs |
|                 |                 |      | 12   |                                | 8  | 48   | 66    | 82    | 41 |    |    |          | 0,518             | GDA 30>12                 | GDA 30>12 daxs |
|                 |                 |      | 16   |                                | 12 | 49   | 69,5  | 91    | 41 |    |    |          | 0,511             | GDA 30>16                 | GDA 30>16 daxs |
|                 |                 |      | 20   |                                | 15 | 49   | 73    | 95,5  | 41 |    |    |          | 0,514             | GDA 30>20                 | GDA 30>20 daxs |
|                 |                 |      | 25   |                                | 19 | 49   | 76,5  | 104   | 41 |    |    |          | 0,512             | GDA 30>25                 | GDA 30>25 daxs |
|                 | 250             | 38   | 30   | M42x2,0                        | 24 | 51   | 79,5  | 109   | 46 | 50 | 22 | 33,3x2,4 | 0,548             | GDA 30                    | GDA 30 daxs    |
|                 |                 |      | 10   |                                | 8  | 52   | 70    | 86    | 50 |    |    |          | 0,835             | GDA 38>12                 | GDA 38>12 daxs |
|                 |                 |      | 16   |                                | 12 | 53   | 74    | 95,5  | 50 |    |    |          | 0,829             | GDA 38>16                 | GDA 38>16 daxs |
|                 |                 |      | 20   |                                | 15 | 53   | 77,5  | 100,5 | 50 |    |    |          | 0,832             | GDA 38>20                 | GDA 38>20 daxs |
|                 |                 |      | 25   |                                | 19 | 54   | 81    | 108,5 | 50 |    |    |          | 0,830             | GDA 38>25                 | GDA 38>25 daxs |
|                 |                 |      | 30   |                                | 24 | 54,5 | 83    | 112,5 | 50 |    |    |          | 0,816             | GDA 38>30                 | GDA 38>30 daxs |
|                 | 250             | 50   | 38   | M52x2,0                        | 30 | 54   | 86,5  | 119   | 55 | 60 | 24 | 46,0x3,0 | 0,806             | GDA 38                    | GDA 38 daxs    |
|                 |                 |      | 16   |                                | 12 | 67,5 | 88    | 109,5 | 70 |    |    |          | 2,020             | GDA 50>16                 | GDA 50>16 daxs |
|                 |                 |      | 20   |                                | 15 | 67,5 | 91,5  | 114,5 | 70 |    |    |          | 2,010             | GDA 50>20                 | GDA 50>20 daxs |
|                 |                 |      | 25   |                                | 19 | 68   | 95    | 122,5 | 70 |    |    |          | 2,010             | GDA 50>25                 | GDA 50>25 daxs |
|                 |                 |      | 30   |                                | 24 | 68,5 | 97    | 126,5 | 70 |    |    |          | 1,980             | GDA 50>30                 | GDA 50>30 daxs |
|                 |                 |      | 38   |                                | 30 | 68   | 100,5 | 133   | 70 |    |    |          | 1,950             | GDA 50>38                 | GDA 50>38 daxs |
|                 | 250             | 50   | 50   | M68x2,0                        | 40 | 70   | 109,5 | 138,5 | 70 | 80 | 30 | 46,0x3,0 | 1,910             | GDA 50                    | GDA 50 daxs    |
|                 |                 |      | 50   |                                | 40 | 70   | 109,5 | 138,5 | 70 |    |    |          | 1,910             | GDA 50                    | GDA 50 daxs    |

1 Druckeinschränkung wegen Drahtstiftmutter | Pressure restrictions due to wire nail nut



AVIT, ISO 8434-1 – SWOSDS

BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Einschraubzapfen<sup>1</sup> mit U-Ring (ED) nach ISO 1179-2.  
24° Dichtkegelanschluss (DKO) mit aufgezogenem O-  
Ring (FKM) und montierter Drahtstiftmutter.

Stud end<sup>1</sup> with U-ring sealing (ED) acc. ISO 1179-2.  
24° seal cone end (DKO) with mounted O-ring (FKM) and  
assembled wire nail nut.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG -**  |
|----------------------------------------------------|-------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GUL 25 - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GUL 25 - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GUL 25 - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GUL 25 - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GUL 25 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GUL 25 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                              |
|------|--------------------------------------------------------|
| 1    | Stutzen mit Drahtstiftmutter / Stud with wire nail nut |
| 1.1  | O-Ring Dichtung / O-ring sealing; FKM                  |
| 5    | U-Ring Dichtung / U-ring sealing                       |

| REIHE<br>SERIES | PN <sup>2</sup> | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |    |      |    |    | O-RING   |               | U-RING | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|------|--------------------------------|------|---------|----|----|------|----|----|----------|---------------|--------|-------------------|---------------------------|
|                 | [bar]           | [mm] | d1                             | d2   | d       | di | i  | l1   | S1 | S2 | Pos. 1.1 | Pos. 5        | [kg]   | Pos. 1+5          |                           |
| L               | 250             | 15   | G 1/2 A                        | 26,9 | M22x1,5 | 10 | 14 | 31,5 | 27 | 27 | 12,0x2,0 | 18,5x23,9x1,5 | 0,122  | GUL 15            |                           |
|                 | 160             | 18   | G 1/2 A                        | 26,9 | M26x1,5 | 13 | 14 | 32   | 27 | 32 | 15,0x2,0 | 18,5x23,9x1,5 | 0,166  | GUL 18            |                           |
|                 | 160             | 22   | G 3/4 A                        | 31,9 | M30x2,0 | 17 | 16 | 38   | 32 | 36 | 20,0x2,0 | 23,9x29,2x1,5 | 0,248  | GUL 22            |                           |
|                 | 100             | 28   | G 1 A                          | 39,9 | M36x2,0 | 22 | 18 | 39,5 | 41 | 46 | 26,0x2,0 | 29,7x35,7x2,0 | 0,444  | GUL 28            |                           |
|                 | 100             | 35   | G 1 1/4 A                      | 49,9 | M45x2,0 | 28 | 20 | 44,5 | 50 | 50 | 32,0x2,5 | 38,8x45,8x2,0 | 0,597  | GUL 35            |                           |
|                 | 100             | 42   | G 1 1/2 A                      | 54,9 | M52x2,0 | 34 | 22 | 46   | 55 | 60 | 38,0x2,5 | 44,7x50,7x2,0 | 0,809  | GUL 42            |                           |

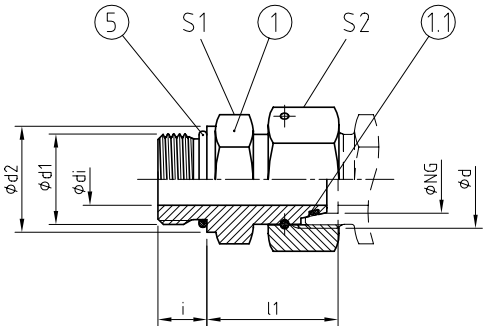
Fortsetzung nächste Seite | Continued on next page

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification  
2 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!



| REIHE<br>SERIES                                  | PN <sup>2</sup> | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |    |      |    |    | U-RING        | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|--------------------------------------------------|-----------------|------|--------------------------------|------|---------|----|----|------|----|----|---------------|-------------------|---------------------------|
|                                                  | [bar]           | [mm] | d1                             | d2   | d       | di | i  | l1   | S1 | S2 | Pos. 5        | [kg]              | Pos. 1+5                  |
| S                                                | 630             | 10   | G 1/4 A                        | 18,9 | M18x1,5 | 5  | 12 | 29   | 19 |    | 11,6x16,5x1,5 | 0,080             | GULR 10                   |
|                                                  |                 |      | G 3/8 A                        | 21,9 |         | 6  | 12 | 31   | 22 | 22 | 14,7x18,9x1,5 | 0,090             | GUL 10                    |
|                                                  |                 |      | G 1/2 A                        | 26,9 |         | 6  | 14 | 33   | 27 |    | 18,5x23,9x1,5 | 0,120             | GULG 10                   |
|                                                  | 420             | 12   | G 1/4 A                        | 18,9 | M20x1,5 | 5  | 12 | 30   | 22 |    | 11,6x16,5x1,5 | 0,092             | GULR 12                   |
|                                                  |                 |      | G 3/8 A                        | 21,9 |         | 8  | 12 | 31   | 22 | 24 | 14,7x18,9x1,5 | 0,097             | GUL 12                    |
|                                                  |                 |      | G 1/2 A                        | 26,9 |         | 8  | 14 | 33   | 27 |    | 18,5x23,9x1,5 | 0,127             | GULG 12                   |
|                                                  | 315             | 16   | G 3/8 A                        | 21,9 | M24x1,5 | 8  | 12 | 33   | 24 |    | 14,7x18,9x1,5 | 0,139             | GULR 16                   |
|                                                  |                 |      | G 1/2 A                        | 26,9 |         | 11 | 14 | 35   | 27 | 30 | 18,5x23,9x1,5 | 0,156             | GUL 16                    |
|                                                  |                 |      | G 3/4 A                        | 31,9 |         | 11 | 16 | 36,5 | 32 |    | 23,9x29,2x1,5 | 0,213             | GULG 16                   |
|                                                  | 315             | 20   | G 1/2 A                        | 26,9 | M30x2,0 | 12 | 14 | 41,5 | 32 |    | 18,5x23,9x1,5 | 0,241             | GULR 20                   |
|                                                  |                 |      | G 3/4 A                        | 31,9 |         | 14 | 16 | 41,5 | 32 | 36 | 23,9x29,2x1,5 | 0,262             | GUL 20                    |
|                                                  |                 |      | G 1 A                          | 39,9 |         | 14 | 18 | 43,5 | 41 |    | 29,7x35,7x2,0 | 0,369             | GULG 20                   |
|                                                  | 315             | 25   | G 3/4 A                        | 31,9 | M36x2,0 | 15 | 16 | 44   | 36 |    | 23,9x29,2x1,5 | 0,398             | GULR 25                   |
|                                                  |                 |      | G 1 A                          | 39,9 |         | 19 | 18 | 45   | 41 | 46 | 29,7x35,7x2,0 | 0,472             | GUL 25                    |
|                                                  |                 |      | G 1 1/4 A                      | 49,9 |         | 19 | 20 | 47   | 50 |    | 38,8x45,8x2,0 | 0,640             | GULG 25                   |
|                                                  | 250             | 30   | G 1 A                          | 39,9 | M42x2,0 | 19 | 18 | 46,5 | 41 |    | 29,7x35,7x2,0 | 0,489             | GULR 30                   |
|                                                  |                 |      | G 1 1/4 A                      | 49,9 |         | 24 | 20 | 48,5 | 50 | 50 | 38,8x45,8x2,0 | 0,657             | GUL 30                    |
|                                                  |                 |      | G 1 1/2 A                      | 54,9 |         | 24 | 22 | 47,5 | 55 |    | 44,7x50,7x2,0 | 0,758             | GULG 30                   |
| METRISCHES GEWINDE <sup>1</sup><br>METRIC THREAD | 250             | 38   | G 1 1/4 A                      | 49,9 | M52x2,0 | 24 | 20 | 50   | 50 |    | 38,8x45,8x2,0 | 0,739             | GULR 38                   |
|                                                  |                 |      | G 1 1/2 A                      | 54,9 |         | 30 | 22 | 51   | 55 | 60 | 44,7x50,7x2,0 | 0,839             | GUL 38                    |
|                                                  |                 |      | G 2 A                          | 69,9 |         | 30 | 24 | 55   | 70 |    | 56,1x62,7x2,5 | 1,24              | GULG 38                   |
|                                                  | 250             | 50   | G 1 1/2 A                      | 54,9 | M68x2,0 | 30 | 22 | 65   | 70 | 80 | 44,7x50,7x2,0 | 1,82              | GULR 50                   |
|                                                  |                 |      | G 2 A                          | 69,9 |         | 40 | 24 | 65   | 70 |    | 56,1x62,7x2,5 | 1,87              | GUL 50                    |
|                                                  |                 |      |                                |      |         |    |    |      |    |    |               |                   |                           |
|                                                  | 420             | 10   | M14x1,5                        | 18,9 | M18x1,5 | 6  | 12 | 30,5 | 19 | 22 | 11,6x16,5x1,5 | 0,079             | GULM 10                   |
|                                                  | 420             | 10   | M16x1,5                        | 21,9 | M18x1,5 | 6  | 12 | 30,5 | 22 | 22 | 13,8x18,9x1,5 | 0,090             | GULM 10                   |
|                                                  | 420             | 12   | M18x1,5                        | 23,9 | M20x1,5 | 8  | 12 | 31,5 | 24 | 24 | 15,7x20,9x1,5 | 0,105             | GULM 12                   |
|                                                  | 315             | 16   | M22x1,5                        | 26,9 | M24x1,5 | 11 | 14 | 35   | 27 | 30 | 19,6x24,3x1,5 | 0,161             | GULM 16                   |
|                                                  | 315             | 20   | M27x2,0                        | 31,9 | M30x2,0 | 14 | 16 | 41,5 | 32 | 36 | 23,9x29,2x1,5 | 0,263             | GULM 20                   |
|                                                  | 315             | 25   | M33x2,0                        | 39,9 | M36x2,0 | 19 | 18 | 45   | 41 | 46 | 29,7x35,7x2,0 | 0,472             | GULM 25                   |
|                                                  | 250             | 30   | M42x2,0                        | 49,9 | M42x2,0 | 24 | 20 | 48,5 | 50 | 50 | 38,8x45,8x2,0 | 0,658             | GULM 30                   |
|                                                  | 250             | 38   | M48x2,0                        | 54,9 | M52x2,0 | 30 | 22 | 51   | 55 | 60 | 44,7x50,7x2,0 | 0,840             | GULM 38                   |
|                                                  | 250             | 50   | M60x2,0                        | 69,9 | M68x2,0 | 40 | 24 | 65   | 70 | 80 | 56,1x62,7x2,5 | 1,88              | GULM 50                   |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification  
2 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!



AVIT, ISO 8434-1 – SWOSDS  
BAUREIHE / SERIES: S = HEAVY

Einschraubzapfen <sup>1</sup> mit O-Ring Dichtung mit metrischem Gewinde nach ISO 6149-2 oder mit amerikanischem UNF Feingewinde nach ISO 11926-2.

Stud end <sup>1</sup> with O-ring sealing with metric thread acc. ISO 6149-2 or with American national fine thread acc. ISO 11926-2.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - **  |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GELM 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GELM 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GELM 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GELM 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GELM 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GELM 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                              |
|------|--------------------------------------------------------|
| 1    | Stutzen mit Drahtstiftmutter / Stud with wire nail nut |
| 1.1  | O-Ring Dichtung / O-ring sealing; FKM                  |
| 5    | O-Ring Dichtung / O-ring sealing                       |

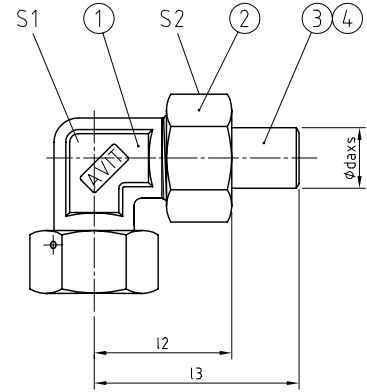
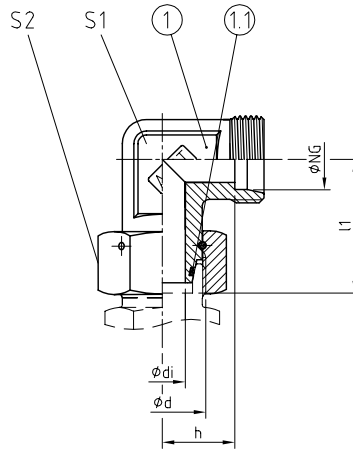
| TYPE                                | PN <sup>2</sup> | NG      | ABMESSUNGEN [mm] |         |         |    |    |      |    |          | O-RING     | GEWICHT | BESTELLCODE |
|-------------------------------------|-----------------|---------|------------------|---------|---------|----|----|------|----|----------|------------|---------|-------------|
|                                     |                 |         | DIMENSIONS       |         |         |    |    |      |    |          |            | WEIGHT  | ORDER CODE  |
| METRISCHES GEWINDE<br>METRIC THREAD | [bar]           | [mm]    | d1               | d2      | d       | di | i  | l1   | S1 | S2       | Pos. 5     | [kg]    | Pos. 1+5    |
|                                     | 630             | 10      | M16x1,5          | 21,8    | M18x1,5 | 6  | 12 | 30,5 | 22 | 22       | 13,3x2,2   | 0,094   | GELM 10     |
|                                     | 420             | 12      | M18x1,5          | 23,8    | M20x1,5 | 8  | 14 | 31,5 | 24 | 22       | 15,3x2,2   | 0,115   | GELM 12     |
|                                     | 420             | 16      | M22x1,5          | 26,8    | M24x1,5 | 11 | 15 | 35   | 27 | 30       | 19,3x2,2   | 0,163   | GELM 16     |
|                                     | 315             | 20      | M27x2,0          | 31,8    | M30x2,0 | 14 | 18 | 41,5 | 32 | 36       | 23,6x2,9   | 0,270   | GELM 20     |
|                                     | 315             | 25      | M33x2,0          | 40,8    | M36x2,0 | 19 | 19 | 45   | 41 | 46       | 29,6x2,9   | 0,482   | GELM 25     |
|                                     | 250             | 30      | M42x2,0          | 49,8    | M42x2,0 | 24 | 20 | 48,5 | 50 | 50       | 38,6x2,9   | 0,667   | GELM 30     |
|                                     | 250             | 38      | M48x2,0          | 54,8    | M52x2,0 | 30 | 22 | 51   | 55 | 60       | 44,6x2,9   | 0,851   | GELM 38     |
| 250                                 | 50              | M60x2,0 | 64,8             | M68x2,0 | 40      | 24 | 65 | 70   | 80 | 56,6x2,9 | 1,890      | GELM 50 |             |
| UNF GEWINDE<br>UNF THREAD ANSI B1.1 | 630             | 10      | ¾ - 18 UNF       | 18,9    | M18x1,5 | 6  | 12 | 29   | 19 | 22       | 11,89x1,98 | 0,090   | GELA 10     |
|                                     | 420             | 12      | ¾ - 16 UNF       | 22,9    | M20x1,5 | 8  | 12 | 30,5 | 22 | 22       | 16,36x2,20 | 0,113   | GELA 12     |
|                                     | 420             | 16      | ¾ - 16 UNF       | 23,0    | M24x1,5 | 11 | 14 | 34   | 27 | 24       | 16,36x2,20 | 0,155   | GELA 16     |
|                                     | 420             | 16      | ¾ - 14 UNF       | 26,0    | M24x1,5 | 11 | 16 | 34   | 27 | 30       | 19,18x2,46 | 0,161   | GELA 16     |
|                                     | 315             | 20      | 1 ¼ - 12 UN      | 31,0    | M30x2,0 | 14 | 19 | 41   | 32 | 36       | 23,47x2,95 | 0,268   | GELA 20     |
|                                     | 315             | 25      | 1 ¼ - 12 UN      | 40,0    | M36x2,0 | 19 | 19 | 45   | 41 | 46       | 29,74x2,95 | 0,476   | GELA 25     |
|                                     | 250             | 30      | 1 ½ - 12 UN      | 49,0    | M42x2,0 | 24 | 19 | 48,5 | 50 | 50       | 37,46x3,00 | 0,653   | GELA 30     |
|                                     | 250             | 38      | 1 ¾ - 12 UN      | 54,0    | M52x2,0 | 30 | 19 | 51   | 55 | 60       | 43,69x3,00 | 0,841   | GELA 38     |
|                                     | 250             | 50      | 2 ½ - 12 UN      | 69,0    | M68x2,0 | 40 | 22 | 65   | 70 | 80       | 59,00x3,00 | 1,922   | GELA 50     |

1 Metrische Einschraubzapfen werden zur Identifikation mit einer umlaufenden Kerbe gekennzeichnet. | Metric stud ends are marked with a circumferential groove for identification.  
2 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!



WS [Pos. 1]

WS [Pos. 1-4]



## AVIT, ISO 8434-1 – SWOE

## BAUREIHE / SERIES: L = LIGHT / S = HEAVY

- 24° Dichtkegelanschluss mit eingelegetem O-Ring (FKM) nach ISO 8434-1 und montierter Drahtstiftmutter.
- 24° Konusanschluss nach ISO 8434-1
- 24° seal cone end with mounted O-ring (FKM) acc. ISO 8434-1 and assembled wire nail nut.
- 24° cone end acc. ISO 8434-1

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - d ax - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | WS 25 - d ax - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | WS 25 - d ax - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | WS 25 - d ax - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | WS 25 - d ax - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | WS 25 - d ax - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | WS 25 - d ax - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                          |
|------|--------------------------------------------------------------------|
| 1    | Winkelstutzen mit Drahtstiftmutter / Elbow stud with wire nail nut |
| 1.1  | O-Ring Dichtung / O-ring sealing; FKM                              |
| 2    | Überwurfmutter / Union nut                                         |
| 3    | 24° Schweißkegel / 24° weld-on nipple                              |
| 4    | O-Ring Dichtung / O-ring sealing                                   |

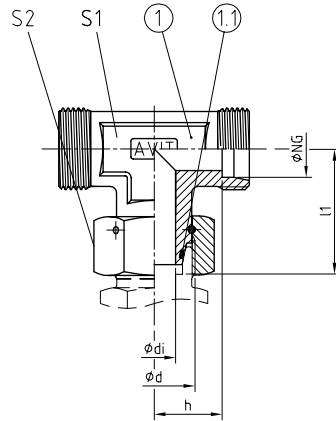
| REIHE<br>SERIES | PN <sup>1</sup> | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |      |      |       |       |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-----------------|------|--------------------------------|-----------------|------|------|-------|-------|----|----|-------------------|---------------------------|------------|
|                 | [bar]           | [mm] | d                              | di <sup>2</sup> | h    | l1   | l2    | l3    | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4   |
| L               | 250             | 15   | M22x1,5                        | 10              | 21   | 31   | 38    | 57,5  | 19 | 27 | 0,13              | WS 15                     | WS 15 daxs |
|                 | 160             | 18   | M26x1,5                        | 13              | 23,5 | 35,5 | 42    | 62    | 24 | 32 | 0,21              | WS 18                     | WS 18 daxs |
|                 | 160             | 22   | M30x2,0                        | 17              | 27,5 | 40,5 | 45,5  | 67    | 27 | 36 | 0,26              | WS 22                     | WS 22 daxs |
|                 | 100             | 28   | M36x2,0                        | 22              | 30,5 | 41,5 | 50    | 73,5  | 36 | 46 | 0,49              | WS 28                     | WS 28 daxs |
|                 | 100             | 35   | M45x2,0                        | 28              | 34,5 | 51   | 59    | 85,5  | 41 | 50 | 0,64              | WS 35                     | WS 35 daxs |
|                 | 100             | 42   | M52x2,0                        | 34              | 40   | 56   | 64,5  | 91    | 50 | 60 | 1,01              | WS 42                     | WS 42 daxs |
| S               | 630             | 10   | M18x1,5                        | 6               | 17,5 | 29   | 35    | 51    | 19 | 22 | 0,10              | WS 10                     | WS 10 daxs |
|                 | 420             | 12   | M20x1,5                        | 8               | 21,5 | 31   | 39,5  | 55,5  | 19 | 24 | 0,13              | WS 12                     | WS 12 daxs |
|                 | 420             | 16   | M24x1,5                        | 11              | 24,5 | 36,5 | 45    | 66,5  | 24 | 30 | 0,21              | WS 16                     | WS 16 daxs |
|                 | 315             | 20   | M30x2,0                        | 14              | 26,5 | 43   | 50    | 73    | 27 | 36 | 0,31              | WS 20                     | WS 20 daxs |
|                 | 315             | 25   | M36x2,0                        | 18              | 30   | 48   | 57    | 85    | 36 | 46 | 0,60              | WS 25                     | WS 25 daxs |
|                 | 250             | 30   | M42x2,0                        | 23              | 35,5 | 55   | 64    | 93,5  | 41 | 50 | 0,77              | WS 30                     | WS 30 daxs |
|                 | 250             | 38   | M52x2,0                        | 30              | 41   | 63   | 73,5  | 106   | 50 | 60 | 1,26              | WS 38                     | WS 38 daxs |
|                 | 250             | 50   | M68x2,0                        | 40              | 67   | 94   | 106,5 | 135,5 | 70 | 80 | 3,62              | WS 50                     | WS 50 daxs |

1 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!

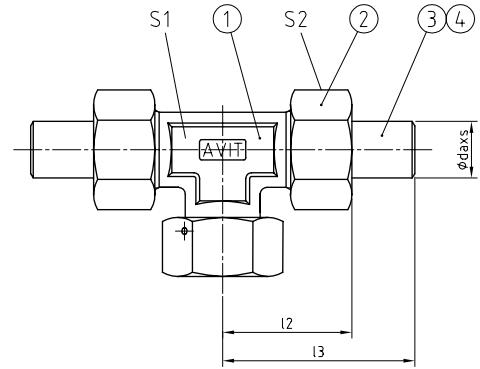
2 Bitte beachten Sie, dass der Innendurchmesser (di) durch die Kegelseite reduziert wird. | Please note that the inside diameter (di) is reduced by the cone side.



TS [Pos. 1]



TS [Pos. 1-4]



## AVIT, ISO 8434-1 – SWOBT

## BAUREIHE / SERIES: L = LIGHT / S = HEAVY

- 24° Dichtkegelanschluss mit eingelegtem O-Ring (FKM) nach ISO 8434-1 und montierter Drahtstiftmutter.
- 24° Konusanschluss nach ISO 8434-1
- 24° seal cone end with mounted O-ring (FKM) acc. ISO 8434-1 and assembled wire nail nut.
- 24° cone end acc. ISO 8434-1

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | TS 25 - daxs - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | TS 25 - daxs - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | TS 25 - daxs - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | TS 25 - daxs - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | TS 25 - daxs - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | TS 25 - daxs - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                  |
|------|------------------------------------------------------------|
| 1    | T-Stutzen mit Drahtstiftmutter / T-Stud with wire nail nut |
| 1.1  | O-Ring Dichtung / O-ring sealing; FKM                      |
| 2    | Überwurfmutter / Union nut                                 |
| 3    | 24° Schweißkegel / 24° weld-on nipple                      |
| 4    | O-Ring Dichtung / O-ring sealing                           |

| REIHE<br>SERIES | PN <sup>1</sup> | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |      |      |       |       |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-----------------|------|--------------------------------|-----------------|------|------|-------|-------|----|----|-------------------|---------------------------|------------|
|                 | [bar]           | [mm] | d                              | di <sup>2</sup> | h    | l1   | l2    | l3    | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4   |
| L               | 250             | 15   | M22x1,5                        | 10              | 21   | 31   | 38    | 57,5  | 19 | 27 | 0,16              | TS 15                     | TS 15 daxe |
|                 | 160             | 18   | M26x1,5                        | 13              | 23,5 | 35,5 | 42    | 62    | 24 | 32 | 0,24              | TS 18                     | TS 18 daxe |
|                 | 160             | 22   | M30x2,0                        | 17              | 27,5 | 40,5 | 45,5  | 67    | 27 | 36 | 0,31              | TS 22                     | TS 22 daxe |
|                 | 100             | 28   | M36x2,0                        | 22              | 30,5 | 41,5 | 50    | 73,5  | 36 | 46 | 0,56              | TS 28                     | TS 28 daxe |
|                 | 100             | 35   | M45x2,0                        | 28              | 34,5 | 51   | 59    | 85,5  | 41 | 50 | 0,81              | TS 35                     | TS 35 daxe |
|                 | 100             | 42   | M52x2,0                        | 34              | 40   | 56   | 64,5  | 91    | 50 | 60 | 1,09              | TS 42                     | TS 42 daxe |
| S               | 630             | 10   | M18x1,5                        | 6               | 17,5 | 29   | 35    | 51    | 19 | 22 | 0,12              | TS 10                     | TS 10 daxe |
|                 | 420             | 12   | M20x1,5                        | 8               | 21,5 | 31   | 39,5  | 55,5  | 19 | 24 | 0,15              | TS 12                     | TS 12 daxe |
|                 | 420             | 16   | M24x1,5                        | 11              | 24,5 | 36,5 | 45    | 66,5  | 24 | 30 | 0,24              | TS 16                     | TS 16 daxe |
|                 | 315             | 20   | M30x2,0                        | 14              | 26,5 | 43   | 50    | 73    | 27 | 36 | 0,38              | TS 20                     | TS 20 daxe |
|                 | 315             | 25   | M36x2,0                        | 18              | 30   | 48   | 57    | 85    | 36 | 46 | 0,72              | TS 25                     | TS 25 daxe |
|                 | 250             | 30   | M42x2,0                        | 23              | 35,5 | 55   | 64    | 93,5  | 41 | 50 | 0,94              | TS 30                     | TS 30 daxe |
|                 | 250             | 38   | M52x2,0                        | 30              | 41   | 63   | 73,5  | 106   | 50 | 60 | 1,49              | TS 38                     | TS 38 daxe |
|                 | 250             | 50   | M68x2,0                        | 40              | 67   | 94   | 106,5 | 135,5 | 70 | 80 | 4,60              | TS 50                     | TS 50 daxe |

1 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!

2 Bitte beachten Sie, dass der Innendurchmesser (di) durch die Kegelseite reduziert wird. | Please note that the inside diameter (di) is reduced by the cone side.



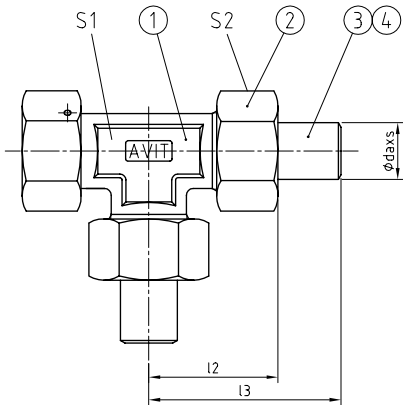
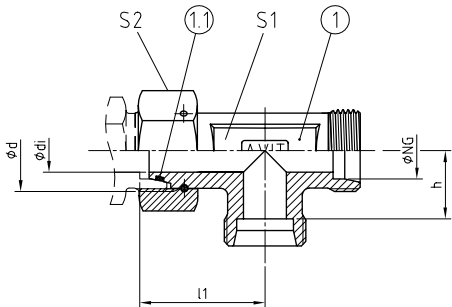
LS [Pos. 1]

LS [Pos. 1-4]

**AVIT, ISO 8434-1 – SWORT**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

- 24° Dichtegelanschluss mit eingelegtem O-Ring (FKM) nach ISO 8434-1 und montierter Drahtstiftmutter.
- 24° Konusanschluss nach ISO 8434-1

- 24° seal cone end with mounted O-ring (FKM) acc. ISO 8434-1 and assembled wire nail nut.
- 24° cone end acc. ISO 8434-1



WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | LS 25 - daxs - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | LS 25 - daxs - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | LS 25 - daxs - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | LS 25 - daxs - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | LS 25 - daxs - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | LS 25 - daxs - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                  |
|------|------------------------------------------------------------|
| 1    | T-Stutzen mit Drahtstiftmutter / T-Stud with wire nail nut |
| 1.1  | O-Ring Dichtung / O-ring sealing; FKM                      |
| 2    | Überwurfmutter / Union nut                                 |
| 3    | 24° Schweißkegel / 24° weld-on nipple                      |
| 4    | O-Ring Dichtung / O-ring sealing                           |

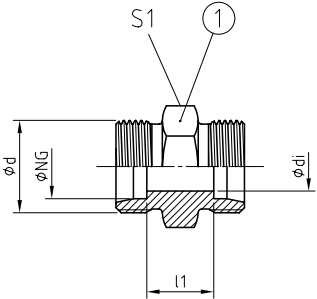
| REIHE<br>SERIES | PN <sup>1</sup> | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |      |      |       |       |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-----------------|------|--------------------------------|-----------------|------|------|-------|-------|----|----|-------------------|---------------------------|------------|
|                 | [bar]           | [mm] | d                              | di <sup>2</sup> | h    | l1   | l2    | l3    | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4   |
| L               | 250             | 15   | M22x1,5                        | 10              | 21   | 31   | 38    | 57,5  | 19 | 27 | 0,16              | LS 15                     | LS 15 daxe |
|                 | 160             | 18   | M26x1,5                        | 13              | 23,5 | 35,5 | 42    | 62    | 24 | 32 | 0,24              | LS 18                     | LS 18 daxe |
|                 | 160             | 22   | M30x2,0                        | 17              | 27,5 | 40,5 | 45,5  | 67    | 27 | 36 | 0,31              | LS 22                     | LS 22 daxe |
|                 | 100             | 28   | M36x2,0                        | 22              | 30,5 | 41,5 | 50    | 73,5  | 36 | 46 | 0,56              | LS 28                     | LS 28 daxe |
|                 | 100             | 35   | M45x2,0                        | 28              | 34,5 | 51   | 59    | 85,5  | 41 | 50 | 0,81              | LS 35                     | LS 35 daxe |
|                 | 100             | 42   | M52x2,0                        | 34              | 40   | 56   | 64,5  | 91    | 50 | 60 | 1,09              | LS 42                     | LS 42 daxe |
| S               | 630             | 10   | M18x1,5                        | 6               | 17,5 | 29   | 35    | 51    | 19 | 22 | 0,12              | LS 10                     | LS 10 daxe |
|                 | 420             | 12   | M20x1,5                        | 8               | 21,5 | 31   | 39,5  | 55,5  | 19 | 24 | 0,15              | LS 12                     | LS 12 daxe |
|                 | 420             | 16   | M24x1,5                        | 11              | 24,5 | 36,5 | 45    | 66,5  | 24 | 30 | 0,24              | LS 16                     | LS 16 daxe |
|                 | 315             | 20   | M30x2,0                        | 14              | 26,5 | 43   | 50    | 73    | 27 | 36 | 0,38              | LS 20                     | LS 20 daxe |
|                 | 315             | 25   | M36x2,0                        | 18              | 30   | 48   | 57    | 85    | 36 | 46 | 0,72              | LS 25                     | LS 25 daxe |
|                 | 250             | 30   | M42x2,0                        | 23              | 35,5 | 55   | 64    | 93,5  | 41 | 50 | 0,94              | LS 30                     | LS 30 daxe |
|                 | 250             | 38   | M52x2,0                        | 30              | 41   | 63   | 73,5  | 106   | 50 | 60 | 1,49              | LS 38                     | LS 38 daxe |
|                 | 250             | 50   | M68x2,0                        | 40              | 67   | 94   | 106,5 | 135,5 | 70 | 80 | 4,60              | LS 50                     | LS 50 daxe |

1 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!  
2 Bitte beachten Sie, dass der Innendurchmesser (di) durch die Kegelseite reduziert wird. | Please note that the inside diameter (di) is reduced by the cone side.

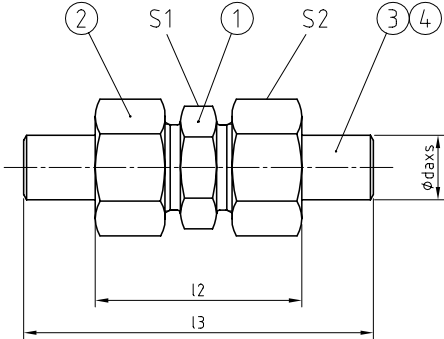




GV [Pos. 1]



GV [Pos. 1-4]



AVIT, ISO 8434-1 – S  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Beidseitiger 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1

Both ends with 24° cone end with metric thread acc. to ISO 8434-1

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxx - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GV 25 - daxx - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | GV 25 - daxx - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GV 25 - daxx - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GV 25 - daxx - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GV 25 - daxx - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GV 25 - daxx - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

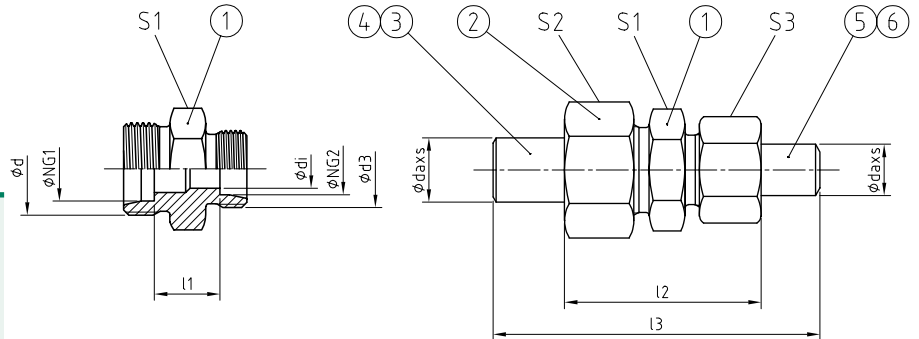
| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Verbindungsstutzen / Union connector  |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |     |     |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-----------------|-------|------|--------------------------------|----|----|-----|-----|----|----|-------------------|---------------------------|--------------|
|                 |       |      | d                              | di | l1 | l2  | l3  | S1 | S2 |                   | Pos. 1                    | Pos. 1-4     |
| L               | [bar] | [mm] |                                |    |    |     |     |    |    |                   |                           |              |
|                 | 250   | 10   | M16x1,5                        | 8  | 13 | 45  | 80  | 17 | 19 | 0,025             | GV 10 L                   | GV 10 L daxx |
|                 | 250   | 12   | M18x1,5                        | 10 | 14 | 47  | 82  | 19 | 22 | 0,032             | GV 12 L                   | GV 12 L daxx |
|                 | 250   | 15   | M22x1,5                        | 12 | 16 | 54  | 89  | 24 | 27 | 0,052             | GV 15                     | GV 15 daxx   |
|                 | 160   | 18   | M26x1,5                        | 15 | 16 | 55  | 93  | 27 | 32 | 0,071             | GV 18                     | GV 18 daxx   |
|                 | 160   | 22   | M30x2,0                        | 19 | 20 | 56  | 99  | 32 | 36 | 0,095             | GV 22                     | GV 22 daxx   |
|                 | 100   | 28   | M36x2,0                        | 24 | 21 | 60  | 107 | 41 | 41 | 0,144             | GV 28                     | GV 28 daxx   |
|                 | 100   | 35   | M45x2,0                        | 30 | 20 | 69  | 122 | 46 | 50 | 0,224             | GV 35                     | GV 35 daxx   |
| S               | 100   | 42   | M52x2,0                        | 36 | 21 | 70  | 123 | 55 | 60 | 0,311             | GV 42                     | GV 42 daxx   |
|                 | 800   | 10   | M18x1,5                        | 7  | 17 | 52  | 85  | 19 | 22 | 0,045             | GV 10                     | GV 10 daxx   |
|                 | 630   | 12   | M20x1,5                        | 8  | 19 | 55  | 88  | 22 | 24 | 0,064             | GV 12                     | GV 12 daxx   |
|                 | 630   | 16   | M24x1,5                        | 12 | 21 | 62  | 106 | 27 | 30 | 0,092             | GV 16                     | GV 16 daxx   |
|                 | 420   | 20   | M30x2,0                        | 15 | 23 | 71  | 116 | 32 | 36 | 0,156             | GV 20                     | GV 20 daxx   |
|                 | 420   | 25   | M36x2,0                        | 19 | 26 | 80  | 135 | 41 | 46 | 0,275             | GV 25                     | GV 25 daxx   |
|                 | 420   | 30   | M42x2,0                        | 24 | 27 | 84  | 143 | 46 | 50 | 0,358             | GV 30                     | GV 30 daxx   |
|                 | 420   | 38   | M52x2,0                        | 30 | 29 | 94  | 159 | 55 | 60 | 0,607             | GV 38                     | GV 38 daxx   |
|                 | 420   | 50   | M68x2,0                        | 38 | 36 | 115 | 174 | 70 | 80 | 1,197             | GV 50                     | GV 50 daxx   |



GVR [Pos. 1]

GVR [Pos. 1-6]



## AVIT ≈ ISO 8434-1 – SRD

## BAUREIHE / SERIES: L = LIGHT / S = HEAVY

- Beidseitiger 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1
- Um eine Nenngröße reduzierte Ausführung
- Both ends with 24° cone end with metric thread acc. to ISO 8434-1
- Reduced by one nominal size

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - **    |
|----------------------------------------------------|------------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GVR 25>20 - daxis - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GVR 25>20 - daxis - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GVR 25>20 - daxis - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GVR 25>20 - daxis - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GVR 25>20 - daxis - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GVR 25>20 - daxis - 42 |

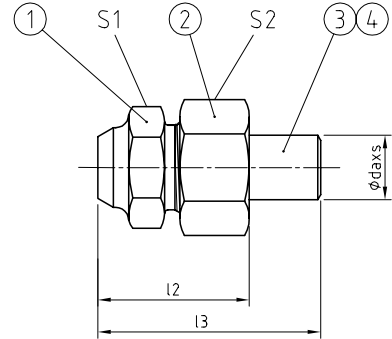
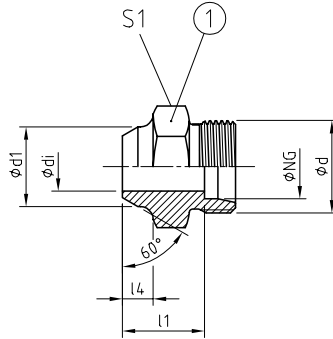
BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Verbindungsstutzen / Union connector  |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | 24° Schweißkegel / 24° weld-on nipple |
| 6    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG1  | NG2  | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |      |       |    |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                       |
|-----------------|-------|------|------|--------------------------------|---------|----|------|------|-------|----|----|----|-------------------|---------------------------|-----------------------|
|                 | [bar] | [mm] | [mm] | d                              | d3      | di | l1   | l2   | l3    | S1 | S2 | S3 | [kg]              | Pos. 1                    | Pos. 1-6              |
| L               | 160   | 18   | 15   | M26x1,5                        | M22x1,5 | 12 | 17,5 | 53   | 93    | 27 | 32 | 27 | 0,074             | GVR 18>15                 | GVR 18>15 daxis daxis |
|                 | 160   | 22   | 18   | M30x2,0                        | M26x1,5 | 15 | 20   | 56   | 98    | 32 | 36 | 32 | 0,109             | GVR 22>18                 | GVR 22>18 daxis daxis |
|                 | 100   | 28   | 22   | M36x2,0                        | M30x2,0 | 19 | 24   | 62   | 106   | 41 | 41 | 36 | 0,179             | GVR 28>22                 | GVR 28>22 daxis daxis |
|                 | 100   | 35   | 28   | M45x2,0                        | M36x2,0 | 24 | 23   | 67   | 117   | 46 | 50 | 41 | 0,239             | GVR 35>28                 | GVR 35>28 daxis daxis |
|                 | 100   | 42   | 35   | M52x2,0                        | M45x2,0 | 30 | 23,5 | 72,5 | 125,5 | 55 | 60 | 50 | 0,360             | GVR 42>35                 | GVR 42>35 daxis daxis |
| S>L             | 250   | 16   | 15   | M24x1,5                        | M22x1,5 | 12 | 18,5 | 56,5 | 97,5  | 27 | 30 | 27 | 0,080             | GVR 16>15                 | GVR 16>15 daxis daxis |
|                 | 160   | 20   | 18   | M30x2,0                        | M26x1,5 | 15 | 19   | 60,5 | 104,5 | 32 | 36 | 32 | 0,118             | GVR 20>18                 | GVR 20>18 daxis daxis |
|                 | 160   | 25   | 22   | M36x2,0                        | M30x2,0 | 19 | 22,5 | 67,5 | 116,5 | 41 | 46 | 36 | 0,194             | GVR 25>22                 | GVR 25>22 daxis daxis |
|                 | 100   | 30   | 28   | M42x2,0                        | M36x2,0 | 24 | 24   | 72   | 125   | 46 | 50 | 41 | 0,263             | GVR 30>28                 | GVR 30>28 daxis daxis |
|                 | 100   | 38   | 35   | M52x2,0                        | M45x2,0 | 30 | 24,5 | 81,5 | 140,5 | 55 | 60 | 50 | 0,436             | GVR 38>35                 | GVR 38>35 daxis daxis |
|                 | 100   | 50   | 42   | M68x2,0                        | M52x2,0 | 36 | 29   | 93   | 149   | 70 | 80 | 60 | 0,847             | GVR 50>42                 | GVR 50>42 daxis daxis |
| S               | 630   | 12   | 10   | M20x1,5                        | M18x1,5 | 7  | 17   | 53   | 85    | 22 | 24 | 22 | 0,055             | GVR 12>10                 | GVR 12>10 daxis daxis |
|                 | 630   | 16   | 12   | M24x1,5                        | M20x1,5 | 8  | 20   | 59   | 97    | 27 | 30 | 24 | 0,091             | GVR 16>12                 | GVR 16>12 daxis daxis |
|                 | 420   | 20   | 16   | M30x2,0                        | M24x1,5 | 12 | 23   | 68   | 112   | 32 | 36 | 30 | 0,138             | GVR 20>16                 | GVR 20>16 daxis daxis |
|                 | 420   | 25   | 20   | M36x2,0                        | M30x2,0 | 15 | 25,5 | 76   | 127   | 41 | 46 | 36 | 0,259             | GVR 25>20                 | GVR 25>20 daxis daxis |
|                 | 420   | 30   | 25   | M42x2,0                        | M36x2,0 | 19 | 27,5 | 83   | 140   | 46 | 50 | 46 | 0,362             | GVR 30>25                 | GVR 30>25 daxis daxis |
|                 | 420   | 38   | 30   | M52x2,0                        | M42x2,0 | 24 | 29,5 | 91   | 153   | 55 | 60 | 50 | 0,569             | GVR 38>30                 | GVR 38>30 daxis daxis |
|                 | 420   | 50   | 38   | M68x2,0                        | M52x2,0 | 30 | 34   | 107  | 168   | 70 | 80 | 60 | 1,095             | GVR 50>38                 | GVR 50>38 daxis daxis |

AV [Pos. 1]

AV [Pos. 1-4]



**AVIT, ISO 8434-1 – WDS  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Schweißstutzen mit 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.

Weld-on stud with 24° cone end with metric thread acc. to ISO 8434-1.

**WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface                       | TYP NG - daxis - ** |
|-----------------------------------------------------------------|---------------------|
| Stahl, Mutter verzinkt / Steel, union nut galvanised; NBR       | AV 25 - daxis - 01  |
| Stahl, Mutter verzinkt / Steel, union nut galvanised; FKM       | AV 25 - daxis - 02  |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; NBR | AV 25 - daxis - 04  |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; FKM | AV 25 - daxis - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR              | AV 25 - daxis - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM              | AV 25 - daxis - 42  |

**BESTELLBEISPIEL  
ORDER EXAMPLE**

**STÜCKLISTE  
PARTS LIST**

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Schweißstutzen / Weld-on stud         |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |      |      |       |    |    |    |       | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |  |
|-----------------|-------|------|--------------------------------|---------|----|------|------|-------|----|----|----|-------|-------------------|---------------------------|--|
|                 | [bar] | [mm] | d1                             | d       | di | l1   | l2   | l3    | l4 | S1 | S2 | [kg]  | Pos. 1            | Pos. 1- 4                 |  |
| L               | 250   | 15   | 19                             | M22x1,5 | 12 | 22   | 39,5 | 58,5  | 10 | 22 | 27 | 0,045 | AV 15             | AV 15 daxis               |  |
|                 | 160   | 18   | 22                             | M26x1,5 | 15 | 23,5 | 41,5 | 62    | 10 | 27 | 32 | 0,070 | AV 18             | AV 18 daxis               |  |
|                 | 160   | 22   | 27                             | M30x2,0 | 19 | 28,5 | 46,5 | 67,5  | 12 | 32 | 36 | 0,103 | AV 22             | AV 22 daxis               |  |
|                 | 100   | 28   | 32                             | M36x2,0 | 24 | 30,5 | 50   | 73,5  | 12 | 41 | 41 | 0,166 | AV 28             | AV 28 daxis               |  |
|                 | 100   | 35   | 40                             | M45x2,0 | 30 | 32,5 | 56,5 | 83,5  | 14 | 46 | 50 | 0,244 | AV 35             | AV 35 daxis               |  |
|                 | 100   | 42   | 46                             | M52x2,0 | 36 | 35   | 59,5 | 86    | 16 | 55 | 60 | 0,339 | AV 42             | AV 42 daxis               |  |
| S               | 800   | 10   | 15                             | M18x1,5 | 7  | 22,5 | 39,5 | 56,5  | 8  | 19 | 22 | 0,043 | AV 10             | AV 10 daxis               |  |
|                 | 630   | 12   | 17                             | M20x1,5 | 8  | 24,5 | 42,5 | 59    | 10 | 22 | 24 | 0,058 | AV 12             | AV 12 daxis               |  |
|                 | 630   | 16   | 21                             | M24x1,5 | 12 | 26,5 | 47   | 68,5  | 10 | 27 | 30 | 0,087 | AV 16             | AV 16 daxis               |  |
|                 | 420   | 20   | 26                             | M30x2,0 | 15 | 29,5 | 52,5 | 76    | 12 | 32 | 36 | 0,137 | AV 20             | AV 20 daxis               |  |
|                 | 420   | 25   | 31                             | M36x2,0 | 19 | 32   | 59   | 86,5  | 12 | 41 | 46 | 0,231 | AV 25             | AV 25 daxis               |  |
|                 | 420   | 30   | 36                             | M42x2,0 | 24 | 35,5 | 64   | 93    | 14 | 46 | 50 | 0,310 | AV 30             | AV 30 daxis               |  |
|                 | 420   | 38   | 44                             | M52x2,0 | 30 | 38   | 70,5 | 103   | 16 | 55 | 60 | 0,456 | AV 38             | AV 38 daxis               |  |
|                 | 420   | 50   | 60                             | M68x2,0 | 38 | 52   | 91,5 | 120,5 | 25 | 70 | 80 | 1,130 | AV 50             | AV 50 daxis               |  |

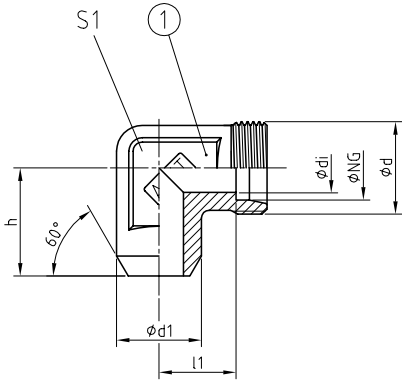


**AVIT ≈ ISO 8434-1 – EWDS**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

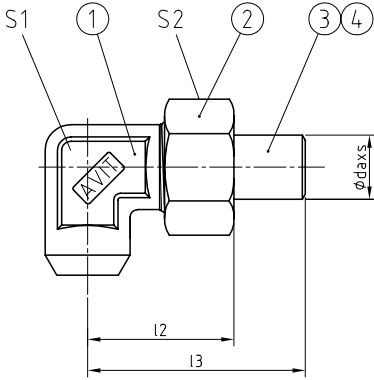
Winkelschweißstutzen mit 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.

Weld-on elbow stud with 24° cone end with metric thread acc. to ISO 8434-1.

WAV [Pos. 1]



WAV [Pos. 1-4]

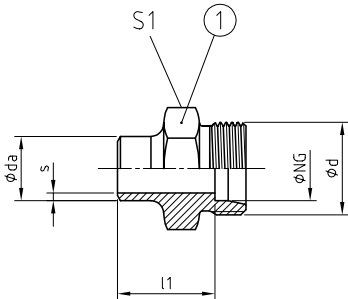


| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION                   | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                    |
|-----------------------------------------------------------------|----------------------------------|---------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface                       | TYP NG - daxs - **               | Pos. Bezeichnung / Description              |
| Stahl, Mutter verzinkt / Steel, union nut galvanised; NBR       | WAV 25 - daxs - 01               | 1 Winkelschweißstutzen / Weld-on elbow stud |
| Stahl, Mutter verzinkt / Steel, union nut galvanised; FKM       | WAV 25 - daxs - 02               | 2 Überwurfmutter / Union nut                |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; NBR | WAV 25 - daxs - 04               | 3 24° Schweißkegel / 24° weld-on nipple     |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; FKM | WAV 25 - daxs - 05               | 4 O-Ring Dichtung / O-ring sealing          |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR              | WAV 25 - daxs - 41               |                                             |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM              | WAV 25 - daxs - 42               |                                             |

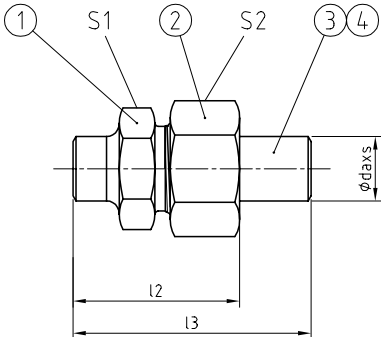
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |    |      |      |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|---------|----|----|------|------|------|----|----|-------------------|---------------------------|-------------|
|                 | [bar] | [mm] | d1                             | d       | di | h  | l1   | l2   | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4    |
| L               | 250   | 15   | 19                             | M22x1,5 | 12 | 28 | 21   | 38,5 | 57,5 | 19 | 27 | 0,097             | WAV 15                    | WAV 15 daxs |
|                 | 160   | 18   | 22                             | M26x1,5 | 15 | 31 | 23,5 | 41   | 62   | 24 | 32 | 0,113             | WAV 18                    | WAV 18 daxs |
|                 | 160   | 22   | 27                             | M30x2,0 | 19 | 35 | 27,5 | 45,5 | 67   | 27 | 36 | 0,160             | WAV 22                    | WAV 22 daxs |
|                 | 100   | 28   | 32                             | M36x2,0 | 24 | 38 | 30,5 | 50   | 73,5 | 36 | 41 | 0,287             | WAV 28                    | WAV 28 daxs |
|                 | 100   | 35   | 40                             | M45x2,0 | 30 | 45 | 34,5 | 58,5 | 85   | 41 | 50 | 0,413             | WAV 35                    | WAV 35 daxs |
|                 | 100   | 42   | 46                             | M52x2,0 | 36 | 51 | 40   | 64,5 | 91   | 50 | 60 | 0,710             | WAV 42                    | WAV 42 daxs |
| S               | 800   | 10   | 15                             | M18x1,5 | 7  | 25 | 17,5 | 35   | 52   | 19 | 22 | 0,069             | WAV 10                    | WAV 10 daxs |
|                 | 630   | 12   | 17                             | M20x1,5 | 8  | 29 | 21,5 | 39,5 | 55,5 | 19 | 24 | 0,096             | WAV 12                    | WAV 12 daxs |
|                 | 630   | 16   | 21                             | M24x1,5 | 12 | 33 | 24,5 | 45   | 66   | 24 | 30 | 0,139             | WAV 16                    | WAV 16 daxs |
|                 | 420   | 20   | 26                             | M30x2,0 | 15 | 37 | 26,5 | 50   | 73   | 27 | 36 | 0,205             | WAV 20                    | WAV 20 daxs |
|                 | 420   | 25   | 31                             | M36x2,0 | 19 | 42 | 30   | 56   | 85   | 36 | 46 | 0,385             | WAV 25                    | WAV 25 daxs |
|                 | 420   | 30   | 36                             | M42x2,0 | 24 | 49 | 35,5 | 63   | 92   | 41 | 50 | 0,588             | WAV 30                    | WAV 30 daxs |
|                 | 420   | 38   | 44                             | M52x2,0 | 30 | 57 | 41   | 73,5 | 106  | 50 | 60 | 0,941             | WAV 38                    | WAV 38 daxs |
|                 | 420   | 50   | 60                             | M68x2,0 | 38 | 85 | 67   | 107  | 137  | 70 | 80 | 3,030             | WAV 50                    | WAV 50 daxs |



GAV [Pos. 1]



GAV [Pos. 1-4]



AVIT ≈ ISO 8434-1  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Die wirtschaftlichste Rohranschlussmöglichkeit.  
Rohranschluss mit 24° Konusanschluss mit  
metrischem Gewinde nach ISO 8434-1.

The most economical solution for tube and pipe  
connections. Tube connection with 24° cone end with  
metric thread acc. to ISO 8434-1.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface                       | TYP NG - daxis - ** |
|-----------------------------------------------------------------|---------------------|
| Stahl, Mutter verzinkt / Steel, union nut galvanised; NBR       | GAV 25 - daxis - 01 |
| Stahl, Mutter verzinkt / Steel, union nut galvanised; FKM       | GAV 25 - daxis - 02 |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; NBR | GAV 25 - daxis - 04 |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; FKM | GAV 25 - daxis - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR              | GAV 25 - daxis - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM              | GAV 25 - daxis - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Schweißstutzen / Welding stud         |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG     | ABMESSUNGEN [mm]<br>DIMENSIONS |         |      |        |    |    |       | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                 |
|-----------------|-------|--------|--------------------------------|---------|------|--------|----|----|-------|-------------------|---------------------------|-----------------|
|                 | [bar] | [mm]   | daxs                           | d       | l1   | l2 ca. | l3 | S1 | S2    | [kg]              | Pos. 1                    | Pos. 1-4        |
| L               | 100   | 15     | 15x1,5                         | M22x1,5 | 22   | 39     | 59 | 22 | 27    | 0,041             | GAV 15x1,5                | GAV 15x1,5-daxs |
|                 | 160   |        | 15x2,0                         |         |      |        |    |    |       | 0,042             | GAV 15x2                  | GAV 15x2-daxs   |
|                 | 100   | 18     | 18x1,5                         | M26x1,5 | 23,5 | 43     | 62 | 27 | 32    | 0,063             | GAV 18x1,5                | GAV 18x1,5-daxs |
|                 | 160   |        | 18x2,0                         |         |      |        |    |    |       | 0,066             | GAV 18x2                  | GAV 18x2-daxs   |
|                 | 160   |        | 18x2,5                         |         |      |        |    |    |       | 0,071             | GAV 18x2,5                | GAV 18x2,5-daxs |
|                 | 160   |        | 18x3,0                         |         |      |        |    |    |       | 0,074             | GAV 18x3                  | GAV 18x3-daxs   |
|                 | 100   | 22     | 22x2,0                         | M30x2,0 | 28,5 | 47     | 68 | 32 | 36    | 0,095             | GAV 22x2                  | GAV 22x2-daxs   |
|                 | 160   |        | 22x2,5                         |         |      |        |    |    |       | 0,101             | GAV 22x2,5                | GAV 22x2,5-daxs |
|                 | 160   |        | 22x3,0                         |         |      |        |    |    |       | 0,106             | GAV 22x3                  | GAV 22x3-daxs   |
|                 | 160   |        | 22x4,0                         |         |      |        |    |    |       | 0,115             | GAV 22x4                  | GAV 22x4-daxs   |
|                 | 100   | 28     | 28x2,0                         | M36x2,0 | 30,5 | 50     | 74 | 41 | 41    | 0,155             | GAV 28x2                  | GAV 28x2-daxs   |
|                 | 100   |        | 28x2,5                         |         |      |        |    |    |       | 0,162             | GAV 28x2,5                | GAV 28x2,5-daxs |
|                 | 100   |        | 28x3,0                         |         |      |        |    |    |       | 0,170             | GAV 28x3                  | GAV 28x3-daxs   |
|                 | 160   |        | 28x4,0                         |         |      |        |    |    |       | 0,184             | GAV 28x4                  | GAV 28x4-daxs   |
|                 | 100   | 35     | 35x3,0                         | M45x2,0 | 33,5 | 58     | 85 | 46 | 50    | 0,237             | GAV 35x3                  | GAV 35x3-daxs   |
|                 | 160   |        | 35x4,0                         |         |      |        |    |    |       | 0,258             | GAV 35x4                  | GAV 35x4-daxs   |
| 100             | 42    | 42x3,0 | M52x2,0                        | 35      | 60   | 86     | 55 | 60 | 0,312 | GAV 42x3          | GAV 42x3-daxs             |                 |
| 160             |       | 42x4,0 |                                |         |      |        |    |    | 0,339 | GAV 42x4          | GAV 42x4-daxs             |                 |
| S               | 160   | 10     | 10x1,0                         | M18x1,5 | 22,5 | 40     | 56 | 19 | 22    | 0,034             | GAV 10x1                  | GAV 10x1-daxs   |
|                 | 250   |        | 10x1,5                         |         |      |        |    |    |       | 0,350             | GAV 10x1,5                | GAV 10x1,5-daxs |
|                 | 420   |        | 10x2,0                         |         |      |        |    |    |       | 0,037             | GAV 10x2                  | GAV 10x2-daxs   |
|                 | 630   |        | 10x2,5                         |         |      |        |    |    |       | 0,038             | GAV 10x2,5                | GAV 10x2,5-daxs |
|                 | 160   | 12     | 12x1,5                         | M20x1,5 | 28,5 | 46     | 63 | 22 | 24    | 0,048             | GAV 12x1,5                | GAV 12x1,5-daxs |
|                 | 315   |        | 12x2,0                         |         |      |        |    |    |       | 0,049             | GAV 12x2                  | GAV 12x2-daxs   |

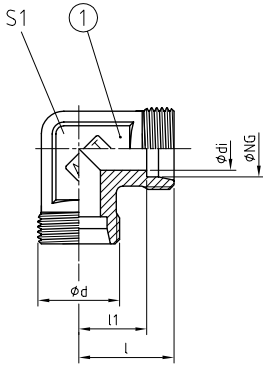
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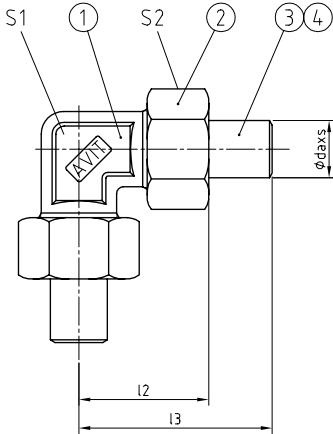
| REIHE<br>SERIES | PN    | NG   | NPS    | ABMESSUNGEN [mm]<br>DIMENSIONS |         |      |    |     |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                      |
|-----------------|-------|------|--------|--------------------------------|---------|------|----|-----|----|----|-------------------|---------------------------|----------------------|
|                 | [bar] | [mm] | [inch] | daxs                           | d       | l1   | l2 | l3  | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4             |
| S               | 420   | 12   | -      | 12x2,5                         | M20x1,5 | 28,5 | 46 | 63  | 22 | 24 | 0,051             | GAV 12x2,5                | GAV 12x2,5-daxs      |
|                 | 630   |      | -      | 12x3,0                         |         |      |    |     |    |    | 0,530             | GAV 12x3                  | GAV 12x3-daxs        |
|                 | 250   | 16   | ¼"     | 13,5x1,8                       | M24x1,5 | 31,5 | 52 | 74  | 27 | 30 | 0,079             | GAV 16>13,5x1,8           | GAV 16>13,5x1,8-daxs |
|                 | 315   |      | ¼"     | 13,5x2,6                       |         |      |    |     |    |    | 0,086             | GAV 16>13,5x2,6           | GAV 16>13,5x2,6-daxs |
|                 | 250   |      | ¼"     | 13,7x2,2                       |         |      |    |     |    |    | 0,082             | GAV 16>13,7x2,2           | GAV 16>13,7x2,2-daxs |
|                 | 315   |      | ¼"     | 13,7x3,0                       |         |      |    |     |    |    | 0,086             | GAV 16>13,7x3             | GAV 16>13,7x3-daxs   |
|                 | 160   |      | -      | 16x1,5                         |         |      |    |     |    |    | 0,076             | GAV 16x1,5                | GAV 16x1,5-daxs      |
|                 | 250   |      | -      | 16x2,0                         |         |      |    |     |    |    | 0,079             | GAV 16x2                  | GAV 16x2-daxs        |
|                 | 315   |      | -      | 16x2,5                         |         |      |    |     |    |    | 0,084             | GAV 16x2,5                | GAV 16x2,5-daxs      |
|                 | 420   |      | -      | 16x3,0                         |         |      |    |     |    |    | 0,086             | GAV 16x3                  | GAV 16x3-daxs        |
|                 | 160   | 20   | ¾"     | 17,2x2,0                       | M30x2,0 | 33,5 | 57 | 80  | 32 | 36 | 0,132             | GAV 20>17,2x2             | GAV 20>17,2x2-daxs   |
|                 | 250   |      | ¾"     | 17,2x2,3                       |         |      |    |     |    |    | 0,135             | GAV 20>17,2x2,3           | GAV 20>17,2x2,3-daxs |
|                 | 315   |      | ¾"     | 17,2x2,6                       |         |      |    |     |    |    | 0,137             | GAV 20>17,2x2,6           | GAV 20>17,2x2,6-daxs |
|                 | 420   |      | ¾"     | 17,2x3,2                       |         |      |    |     |    |    | 0,143             | GAV 20>17,2x3,2           | GAV 20>17,2x3,2-daxs |
|                 | 160   |      | -      | 20x2,0                         |         |      |    |     |    |    | 0,123             | GAV 20x2                  | GAV 20x2-daxs        |
|                 | 250   |      | -      | 20x2,5                         |         |      |    |     |    |    | 0,131             | GAV 20x2,5                | GAV 20x2,5-daxs      |
|                 | 315   |      | -      | 20x3,0                         |         |      |    |     |    |    | 0,137             | GAV 20x3                  | GAV 20x3-daxs        |
|                 | 420   |      | -      | 20x4,0                         |         |      |    |     |    |    | 0,145             | GAV 20x4                  | GAV 20x4-daxs        |
|                 | 160   | 25   | ½"     | 21,3x2,0                       | M36x2,0 | 38   | 65 | 93  | 41 | 46 | 0,226             | GAV 25>21,3x2             | GAV 25>21,3x2-daxs   |
|                 | 250   |      | ½"     | 21,3x2,6                       |         |      |    |     |    |    | 0,235             | GAV 25>21,3x2,6           | GAV 25>21,3x2,6-daxs |
|                 | 250   |      | ½"     | 21,3x2,9                       |         |      |    |     |    |    | 0,239             | GAV 25>21,3x2,9           | GAV 25>21,3x2,9-daxs |
|                 | 315   |      | ½"     | 21,3x3,7                       |         |      |    |     |    |    | 0,248             | GAV 25>21,3x3,7           | GAV 25>21,3x3,7-daxs |
|                 | 160   |      | -      | 25x2,5                         |         |      |    |     |    |    | 0,222             | GAV 25x2,5                | GAV 25x2,5-daxs      |
|                 | 250   |      | -      | 25x3,0                         |         |      |    |     |    |    | 0,231             | GAV 25x3                  | GAV 25x3-daxs        |
|                 | 315   |      | -      | 25x4,0                         |         |      |    |     |    |    | 0,246             | GAV 25x4                  | GAV 25x4-daxs        |
|                 | 420   |      | -      | 25x5,0                         |         |      |    |     |    |    | 0,260             | GAV 25x5                  | GAV 25x5-daxs        |
|                 | 160   | 30   | ¾"     | 26,7x2,9                       | M42x2,0 | 39,5 | 69 | 98  | 46 | 50 | 0,307             | GAV 30>26,7x2,9           | GAV 30>26,7x2,9-daxs |
|                 | 315   |      | ¾"     | 26,7x3,9                       |         |      |    |     |    |    | 0,307             | GAV 30>26,7x3,9           | GAV 30>26,7x3,9-daxs |
|                 | 160   |      | ¾"     | 26,9x 2,3                      |         |      |    |     |    |    | 0,297             | GAV 30>26,9x2,3           | GAV 30>26,9x2,3-daxs |
|                 | 250   |      | ¾"     | 26,9x3,2                       |         |      |    |     |    |    | 0,320             | GAV 30>26,9x3,2           | GAV 30>26,9x3,2-daxs |
|                 | 160   |      | -      | 30x3,0                         |         |      |    |     |    |    | 0,297             | GAV 30x3                  | GAV 30x3-daxs        |
|                 | 250   |      | -      | 30x4,0                         |         |      |    |     |    |    | 0,318             | GAV 30x4                  | GAV 30x4-daxs        |
|                 | 315   |      | -      | 30x5,0                         |         |      |    |     |    |    | 0,338             | GAV 30x5                  | GAV 30x5-daxs        |
|                 | 420   |      | -      | 30x6,0                         |         |      |    |     |    |    | 0,352             | GAV 30x6                  | GAV 30x6-daxs        |
|                 | 160   | 38   | 1"     | 33,4x2,6                       | M52x2,0 | 44   | 77 | 109 | 55 | 60 | 0,480             | GAV 38>33,4x2,6           | GAV 38>33,4x2,6-daxs |
|                 | 250   |      | 1"     | 33,4x4,0                       |         |      |    |     |    |    | 0,515             | GAV 38>33,4x4             | GAV 38>33,4x4-daxs   |
|                 | 160   |      | 1"     | 33,7x2,6                       |         |      |    |     |    |    | 0,478             | GAV 38>33,7x2,6           | GAV 38>33,7x2,6-daxs |
|                 | 250   |      | 1"     | 33,7x4,0                       |         |      |    |     |    |    | 0,525             | GAV 38>33,7x4             | GAV 38>33,7x4-daxs   |
|                 | 160   |      | -      | 38x4,0                         |         |      |    |     |    |    | 0,500             | GAV 38x4                  | GAV 38x4-daxs        |
|                 | 250   |      | -      | 38x5,0                         |         |      |    |     |    |    | 0,520             | GAV 38x5                  | GAV 38x5-daxs        |
|                 | 315   |      | -      | 38x6,0                         |         |      |    |     |    |    | 0,545             | GAV 38x6                  | GAV 38x6-daxs        |
|                 | 420   |      | -      | 38x8,0                         |         |      |    |     |    |    | 0,590             | GAV 38x8                  | GAV 38x8-daxs        |
|                 | 160   | 50   | 1½"    | 48,3x2,6                       | M68x2,0 | 49   | 90 | 119 | 70 | 80 | 0,888             | GAV 50>48,3x2,6           | GAV 50>48,3x2,6-daxs |
|                 | 160   |      | 1½"    | 48,3x4,0                       |         |      |    |     |    |    | 0,910             | GAV 50>48,3x4             | GAV 50>48,3x4-daxs   |
|                 | 250   |      | 1½"    | 48,3x6,3                       |         |      |    |     |    |    | 0,970             | GAV 50>48,3x6,3           | GAV 50>48,3x6,3-daxs |
|                 | 315   |      | 1½"    | 48,3x8,0                       |         |      |    |     |    |    | 1,031             | GAV 50>48,3x8             | GAV 50>48,3x8-daxs   |
|                 | 160   |      | -      | 50x5,0                         |         |      |    |     |    |    | 0,900             | GAV 50x5                  | GAV 50x5-daxs        |
|                 | 250   |      | -      | 50x6,0                         |         |      |    |     |    |    | 0,945             | GAV 50x6                  | GAV 50x6-daxs        |
|                 | 315   |      | -      | 50x8,0                         |         |      |    |     |    |    | 0,958             | GAV 50x8                  | GAV 50x8-daxs        |
|                 | 400   |      | -      | 50 x10,0                       |         |      |    |     |    |    | 1,108             | GAV 50x10                 | GAV 50x10-daxs       |



WV [Pos. 1]



WV [Pos. 1-4]



AVIT, ISO 8434-1 – E  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Winkelstutzen mit 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.  
  
Elbow stud with 24° cone end with metric thread acc. to ISO 8434-1.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - ** |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | WV 25 - daxis - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | WV 25 - daxis - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | WV 25 - daxis - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | WV 25 - daxis - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | WV 25 - daxis - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | WV 25 - daxis - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Winkelstutzen / Elbow stud            |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

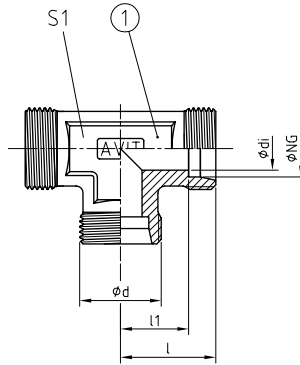
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |       |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|----|----|------|-------|------|----|----|-------------------|---------------------------|-------------|
|                 | [bar] | [mm] | d                              | di | l  | l1   | l2    | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4    |
| L               | 420   | 15   | M22x1,5                        | 12 | 28 | 21   | 38,5  | 57,5 | 19 | 27 | 0,083             | WV 15                     | WV 15 daxis |
|                 | 420   | 18   | M26x1,5                        | 15 | 31 | 23,5 | 41    | 62   | 24 | 32 | 0,120             | WV 18                     | WV 18 daxis |
|                 | 250   | 22   | M30x2,0                        | 19 | 35 | 27,5 | 45,5  | 67   | 27 | 36 | 0,166             | WV 22                     | WV 22 daxis |
|                 | 250   | 28   | M36x2,0                        | 24 | 38 | 30,5 | 50    | 73,5 | 36 | 41 | 0,299             | WV 28                     | WV 28 daxis |
|                 | 250   | 35   | M45x2,0                        | 30 | 45 | 34,5 | 58,5  | 85,5 | 41 | 50 | 0,438             | WV 35                     | WV 35 daxis |
|                 | 250   | 42   | M52x2,0                        | 36 | 51 | 40   | 64,5  | 91   | 50 | 60 | 0,544             | WV 42                     | WV 42 daxis |
| S               | 800   | 10   | M18x1,5                        | 7  | 25 | 17,5 | 35    | 51,5 | 19 | 22 | 0,073             | WV 10                     | WV 10 daxis |
|                 | 630   | 12   | M20x1,5                        | 8  | 29 | 21,5 | 39,5  | 55,5 | 19 | 24 | 0,101             | WV 12                     | WV 12 daxis |
|                 | 630   | 16   | M24x1,5                        | 12 | 33 | 24,5 | 45    | 66,5 | 24 | 30 | 0,147             | WV 16                     | WV 16 daxis |
|                 | 420   | 20   | M30x2,0                        | 15 | 37 | 26,5 | 50,5  | 73   | 27 | 36 | 0,215             | WV 20                     | WV 20 daxis |
|                 | 420   | 25   | M36x2,0                        | 19 | 42 | 30   | 57    | 84,5 | 36 | 46 | 0,404             | WV 25                     | WV 25 daxis |
|                 | 420   | 30   | M42x2,0                        | 24 | 49 | 35,5 | 64    | 93,5 | 41 | 50 | 0,597             | WV 30                     | WV 30 daxis |
|                 | 420   | 38   | M52x2,0                        | 30 | 57 | 41   | 73,5  | 106  | 50 | 60 | 1,010             | WV 38                     | WV 38 daxis |
|                 | 420   | 50   | M68x2,0                        | 38 | 85 | 67   | 106,5 | 136  | 70 | 80 | 3,124             | WV 50                     | WV 50 daxis |


**AVIT, ISO 8434-1 – T**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

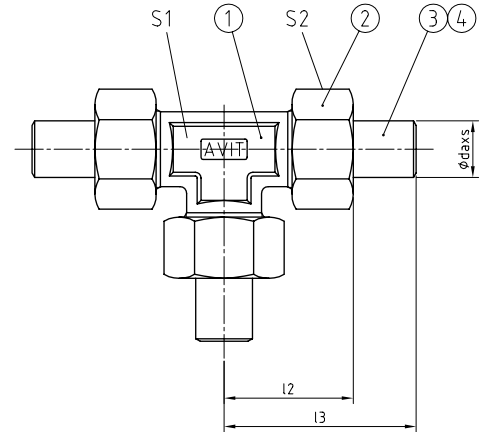
T-Stutzen mit 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.

Tee stud with 24° cone end with metric thread acc. to ISO 8434-1.

TV [Pos. 1]



TV [Pos. 1-4]


**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | TV 25 - daxs - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | TV 25 - daxs - 02  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | TV 25 - daxs - 04  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | TV 25 - daxs - 05  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | TV 25 - daxs - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | TV 25 - daxs - 42  |

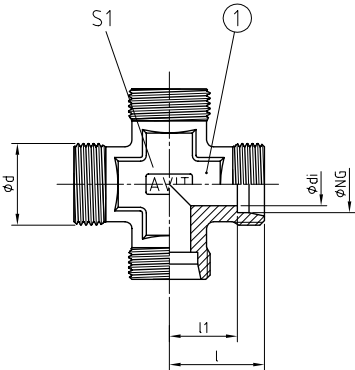
**BESTELLBEISPIEL**  
**ORDER EXAMPLE**
**STÜCKLISTE**  
**PARTS LIST**

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | T-Stutzen / Tee stud                  |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

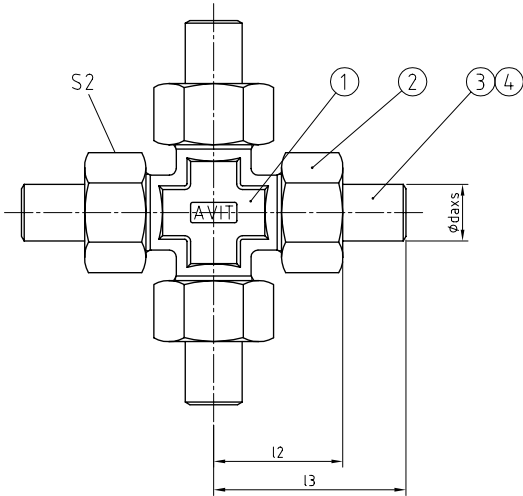
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |       |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |            |
|-----------------|-------|------|--------------------------------|----|----|------|-------|------|----|----|-------------------|---------------------------|------------|
|                 | [bar] | [mm] | d                              | di | l  | l1   | l2    | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4   |
| L               | 420   | 15   | M22x1,5                        | 12 | 28 | 21   | 38,5  | 57,5 | 19 | 27 | 0,107             | TV 15                     | TV 15 daxs |
|                 | 420   | 18   | M26x1,5                        | 15 | 31 | 23,5 | 41    | 62   | 24 | 32 | 0,157             | TV 18                     | TV 18 daxs |
|                 | 250   | 22   | M30x2,0                        | 19 | 35 | 27,5 | 45,5  | 67   | 27 | 36 | 0,217             | TV 22                     | TV 22 daxs |
|                 | 250   | 28   | M36x2,0                        | 24 | 38 | 30,5 | 50    | 73,5 | 36 | 41 | 0,369             | TV 28                     | TV 28 daxs |
|                 | 250   | 35   | M45x2,0                        | 30 | 45 | 34,5 | 58,5  | 85,5 | 41 | 50 | 0,534             | TV 35                     | TV 35 daxs |
|                 | 250   | 42   | M52x2,0                        | 36 | 51 | 40   | 64,5  | 91   | 50 | 60 | 0,640             | TV 42                     | TV 42 daxs |
| S               | 800   | 10   | M18x1,5                        | 7  | 25 | 17,5 | 35    | 51,5 | 19 | 22 | 0,092             | TV 10                     | TV 10 daxs |
|                 | 630   | 12   | M20x1,5                        | 8  | 29 | 21,5 | 39,5  | 55,5 | 19 | 24 | 0,129             | TV 12                     | TV 12 daxs |
|                 | 630   | 16   | M24x1,5                        | 12 | 33 | 24,5 | 45    | 66,5 | 24 | 30 | 0,190             | TV 16                     | TV 16 daxs |
|                 | 420   | 20   | M30x2,0                        | 15 | 37 | 26,5 | 50,5  | 73   | 27 | 36 | 0,296             | TV 20                     | TV 20 daxs |
|                 | 420   | 25   | M36x2,0                        | 19 | 42 | 30   | 57    | 84,5 | 36 | 46 | 0,538             | TV 25                     | TV 25 daxs |
|                 | 420   | 30   | M42x2,0                        | 24 | 49 | 35,5 | 64    | 93,5 | 41 | 50 | 0,778             | TV 30                     | TV 30 daxs |
|                 | 420   | 38   | M52x2,0                        | 30 | 57 | 41   | 73,5  | 106  | 50 | 60 | 1,157             | TV 38                     | TV 38 daxs |
|                 | 420   | 50   | M68x2,0                        | 38 | 85 | 67   | 106,5 | 136  | 70 | 80 | 3,956             | TV 50                     | TV 50 daxs |



KV [Pos. 1]



KV [Pos. 1-4]



**ISO 8434-1 – K**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**  
Kreuzstutzen mit 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.  
*Cross stud with 24° cone end with metric thread acc. to ISO 8434-1.*

**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - ** |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | KV 25 - daxis - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | KV 25 - daxis - 02  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | KV 25 - daxis - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | KV 25 - daxis - 42  |

**BESTELLBEISPIEL**  
**ORDER EXAMPLE**

**STÜCKLISTE**  
**PARTS LIST**

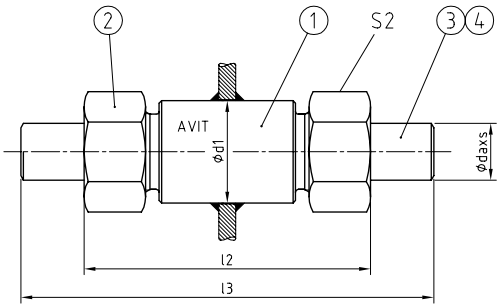
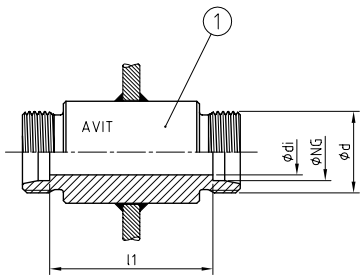
| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Kreuzstutzen / Cross stud             |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |      |      |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|----|----|------|------|------|----|----|-------------------|---------------------------|-------------|
|                 | [bar] | [mm] | d                              | di | l  | l1   | l2   | l3   | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4    |
| L               | 420   | 15   | M22x1,5                        | 12 | 28 | 21   | 38,5 | 57,5 | 19 | 27 | 0,147             | KV 15                     | KV 15 daxis |
|                 | 420   | 18   | M26x1,5                        | 15 | 31 | 23,5 | 41   | 62   | 24 | 32 | 0,235             | KV 18                     | KV 18 daxis |
|                 | 250   | 22   | M30x2,0                        | 19 | 35 | 27,5 | 45,5 | 67   | 27 | 36 | 0,396             | KV 22                     | KV 22 daxis |
|                 | 250   | 28   | M36x2,0                        | 24 | 38 | 30,5 | 50   | 73,5 | 36 | 41 | 0,628             | KV 28                     | KV 28 daxis |
|                 | 250   | 35   | M45x2,0                        | 30 | 45 | 34,5 | 58,5 | 85,5 | 41 | 50 | 0,648             | KV 35                     | KV 35 daxis |
|                 | 250   | 42   | M52x2,0                        | 36 | 51 | 40   | 64,5 | 91   | 50 | 60 | 0,920             | KV 42                     | KV 42 daxis |
| S               | 800   | 10   | M18x1,5                        | 7  | 25 | 17,5 | 35   | 51,5 | 19 | 22 | 0,100             | KV 10                     | KV 10 daxis |
|                 | 630   | 12   | M20x1,5                        | 8  | 29 | 21,5 | 39,5 | 55,5 | 19 | 24 | 0,132             | KV 12                     | KV 12 daxis |
|                 | 630   | 16   | M24x1,5                        | 12 | 33 | 24,5 | 45   | 66,5 | 24 | 30 | 0,221             | KV 16                     | KV 16 daxis |
|                 | 420   | 20   | M30x2,0                        | 16 | 37 | 26,5 | 50,5 | 73   | 27 | 36 | 0,320             | KV 20                     | KV 20 daxis |
|                 | 420   | 25   | M36x2,0                        | 20 | 42 | 30   | 57   | 84,5 | 36 | 46 | 0,550             | KV 25                     | KV 25 daxis |
|                 | 420   | 30   | M42x2,0                        | 25 | 49 | 35,5 | 64   | 93,5 | 41 | 50 | 0,829             | KV 30                     | KV 30 daxis |
|                 | 420   | 38   | M52x2,0                        | 32 | 57 | 41   | 73,5 | 106  | 50 | 60 | 1,381             | KV 38                     | KV 38 daxis |



GESV [Pos. 1]

GESV [Pos. 1-4]



**AVIT, ISO 8434-1 – WDBHS**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Beidseitiger 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.

*Both ends with 24° cone end with metric thread acc. to ISO 8434-1.*

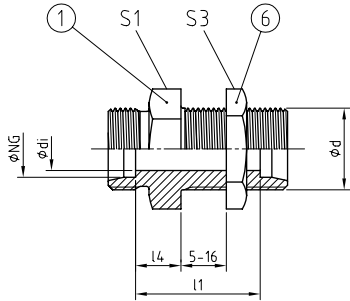
| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION                   | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                |
|-----------------------------------------------------------------|----------------------------------|-----------------------------------------|
| Werkstoff, Oberfläche / Material, Surface                       | TYP NG - daxs - **               | Pos. Bezeichnung / Description          |
| Stahl, Mutter verzinkt / Steel, union nut galvanised; NBR       | GESV 25 - daxs - 01              | 1 Schottstutzen / Bulkhead union        |
| Stahl, Mutter verzinkt / Steel, union nut galvanised; FKM       | GESV 25 - daxs - 02              | 2 Überwurfmutter / Union nut            |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; NBR | GESV 25 - daxs - 04              | 3 24° Schweißkegel / 24° weld-on nipple |
| Stahl, Mutter phosphatiert / Steel, union nut phosphatised; FKM | GESV 25 - daxs - 05              | 4 O-Ring Dichtung / O-ring sealing      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR              | GESV 25 - daxs - 41              |                                         |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM              | GESV 25 - daxs - 42              |                                         |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |    |     |     |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-----------------|-------|------|--------------------------------|----|----|----|-----|-----|----|-------------------|---------------------------|--------------|
|                 | [bar] | [mm] | d                              | d1 | di | l1 | l2  | l3  | S2 | [kg]              | Pos. 1                    | Pos. 1-4     |
| L               | 420   | 15   | M22x1,5                        | 28 | 12 | 70 | 105 | 143 | 27 | 0,270             | GESV 15                   | GESV 15 daxs |
|                 | 420   | 18   | M26x1,5                        | 32 | 15 | 69 | 107 | 147 | 32 | 0,341             | GESV 18                   | GESV 18 daxs |
|                 | 250   | 22   | M30x2,0                        | 36 | 19 | 73 | 110 | 152 | 36 | 0,407             | GESV 22                   | GESV 22 daxs |
|                 | 250   | 28   | M36x2,0                        | 40 | 24 | 73 | 112 | 159 | 41 | 0,460             | GESV 28                   | GESV 28 daxs |
|                 | 250   | 35   | M45x2,0                        | 50 | 30 | 71 | 120 | 173 | 50 | 0,736             | GESV 35                   | GESV 35 daxs |
|                 | 250   | 42   | M52x2,0                        | 60 | 36 | 70 | 119 | 172 | 60 | 1,024             | GESV 42                   | GESV 42 daxs |
| S               | 800   | 10   | M18x1,5                        | 25 | 7  | 59 | 94  | 127 | 22 | 0,206             | GESV 10                   | GESV 10 daxs |
|                 | 630   | 12   | M20x1,5                        | 28 | 8  | 59 | 95  | 127 | 24 | 0,256             | GESV 12                   | GESV 12 daxs |
|                 | 630   | 16   | M24x1,5                        | 35 | 12 | 71 | 112 | 155 | 30 | 0,452             | GESV 16                   | GESV 16 daxs |
|                 | 420   | 20   | M30x2,0                        | 38 | 15 | 71 | 119 | 165 | 36 | 0,551             | GESV 20                   | GESV 20 daxs |
|                 | 420   | 25   | M36x2,0                        | 45 | 19 | 72 | 126 | 181 | 46 | 0,759             | GESV 25                   | GESV 25 daxs |
|                 | 420   | 30   | M42x2,0                        | 50 | 24 | 73 | 130 | 189 | 50 | 0,920             | GESV 30                   | GESV 30 daxs |
|                 | 420   | 38   | M52x2,0                        | 60 | 30 | 72 | 137 | 202 | 60 | 1,341             | GESV 38                   | GESV 38 daxs |
|                 | 420   | 50   | M68x2,0                        | 80 | 38 | 86 | 165 | 223 | 80 | 2,904             | GESV 50                   | GESV 50 daxs |

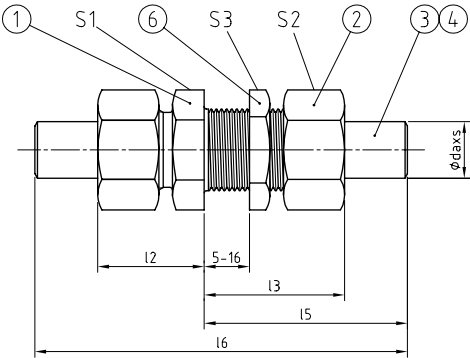




GSV [Pos. 1+6]



GSV [Pos. 1-6]



**ISO 8434-1 – BHS**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**  
Schottstutzen mit beidseitigem 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.  
Schottstärke 5 - 16 mm.  
  
Bulkhead union body, both ends with 24° cone end with metric thread acc. to ISO 8434-1.  
Bulkhead thickness 5 - 16 mm.

**WERKSTOFF-KOMBINATION**  
**MATERIAL COMBINATION**

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - ** |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GSV 25 - daxis - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GSV 25 - daxis - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GSV 25 - daxis - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GSV 25 - daxis - 42 |

**BESTELLBEISPIEL**  
**ORDER EXAMPLE**

**STÜCKLISTE**  
**PARTS LIST**

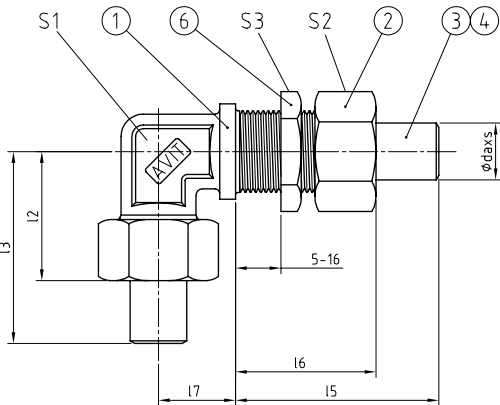
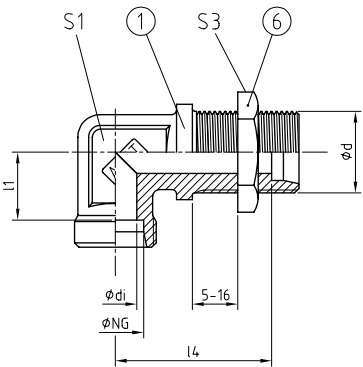
| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Schottstutzen / Bulkhead union body   |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 6    | Kontermutter / Locknut                |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |      |      |       |       |    |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-----------------|-------|------|--------------------------------|----|----|------|------|------|-------|-------|----|----|----|-------------------|---------------------------|--------------|
|                 | [bar] | [mm] | d                              | di | l1 | l2   | l3   | l4   | l5    | l6    | S1 | S2 | S3 | [kg]              | Pos. 1+6                  | Pos. 1-4     |
| L               | 420   | 10   | M16x1,5                        | 8  | 38 | 26   | 44   | 10   | 61,5  | 104,5 | 22 | 19 | 22 | 0,145             | GSV 10                    | GSV 10 daxis |
|                 | 420   | 12   | M18x1,5                        | 10 | 39 | 26,5 | 45,5 | 10   | 62,5  | 106,5 | 24 | 22 | 24 | 0,185             | GSV 12                    | GSV 12 daxis |
|                 | 420   | 15   | M22x1,5                        | 12 | 43 | 29,5 | 48,5 | 12   | 68    | 116,5 | 27 | 27 | 30 | 0,355             | GSV 15                    | GSV 15 daxis |
|                 | 250   | 18   | M26x1,5                        | 15 | 46 | 32,5 | 51,5 | 13,5 | 71,5  | 123,5 | 32 | 32 | 36 | 0,345             | GSV 18                    | GSV 18 daxis |
|                 | 250   | 22   | M30x2,0                        | 19 | 51 | 35   | 53   | 16,5 | 74    | 129,5 | 36 | 36 | 36 | 0,545             | GSV 22                    | GSV 22 daxis |
|                 | 250   | 28   | M36x2,0                        | 24 | 54 | 38   | 55   | 18,5 | 78,5  | 140   | 41 | 41 | 46 | 0,775             | GSV 28                    | GSV 28 daxis |
|                 | 250   | 35   | M45x2,0                        | 30 | 55 | 43   | 61   | 18,5 | 87,5  | 157   | 55 | 50 | 55 | 1,221             | GSV 35                    | GSV 35 daxis |
|                 | 250   | 42   | M52x2,0                        | 36 | 55 | 43,5 | 60,5 | 19   | 87    | 157   | 60 | 60 | 65 | 1,725             | GSV 42                    | GSV 42 daxis |
| S               | 800   | 10   | M18x1,5                        | 7  | 44 | 32   | 47   | 14,5 | 63    | 111,5 | 24 | 24 | 24 | 0,122             | GSV 10                    | GSV 10 daxis |
|                 | 630   | 12   | M20x1,5                        | 8  | 45 | 32,5 | 48,5 | 14,5 | 64,5  | 113,5 | 27 | 27 | 27 | 0,150             | GSV 12                    | GSV 12 daxis |
|                 | 630   | 16   | M24x1,5                        | 12 | 48 | 37   | 52   | 16,5 | 73,5  | 132,5 | 32 | 32 | 32 | 0,214             | GSV 16                    | GSV 16 daxis |
|                 | 420   | 20   | M30x2,0                        | 15 | 51 | 41,5 | 57   | 17,5 | 80    | 144,5 | 41 | 36 | 41 | 0,383             | GSV 20                    | GSV 20 daxis |
|                 | 420   | 25   | M36x2,0                        | 19 | 55 | 47   | 62   | 20   | 89,5  | 164   | 46 | 46 | 46 | 0,554             | GSV 25                    | GSV 25 daxis |
|                 | 420   | 30   | M42x2,0                        | 24 | 59 | 50   | 66   | 21,5 | 95,5  | 175   | 50 | 50 | 50 | 0,734             | GSV 30                    | GSV 30 daxis |
|                 | 420   | 38   | M52x2,0                        | 32 | 59 | 54,5 | 70   | 22   | 102   | 189   | 65 | 65 | 65 | 1,180             | GSV 38                    | GSV 38 daxis |
|                 | 420   | 50   | M68x2,0                        | 38 | 64 | 65,5 | 78,5 | 26   | 107,5 | 202   | 75 | 80 | 80 | 1,950             | GSV 50                    | GSV 50 daxis |



WSV [Pos. 1+6]

WSV [Pos. 1-6]



**ISO 8434-1 – BHE**  
**BAUREIHE / SERIES: S = HEAVY**

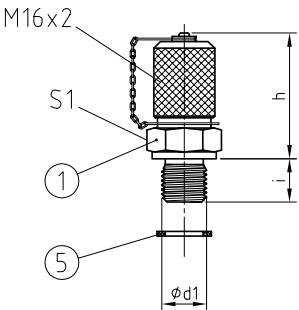
Winkelschottstutzen mit beidseitigem 24° Konus-anschluss mit metrischem Gewinde nach ISO 8434-1. Schottstärke 5 - 16 mm.

Bulkhead union elbow body, both ends with 24° cone end with metric thread acc. to ISO 8434-1. Bulkhead thickness 5 - 16 mm.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|----------------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - **               |
| Stahl, verzinkt / Steel, galvanised; NBR           | WSV 25 - daxs - 01               |
| Stahl, verzinkt / Steel, galvanised; FKM           | WSV 25 - daxs - 02               |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | WSV 25 - daxs - 41               |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | WSV 25 - daxs - 42               |

| STÜCKLISTE |                                                 |
|------------|-------------------------------------------------|
| PARTS LIST |                                                 |
| Pos.       | Bezeichnung / Description                       |
| 1          | Winkelschottstutzen / Bulkhead union elbow body |
| 2          | Überwurfmutter / Union nut                      |
| 3          | 24° Schweißkegel / 24° weld-on nipple           |
| 4          | O-Ring Dichtung / O-ring sealing                |
| 6          | Kontermutter / Locknut                          |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |      |     |      |      |      |    |    | GEWICHT<br>WEIGHT |    |       | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|----|------|------|-----|------|------|------|----|----|-------------------|----|-------|---------------------------|-------------|
|                 | [bar] | [mm] | d                              | di | l1   | l2   | l3  | l4   | l5   | l6   | l7 | S1 | S2                | S3 | [kg]  | Pos. 1+6                  | Pos. 1-6    |
| S               | 800   | 10   | M18x1,5                        | 7  | 17,5 | 35   | 51  | 50   | 63   | 47   | 20 | 24 | 24                | 24 | 0,125 | WSV 10                    | WSV 10 daxs |
|                 | 630   | 12   | M20x1,5                        | 8  | 21,5 | 39,5 | 56  | 51,5 | 65   | 48,5 | 21 | 27 | 27                | 27 | 0,162 | WSV 12                    | WSV 12 daxs |
|                 | 630   | 16   | M24x1,5                        | 12 | 24,5 | 45   | 67  | 55,5 | 73,5 | 52   | 24 | 32 | 32                | 32 | 0,249 | WSV 16                    | WSV 16 daxs |
|                 | 420   | 20   | M30x2,0                        | 16 | 26,5 | 50   | 73  | 63,5 | 80   | 57   | 30 | 41 | 36                | 41 | 0,394 | WSV 20                    | WSV 20 daxs |
|                 | 420   | 25   | M36x2,0                        | 20 | 30   | 57   | 85  | 69   | 89,5 | 62   | 34 | 46 | 46                | 46 | 0,675 | WSV 25                    | WSV 25 daxs |
|                 | 420   | 30   | M42x2,0                        | 25 | 35,5 | 64   | 93  | 76,5 | 95,5 | 66   | 39 | 50 | 50                | 50 | 0,938 | WSV 30                    | WSV 30 daxs |
|                 | 420   | 38   | M52x2,0                        | 32 | 41   | 73,5 | 106 | 80   | 102  | 70   | 43 | 65 | 65                | 65 | 1,45  | WSV 38                    | WSV 38 daxs |



ISO 15171-2

Messkupplung mit Kegelventil für hydraulische Standard Hoch- und Niederdrucksysteme. Einschraubgewinde mit U-Ring Dichtung (ED) nach ISO 1179-2.

Test coupling with piston valve for standard high and low-pressure hydraulic systems. Stud end with U-ring sealing (ED) acc. ISO 1179-2.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP d1 - ** |
|---------------------------------------------------|-------------|
| Stahl, Zink-Nickel / Steel, zinc-nickel; NBR      | MK 1/4 - 01 |
| Stahl, Zink-Nickel / Steel, zinc-nickel; FKM      | MK 1/4 - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | MK 1/4 - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | MK 1/4 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                |
|------|------------------------------------------|
| 1    | Messkupplung M16x2 / Test coupling M16x2 |
| 5    | U-Ring Dichtung / U-ring sealing         |

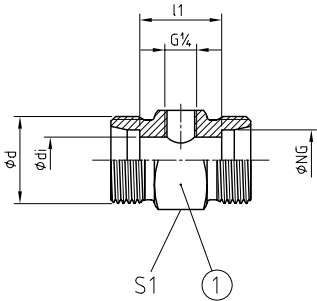
| PN    |         | ABMESSUNGEN [mm]<br>DIMENSIONS |    | U-RING |               | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------|---------|--------------------------------|----|--------|---------------|-------------------|---------------------------|
| [bar] | d1      | i                              | h  | S1     | Pos. 5        | [kg]              | TYP d1                    |
| 630   | G 1/4 A | 12                             | 37 | 19     | 11,6x16,5x1,5 | 0,085             | MK 1/4                    |

Drucküberwachung und -kontrolle sowie Entlüftung für normale Hydrauliksysteme mit Hydrauliköl und anderen Ölen auf Mineralölbasis. Probeentnahme bei Hoch- und Niederdrucksystemen. An das Außengewinde M16x2 können Sie Mess-, Prüf- und Schaltgeräte unter Systemdruck (max. 420 bar) einfach anschließen.

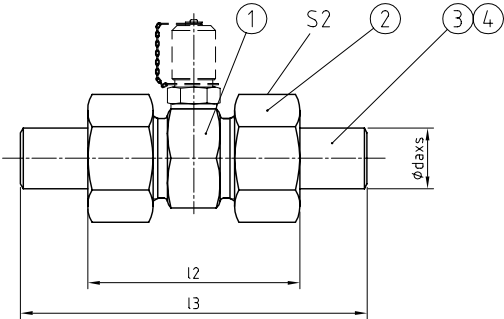
Monitoring and controlling pressure and ventilation for normal hydraulic systems with hydraulic oils and other mineral-based oils. Taking samples for high- and low-pressure systems. Measurement, test and switching devices can be connected easily to the male thread M16x2 under system pressure (max. 420 bar).



DEV [Pos. 1]



DEV [Pos. 1-4]



**AVIT ≈ ISO 8434-1**  
**BAUREIHE / SERIES: L = LIGHT / S = HEAVY**

Gerader Stutzen mit G1/4 Innengewinde für Messkupplungen<sup>1</sup> mit 24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1.

*Straight stud with G 1/4 internal thread for test couplings<sup>1</sup> with 24° cone end with metric thread acc. to ISO 8434-1.*

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|----------------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - **               |
| Stahl, verzinkt / Steel, galvanised; NBR           | DEV 25 - daxs - 01               |
| Stahl, verzinkt / Steel, galvanised; FKM           | DEV 25 - daxs - 02               |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | DEV 25 - daxs - 04               |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | DEV 25 - daxs - 05               |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | DEV 25 - daxs - 41               |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | DEV 25 - daxs - 42               |

| STÜCKLISTE |                                                           |
|------------|-----------------------------------------------------------|
| PARTS LIST |                                                           |
| Pos.       | Bezeichnung / Description                                 |
| 1          | Stutzen mit G1/4 Gewinde / Stud with G1/4 internal thread |
| 2          | Überwurfmutter / Union nut                                |
| 3          | 24° Schweißkegel / 24° weld-on nipple                     |
| 4          | O-Ring Dichtung / O-ring sealing                          |

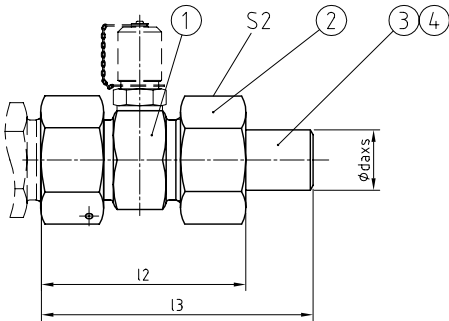
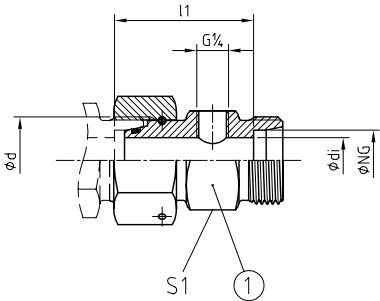
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |    |     |     |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|-----------------|----|-----|-----|----|----|-------------------|---------------------------|-------------|
|                 | [bar] | [mm] | d                              | di <sup>2</sup> | l1 | l2  | l3  | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4    |
| L               | 250   | 15   | M22x1,5                        | 10              | 32 | 67  | 105 | 32 | 27 | 0,171             | DEV 15                    | DEV 15 daxs |
|                 | 160   | 18   | M26x1,5                        | 12              | 31 | 69  | 109 | 36 | 32 | 0,195             | DEV 18                    | DEV 18 daxs |
|                 | 160   | 22   | M30x2,0                        | 15              | 35 | 72  | 114 | 41 | 36 | 0,205             | DEV 22                    | DEV 22 daxs |
|                 | 100   | 28   | M36x2,0                        | 19              | 35 | 74  | 121 | 41 | 41 | 0,292             | DEV 28                    | DEV 28 daxs |
|                 | 100   | 35   | M45x2,0                        | 24              | 33 | 82  | 135 | 46 | 50 | 0,400             | DEV 35                    | DEV 35 daxs |
|                 | 100   | 42   | M52x2,0                        | 32              | 32 | 81  | 134 | 55 | 60 | 0,490             | DEV 42                    | DEV 42 daxs |
| S               | 630   | 10   | M18x1,5                        | 7               | 31 | 66  | 99  | 32 | 22 | 0,166             | DEV 10                    | DEV 10 daxs |
|                 | 630   | 12   | M20x1,5                        | 8               | 31 | 67  | 99  | 32 | 24 | 0,170             | DEV 12                    | DEV 12 daxs |
|                 | 630   | 16   | M24x1,5                        | 12              | 33 | 74  | 117 | 36 | 30 | 0,188             | DEV 16                    | DEV 16 daxs |
|                 | 420   | 20   | M30x2,0                        | 15              | 33 | 81  | 127 | 41 | 36 | 0,298             | DEV 20                    | DEV 20 daxs |
|                 | 420   | 25   | M36x2,0                        | 19              | 34 | 88  | 143 | 41 | 46 | 0,342             | DEV 25                    | DEV 25 daxs |
|                 | 420   | 30   | M42x2,0                        | 24              | 35 | 92  | 151 | 46 | 50 | 0,454             | DEV 30                    | DEV 30 daxs |
|                 | 420   | 38   | M52x2,0                        | 30              | 34 | 99  | 164 | 55 | 60 | 0,660             | DEV 38                    | DEV 38 daxs |
|                 | 420   | 50   | M68x2,0                        | 38              | 38 | 117 | 175 | 70 | 80 | 1,220             | DEV 50                    | DEV 50 daxs |

1 Die Messkupplung ist nicht im Lieferumfang enthalten und muss separat bestellt werden. | The test coupling is not part of the scope of delivery and must be ordered separately.  
2 Bitte beachten Sie, dass der Innendurchmesser (di) manchmal kleiner als das Normmaß ist. | Please notice that the inside diameter (di) is sometimes smaller than the standard size.



GDV [Pos. 1]

GDV [Pos. 1-4]



AVIT ≈ ISO 8434-1  
BAUREIHE / SERIES: S = HEAVY

24° Kegel-Konus Adapter mit G 1/4 Innengewinde für Messkupplungen. <sup>1</sup>

Straight cone stud with G 1/4 internal thread for test couplings. <sup>1</sup>

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | GDV 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | GDV 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | GDV 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | GDV 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | GDV 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | GDV 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                 |
|------|-----------------------------------------------------------|
| 1    | Stutzen mit G1/4 Gewinde / Stud with G1/4 internal thread |
| 2    | Überwurfmutter / Union nut                                |
| 3    | 24° Schweißkegel / 24° weld-on nipple                     |
| 4    | O-Ring Dichtung / O-ring sealing                          |

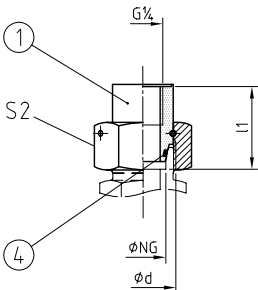
| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |      |       |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|----|------|------|-------|----|----|-------------------|---------------------------|-------------|
|                 | [bar] | [mm] | d                              | di | l1   | l2   | l3    | S1 | S2 | [kg]              | Pos. 1                    | Pos. 1-4    |
| L               | 250   | 15   | M22x1,5                        | 10 | 45   | 63,5 | 82,5  | 32 | 27 | 0,169             | GDV 15                    | GDV 15 daxs |
|                 | 160   | 18   | M26x1,5                        | 13 | 45   | 64,5 | 84,5  | 36 | 32 | 0,214             | GDV 18                    | GDV 18 daxs |
|                 | 160   | 22   | M30x2,0                        | 17 | 51,5 | 73   | 94    | 41 | 36 | 0,278             | GDV 22                    | GDV 22 daxs |
|                 | 100   | 28   | M36x2,0                        | 23 | 51   | 73,5 | 97    | 46 | 41 | 0,331             | GDV 28                    | GDV 28 daxs |
|                 | 100   | 35   | M45x2,0                        | 24 | 53   | 79   | 105,5 | 46 | 50 | 0,440             | GDV 35                    | GDV 35 daxs |
|                 | 100   | 42   | M52x2,0                        | 32 | 53   | 78,5 | 105   | 55 | 60 | 0,550             | GDV 42                    | GDV 42 daxs |
| S               | 630   | 10   | M18x1,5                        | 6  | 46,5 | 64   | 80    | 32 | 22 | 0,196             | GDV 10                    | GDV 10 daxs |
|                 | 420   | 12   | M20x1,5                        | 8  | 46,5 | 64   | 80    | 32 | 24 | 0,203             | GDV 12                    | GDV 12 daxs |
|                 | 420   | 16   | M24x1,5                        | 11 | 49   | 69,5 | 91,5  | 36 | 30 | 0,238             | GDV 16                    | GDV 16 daxs |
|                 | 315   | 20   | M30x2,0                        | 15 | 52   | 78   | 101   | 41 | 36 | 0,399             | GDV 20                    | GDV 20 daxs |
|                 | 315   | 25   | M36x2,0                        | 19 | 56   | 83   | 110,5 | 41 | 46 | 0,517             | GDV 25                    | GDV 25 daxs |
|                 | 250   | 30   | M42x2,0                        | 24 | 57   | 86,5 | 115,5 | 46 | 50 | 0,632             | GDV 30                    | GDV 30 daxs |
|                 | 250   | 38   | M52x2,0                        | 30 | 59   | 92   | 124   | 55 | 60 | 0,871             | GDV 38                    | GDV 38 daxs |
|                 | 250   | 50   | M68x2,0                        | 40 | 72   | 111  | 140   | 70 | 80 | 1,920             | GDV 50                    | GDV 50 daxs |

1 Die Messkupplung ist nicht im Lieferumfang enthalten und muss separat bestellt werden. | The test coupling is not part of the scope of delivery and must be ordered separately.  
2 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!  
3 Bitte beachten Sie, dass der Innendurchmesser (di) manchmal kleiner als das Normmaß ist. | Please notice that the inside diameter (di) is sometimes smaller than the standard size.

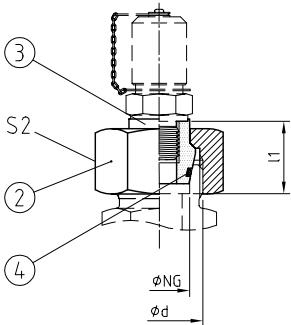


AVIT ≈ ISO 8434-1  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY  
24° Dichtkegelanschluss mit G 1/4 Innengewinde für Messkupplungen.<sup>1</sup>  
24° seal cone end with G 1/4 internal thread for test couplings.<sup>1</sup>

Form A



Form B

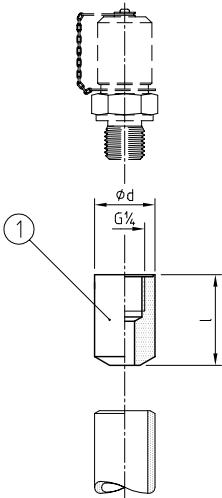


| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                               |
|----------------------------------------------------|----------------------------------|------------------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG - **                      | Pos. Bezeichnung / Description                                         |
| Stahl, verzinkt / Steel, galvanised; NBR           | MAK 25 - 01                      | 1 Gewindekegel mit Drahtstiftmutter / Threaded cone with wire nail nut |
| Stahl, verzinkt / Steel, galvanised; FKM           | MAK 25 - 02                      | 2 Überwurfmutter / Union nut                                           |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | MAK 25 - 41                      | 3 Gewindekegel / Threaded cone                                         |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | MAK 25 - 42                      | 4 O-Ring Dichtung / O-ring sealing                                     |

| REIHE<br>SERIES | PN               | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |    |      | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------------------|------|--------------------------------|------|----|------|-------------------|---------------------------|
|                 | [bar]            | [mm] | d                              | l1   | S2 | Form | [kg]              | TYP NG                    |
| L               | 315 <sup>2</sup> | 10   | M16x1,5                        | 38   | 19 | A    | 0,075             | MAK 10 L                  |
|                 | 315 <sup>2</sup> | 12   | M18x1,5                        | 40   | 22 | A    | 0,089             | MAK 12 L                  |
|                 | 250 <sup>2</sup> | 15   | M22x1,5                        | 29   | 27 | A    | 0,088             | MAK 15                    |
|                 | 160 <sup>2</sup> | 18   | M26x1,5                        | 30   | 32 | A    | 0,120             | MAK 18                    |
|                 | 250              | 22   | M30x2,0                        | 22   | 36 | B    | 0,137             | MAK 22                    |
|                 | 250              | 28   | M36x2,0                        | 22,5 | 46 | B    | 0,193             | MAK 28                    |
|                 | 250              | 35   | M45x2,0                        | 26,5 | 50 | B    | 0,336             | MAK 35                    |
|                 | 250              | 42   | M52x2,0                        | 27   | 60 | B    | 0,504             | MAK 42                    |
| S               | 630 <sup>2</sup> | 10   | M18x1,5                        | 40   | 22 | A    | 0,089             | MAK 10                    |
|                 | 420 <sup>2</sup> | 12   | M20x1,5                        | 38   | 24 | A    | 0,094             | MAK 12                    |
|                 | 420 <sup>2</sup> | 16   | M24x1,5                        | 31   | 30 | A    | 0,110             | MAK 16                    |
|                 | 420              | 20   | M30x2,0                        | 26,5 | 36 | B    | 0,158             | MAK 20                    |
|                 | 420              | 25   | M36x2,0                        | 30   | 46 | B    | 0,317             | MAK 25                    |
|                 | 420              | 30   | M42x2,0                        | 31,5 | 50 | B    | 0,377             | MAK 30                    |
|                 | 420              | 38   | M52x2,0                        | 35   | 60 | B    | 0,596             | MAK 38                    |
|                 | 420              | 50   | M68x2,0                        | 42   | 80 | B    | 1,364             | MAK 50                    |

1 Die Messkupplung ist nicht im Lieferumfang enthalten und muss separat bestellt werden. | The test coupling is not part of the scope of delivery and must be ordered separately.  
2 Druckeinschränkung wegen Drahtstiftmutter! | Pressure restrictions due to wire nail nut!





AVIT, BAUREIHE / SERIES: S = HEAVY

Schweißstutzen mit G 1/4 Innengewinde für Messkupplungen.<sup>1</sup>

Welding stud with G 1/4 internal thread for test coupling.<sup>1</sup>

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface     |
|-----------------------------------------------|
| Stahl / Steel                                 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti |

BESTELLBEISPIEL  
ORDER EXAMPLE

| TYP NG - ** |
|-------------|
| MIS 20 - 01 |
| MIS 20 - 41 |

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                   |
|------|-------------------------------------------------------------|
| 1    | Stutzen mit G 1/4 Gewinde / Stud with G 1/4 internal thread |

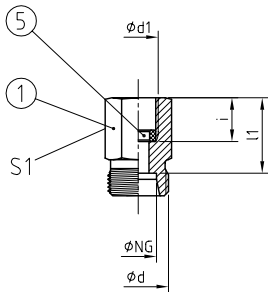
| REIHE<br>SERIES | PN    | ABMESSUNGEN [mm]<br>DIMENSIONS |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-------|--------------------------------|----|-------------------|---------------------------|
|                 | [bar] | d                              | l  | [kg]              | TYP NG                    |
| S               | 420   | 20                             | 30 | 0,050             | MIS 20                    |

1 Die Messkupplung ist nicht im Lieferumfang enthalten und muss separat bestellt werden. | The test coupling is not part of the scope of delivery and must be ordered separately.

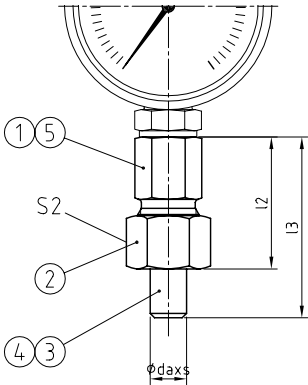


AVIT ≈ ISO 8434-1  
BAUREIHE / SERIES: L = LIGHT / S = HEAVY  
Gewindestutzen mit Dichtkantenring für Manometer.  
Straight threaded stud with sealing ring for gauge.

MAV [Pos. 1+5]



MAV [Pos. 1-5]



WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxs - ** |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | MAV 10 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | MAV 10 - daxs - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | MAV 10 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | MAV 10 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

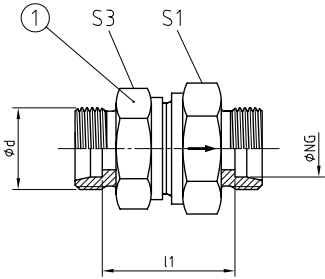
STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Gewindestutzen / Threaded stud        |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | Dichtkantenring / Edge sealing ring   |

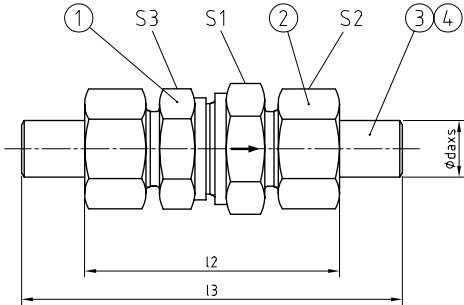
| REIHE<br>SERIES | PN  | NG | ABMESSUNGEN [mm]<br>DIMENSIONS |       |      |      |    |    |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|-----------------|-----|----|--------------------------------|-------|------|------|----|----|----|----|-------------------|---------------------------|---------------|
|                 |     |    | d                              | d1    | i    | l1   | l2 | l3 | S1 | S2 |                   | Pos. 1+5                  | Pos. 1-5      |
| L               | 315 | 10 | M16x1,5                        | G 1/4 | 14,5 | 23   | 41 | 57 | 19 | 19 | 0,062             | MAV 10 L                  | MAV 10 L daxs |
|                 | 315 | 12 | M18x1,5                        | G 1/4 | 14,5 | 23   | 41 | 57 | 19 | 22 | 0,070             | MAV 12 L                  | MAV 12 L daxs |
| S               | 630 | 10 | M18x1,5                        | G 1/2 | 20   | 30,5 | 48 | 64 | 27 | 22 | 0,125             | MAV 10                    | MAV 10 daxs   |
|                 | 630 | 12 | M20x1,5                        | G 1/2 | 20   | 30,5 | 48 | 65 | 27 | 24 | 0,134             | MAV 12                    | MAV 12 daxs   |



RV [Pos. 1]



RV [Pos. 1-4]



BAUREIHE / SERIES: L = LIGHT / S = HEAVY

Rohranschluss mit 24° Konus nach ISO 8434-1.  
Standard Öffnungsdruck 1 bar, Durchfluss-  
geschwindigkeit max. 8 m/sec.

Tube connection with 24° conus acc. ISO 8434-1.  
Standard cracking pressure 1 bar,  
max. flow speed 8 m/sec.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxis - ** |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | RV 25 - daxis - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | RV 25 - daxis - 02  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | RV 25 - daxis - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | RV 25 - daxis - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Rückschlagventil / Non-return valve   |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |

| REIHE<br>SERIES | PN    | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |     |     |    |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-------|------|--------------------------------|------|-----|-----|----|----|----|-------------------|---------------------------|-------------|
|                 | [bar] | [mm] | d                              | l1   | l2  | l3  | S1 | S2 | S3 | [kg]              | Pos. 1                    | Pos. 1-4    |
| L               | 250   | 15   | M22x1,5                        | 47,5 | 82  | 121 | 32 | 27 | 27 | 0,25              | RV 15                     | RV 15 daxis |
|                 | 160   | 18   | M26x1,5                        | 51,5 | 90  | 129 | 36 | 32 | 36 | 0,40              | RV 18                     | RV 18 daxis |
|                 | 160   | 22   | M30x2,0                        | 61,5 | 98  | 140 | 46 | 36 | 41 | 0,61              | RV 22                     | RV 22 daxis |
|                 | 100   | 28   | M36x2,0                        | 69,5 | 109 | 156 | 55 | 41 | 50 | 0,88              | RV 28                     | RV 28 daxis |
|                 | 100   | 35   | M45x2,0                        | 74,5 | 124 | 177 | 60 | 50 | 60 | 1,30              | RV 35                     | RV 35 daxis |
|                 | 100   | 42   | M52x2,0                        | 74   | 123 | 176 | 70 | 60 | 65 | 2,00              | RV 42                     | RV 42 daxis |
| S               | 420   | 10   | M18x1,5                        | 40,5 | 76  | 108 | 24 | 22 | 22 | 0,18              | RV 10                     | RV 10 daxis |
|                 | 420   | 12   | M20x1,5                        | 42,5 | 78  | 111 | 27 | 24 | 24 | 0,21              | RV 12                     | RV 12 daxis |
|                 | 420   | 16   | M24x1,5                        | 50,5 | 91  | 135 | 36 | 30 | 32 | 0,40              | RV 16                     | RV 16 daxis |
|                 | 420   | 20   | M30x2,0                        | 54,5 | 102 | 148 | 46 | 36 | 41 | 0,69              | RV 20                     | RV 20 daxis |
|                 | 250   | 25   | M36x2,0                        | 58,5 | 112 | 168 | 50 | 46 | 46 | 1,03              | RV 25                     | RV 25 daxis |
|                 | 250   | 30   | M42x2,0                        | 69,5 | 127 | 185 | 60 | 50 | 60 | 1,59              | RV 30                     | RV 30 daxis |
|                 | 250   | 38   | M52x2,0                        | 75,5 | 141 | 206 | 70 | 60 | 65 | 2,27              | RV 38                     | RV 38 daxis |
|                 | 350   | 50   | M68x2,0                        | 229  | 308 | 367 | 70 | 80 | -  | 7,50              | RV 50                     | RV 50 daxis |

Das Rückschlagventil der NG 50 erweitert diese Baureihe, hat allerdings eine abweichende Bauart und einen Öffnungsdruck von 0,5 bar.  
Bitte beachten Sie die Technischen Daten.

The check valve nominal size 50 extends this series, but has a different design and an opening pressure of 0.5 bar.  
Please check the technical data..

BESTELLCODE VARIANTEN

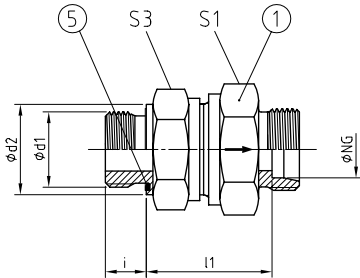
Abweichender Öffnungsdruck (z.B. 0,5 bar) ..... RV NG **F05**

ORDER CODE OPTIONS

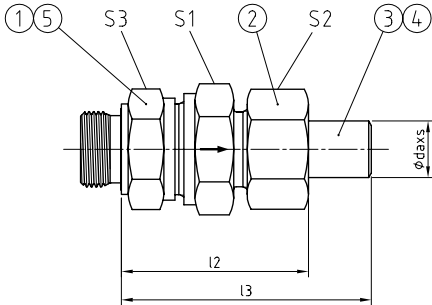
Alternative cracking pressure (e.g. 0.5 bar) ..... RV NG **F05**



RRV [Pos. 1+5]



RRV [Pos. 1-5]



Durchfluss vom Einschraubzapfen zum Rohr,  
Öffnungsdruck 1 bar, Durchfluss max. 8 m/sec.  
Einschraubzapfen mit U-Ring Dichtung (ED) nach ISO  
1179-2 (Whitworth) oder ISO 9974-2 (Metrisch).

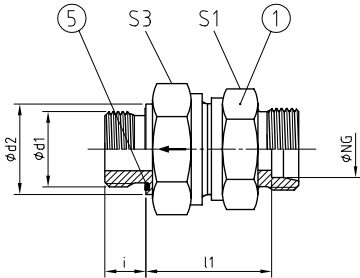
Flow from male stud to tube. Opening pressure 1 bar,  
max. flow speed 8 m/sec.  
Stud end with U-ring sealing (ED) acc. ISO 1179-2  
(BSP thread) or ISO 9974-2 (metric thread).

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                |
|----------------------------------------------------|----------------------------------|-----------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG - daxx - **               | Pos. Bezeichnung / Description          |
| Stahl, verzinkt / Steel, galvanised; NBR           | RRV 25 - daxx - 01               | 1 Rückschlagventil / Non-return valve   |
| Stahl, verzinkt / Steel, galvanised; FKM           | RRV 25 - daxx - 02               | 2 Überwurfmutter / Union nut            |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | RRV 25 - daxx - 41               | 3 24° Schweißkegel / 24° weld-on nipple |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | RRV 25 - daxx - 42               | 4 O-Ring Dichtung / O-ring sealing      |
|                                                    |                                  | 5 U-Ring Dichtung / U-ring sealing      |

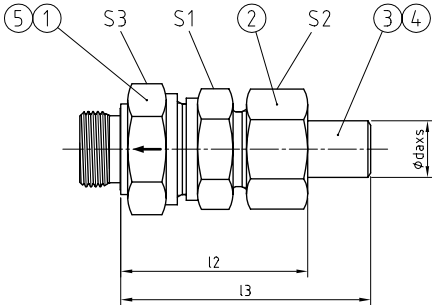
| TYPE                                       | PN    | NG        | ABMESSUNGEN [mm] |      |      |      |       |       |    |    |               | U-RING        | GEWICHT | BESTELLCODE |              |
|--------------------------------------------|-------|-----------|------------------|------|------|------|-------|-------|----|----|---------------|---------------|---------|-------------|--------------|
|                                            |       |           | DIMENSIONS       |      |      |      |       |       |    |    |               |               | WEIGHT  | ORDER CODE  |              |
| WHITWORTH-ROHRGEWINDE<br><i>BSP THREAD</i> | [bar] | [mm]      | d1               | d2   | i    | l1   | l2    | l3    | S1 | S2 | S3            | Pos. 5        | [kg]    | Pos. 1+5    | Pos. 1-5     |
|                                            | 420   | 8         | G 1/4 A          | 18,9 | 12   | 31,5 | 46,5  | 62,5  | 19 | 19 | 19            | 11,6x16,5x1,5 | 0,115   | RRV 08      | RRV 08 daxe  |
|                                            | 420   | 10        | G 3/8 A          | 21,9 | 12   | 38   | 56    | 72    | 24 | 22 | 22            | 14,7x18,9x1,5 | 0,150   | RRV 10      | RRV 10 daxe  |
|                                            | 420   | 12        | G 3/8 A          | 21,9 | 12   | 41   | 59    | 75    | 27 | 24 | 24            | 14,7x18,9x1,5 | 0,185   | RRV 12      | RRV 12 daxe  |
|                                            | 420   | 16        | G 1/2 A          | 26,9 | 14   | 48   | 68,5  | 90    | 36 | 30 | 32            | 18,5x23,9x1,5 | 0,320   | RRV 16      | RRV 16 daxe  |
|                                            | 420   | 20        | G 3/4 A          | 31,9 | 16   | 52   | 76    | 99    | 46 | 36 | 41            | 23,9x29,2x1,5 | 0,595   | RRV 20      | RRV 20 daxe  |
|                                            | 250   | 25        | G 1 A            | 39,9 | 18   | 54,5 | 81,5  | 109   | 50 | 46 | 46            | 29,7x35,7x2,0 | 0,850   | RRV 25      | RRV 25 daxe  |
|                                            | 250   | 30        | G 1 1/4 A        | 49,9 | 20   | 64   | 92,5  | 122   | 60 | 50 | 60            | 38,8x45,8x2,0 | 1,360   | RRV 30      | RRV 30 daxe  |
| 250                                        | 38    | G 1 1/2 A | 54,9             | 22   | 69,5 | 102  | 134,5 | 70    | 60 | 65 | 44,7x50,7x2,0 | 1,950         | RRV 38  | RRV 38 daxe |              |
| METRISCHES GEWINDE<br><i>METRIC THREAD</i> | 420   | 8         | M14x1,5          | 18,9 | 12   | 31,5 | 46,5  | 62,5  | 19 | 19 | 19            | 11,6x16,5x1,5 | 0,115   | RRVM 08     | RRVM 08 daxe |
|                                            | 420   | 10        | M16x1,5          | 21,9 | 12   | 38   | 56    | 72    | 27 | 24 | 24            | 13,8x18,9x1,5 | 0,150   | RRVM 10     | RRVM 10 daxe |
|                                            | 420   | 12        | M18x1,5          | 23,9 | 12   | 41   | 59    | 75    | 27 | 24 | 24            | 15,7x20,9x1,5 | 0,185   | RRVM 12     | RRVM 12 daxe |
|                                            | 420   | 16        | M22x1,5          | 26,9 | 14   | 48   | 68,5  | 90    | 36 | 30 | 32            | 19,6x24,3x1,5 | 0,320   | RRVM 16     | RRVM 16 daxe |
|                                            | 420   | 20        | M27x2,0          | 31,9 | 16   | 52   | 76    | 99    | 46 | 36 | 41            | 23,9x29,2x1,5 | 0,595   | RRVM 20     | RRVM 20 daxe |
|                                            | 250   | 25        | M33x2,0          | 39,9 | 18   | 54,5 | 81,5  | 109   | 50 | 46 | 46            | 29,7x35,7x2,0 | 0,845   | RRVM 25     | RRVM 25 daxe |
|                                            | 250   | 30        | M42x2,0          | 49,9 | 20   | 64   | 92,5  | 122   | 60 | 50 | 60            | 38,8x45,8x2,0 | 1,350   | RRVM 30     | RRVM 30 daxe |
|                                            | 250   | 38        | M48x2,0          | 54,9 | 22   | 69,5 | 102   | 134,5 | 70 | 60 | 65            | 44,7x50,7x2,0 | 1,968   | RRVM 38     | RRVM 38 daxe |



ERV [Pos. 1+5]



ERV [Pos. 1-5]



Durchfluss vom Rohr zum Einschraubzapfen.  
Öffnungsdruck 1 bar, Durchfluss max. 8 m/sec.  
Einschraubzapfen mit U-Ring Dichtung (ED) nach ISO 1179-2 (Whitworth) oder ISO 9974-2 (Metrisch).

Flow from tube to male stud. Opening pressure 1 bar, max. flow speed 8 m/sec.  
Stud end with U-ring sealing (ED) ISO 1179-2 (BSP thread) or ISO 9974-2 (metric thread).

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG-daxs-**-    |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | ERV 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | ERV 25 - daxs - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | ERV 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | ERV 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

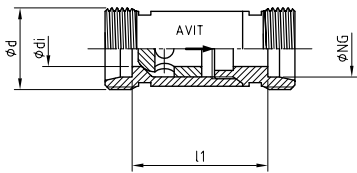
STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description             |
|------|---------------------------------------|
| 1    | Rückschlagventil / Non-return valve   |
| 2    | Überwurfmutter / Union nut            |
| 3    | 24° Schweißkegel / 24° weld-on nipple |
| 4    | O-Ring Dichtung / O-ring sealing      |
| 5    | U-Ring Dichtung / U-ring sealing      |

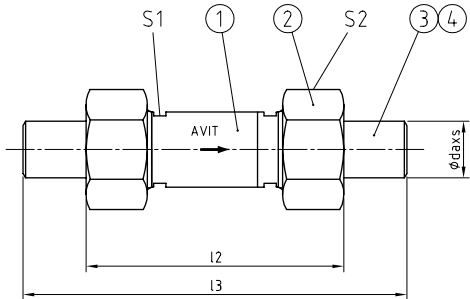
| TYPE                                               | PN    | NG   | ABMESSUNGEN [mm] |      |    |      |      |       |    |    |    | U-RING        | GEWICHT | BESTELLCODE |              |
|----------------------------------------------------|-------|------|------------------|------|----|------|------|-------|----|----|----|---------------|---------|-------------|--------------|
|                                                    | [bar] | [mm] | d1               | d2   | i  | l1   | l2   | l3    | S1 | S2 | S3 | Pos. 5        | [kg]    | Pos. 1+5    | Pos. 1-5     |
| WHITWORTH-ROHRGEWINDE<br><small>BSP THREAD</small> | 420   | 8    | G 1/4 A          | 18,9 | 12 | 31,5 | 46,5 | 62,5  | 19 | 19 | 19 | 11,6x16,5x1,5 | 0,085   | ERV 08      | ERV 08 daxs  |
|                                                    | 420   | 10   | G 3/8 A          | 21,9 | 12 | 38   | 56   | 72    | 24 | 22 | 22 | 14,7x18,9x1,5 | 0,150   | ERV 10      | ERV 10 daxs  |
|                                                    | 420   | 12   | G 3/8 A          | 21,9 | 12 | 41   | 59   | 75    | 27 | 24 | 24 | 14,7x18,9x1,5 | 0,185   | ERV 12      | ERV 12 daxs  |
|                                                    | 420   | 16   | G 1/2 A          | 26,9 | 14 | 48   | 68,5 | 90    | 36 | 30 | 32 | 18,5x23,9x1,5 | 0,320   | ERV 16      | ERV 16 daxs  |
|                                                    | 420   | 20   | G 3/4 A          | 31,9 | 16 | 52   | 76   | 99    | 46 | 36 | 41 | 23,9x29,2x1,5 | 0,595   | ERV 20      | ERV 20 daxs  |
|                                                    | 250   | 25   | G 1 A            | 39,9 | 18 | 54,5 | 81,5 | 109   | 50 | 46 | 46 | 29,7x35,7x2,0 | 0,850   | ERV 25      | ERV 25 daxs  |
|                                                    | 250   | 30   | G 1 1/4 A        | 49,9 | 20 | 64   | 92,5 | 122   | 60 | 50 | 60 | 38,8x45,8x2,0 | 1,360   | ERV 30      | ERV 30 daxs  |
|                                                    | 250   | 38   | G 1 1/2 A        | 54,9 | 22 | 69,5 | 102  | 134,5 | 70 | 60 | 65 | 44,7x50,7x2,0 | 1,950   | ERV 38      | ERV 38 daxs  |
| METRISCHES GEWINDE<br><small>METRIC THREAD</small> | 420   | 8    | M14x1,5          | 18,9 | 12 | 31,5 | 46,5 | 62,5  | 19 | 19 | 19 | 11,6x16,5x1,5 | 0,085   | ERVM 08     | ERVM 08 daxs |
|                                                    | 420   | 10   | M16x1,5          | 21,9 | 12 | 38   | 56   | 72    | 27 | 24 | 24 | 13,8x18,9x1,5 | 0,150   | ERVM 10     | ERVM 10 daxs |
|                                                    | 420   | 12   | M18x1,5          | 23,9 | 12 | 41   | 59   | 75    | 27 | 24 | 24 | 15,7x20,9x1,5 | 0,180   | ERVM 12     | ERVM 12 daxs |
|                                                    | 420   | 16   | M22x1,5          | 26,9 | 14 | 48   | 68,5 | 90    | 36 | 30 | 32 | 19,6x24,3x1,5 | 0,325   | ERVM 16     | ERVM 16 daxs |
|                                                    | 420   | 20   | M27x2,0          | 31,9 | 16 | 52   | 76   | 99    | 46 | 36 | 41 | 23,9x29,2x1,5 | 0,595   | ERVM 20     | ERVM 20 daxs |
|                                                    | 250   | 25   | M33x2,0          | 39,9 | 18 | 54,5 | 81,5 | 109   | 50 | 46 | 46 | 29,7x35,7x2,0 | 0,840   | ERVM 25     | ERVM 25 daxs |
|                                                    | 250   | 30   | M42x2,0          | 49,9 | 20 | 64   | 92,5 | 122   | 60 | 50 | 60 | 38,8x45,8x2,0 | 1,345   | ERVM 30     | ERVM 30 daxs |
|                                                    | 250   | 38   | M48x2,0          | 54,9 | 22 | 69,5 | 102  | 134,5 | 70 | 60 | 65 | 44,7x50,7x2,0 | 1,968   | ERVM 38     | ERVM 38 daxs |



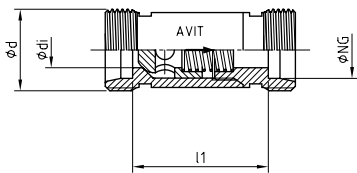
RVS [Pos. 1]



RVS / RVSF [Pos. 1-4]



RVSF [Pos. 1]



AVIT, BAUREIHE / SERIES: S = HEAVY

Edelstahl Rückschlagventil mit metallischer Abdichtung für hohe Temperaturen (max. 400°C).  
Rohranschluss mit 24° Konus nach ISO 8434-1.

Stainless steel non-return valve with metallic sealing for high temperatures (max. 400°C).  
Tube connection with 24° conus acc. ISO 8434-1.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface                 | TYP NG - daxs - ** |
|-----------------------------------------------------------|--------------------|
| Stahl, Mutter verzinkt / Steel, nut galvanised; FKM       | RVS 25 - daxs - 02 |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; FKM | RVS 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM        | RVS 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                 |
|------|-----------------------------------------------------------|
| 1    | Rückschlagventil / Non-return valve; (1.4122) X39CrMo17-1 |
| 2    | Überwurfmutter / Union nut                                |
| 3    | 24° Schweißkegel / 24° weld-on nipple                     |
| 4    | O-Ring Dichtung / O-ring sealing                          |

| REIHE<br>SERIES | PN  | NG | ABMESSUNGEN [mm]<br>DIMENSIONS |                 |       |     |     |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|-----|----|--------------------------------|-----------------|-------|-----|-----|----|----|-------------------|---------------------------|-------------|
|                 |     |    | d                              | di <sup>1</sup> | l1    | l2  | l3  | S1 | S2 |                   | Pos. 1                    | Pos. 1-4    |
| S               | 315 | 16 | M24x1,5                        | 10              | 60,5  | 101 | 145 | 27 | 30 | 0,400             | RVS 16                    | RVS 16 daxs |
|                 | 315 | 20 | M30x2,0                        | 10              | 56,5  | 104 | 150 | 27 | 36 | 0,690             | RVS 20                    | RVS 20 daxs |
|                 | 250 | 25 | M36x2,0                        | 18              | 76    | 130 | 185 | 36 | 46 | 1,035             | RVS 25                    | RVS 25 daxs |
|                 | 250 | 30 | M42x2,0                        | 18              | 73    | 130 | 189 | 36 | 50 | 1,590             | RVS 30                    | RVS 30 daxs |
|                 | 100 | 38 | M52x2,0                        | 26              | 110,5 | 176 | 241 | 55 | 60 | 1.863             | RVS 38                    | RVS 38 daxs |

Das Rückschlagventil kann ohne Druckfeder (RVS) nur in vertikaler Einbaulage verwendet werden. Mit Druckfeder (RVSF) kann die Einbaulage frei gewählt werden. Der Öffnungsdruck liegt beim RVS unter 0,1 bar und beim RVSF bei 1 bar. Durchflussgeschwindigkeit max. 8 m/sec.

The non-return valve without compression spring (RVS) can only be used in vertical position. With compression spring (RVSF) it can be mounted in any position. The cracking pressure of the RVS is below 0.1 bar. The cracking pressure of the RVSF is 1 bar. Max. flow rate 8 m/sec.

BESTELLCODE VARIANTEN

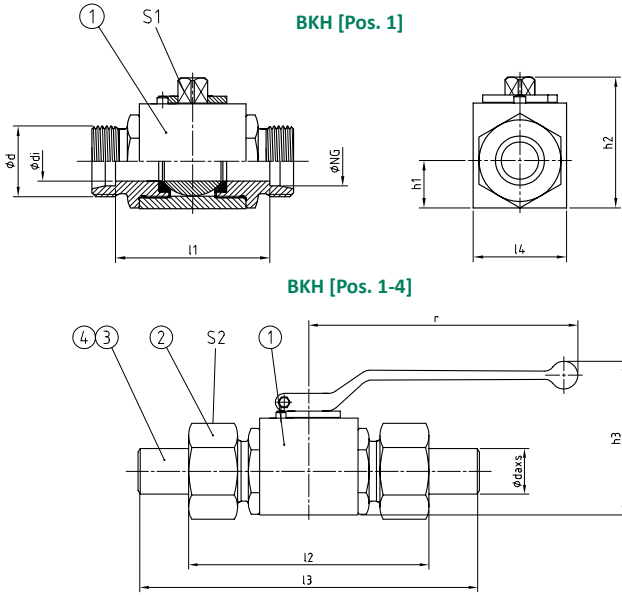
ohne Druckfeder (Standard) .....RVS  
mit Druckfeder .....RVSF  
Abweicher Öffnungsdruck (z.B. 0,5 bar)..... TYP F05

ORDER CODE OPTIONS

without compression spring (standard) .....RVS  
with compression spring .....RVSF  
cracking pressure (0,5 bar) .....RVSF05

1 Bitte beachten Sie, dass der Innendurchmesser (di) manchmal kleiner als das Normmaß ist. | Please notice that the inside diameter (di) is sometimes smaller than the standard size.





BAUREIHE / SERIES: L = LIGHT / S = HEAVY

2/2 Wege Kugelhahn zum Absperren eines Druckmittelstroms in beiden Richtungen. Mit gekröpftem Schalthebel.

2/2 way ball valve is used to shut-off a pressure flow in both directions. With cranked lever.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG-daxs-**-    |
|----------------------------------------------------|--------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | BKH 25 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | BKH 25 - daxs - 02 |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | BKH 25 - daxs - 04 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | BKH 25 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | BKH 25 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | BKH 25 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                         |
|------|---------------------------------------------------|
| 1    | Kugelhahn mit Schalthebel / Ball valve with lever |
| 2    | Überwurfmutter / Union nut                        |
| 3    | 24° Schweißkegel / 24° weld-on nipple             |
| 4    | O-Ring Dichtung / O-ring sealing                  |

| REIHE<br>SERIES | PN   | NG | DN | ABMESSUNGEN [mm]<br>DIMENSIONS |                |                |                |                |                |                |                |                |     |    |    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |             |
|-----------------|------|----|----|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|----|----|-------------------|---------------------------|-------------|
|                 |      |    |    | d                              | d <sub>i</sub> | l <sub>1</sub> | l <sub>2</sub> | l <sub>3</sub> | l <sub>4</sub> | h <sub>1</sub> | h <sub>2</sub> | h <sub>3</sub> | r   | S1 | S2 |                   | Pos. 1                    | Pos. 1-4    |
| L               | 420  | 15 | 12 | M22x1,5                        | 12             | 72             | 103            | 141            | 40             | 20             | 62             | 103            | 163 | 12 | 27 | 0,64              | BKH 15                    | BKH 15 daxs |
|                 | 420  | 18 | 16 | M26x1,5                        | 15             | 73             | 105            | 144            | 40             | 20             | 62             | 103            | 163 | 12 | 32 | 1,25              | BKH 18                    | BKH 18 daxs |
|                 | 420  | 22 | 20 | M30x2,0                        | 19             | 88             | 122            | 164            | 49             | 24,5           | 75             | 118            | 183 | 14 | 36 | 1,54              | BKH 22                    | BKH 22 daxs |
|                 | 420  | 28 | 25 | M36x2,0                        | 24             | 95             | 132            | 179            | 58             | 28,5           | 82             | 125            | 183 | 14 | 41 | 1,54              | BKH 28                    | BKH 28 daxs |
|                 | 420  | 35 | 32 | M45x2,0                        | 30             | 130            | 169            | 222            | 82             | 40             | 106            | 149            | 227 | 17 | 50 | 3,36              | BKH 35                    | BKH 35 daxs |
|                 | 420  | 42 | 40 | M52x2,0                        | 36             | 152            | 189            | 242            | 94             | 45             | 118            | 161            | 227 | 17 | 60 | 4,88              | BKH 42                    | BKH 42 daxs |
| S               | 500  | 10 | 6  | M18x1,5                        | 7              | 64             | 93             | 125            | 28             | 14             | 44             | 60             | 140 | 9  | 22 | 0,32              | BKH 10                    | BKH 10 daxs |
|                 | 500  | 12 | 8  | M20x1,5                        | 8              | 67             | 97             | 129            | 32             | 17             | 53             | 84             | 140 | 9  | 24 | 0,45              | BKH 12                    | BKH 12 daxs |
|                 | 500  | 16 | 12 | M24x1,5                        | 12             | 75             | 110            | 153            | 40             | 20             | 62             | 103            | 163 | 12 | 30 | 0,65              | BKH 16                    | BKH 16 daxs |
|                 | 420* | 20 | 16 | M30x2,0                        | 15             | 79             | 116            | 162            | 40             | 20             | 62             | 103            | 163 | 12 | 36 | 0,67              | BKH 20                    | BKH 20 daxs |
|                 | 420* | 25 | 20 | M36x2,0                        | 20             | 97             | 139            | 194            | 49             | 24,5           | 75             | 117            | 183 | 14 | 46 | 1,32              | BKH 25                    | BKH 25 daxs |
|                 | 420* | 30 | 25 | M42x2,0                        | 25             | 107            | 150            | 209            | 58             | 28,5           | 82             | 124            | 183 | 14 | 50 | 1,87              | BKH 30                    | BKH 30 daxs |
|                 | 420* | 38 | 32 | M52x2,0                        | 30             | 141,5          | 187            | 252            | 82             | 40             | 106            | 149            | 227 | 17 | 60 | 3,43              | BKH 38                    | BKH 38 daxs |
|                 | 420  | 50 | 50 | M68x2,0                        | 40             | 204            | 282            | 340            | 111            | 59             | 134            | 177            | 227 | 17 | 80 | 6,60              | BKH 50                    | BKH 50 daxs |

2/2 Wege Kugelhahn mit optischer Stellungenanzeige auf der Betätigungs-  
welle. Geeignet für Hydrauliksysteme mit Hydrauliköl auf Mineralölbasis.  
Druckflüssigkeitstemperatur von -10°C bis +80°C.

\*) Bei der Ausführung Edelstahl gelten reduzierte Druckwerte von 350 bar.

BESTELLCODE VARIANTEN

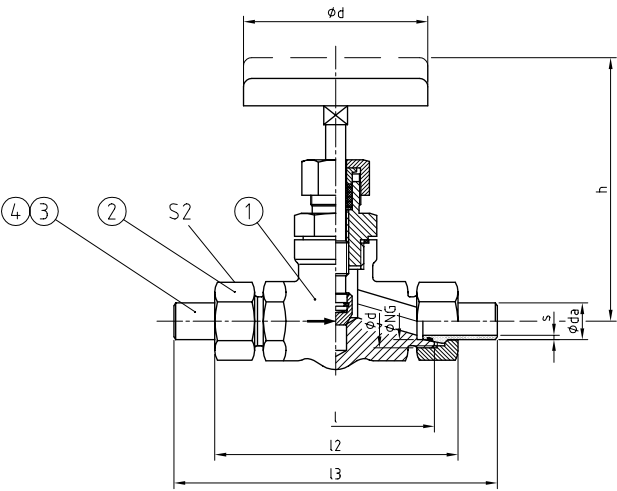
mit Abschließvorrichtung und Schloss ..... BKH NG -SCH  
mit Abschließvorrichtung ohne Schloss ..... BKH NG -SCHO

2/2-way ball valve with optical position indicator. Suitable for hydrau-  
lic systems with mineral oil-based hydraulic oil. Fluid temperature from  
-10°C to +80°C.

\*) For material stainless steel there are reduced pressure ratings of 350 bar.

ORDER CODE OPTIONS

with locking device and padlock ..... BKH NG -SCH  
with locking device but without padlock. .... BKH NG -SCHO



**BAUREIHE / SERIES: S = HEAVY**

Zum Absperren eines Druckmittelstroms in einer Richtung. Für hohe Temperaturen (Stahl max. 300°C, Edelstahl max. 400°C) geeignet.

*To shut-off a pressure flow in one direction. Suitable for high temperatures (Steel max. 300°C, Stainless steel max. 400°C). Both ends with 24° cone end with metric thread acc. to ISO 8434-1.*

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION             | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|-----------------------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface                 | TYP NG - daxs - **               |
| Stahl, Mutter verzinkt / Steel, nut galvanised; NBR       | HVAB 25 - daxs - 01              |
| Stahl, Mutter verzinkt / Steel, nut galvanised; FKM       | HVAB 25 - daxs - 02              |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; NBR | HVAB 25 - daxs - 04              |
| Stahl, Mutter phosphatiert / Steel, nut phosphatised; FKM | HVAB 25 - daxs - 05              |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR        | HVAB 25 - daxs - 41              |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM        | HVAB 25 - daxs - 42              |

| STÜCKLISTE |                                                       |
|------------|-------------------------------------------------------|
| PARTS LIST |                                                       |
| Pos.       | Bezeichnung / Description                             |
| 1          | Absperrventil mit Handrad / Stop valve with handwheel |
| 2          | Überwurfmutter / Union nut                            |
| 3          | 24° Schweißkegel / 24° weld-on nipple                 |
| 4          | O-Ring Dichtung / O-ring sealing                      |

| REIHE<br>SERIES | PN    | NG   | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     | GEWICHT<br>WEIGHT |    | BESTELLCODE<br>ORDER CODE |         |              |
|-----------------|-------|------|------|--------------------------------|-----|-----|-----|-----|-------------------|----|---------------------------|---------|--------------|
|                 | [bar] | [mm] | [mm] | d                              | d   | l   | l2  | l3  | h                 | S2 | [kg]                      | Pos. 1  | Pos. 1-4     |
| S               | 420   | 10   | 6    | M18x1,5                        | 90  | 71  | 91  | 123 | 130               | 22 | 0,715                     | HVAB 10 | HVAB 10 daxs |
|                 | 420   | 12   | 8    | M20x1,5                        | 90  | 71  | 92  | 124 | 130               | 24 | 0,725                     | HVAB 12 | HVAB 12 daxs |
|                 | 420   | 16   | 12   | M24x1,5                        | 90  | 89  | 113 | 156 | 135               | 30 | 1,320                     | HVAB 16 | HVAB 16 daxs |
|                 | 420   | 20   | 16   | M30x2,0                        | 90  | 89  | 116 | 162 | 135               | 36 | 1,410                     | HVAB 20 | HVAB 20 daxs |
|                 | 420   | 25   | 20   | M36x2,0                        | 150 | 118 | 148 | 203 | 160               | 46 | 3,030                     | HVAB 25 | HVAB 25 daxs |
|                 | 250   | 30   | 25   | M42x2,0                        | 150 | 117 | 147 | 206 | 160               | 50 | 3,160                     | HVAB 30 | HVAB 30 daxs |
|                 | 250   | 38   | 32   | M52x2,0                        | 150 | 148 | 181 | 246 | 170               | 60 | 6,250                     | HVAB 38 | HVAB 38 daxs |

MEDIEN

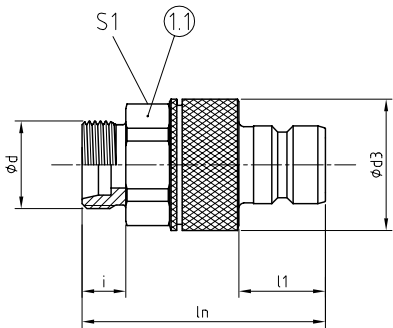
Geeignet für Dämpfe, Gase und Flüssigkeiten.  
Hydrauliksysteme mit Hydrauliköl auf Mineralölbasis, Wasser, Druckluft, Stickstoff, Sauerstoff und Wasserdampf.

MEDIA

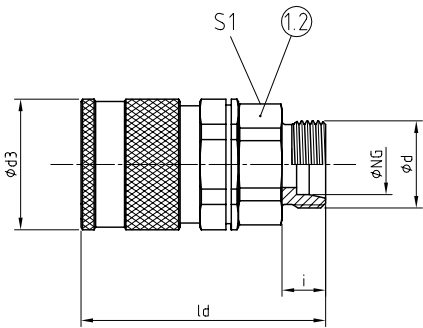
Suitable for vapours, gases and liquids.  
Hydraulic systems with mineral oil-based hydraulic oil, as well as water, compressed-air, nitrogen, oxygen and water vapour.



HKN [Pos. 1.1]



HKD [Pos. 1.2]



BAUREIHE: SCHWER / SERIES: HEAVY

- Beidseitiger Rohranschluss mit 24° Konus nach ISO 8434-1
- Durchgang im entkuppelten Zustand abgesperrt.
- Tube connection with 24° conus acc. ISO 8434-1.
- Upon disconnection the valves are closed.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP NG - ** |
|----------------------------------------------------|-------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | HK 25 - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | HK 25 - 02  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | HK 25 - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | HK 25 - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description         |
|------|-----------------------------------|
| 1.1  | Kupplungsstempel / Connector plug |
| 1.2  | Kupplungsdose / Connector socket  |

| TYPE                         | PN    | NG   | DN   | ABMESSUNGEN [mm] |    |      |      |       |    | GEWICHT | BESTELLCODE |                |
|------------------------------|-------|------|------|------------------|----|------|------|-------|----|---------|-------------|----------------|
|                              |       |      |      | DIMENSIONS       |    |      |      |       |    |         |             | WEIGHT         |
|                              | [bar] | [mm] | [mm] | d                | d3 | l1   | ln   | ld    | i  | S1      | [kg]        | Pos. 1.1 + 1.2 |
| STAHL<br>STEEL               | 250   | 10   | 6    | M18x1,5          | 30 | 25   | 66,5 | 68    | 12 | 24      | 0,36        | HK 10          |
|                              | 250   | 12   | 8    | M20x1,5          | 30 | 25   | 66,5 | 68    | 12 | 24      | 0,36        | HK 12          |
|                              | 250   | 16   | 12   | M24x1,5          | 40 | 31,5 | 81   | 81    | 14 | 32      | 0,70        | HK 16          |
|                              | 250   | 20   | 16   | M30x2,0          | 54 | 35,5 | 98   | 99    | 16 | 46      | 1,57        | HK 20          |
|                              | 220   | 25   | 20   | M36x2,0          | 54 | 35,5 | 100  | 101   | 18 | 46      | 1,61        | HK 25          |
|                              | 200   | 30   | 25   | M42x2,0          | 90 | 49,5 | 139  | 139,5 | 20 | 80      | 6,40        | HK 30          |
|                              | 200   | 38   | 32   | M52x2,0          | 90 | 49,5 | 141  | 141,5 | 22 | 80      | 6,52        | HK 38          |
| EDELSTAHL<br>STAINLESS STEEL | 100   | 10   | 6    | M18x1,5          | 30 | 25   | 66,5 | 68    | 12 | 24      | 0,36        | HK 10          |
|                              | 100   | 12   | 8    | M20x1,5          | 30 | 25   | 66,5 | 68    | 12 | 24      | 0,36        | HK 12          |
|                              | 100   | 16   | 12   | M24x1,5          | 40 | 31,5 | 81   | 81    | 14 | 32      | 0,71        | HK 16          |
|                              | 50    | 20   | 16   | M30x2,0          | 54 | 35,5 | 98   | 99    | 16 | 46      | 1,60        | HK 20          |
|                              | 50    | 25   | 20   | M36x2,0          | 54 | 35,5 | 100  | 101   | 18 | 46      | 1,64        | HK 25          |
|                              | 40    | 30   | 25   | M42x2,0          | 90 | 49,5 | 139  | 139,5 | 20 | 80      | 6,52        | HK 30          |
|                              | 40    | 38   | 32   | M52x2,0          | 90 | 49,5 | 141  | 141,5 | 22 | 80      | 6,65        | HK 38          |

MEDIEN

Geeignet für Hydrauliksysteme mit Hydrauliköl auf Mineralölbasis,  
Schmierfette, Kraftstoff, Wasser und Druckluft.  
Durchflussgeschwindigkeit max. 8 m/sec.

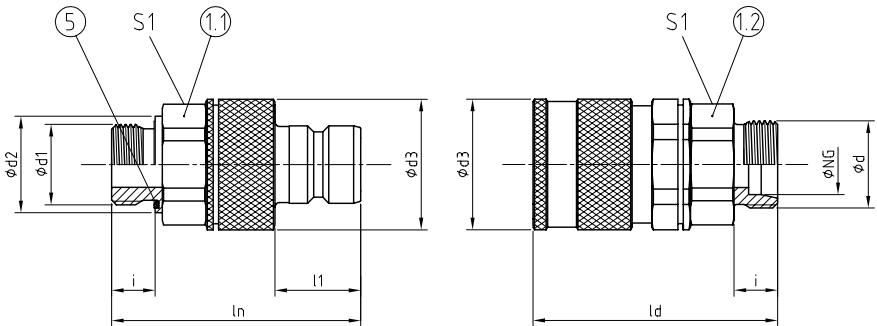
MEDIA

Suitable for hydraulic systems with mineral oil-based hydraulic oil, as  
well as lubricating grease, fuel, water or compressed-air.  
Max. flow rate 8 m/sec.



HKNE [Pos. 1.1]

HKD [Pos. 1.2]



**BAUREIHE: SCHWER / SERIES: HEAVY**

- Einschraubzapfen mit U-Ring Dichtung (ED) <sup>1</sup> nach ISO 1179-2 mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1.
- Durchgang im entkuppelten Zustand abgesperrt.

---

- Stud end with U-ring sealing (ED) <sup>1</sup> acc. ISO 1179-2 with cylindrical BSP thread acc. ISO 228-1.
- Upon disconnection the valves are closed.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|----------------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP NG - **                      |
| Stahl, verzinkt / Steel, galvanised; NBR           | HKE 25 - 01                      |
| Stahl, verzinkt / Steel, galvanised; FKM           | HKE 25 - 02                      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | HKE 25 - 41                      |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | HKE 25 - 42                      |

| STÜCKLISTE |                                   |
|------------|-----------------------------------|
| PARTS LIST |                                   |
| Pos.       | Bezeichnung / Description         |
| 1.1        | Kupplungsstempel / Connector plug |
| 1.2        | Kupplungsdose / Connector socket  |
| 5          | U-Ring Dichtung / U-ring sealing  |

| TYPE                         | PN    | NG   | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |         |    |      |      |       |    |    |                | U-RING | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|------------------------------|-------|------|------|--------------------------------|------|---------|----|------|------|-------|----|----|----------------|--------|-------------------|---------------------------|
|                              | [bar] | [mm] | [mm] | d1                             | d2   | d       | d3 | l1   | ln   | ld    | i  | S1 | Pos. 5         | [kg]   | Pos. 1.1 + 1.2+5  |                           |
| STAHL<br>STEEL               | 250   | 10   | 6    | G 1/4 A                        | 18,9 | M18x1,5 | 30 | 25   | 66,5 | 68    | 12 | 24 | 11,6x16,5x1,5  | 0,37   | HKE 10            |                           |
|                              | 250   | 12   | 8    | G 3/8 A                        | 21,9 | M20x1,5 | 30 | 25   | 66,5 | 68    | 12 | 24 | 14,7x18,9x1,5  | 0,37   | HKE 12            |                           |
|                              | 250   | 16   | 12   | G 1/2 A                        | 26,9 | M24x1,5 | 40 | 31,5 | 81   | 81    | 14 | 32 | 18,5x23,9x1,5  | 0,70   | HKE 16            |                           |
|                              | 250   | 20   | 16   | G 3/4 A                        | 31,9 | M30x2,0 | 54 | 35,5 | 98   | 99    | 16 | 46 | 23,9x29,2x1,5  | 1,57   | HKE 20            |                           |
|                              | 220   | 25   | 20   | G 1 A                          | 39,9 | M36x2,0 | 54 | 35,5 | 100  | 101   | 18 | 46 | 29,7x35,7x2,0  | 1,61   | HKE 25            |                           |
|                              | 200   | 38   | 32   | G 1 1/2 A <sup>1</sup>         | 55   | M52x2,0 | 90 | 49,5 | 141  | 141,5 | 22 | 80 | - <sup>1</sup> | 6,53   | HKE 38            |                           |
| EDELSTAHL<br>STAINLESS STEEL | 100   | 10   | 6    | G 1/4 A                        | 18,9 | M18x1,5 | 30 | 25   | 66,5 | 68    | 12 | 24 | 11,6x16,5x1,5  | 0,36   | HKE 10            |                           |
|                              | 100   | 12   | 8    | G 3/8 A                        | 21,9 | M20x1,5 | 30 | 25   | 66,5 | 68    | 12 | 24 | 14,7x18,9x1,5  | 0,36   | HKE 12            |                           |
|                              | 100   | 16   | 12   | G 1/2 A                        | 26,9 | M24x1,5 | 40 | 31,5 | 81   | 81    | 14 | 32 | 18,5x23,9x1,5  | 0,71   | HKE 16            |                           |
|                              | 50    | 20   | 16   | G 3/4 A                        | 31,9 | M30x2,0 | 54 | 35,5 | 98   | 99    | 16 | 46 | 23,9x29,2x1,5  | 1,60   | HKE 20            |                           |
|                              | 50    | 25   | 20   | G 1 A                          | 39,9 | M36x2,0 | 54 | 35,5 | 100  | 101   | 18 | 46 | 29,7x35,7x2,0  | 1,64   | HKE 25            |                           |
|                              | 40    | 38   | 32   | G 1 1/2 A <sup>1</sup>         | 55   | M52x2,0 | 90 | 49,5 | 141  | 141,5 | 22 | 80 | - <sup>1</sup> | 6,66   | HKE 38            |                           |

MEDIEN

Geeignet für Hydrauliksysteme mit Hydrauliköl auf Mineralölbasis, Schmierfette, Kraftstoff, Wasser und Druckluft.  
Durchflussgeschwindigkeit max. 8 m/sec.

MEDIA

Suitable for hydraulic systems with mineral oil-based hydraulic oil, as well as lubricating grease, fuel, water or compressed-air.  
Max. flow rate 8 m/sec.

<sup>1</sup> Einschraubzapfen bei NG 38 mit metallischer Dichtkante nach ISO 1179-4 (Type B). | NG 38 stud end with metal to metal sealing acc. ISO 1179-4 (Type B).





**FLANSCH**  
UND ZUBEHÖR

**FLANGES**  
AND ACCESSORIES

**WIR VERBINDEN. SICHER!**  
**WE CONNECT. SECURELY!**

### FUNKTIONSPRINZIP AVIT FLANSCH ≈ ISO 6164

Das AVIT Flanschprogramm, dessen Anschlussmaße nach ISO 6164 genormt sind, wurde von AVIT in den letzten Jahrzehnten konsequent erweitert und verbessert.

Durch konstruktive Veränderungen ist die Flanschverbindung sicherer, kompakter, robuster und wartungsfreier als herkömmliche SAE-, ANSI- oder DIN- / EN-Flanschverbindungen.

Durch unterschiedliche Schweißbundlängen wurde die Trennfuge verschoben und so eine asymmetrische Teilung erreicht. Der Schweißbund (FA) wird im Gegenlosflansch (FKV) zentriert (Siehe Abb. 1).

Dadurch werden die Schrauben von Querkraften freigehalten, welche für ein mögliches Lösen einer Verbindung verantwortlich sind.

Der Leckageweg wird bei Dichtungsversagen umgelenkt, so dass eine mögliche Gefahrenquelle effektiv vermieden wird.

Die Montage wird durch die Zentrierung und das Losflanschsystem einfacher und genauer. Ein Versatz der Rohrleitung und somit verbundene Turbulenzen oder Strömungsverluste entfallen.

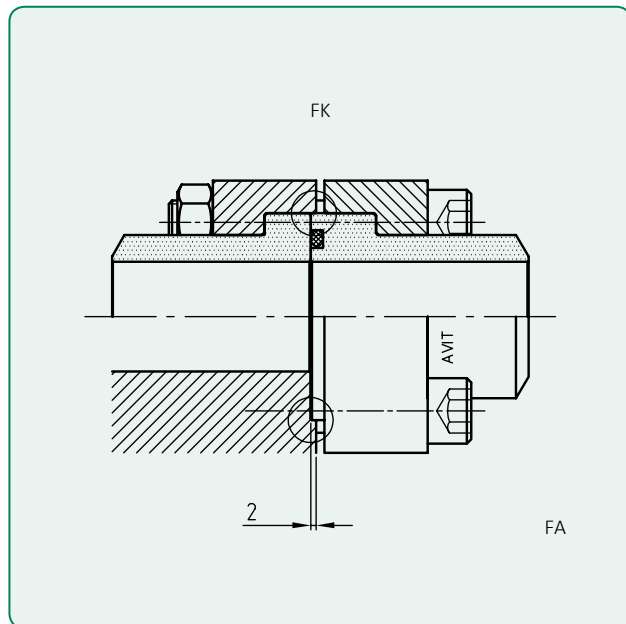


Abb. 1 Schweißbund-Zentrierung | *Welding piece centring*  
Spritzschutz | *Splash protection*

Ein weiterer Vorteil von AVIT Flanschen gegenüber herkömmlichen SAE-, ANSI-, DIN- / EN-Flanschverbindungen ist die kompakte Bauart, welche eine Platzersparnis von bis zu 30 % ergibt. (Siehe Abb. 2)

Besonders gegenüber SAE-Flanschen sind die höhere Schraubensicherheit (Beispiel DN40 PN250: AVIT=M16 > SAE=M12) und die symmetrische Kraftverteilung zu erwähnen.

SAE-Flansche bieten keinen Spritzschutz bei Dichtungsversagen, weil sie symmetrisch geteilt sind. Des Weiteren kann eine höhere Flächenpressung am Schweißbund unter starker Belastung zu Undichtigkeiten bis hin zum Materialversagen führen.

### FUNCTIONAL PRINCIPLE OF THE AVIT FLANGE ≈ ISO 6164

The line of AVIT flange products, which features standard connection dimensions in accordance with ISO 6164, has been continuously expanded and improved throughout the decades.

Changes in the design ensure a flange connection that is more reliable, compact, robust and maintenance-free than conventional SAE-, ANSI- or DIN- / EN-flange connections.

Due to different flange head lengths the dividing joint was shifted to achieve an asymmetrical division. The flange head (FA) is centred in the counter flange clamp (FKV) (fig. 1).

This relieves the bolts of transverse forces which are responsible for the possible loosening of a connection.

The leakage path is diverted in case of a gasket failure, in order to prevent potential source of danger.

Assembly is easier and more precise due to the centring and the flange clamp system. This eliminates misalignment in the pipe and any related turbulences or flow losses.

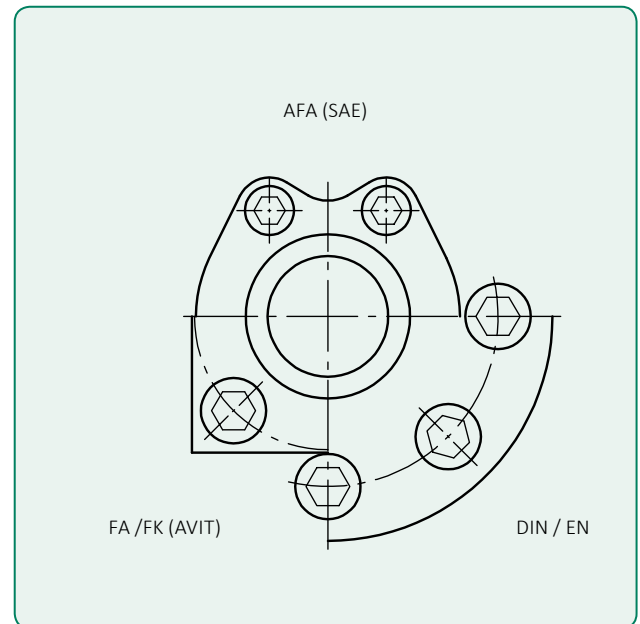


Abb. 2 Baugrößenvergleich | *Comparison of flange size*

Another advantage of AVIT flanges over conventional SAE-, ANSI- or DIN- / EN-flange connections is, that they are designed to be much more compact and can save up to 30 % in space. (fig. 2)

Especially noteworthy in comparison with SAE-flanges is the higher reliability of the bolted connection (eg. DN40 PN250: AVIT=M16 > SAE=M12) and the symmetrical transmission of force.

SAE-flanges do not have a splash protection, because they are divided symmetrically. Additionally a higher contact pressure at the flange head can result in leaks and even material failure at strong loads.



QUADRAT-/RUNDFLANSCH | SQUARE-/ROUND FLANGES

NIEDERDRUCK FLANSCH | LOW-PRESSURE FLANGES

INFORMATIONEN .....  
INFORMATION

3.05

MONTAGEANLEITUNG - FLANSCH .....  
ASSEMBLY INSTRUCTIONS - FLANGES

3.09



FLANSCHANSCHLUSS ..... **FA**  
FLANGE CONNECTION

3.11



FLANSCHKUPPLUNG ..... **FK**  
FLANGE COUPLING

3.13



GEGENFLANSCH ..... **FG**  
COUNTER FLANGE

3.15



BLINDFLANSCH ..... **FAB**  
BLIND FLANGE

3.17



BLIND-FLANSCHKUPPLUNG ..... **FKB**  
BLIND FLANGE COUPLING

3.19



GEGEN-BLINDFLANSCH ..... **FGB**  
COUNTER BLIND FLANGE

3.21



WINKELFLANSCH ..... **WFA**  
ELBOW FLANGE

3.23



ISO-FLANSCHANSCHLUSS ..... **FFA**  
ISO-FLANGE CONNECTION

3.25



ISO-FLANSCHKUPPLUNG ..... **FFK**  
ISO-FLANGE COUPLING

3.26



RÜCKLAUF FLANSCHANSCHLUSS ..... **FAR** 3.31  
RETURN FLANGE CONNECTION



RÜCKLAUF FLANSCHKUPPLUNG ..... **FKR** 3.32  
RETURN FLANGE COUPLING



VORSCHWEISSFLANSCH ..... **DFA** 3.33  
WELDING NECK FLANGE



VORSCHWEISS-FLANSCHKUPPLUNG ..... **DFK** 3.34  
WELDING NECK FLANGE COUPLING

ZUBEHÖR | ACCESSORIES



WINKEL-FLANSCHVERTEILER ..... **FVH** 3.27  
ELBOW FLANGE DISTRIBUTOR



FLANSCHVERTEILER ..... **FV** 3.28  
FLANGE DISTRIBUTOR



FLANSCH MIT 24° KONUS ..... **FAM** 3.29  
FLANGE WITH 24° CONUS



BLOCKKUGELHAHN MIT FLANSCHANSCHLUSS **BKF** 3.30  
BALL VALVE WITH FLANGE CONNECTION



HOCHDRUCK ABSPERRVENTIL ..... **HVAP** 3.31  
HIGH PRESSURE GLOBE VALVE



ABSPERRVENTIL ..... **HVAL** 3.32  
SHUT-OFF VALVE

### 3 FLANSCH FLANGES

SAE-ZUBEHÖR | SAE-ACCESSORIES

**FLANSCH**  
**FLANGES**

3.04

## STANDARD LIEFERUMFANG

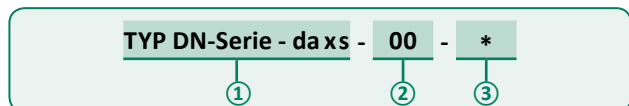
Wir liefern vormontierte Flansche komplett mit Schrauben (ISO 4762) und Muttern (ISO 4032) und O-Ring Dichtungen aus NBR.

Bei **AVIT Stahl Flanschen** sind die Oberflächen der Flanschbunde aus S355J2 (1.0577) metallisch blank, Vierkant- und Rundflansche  $\varnothing d \leq 300$  mm sind manganphosphatiert nach DIN EN ISO 9717 - beide Komponenten sind mit einem Korrosionsschutzöl versehen. Die zugehörigen Schrauben (Muttern) liefern wir für Serie 0-5 in der Festigkeitsklasse 8.8 (8) verzinkt, für Serie 6 in Festigkeitsklasse 10.9 (10).

Bei **AVIT Edelstahl Flanschen** (Flanschbunde 1.4571) sind die Oberflächen metallisch blank. Schrauben (Muttern) liefern wir für Serie 0-5 in der Qualität A2-70 (A2), für Serie 6 in der Festigkeitsklasse 10.9 (10) mit einer Zinklamellenbeschichtung.

## BESTELLBEZEICHNUNG

Unser alphanumerischer Bestellcode ① definiert die Bauform **TYP**, Nennweite **DN**, Druckstufe **Serie** sowie eine mögliche Rohrabmessung **da x s**. Die Werkstoff- und Elastomerkombination wird durch die Kennziffer ② festgelegt. Optionen werden durch Ihre Angabe ③ gesteuert.



Bestellbezeichnung | Principle of the order designation

### ① BESTELLCODE

Bauform, Nennweite, Druckstufe ..... **TYP DN-Serie da**  
Rohrabmessung bei Schweißenden ..... **TYP DN-Serie daxis**

### ② KENNZIFFER WERKSTOFF-KOMBINATION

Stahl, phosphatiert, O-Ring NBR ..... **TYP DN-Serie - 01**  
Stahl, phosphatiert, O-Ring FKM ..... **- 02**  
Stahl, phosphatiert, Kantseal-Ring PUR ..... **- 05**  
Stahl+N, phosphatiert, O-Ring NBR ..... **- 11**  
Stahl+N, phosphatiert, O-Ring FKM ..... **- 12**  
Stahl+N, phosphatiert, Kantseal-Ring PUR ..... **- 15**  
Edelstahl (1.4571), O-Ring NBR ..... **- 41**  
Edelstahl (1.4571), O-Ring FKM ..... **- 44**

### ③ OPTIONEN

Lieferung ohne Schrauben und Dichtung ..... **TYP DN-Serie - A**  
Lieferung ohne Schrauben ..... **- B**  
Lieferung ohne Dichtung ..... **- C**  
Andere Ausführungen, Kombinationen sind selbstverständlich möglich.  
Bitte bei Bestellung entsprechend detailliert angeben.

## ZEUGNISSE

Druckführende Bauteile und alle Schweißteile können kostenpflichtig mit entsprechenden Zeugnissen belegt und nachverfolgt werden. Die Bescheinigungsart muss bei Bestellung angegeben werden.

3.2 Abnahmen werden durch das Kurzzeichen der Klassifikationsgesellschaft (zum Beispiel: DNV GL, LR) gekennzeichnet.

Abnahmeprüfzeugnis 3.2 ..... **TYP DN-Serie - 3.2 DNV**  
Abnahmeprüfzeugnis 3.1 ..... **- 3.1**  
Werkszeugnis ..... **- 2.2**  
Werksbescheinigung ..... **- 2.1**

## SCOPE OF DELIVERY

We supply pre-assembled flanges complete with bolts (ISO 4762) and nuts (ISO 4032) and O-ring sealings made of NBR.

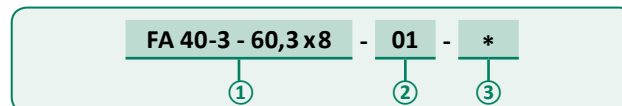
At **AVIT steel flanges** the surfaces of the flange heads made of S355J2 (1.0577) are metallic bright, square and round flanges  $\varnothing d \leq 300$  mm are manganese phosphatised acc. DIN EN ISO 9717. Both components are coated with an oil film to protect against corrosion. The bolts (nuts) for series 0-5 are delivered in property class 8.8 (8) galvanised, for series 6 in property class 10.9 (10).

All **AVIT stainless steel flanges** (flange heads made of AISI 316Ti) surfaces are metallic bright. We supply bolts (nuts) for series 0-5 in property class A2-70 (A2), for series 6 in property class 10.9 (10) with a zinc flake coating.

## ORDER DESIGNATION

Our alphanumeric order code ① defines the **type**, nominal diameter **DN**, pressure **series** and a possible pipe dimension **da x s**.

Materials and elastomer are specified by the reference number ②. Options have to be clearly specified ③ by your information.



Bestellbeispiel | Order example

### ① ORDER CODE

Type, nominal diameter, series ..... **TYPE DN-Series daxis**  
Tube dimension ..... **TYPE DN-Series daxis**

### ② MATERIAL REFERENCE NUMBER

Steel, phosphatised, NBR ..... **TYPE DN-Series - 01**  
Steel, phosphatised, FKM ..... **- 02**  
Steel, phosphatised, Kantseal-ring PUR ..... **- 05**  
Steel+N, galvanised, NBR ..... **- 11**  
Steel+N, galvanised, FKM ..... **- 12**  
Steel+N, galvanised, Kantseal-ring PUR ..... **- 15**  
Stainless steel (1.4571), NBR ..... **- 41**  
Stainless steel (1.4571), FKM ..... **- 44**

### ③ OPTIONS

Supplied without bolts and sealing ..... **TYPE DN-Series - A**  
Supplied without bolts ..... **- B**  
Supplied without sealing ..... **- C**  
Other designs and combinations are also possible.  
When ordering, please specify detailed your requirements.

## APPROVALS AND CERTIFICATES

Pressure retaining components and all weldable parts can be attested and traced regarding the raw material with additional costs. The type of certification has to be specified when the order is placed.

3.2 approvals are designated by the abbreviations used by their classification societies (for example DNV GL, LR).

Inspection certificate 3.2 ..... **TYPE DN-Series - 3.2 DNV**  
Inspection certificate 3.1 ..... **- 3.1**  
Test report ..... **- 2.2**  
Declaration of compliance with order ..... **- 2.1**

## DRUCK

Die Druckangaben gelten für Flanschbunde (Pos. 1 und 2), sind aber vom tatsächlich eingesetzten Rohr abhängig. Die Druckberechnung erfolgte nach DIN 2413, Geltungsbereich III für schwellende Beanspruchung, unter Zugrundelegung der entsprechenden Werkstoffe.

Die Eingruppierung des Nenndrucks (PN) in die Serien erfolgte nach DIN 2445. AVIT Flansche wurden mit einem nennweitenabhängigen Sicherheitsfaktor ausgelegt. Somit sind Nennweiten größer DN 150 nicht überdimensioniert und daher wirtschaftlicher als vergleichbare Flanschanschlüsse.

DN 10 - 40 Sicherheitsfaktor 4,0

DN 50- 80 Sicherheitsfaktor 3,5

> DN 80 Sicherheitsfaktor 2,5

Für SAE-Flanschbunde wurde nach DIN 2413 der Geltungsbereich I für statische Beanspruchung mit einem maximalen Sicherheitsfaktor 2 zugrundegelegt.

## TEMPERATUR

Stahl Flanschverbindungen können einen zulässigen Betriebstemperaturbereich von -40°C bis +120°C abdecken.

Edelstahl Flanschverbindungen können einen zulässigen Betriebstemperaturbereich von -60°C bis +250°C abdecken.

Bitte beachten Sie die Druckabschläge von Edelstahl Flanschverbindungen bei hohen Temperaturen!

von +50°C bis +100°C = -4 %

von +100°C bis +200°C = -11%

von +200°C bis +250°C = -20 %

## GEWICHT

Die Gewichtsangaben in diesem Kapitel beziehen sich immer auf die dargestellte Kombination aus Stahl.

Basis: spezifisches Gewicht = 7,85 kg/dm<sup>3</sup>, bei Edelstahl: +2%

## SONDERLÖSUNGEN

Wir liefern auf Ihre Bedürfnisse optimal angepasste Sonderflansche und Flanschverteiler, auch nach entsprechenden Werknormen.

Insbesondere bei hohen Nenndrücken und schwellenden Beanspruchungen empfehlen wir Sonderdichtelemente. In Verbindung mit entsprechenden Stahlqualitäten und Dichtungen lassen sich auch Temperaturbereiche über 200°C sicher abdecken.

Sollte es vorkommen, dass Sie im Katalog nicht die passenden Lösung finden, sprechen Sie uns an. Wir haben mit Sicherheit eine Idee, um Ihren Wunsch zu realisieren.

## PRESSURE

*The pressures stated refer to the flange heads (Pos. 1 and 2) but they also depend on the tube actually used. Pressure calculations were made on the basis of DIN 2413, case III for dynamic load and on the relevant materials.*

*The classification of the nominal pressure (PN) into the series was done acc. DIN 2445. AVIT flanges have been designed with a width-dependent safety factor. Therefore, nominal sizes greater than DN 150 are not over-dimensioned and are more cost-effective than comparable flange connections.*

*DN 10 - 40 safety factor 4,0*

*DN 50- 80 safety factor 3,5*

*> DN 80 safety factor 2,5*

*SAE-flange heads pressure calculations were made on the basis of DIN 2413, case I for static load, with a maximum safety factor of 2.*

## TEMPERATURE

*Steel flange connections have a permissible operating temperature range from -40°C to +120°C.*

*Stainless steel flange connections have a permissible operating temperature range from -60°C to +250°C.*

*Please pay attention to the pressure reductions of stainless steel flange connections due to high temperatures!*

*from +50°C to +100°C = -4 %*

*from +100°C to +200°C = -11%*

*from +200°C to +250°C = -20 %*

## WEIGHT

*The weights specified in this chapter refer to the illustrated combination made of carbon steel.*

*Basis: specific weight = 7,85 kg/dm<sup>3</sup>, for stainless steel: +2%*

## SPECIAL SOLUTIONS

*We deliver special flanges or flange distributors designed specifically to suit your needs, also according to factory standards.*

*Particularly for high nominal pressures and dynamic loads, we recommend special sealing elements. Using of appropriate steel quality and sealing, a safe functionality can also be provided for temperatures in excess of 200°C.*

*Should you be unable to find the solution you require in our catalogue, please let us know. We are certain to have an idea to meet your particular requirement.*



Elektrisch isolierende Flanschkupplung  
*Galvanic flange coupling*



Flanschverteiler  
*Flange distributor*



SAE-Flanschkombination  
*SAE-flange combination*

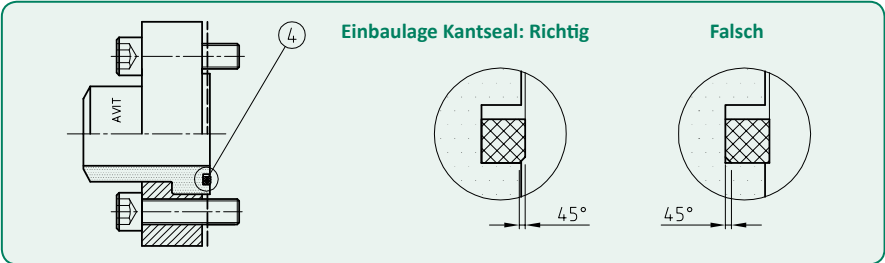
### FLANSCH DICHTUNGEN

Für das gesamte AVIT- Flanschprogramm steht Ihnen neben dem Standard O-Ring aus NBR alternativ ein Kantseal-Ring zur Verfügung. Der Kantseal wird als axial-statische Dichtung eingesetzt und hat einen quadratischen Querschnitt. Dieses Dichtelement ist besonderes für hohe Nenndrücke und starke schwellende Belastungen zu empfehlen.



### FLANGE GASKETS

In addition to the standard O-ring made of NBR, a Kantseal-ring is available as an alternative for the entire AVIT flange range. The Kantseal is used as an axial-static seal and has a square cross-section. This sealing element is particularly recommended for high nominal pressures and high dynamic loads.



### VORTEILE KANTSEAL

- Geringe mechanische Verformung des Querschnittes
- Ausgezeichnetes Dichtverhalten über lange Zeiträume
- Kein Verdrillen in der Nut
- Unempfindlich gegen Spaltextrusion
- Keine Relativbewegung in der Nut bei Pulsation
- Formstabil unter Druckbelastung
- Geringe bleibende Verformung
- Kein Formtrenngrat
- Hohe Dichtheit bei geringer Verpressung

### ADVANTAGES OF KANTSEAL

- Low mechanical deformation of the cross section
- Excellent sealing properties over long periods of time
- No twisting in the groove
- Insensitive to gap extrusion
- No relative movement in the groove during pulsation
- Dimensionally stable under compressive load
- Low permanent deformation
- No mould parting ridge
- High tightness with low compression

### DICHTUNGSWERKSTOFFE

**PUR** ..... Farbe: Grün, geeignetes Medium: Hydrauliköl  
**H-PUR** ..... Farbe: Rot, geeignetes Medium: Hydrauliköl und Wasser

### SEALING MATERIAL

**PUR** ..... Colour: green, suitable medium: hydraulic oil  
**H-PUR** ..... Colour: red, suitable medium: hydraulic oil and water

### BESTELLCODE ② KENNZIFFER WERKSTOFF-KOMBINATION

Stahl, phosphatiert, Kantseal PUR ..... TYP DN-Serie daxis - **05**  
Stahl, phosphatiert, Kantseal H-PUR ..... - **05H**  
Stahl+N, phosphatiert, Kantseal PUR ..... - **15**  
Stahl+N, phosphatiert, Kantseal H-PUR ..... - **15H**

### ORDER CODE ② REFERENCE NUMBER MATERIAL COMBINATION

Steel, phosphated, Kantseal PUR ..... TYP DN series daxis - **05**  
Steel, phosphated, Kantseal H-PUR ..... - **05H**  
Steel+N, phosphated, Kantseal PUR ..... - **15**  
Steel+N, phosphated, Kantseal H-PUR ..... - **15H**

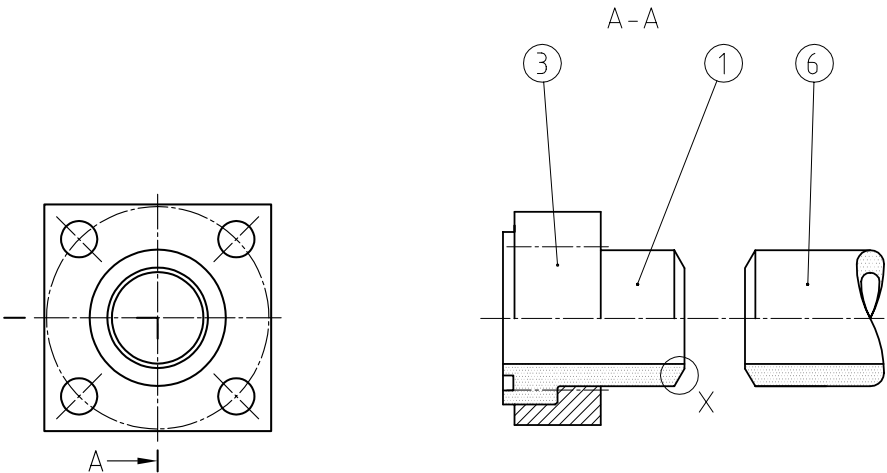
| SERIE<br>SERIES | DN              | DICHTUNGEN POS.4<br>SEALINGS |             | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|------------------------------|-------------|---------------------------|
|                 |                 | O-Ring                       | Kantseal    |                           |
| 5<br>PN 420     | 20              | 28,00x2,62                   | 28,24x2,51  | FA 20-5 33,7x6,3          |
|                 | 25              | 34,52x3,53                   | 34,52x3,40  | FA 25-5 42,4x8,0          |
|                 | 32              | 37,69x3,53                   | 37,69x3,40  | FA 32-5 48,3x8,8          |
|                 | 40              | 50,17x5,33                   | 50,54x5,16  | FA 40-5 60,3x11,0         |
|                 | 50              | 56,52x5,33                   | 56,34x5,16  | FA 50-5 76,1x14,2         |
|                 | 65              | 75,57x5,33                   | 75,28x5,16  | FA 65-5 101,6x20,0        |
|                 | 70              | 81,92x5,33                   | 81,92x5,16  | FA 70-5 114,3x22,0        |
|                 | 80              | 92,50x5,33                   | 92,78x5,16  | FA 80-5 139,7x28,0        |
|                 | 90 <sup>3</sup> | 103,00x5,33                  | 103,34x5,16 | FA 90-5 152,4x30,0        |
|                 | 100             | 116,84x6,99                  | 116,84x6,73 | FA 100-5 168,3x32,0       |
|                 | 125             | 147,50x6,99                  | 148,04x6,73 | FA 125-5 219,1x45,0       |
|                 | 150             | 177,17x6,99                  | 177,17x6,73 | FA 150-5 273,0x55,0       |
|                 | 200             | 227,97x6,99                  | 227,97x6,73 | FA 200-5 323,9x65,0       |

| SERIE<br>SERIES | DN  | DICHTUNGEN POS.4<br>SEALINGS |             | BESTELLCODE<br>ORDER CODE |
|-----------------|-----|------------------------------|-------------|---------------------------|
|                 |     | O-Ring                       | Kantseal    |                           |
| 6<br>PN 500     | 16  | 25,07x2,62                   | 25,00x2,51  | FA 16-6 30,0x7,0          |
|                 | 20  | 31,34x3,53                   | 31,34x3,40  | FA 20-6 38,0x8,8          |
|                 | 25  | 37,69x3,53                   | 37,69x3,40  | FA 25-6 48,3x10,0         |
|                 | 32  | 44,04x3,53                   | 44,04x3,40  | FA 32-6 60,3x14,2         |
|                 | 40  | 56,52x5,33                   | 56,34x5,16  | FA 40-6 76,1x17,5         |
|                 | 50  | 62,87x5,33                   | 62,87x5,16  | FA 50-6 88,9x20,0         |
|                 | 65  | 75,57x5,33                   | 75,28x5,16  | FA 65-6 114,3x25,0        |
|                 | 80  | 97,79x5,33                   | 97,79x5,16  | FA 80-6 139,7x30,0        |
|                 | 100 | 116,84x6,99                  | 116,84x6,73 | FA 100-6 168,3x36,0       |
|                 | 125 | 132,72x6,99                  | 132,72x6,73 | FA 125-6 219,1x50,0       |
|                 | 150 | 177,17x6,99                  | 177,17x6,73 | FA 150-6 273,0x60,0       |

3 Frühere Größe DN 100! | Former size DN 100!







Rohr ⑥ rechtwinklig zur Rohrachse abtrennen und mit einer Schweißfase gemäß der folgenden Empfehlung vorbereiten.  
Die Ausführung der Schweißfase (Einzelheit X) an AVIT Flanschbunden basiert auf Erfahrung, Werksnormen und der DIN 2559-2 / DIN EN ISO 9692-1. Bitte berücksichtigen Sie die Abmessungen der Tabelle (wenn nicht anders im Artikel angegeben) bei Ihrer Nahtvorbereitung.

| WANDDICKE<br>THICKNESS | BEZEICHNUNG<br>DESCRIPTION | ABMESSUNGEN [mm]<br>DIMENSIONS |         |         |       |        |
|------------------------|----------------------------|--------------------------------|---------|---------|-------|--------|
| s                      |                            | $\alpha$                       | $\beta$ | Abstand | Steg  | Flanke |
| $\leq 25$ mm           | V-Naht                     | 60                             | -       | 2-4     | bis 2 | -      |
| $> 25$ mm              | U-Naht auf V               | 60                             | 15      | 2-3     | 2     | 4      |

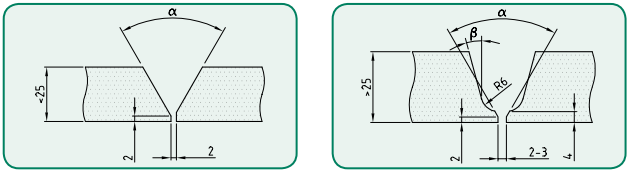
Abmessungen Schweißfase | Dimensions welding bevel

Den Losflansch ③ über den Flanschbund ① schieben. Flanschbund mit dem Rohr ⑥ gemäß DIN EN ISO 5817 verschweißen.

Bei Hydraulikrohrleitungen sollten nur Vollanschlussnähte mit Wurzel-schweißung hergestellt werden. Wenn die Wanddicke es zulässt, sollte die Naht immer mehrlagig geschweißt werden. Es ist zu beachten, dass beim Verschweißen kein Schweißgut oder Schweißperlen in das Rohr-innere gelangen. Um Zunderbildung zu vermeiden, empfehlen wir das Wolfram-Inertgasschweißen (WIG) unter Schutz- und Formiergas zu verwenden. Auf das Formieren der Wurzellage kann nur dann verzichtet werden, wenn die Schweißnahtwurzel zum Schleifen zugänglich ist. Danach werden Füll- und Decklagen der Verbindung aufgetragen. Schweißstellen säubern und falls notwendig, beischleifen.

Bei Material 1.4571 ist zusätzlich zu beachten, dass Anlauffarben in je-dem Fall mit Beizpaste zu entfernen sind, weil sonst Korrosionsgefahr besteht.

The pipe ⑥ must be cut off at an angle of 90° and has to be prepared with a welding bevel according to our recommendation.  
The type of welding bevel (Detail X) on our flange heads is based on expe-rience, factory standards and DIN 2559-0 (DIN EN ISO 9692-1).  
Please take these dimensions (Table) into account in your weld seam preparation.

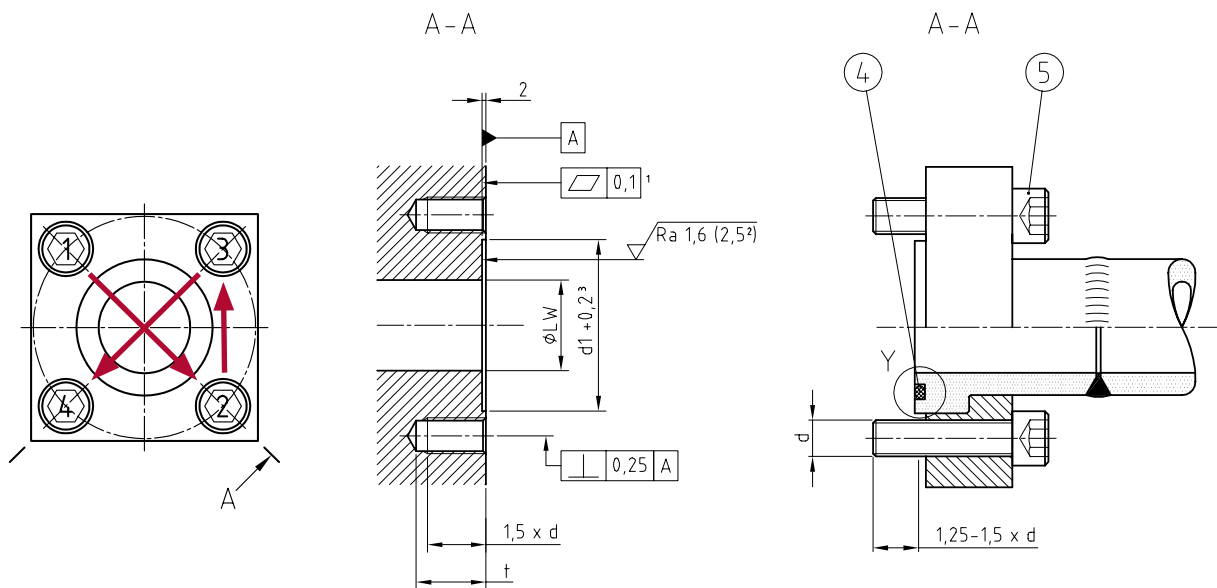


Einzelheit X | Detail X

Push the flange clamp ③ over the flange head ①, then weld flange head and pipe ⑥ with each other according to DIN EN ISO 5817.

Only full-length connection seams with root welding should be used to produce hydraulic pipelines. If the wall thickness allows it, the seam should always be welded in multiple layers.  
Take into account that no weld residue gets into the inside of the tube.  
In order to prevent scaling, we recommend using tungsten inert gas weld-ing (TIG) with protective and forming gas.  
The forming of the root position can only be omitted if the weld seam root is accessible for grinding.  
Then filling and cover layers are applied to the connection. Clean the weld location and grind as necessary.

Additional instructions for material 1.4571: Oxidation tints must be re-moved with pickling paste, otherwise there is a risk of corrosion.



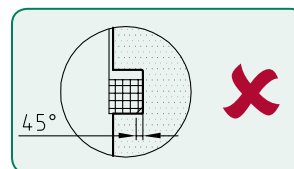
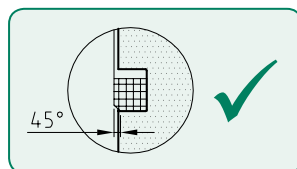
**DIE FOLGENDE MONTAGE SETZT EINE FACHGERECHTE VERSCHWEISSUNG VORAUSS! VOR DER MONTAGE MÜSSEN ALLE TEILE SAUBER UND BESCHÄDIGUNGSFREI SEIN.**



**THE FOLLOWING ASSEMBLY REQUIRES A PROFESSIONAL WELDING! BEFORE MOUNTING ALL COMPONENTS HAVE TO BE CLEAN AND UNDAMAGED.**

Nach dem Abkühlen und Säubern der Bauteile den O-Ring (4) in die saubere Nut des Flanschbundes (1) einlegen. Falls alternativ zum O-Ring ein Kantseal-Ring mit einer kleinen 45° Fase verwendet wird, muss vor dem Verschrauben die richtige Lage (Einzelheit Y) überprüft werden.

After heat dissipation, place the O-ring (4) in the clean groove of the flange head (1). In case a Kantseal-ring with a small 45° chamfer is used as an alternative to the O-ring, before assembling the correct position of the chamfer (Detail Y) must be checked.



Einzelheit Y: Sichtbare 45° Fase | Detail Y: 45° chamfer must be visible!

Für alle AVIT Flanschanschlüsse wurden die Mindesteinschraubtiefen nach der Formel:  $1,25 \text{ bis } 1,5 \times d$  einheitlich festgelegt. Bitte beachten Sie daher eine nutzbare Gewindelänge von min.  $1,5 \times d$  und die dazu passende Bohrungstiefe (t). Gemäß der Druckstufe muss das Material der Gewinde eine entsprechende Festigkeit haben.

The minimum screw-in depth for all AVIT flange connections is determined by the formula:  $1.25 - 1.5 \times d$ . Please therefore observe a thread length of min.  $1.5 \times d$  with the right drill depth (t). The port machining material must have a strength which corresponds to the pressure range!

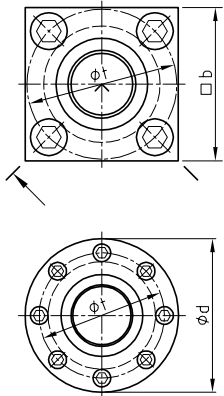
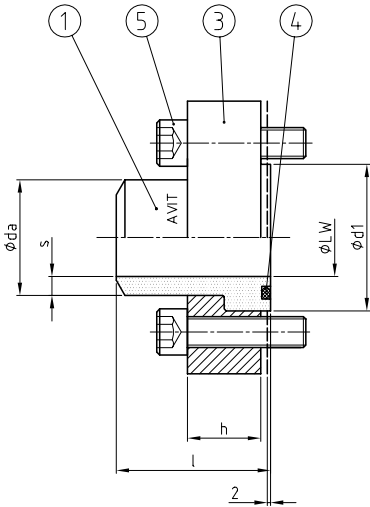
Ölen Sie die Gewinde und die Unterseite der Schraubenköpfe etwas ein. Nach einem handfesten Anziehen die Schrauben (5) in angemessenen Stufen - 30% - 60% - über Kreuz bis zum entsprechenden Drehmoment - 100% (Tabelle) Fertigmontieren. Finalisieren Sie die Montage durch einen weiteren Durchgang mit 100% Drehmoment im Uhrzeigersinn. Bei einer Flanschkupplung oder einer SAE-Flanschverbindung verfahren Sie gleichermaßen.

Lubricate the bolts on the thread and under the head portion. After hand-tight pre-assembly, tighten the bolts (5) in suitable steps - 30% - 60% - crosswise until the appropriate torque - 100% (Table) is reached. Finalise the assembly by applying 100% of the specified torque in a clockwise direction. Equal assembly of an AVIT flange coupling or a SAE-flange connection.

| KLASSE<br>GRADE | ANZUGSDREHMONENTE MA [Nm]<br>ASSEMBLY TORQUE |     |     |     |     |     |     |      |      |      |
|-----------------|----------------------------------------------|-----|-----|-----|-----|-----|-----|------|------|------|
|                 | M8                                           | M10 | M12 | M14 | M16 | M20 | M24 | M30  | M36  | M42  |
| 8.8             | 25                                           | 44  | 75  | 120 | 180 | 360 | 630 | 1250 | 2150 | 3450 |
| 10.9            | 36                                           | 64  | 110 | 175 | 265 | 520 | 890 | 1800 | 3100 | 4900 |
| A2-70           | 18                                           | 37  | 64  | 95  | 160 | 310 | 537 | 1080 | 1800 | -    |

Tabelle - Anzugsdrehmomente, Richtwerte mit Reibungszahl  $\mu=0,12$  | Table - Assembly torque, values for the orientation with coefficient of friction  $\mu=0,12$

1 Ebenheit  $\phi d1 > 120 \text{ mm} = 0,15$  | Evenness  $\phi d1 > 120 \text{ mm} = 0,15$   
2 Oberfläche bei Statischer Belastung | Surface for dynamic loads  
3 Ab  $\phi d1 > 120 \text{ mm} = 0,3$  | Off  $\phi d1 > 120 \text{ mm} = 0,3$



AVIT ≈ ISO 6164 <sup>1</sup>

- Für 2 mm Sicherheits-Flansch-Zentrierung
- Ausgelegt für schwellige Beanspruchungen
- Leichte Montage durch Losflanschsystem
- For 2 mm safety-flange-centring
- Designed for dynamic loads
- Easy assembly by flange clamp system

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-* |
|----------------------------------------------------|---------------------|
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FA 40-3 - daxs - 01 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FA 40-3 - daxs - 02 |
| Stahl+N, phosphatiert / Steel+N, phosphatised; NBR | FA 40-3 - daxs - 11 |
| Stahl+N, phosphatiert / Steel+N, phosphatised; FKM | FA 40-3 - daxs - 12 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FA 40-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FA 40-3 - daxs - 44 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                   |
|------|-------------------------------------------------------------|
| 1    | Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| 3    | Losflansch / Flange clamp                                   |
| 4    | O-Ring Dichtung / O-ring sealing                            |
| 5    | Schrauben / Bolts <sup>2</sup>                              |

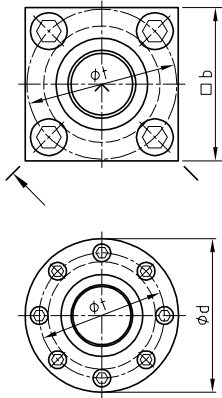
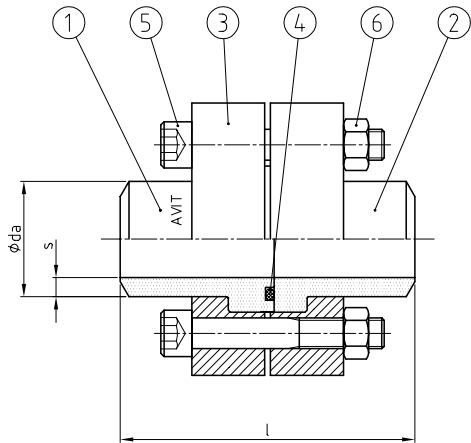
| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     |            | O-RING     | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT   | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|-----|-----|-----|------------|------------|--------------------|--------------|---------------------|---------------------------|
| [bar]           | [mm] | LW                             | b   | d   | t   | d1  | l   | h          | Pos. 4     | Pos. 5             |              | [kg]                | TYP DN-Serie daxs         |
| 0<br>PN 64      | 25   | 24                             | 70  | -   | 64  | 46  | 56  | 19         | 28,0x2,62  | M12x40             | 4            | 0,90                | FA 25-0 33,7x2,6          |
|                 | 32   | 37                             | 80  | -   | 72  | 55  | 64  | 24         | 43,0x3,00  | M12x45             | 4            | 1,40                | FA 32-0 42,4x2,6          |
|                 | 40   | 41,5                           | 90  | -   | 80  | 60  | 68  | 29         | 47,2x3,53  | M16x55             | 4            | 1,97                | FA 40-0 48,3x2,6          |
|                 | 50   | 51                             | 100 | -   | 98  | 76  | 80  | 38         | 56,7x3,53  | M16x60             | 4            | 2,89                | FA 50-0 60,3x2,9          |
|                 | 65   | 70                             | 120 | -   | 118 | 92  | 98  | 48         | 75,5x3,53  | M20x75             | 4            | 4,90                | FA 65-0 76,1x2,9          |
|                 | 80   | 78,5                           | 150 | -   | 145 | 110 | 109 | 48         | 85,1x5,30  | M24x80             | 4            | 8,23                | FA 80-0 88,9x3,2          |
|                 | 90   | 87,5                           | 180 | -   | 175 | 135 | 135 | 58         | 94,6x5,30  | M30x100            | 4            | 15,50               | FA 90-0 101,6x4,0         |
|                 | 100  | 99                             | 180 | -   | 175 | 135 | 135 | 58         | 106,0x5,33 | M30x100            | 4            | 14,74               | FA 100-0 114,3x5,6        |
|                 | 125  | 124                            | -   | 245 | 200 | 168 | 150 | 68         | 132,0x6,99 | M24x100            | 8            | 22,66               | FA 125-0 139,7x8,0        |
|                 | 150  | 148                            | -   | 300 | 245 | 205 | 190 | 78         | 157,5x6,99 | M30x120            | 8            | 40,67               | FA 150-0 168,3x10,0       |
| 200             | 205  | -                              | 355 | 290 | 245 | 200 | 85  | 196,2x6,99 | M36x140    | 8                  | 66,58        | FA 200-0 219,1x7,1  |                           |
| 2<br>PN 160     | 12   | 12                             | 50  | -   | 44  | 28  | 43  | 19         | 16,3x2,40  | M10x35             | 4            | 0,46                | FA 12-2 16,0x1,5          |
|                 | 16   | 15                             | 60  | -   | 54  | 38  | 50  | 19         | 20,3x2,40  | M10x35             | 4            | 0,62                | FA 16-2 20,0x2,5          |
|                 | 20   | 20                             | 60  | -   | 54  | 38  | 50  | 19         | 25,3x2,40  | M10x35             | 4            | 0,62                | FA 20-2 25,0x2,5          |
|                 | 25   | 24                             | 70  | -   | 64  | 46  | 56  | 19         | 28,0x2,62  | M12x40             | 4            | 0,89                | FA 25-2 30,0x3,0          |
|                 | 32   | 28,5                           | 80  | -   | 72  | 55  | 64  | 24         | 34,5x3,53  | M12x45             | 4            | 1,40                | FA 32-2 38,0x4,0          |
|                 | 40   | 40                             | 90  | -   | 80  | 60  | 68  | 29         | 46,2x3,53  | M16x55             | 4            | 2,02                | FA 40-2 48,3x4,0          |
|                 | 50   | 46                             | 100 | -   | 98  | 76  | 80  | 38         | 53,0x5,33  | M16x60             | 4            | 3,12                | FA 50-2 60,3x5,0          |
|                 | 65   | 62                             | 120 | -   | 118 | 92  | 98  | 48         | 69,0x5,33  | M20x75             | 4            | 5,38                | FA 65-2 76,1x6,3          |
|                 | 80   | 84                             | 180 | -   | 175 | 135 | 135 | 58         | 92,5x5,33  | M30x100            | 4            | 12,80               | FA 80-2 101,6x8,8         |
|                 | 100  | 94,5                           | 180 | -   | 175 | 135 | 135 | 58         | 106,0x5,33 | M30x100            | 4            | 15,71               | FA 100-2 114,3x10,0       |
|                 | 125  | 122                            | -   | 245 | 200 | 168 | 150 | 68         | 132,0x6,99 | M24x100            | 8            | 24,71               | FA 125-2 152,4x12,5       |
|                 | 150  | 144                            | -   | 300 | 245 | 205 | 190 | 78         | 157,5x6,99 | M30x120            | 8            | 44,21               | FA 150-2 177,8x16,0       |
| 200             | 179  | -                              | 355 | 290 | 245 | 200 | 85  | 196,2x6,99 | M36x140    | 8                  | 66,58        | FA 200-2 219,1x20,0 |                           |

1 Lochbild der Serie 3 und 4 bis DN 80 gemäß Norm. | Hole pattern form series 3 and 4 to DN 80 according to standard.  
2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     |     | O-RING      | SCHRAUBEN<br>BOLTS   | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|-----|-----|-------------|----------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm]            | LW                             | b   | d   | t   | d1  | l   | h   | Pos. 4      | Pos. 5               |              | [kg]              | TYP DN-Serie daxis        |
| 3<br>PN 250     | 10              | 11                             | 50  | -   | 44  | 28  | 43  | 19  | 16,3x2,40   | M10x35               | 4            | 0,48              | FA 10-3 16,0x2,0          |
|                 | 16              | 16                             | 60  | -   | 54  | 38  | 50  | 19  | 22,4x2,62   | M10x35               | 4            | 0,66              | FA 16-3 21,3x2,6          |
|                 | 20              | 20                             | 70  | -   | 64  | 46  | 56  | 19  | 28,0x2,62   | M12x40               | 4            | 0,91              | FA 20-3 26,9x3,6          |
|                 | 25              | 24,5                           | 80  | -   | 72  | 55  | 64  | 24  | 34,5x3,53   | M12x45               | 4            | 1,40              | FA 25-3 33,7x4,5          |
|                 | 32              | 31                             | 90  | -   | 80  | 60  | 68  | 29  | 38,7x3,53   | M16x55               | 4            | 2,18              | FA 32-3 42,4x5,6          |
|                 | 40              | 44,5                           | 100 | -   | 98  | 76  | 80  | 38  | 53,0x5,33   | M16x60               | 4            | 3,21              | FA 40-3 60,3x8,0          |
|                 | 50              | 54,5                           | 120 | -   | 118 | 92  | 98  | 48  | 61,5x5,33   | M20x75               | 4            | 5,84              | FA 50-3 76,1x10,0         |
|                 | 65              | 67                             | 150 | -   | 145 | 110 | 109 | 48  | 75,57x5,33  | M24x80               | 4            | 9,39              | FA 65-3 88,9x11,0         |
|                 | 80              | 76,5                           | 180 | -   | 175 | 135 | 135 | 58  | 92,5x5,33   | M30x100              | 4            | 17,13             | FA 80-3 101,6x12,5        |
|                 | 100             | 105                            | -   | 245 | 200 | 168 | 150 | 68  | 115,0x6,99  | M24x100              | 8            | 26,50             | FA 100-3 139,7x17,5       |
|                 | 125             | 128,5                          | -   | 300 | 245 | 205 | 190 | 78  | 147,5x6,99  | M30x120              | 8            | 46,83             | FA 125-3 168,3x20,0       |
|                 | 150             | 144                            | -   | 355 | 290 | 245 | 200 | 85  | 170,0x6,99  | M36x140              | 8            | 73,73             | FA 150-3 193,7x25,0       |
| 4<br>PN 315     | 10              | 11                             | 50  | -   | 44  | 28  | 43  | 19  | 16,3x2,40   | M10x35               | 4            | 0,48              | FA 10-4 17,2x3,2          |
|                 | 16              | 17,5                           | 60  | -   | 54  | 38  | 50  | 19  | 22,4x2,62   | M10x35               | 4            | 0,70              | FA 16-4 26,9x4,5          |
|                 | 20              | 22,5                           | 70  | -   | 64  | 46  | 56  | 19  | 28,0x2,62   | M12x40               | 4            | 0,94              | FA 20-4 33,7x5,6          |
|                 | 25              | 28                             | 80  | -   | 72  | 55  | 64  | 24  | 34,5x3,53   | M12x45               | 4            | 1,45              | FA 25-4 42,4x7,1          |
|                 | 32              | 32,5                           | 90  | -   | 80  | 60  | 68  | 29  | 38,7x3,53   | M16x55               | 4            | 2,27              | FA 32-4 48,3x8,0          |
|                 | 40              | 40,5                           | 100 | -   | 98  | 76  | 80  | 38  | 53,0x5,33   | M16x60               | 4            | 3,37              | FA 40-4 60,3x10,0         |
|                 | 50              | 51                             | 120 | -   | 118 | 92  | 98  | 48  | 61,5x5,33   | M20x75               | 4            | 6,10              | FA 50-4 76,1x12,5         |
|                 | 65              | 60,5                           | 150 | -   | 145 | 110 | 109 | 48  | 75,57x5,33  | M24x80               | 4            | 9,30              | FA 65-4 88,9x14,2         |
|                 | 80              | 79,5                           | 180 | -   | 175 | 135 | 135 | 58  | 92,5x5,33   | M30x100              | 4            | 17,36             | FA 80-4 114,3x17,5        |
|                 | 100             | 95,5                           | -   | 245 | 200 | 168 | 150 | 68  | 115,0x6,99  | M24x100              | 8            | 28,13             | FA 100-4 139,7x22,2       |
|                 | 125             | 118                            | -   | 300 | 245 | 205 | 190 | 78  | 147,5x6,99  | M30x120              | 8            | 51,62             | FA 125-4 177,8x30,0       |
|                 | 150             | 147                            | -   | 355 | 290 | 245 | 200 | 85  | 170,0x6,99  | M36x140              | 8            | 78,46             | FA 150-4 219,1x36,0       |
| 5<br>PN 420     | 16              | 15,5                           | 70  | -   | 64  | 46  | 50  | 22  | 22,4x2,62   | M12x35               | 4            | 1,05              | FA 16-5 26,9x5,6          |
|                 | 20              | 21                             | 80  | -   | 72  | 55  | 56  | 26  | 28,0x2,62   | M12x40               | 4            | 1,48              | FA 20-5 33,7x6,3          |
|                 | 25              | 26,5                           | 90  | -   | 84  | 63  | 65  | 32  | 34,5x3,53   | M16x55               | 4            | 2,50              | FA 25-5 42,4x8,0          |
|                 | 32              | 31                             | 100 | -   | 98  | 76  | 80  | 38  | 37,7x3,53   | M16x60               | 4            | 3,41              | FA 32-5 48,3x8,8          |
|                 | 40              | 38,5                           | 120 | -   | 118 | 92  | 98  | 48  | 50,17x5,33  | M20x75               | 4            | 6,31              | FA 40-5 60,3x11,0         |
|                 | 50              | 48                             | 150 | -   | 145 | 110 | 109 | 48  | 56,52x5,33  | M24x80               | 4            | 10,23             | FA 50-5 76,1x14,2         |
|                 | 65              | 61,5                           | 180 | -   | 175 | 135 | 135 | 58  | 75,57x5,33  | M30x100              | 4            | 18,43             | FA 65-5 101,6x20,0        |
|                 | 70              | 70                             | 190 | -   | 185 | 148 | 150 | 64  | 81,92x5,33  | M30x100              | 4            | 22,12             | FA 70-5 114,3x22,0        |
|                 | 80              | 83                             | -   | 245 | 200 | 172 | 150 | 68  | 92,5x5,33   | M24x100              | 8            | 29,96             | FA 80-5 139,7x28,0        |
|                 | 90 <sup>3</sup> | 92,5                           | -   | 300 | 245 | 205 | 190 | 78  | 103,0x5,33  | M30x120              | 8            | 48,20             | FA 90-5 152,4x30,0        |
|                 | 100             | 104                            | -   | 320 | 255 | 215 | 190 | 78  | 116,8x6,99  | M30x120              | 8            | 58,80             | FA 100-5 168,3x32,0       |
|                 | 125             | 129                            | -   | 390 | 315 | 273 | 200 | 86  | 147,5x6,99  | M36x140              | 8            | 99,50             | FA 125-5 219,1x45,0       |
| 6<br>PN 500     | 16              | 16                             | 75  | -   | 67  | 50  | 55  | 30  | 25,07x2,62  | M12x50 <sup>2</sup>  | 4            | 1,52              | FA 16-6 30,0x7,0          |
|                 | 20              | 20,5                           | 90  | -   | 84  | 63  | 65  | 37  | 31,34x3,53  | M16x60 <sup>2</sup>  | 4            | 2,49              | FA 20-6 38,0x8,8          |
|                 | 25              | 28,5                           | 120 | -   | 101 | 76  | 80  | 47  | 37,69x3,53  | M20x75 <sup>2</sup>  | 4            | 5,99              | FA 25-6 48,3x10,0         |
|                 | 32              | 32                             | 140 | -   | 125 | 90  | 90  | 55  | 44,04x3,53  | M24x90 <sup>2</sup>  | 4            | 9,84              | FA 32-6 60,3x14,2         |
|                 | 40              | 41                             | 150 | -   | 142 | 110 | 105 | 60  | 56,52x5,33  | M24x95 <sup>2</sup>  | 4            | 12,25             | FA 40-6 76,1x17,5         |
|                 | 50              | 49                             | 180 | -   | 168 | 125 | 115 | 68  | 62,87x5,33  | M30x110 <sup>2</sup> | 4            | 19,66             | FA 50-6 88,9x20,0         |
|                 | 65              | 64,5                           | -   | 245 | 188 | 154 | 135 | 74  | 75,57x5,33  | M24x110 <sup>2</sup> | 8            | 30,80             | FA 65-6 114,3x25,0        |
|                 | 80              | 80                             | -   | 315 | 228 | 182 | 165 | 82  | 97,79x5,33  | M36x130 <sup>2</sup> | 8            | 60,58             | FA 80-6 139,7x30,0        |
|                 | 100             | 98,5                           | -   | 360 | 264 | 218 | 190 | 98  | 116,84x6,99 | M36x150 <sup>2</sup> | 12           | 96,95             | FA 100-6 168,3x36,0       |
|                 | 125             | 119                            | -   | 420 | 330 | 275 | 210 | 105 | 132,72x6,99 | M42x160 <sup>2</sup> | 12           | 144,3             | FA 125-6 219,1x50,0       |
|                 | 150             | 163                            | -   | 490 | 395 | 340 | 237 | 116 | 177,17x6,99 | M42x170 <sup>2</sup> | 12           | 201,7             | FA 150-6 273,0x60,0       |

2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.

3 Frühere Größe DN 100! | Former size DN 100!



3

FLANSCH  
FLANGES

**AVIT ≈ ISO 6164 <sup>1</sup>**

- Mit Flansch-Zentrierung im Gegenlosflansch
- Ausgelegt für schwellige Beanspruchungen
- Leichte Montage durch Losflanschsystem

• With flange-centring in the counter flange clamp

• Designed for dynamic loads

• Easy assembly by flange clamp system

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                      |
|----------------------------------------------------|----------------------------------|---------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-**             | Pos. Bezeichnung / Description                                |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FK 40-3 - daxs - 01              | 1 Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FK 40-3 - daxs - 02              | 2 Gegenflanschbund / Counter flange                           |
| Stahl+N, phosphatiert / Steel+N, phosphatised; NBR | FK 40-3 - daxs - 11              | 3 Losflansche / Flange clamps                                 |
| Stahl+N, phosphatiert / Steel+N, phosphatised; FKM | FK 40-3 - daxs - 12              | 4 O-Ring Dichtung / O-ring sealing                            |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FK 40-3 - daxs - 41              | 5 Schrauben / Bolts <sup>2</sup>                              |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FK 40-3 - daxs - 44              | 6 Muttern / Nuts <sup>3</sup>                                 |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     | O-RING     | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|-----|-----|------------|--------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm] | b                              | d   | t   | d1  | l   | Pos. 4     | Pos. 5             |              | [kg]              | TYP DN-Serie daxs         |
| 0<br>PN 64      | 25   | 70                             | -   | 64  | 46  | 106 | 28,0x2,62  | M12x55             | 4            | 1,38              | FK 25-0 33,7x2,6          |
|                 | 32   | 80                             | -   | 72  | 55  | 122 | 43,0x3,00  | M12x65             | 4            | 2,17              | FK 32-0 42,4x2,6          |
|                 | 40   | 90                             | -   | 80  | 60  | 130 | 47,2x3,53  | M16x80             | 4            | 3,49              | FK 40-0 48,3x2,6          |
|                 | 50   | 100                            | -   | 98  | 76  | 153 | 56,7x3,53  | M16x100            | 4            | 5,23              | FK 50-0 60,3x2,9          |
|                 | 65   | 120                            | -   | 118 | 92  | 190 | 75,5x3,53  | M20x120            | 4            | 8,79              | FK 65-0 76,1x2,9          |
|                 | 80   | 150                            | -   | 145 | 110 | 210 | 85,1x5,33  | M24x130            | 4            | 14,8              | FK 80-0 88,9x3,2          |
|                 | 90   | 180                            | -   | 175 | 135 | 262 | 94,6x5,33  | M30x150            | 4            | 15,5              | FK 90-0 101,6x7,1         |
|                 | 100  | 180                            | -   | 175 | 135 | 262 | 106,0x5,33 | M30x150            | 4            | 26,3              | FK 100-0 114,3x3,6        |
|                 | 125  | -                              | 245 | 200 | 168 | 292 | 132,0x6,99 | M24x170            | 8            | 40,9              | FK 125-0 139,7x8,0        |
| 2<br>PN 160     | 150  | -                              | 300 | 245 | 205 | 372 | 157,5x6,99 | M30x200            | 8            | 73,2              | FK 150-0 168,3x10,0       |
|                 | 12   | 50                             | -   | 44  | 28  | 80  | 16,3x2,40  | M10x55             | 4            | 0,82              | FK 12-2 16,0x1,5          |
|                 | 16   | 60                             | -   | 54  | 38  | 94  | 20,3x2,40  | M10x55             | 4            | 1,14              | FK 16-2 20,0x2,5          |
|                 | 20   | 60                             | -   | 54  | 38  | 94  | 25,3x2,40  | M10x55             | 4            | 1,14              | FK 20-2 25,0x2,5          |
|                 | 25   | 70                             | -   | 64  | 46  | 106 | 28,0x2,62  | M12x55             | 4            | 1,61              | FK 25-2 30,0x3,0          |
|                 | 32   | 80                             | -   | 72  | 55  | 122 | 34,5x3,53  | M12x65             | 4            | 2,57              | FK 32-2 38,0x4,0          |
|                 | 40   | 90                             | -   | 80  | 60  | 130 | 46,2x3,53  | M16x80             | 4            | 3,60              | FK 40-2 48,3x4,0          |
|                 | 50   | 100                            | -   | 98  | 76  | 153 | 53,0x5,33  | M16x100            | 4            | 5,65              | FK 50-2 60,3x5,0          |
|                 | 65   | 120                            | -   | 118 | 92  | 190 | 69,0x5,33  | M20x120            | 4            | 9,67              | FK 65-2 76,1x6,3          |
|                 | 80   | 180                            | -   | 175 | 135 | 262 | 92,5x5,33  | M30x150            | 4            | 22,3              | FK 80-2 101,6x8,8         |
|                 | 100  | 180                            | -   | 175 | 135 | 262 | 106,0x5,33 | M30x150            | 4            | 28,1              | FK 100-2 114,3x10,0       |
|                 | 125  | -                              | 245 | 200 | 168 | 292 | 132,0x6,99 | M24x170            | 8            | 44,7              | FK 125-2 152,4x12,5       |
|                 | 150  | -                              | 300 | 245 | 205 | 372 | 157,5x6,99 | M30x200            | 8            | 80,0              | FK 150-2 177,8x16,0       |
|                 | 200  | -                              | 355 | 290 | 245 | 391 | 196,2x6,99 | M36x220            | 8            | 122,0             | FK 200-2 219,1x20,0       |

1 Lochbild der Serie 3 und 4 bis DN 80 gemäß Norm. | Hole pattern form series 3 and 4 to DN 80 according to standard.  
2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.  
3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung. | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.

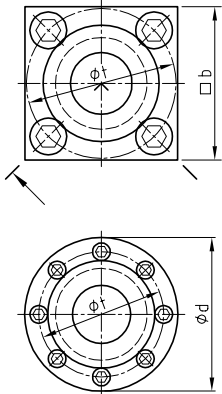
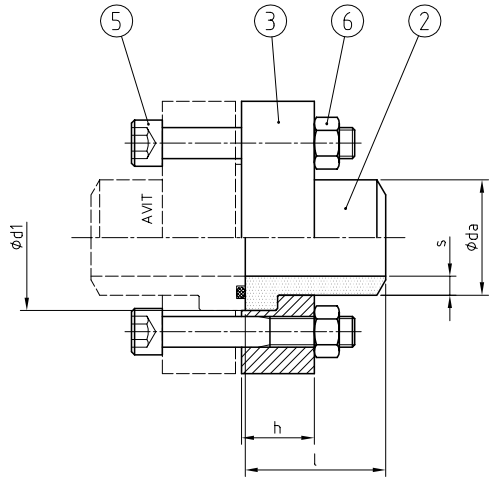
| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     | O-RING      | SCHRAUBEN<br>BOLTS     | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|-------------|------------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm]            | b                              | d   | t   | d1  | l   | Pos. 4      | Pos. 5                 |              | [kg]              | TYP DN-Serie daxis        |
| 3<br>PN 250     | 10              | 50                             | -   | 44  | 28  | 80  | 16,3x2,40   | M10x55                 | 4            | 0,85              | FK 10-3 16,0x2,0          |
|                 | 16              | 60                             | -   | 54  | 38  | 94  | 22,4x2,62   | M10x55                 | 4            | 1,21              | FK 16-3 21,3x2,6          |
|                 | 20              | 70                             | -   | 64  | 46  | 106 | 28,0x2,62   | M12x55                 | 4            | 1,64              | FK 20-3 26,9x3,6          |
|                 | 25              | 80                             | -   | 72  | 55  | 122 | 34,5x3,53   | M12x65                 | 4            | 2,58              | FK 25-3 33,7x4,5          |
|                 | 32              | 90                             | -   | 80  | 60  | 130 | 38,7x3,53   | M16x80                 | 4            | 3,88              | FK 32-3 42,4x5,6          |
|                 | 40              | 100                            | -   | 98  | 76  | 153 | 53,0x5,33   | M16x100                | 4            | 5,82              | FK 40-3 60,3x8,0          |
|                 | 50              | 120                            | -   | 118 | 92  | 190 | 61,5x5,33   | M20x120                | 4            | 10,5              | FK 50-3 76,1x10,0         |
|                 | 65              | 150                            | -   | 145 | 110 | 210 | 75,5x5,33   | M24x130                | 4            | 16,9              | FK 65-3 88,9x11,0         |
|                 | 80              | 180                            | -   | 175 | 135 | 262 | 92,5x5,33   | M30x150                | 4            | 30,6              | FK 80-3 101,6x12,5        |
|                 | 100             | -                              | 245 | 200 | 168 | 292 | 115,0x6,99  | M24x170                | 8            | 47,8              | FK 100-3 139,7x17,5       |
|                 | 125             | -                              | 300 | 245 | 205 | 372 | 147,5x6,99  | M30x200                | 8            | 84,3              | FK 125-3 168,3x20,0       |
|                 | 150             | -                              | 355 | 290 | 245 | 391 | 170,0x6,99  | M36x220                | 8            | 132,0             | FK 150-3 193,7x25,0       |
| 4<br>PN 315     | 10              | 50                             | -   | 44  | 28  | 80  | 16,3x2,40   | M10x55                 | 4            | 0,85              | FK 10-4 17,2x3,2          |
|                 | 16              | 60                             | -   | 54  | 38  | 94  | 22,4x2,62   | M10x55                 | 4            | 1,23              | FK 16-4 26,9x4,5          |
|                 | 20              | 70                             | -   | 64  | 46  | 106 | 28,0x2,62   | M12x55                 | 4            | 1,71              | FK 20-4 33,7x5,6          |
|                 | 25              | 80                             | -   | 72  | 55  | 122 | 34,5x3,53   | M12x65                 | 4            | 2,65              | FK 25-4 42,4x7,1          |
|                 | 32              | 90                             | -   | 80  | 60  | 130 | 38,7x3,53   | M16x80                 | 4            | 4,04              | FK 32-4 48,3x8,0          |
|                 | 40              | 100                            | -   | 98  | 76  | 153 | 53,0x5,33   | M16x100                | 4            | 6,09              | FK 40-4 60,3x10,0         |
|                 | 50              | 120                            | -   | 118 | 92  | 190 | 61,5x5,33   | M20x120                | 4            | 10,9              | FK 50-4 76,1x12,5         |
|                 | 65              | 150                            | -   | 145 | 110 | 210 | 75,5x5,33   | M24x130                | 4            | 17,8              | FK 65-4 88,9x14,2         |
|                 | 80              | 180                            | -   | 175 | 135 | 262 | 92,5x5,33   | M30x150                | 4            | 31,0              | FK 80-4 114,3x17,5        |
|                 | 100             | -                              | 245 | 200 | 168 | 292 | 115,0x6,99  | M24x170                | 8            | 50,7              | FK 100-4 139,7x22,2       |
|                 | 125             | -                              | 300 | 245 | 205 | 372 | 147,5x6,99  | M30x200                | 8            | 92,8              | FK 125-4 177,8x30,0       |
|                 | 150             | -                              | 355 | 290 | 245 | 391 | 170,0x6,99  | M36x220                | 8            | 140,5             | FK 150-4 219,1x36,0       |
| 5<br>PN 420     | 16              | 70                             | -   | 64  | 46  | 94  | 22,4x2,62   | M12x60                 | 4            | 1,84              | FK 16-5 26,9x5,6          |
|                 | 20              | 80                             | -   | 72  | 55  | 106 | 28,0x2,62   | M12x70                 | 4            | 2,83              | FK 20-5 33,7x6,3          |
|                 | 25              | 90                             | -   | 84  | 63  | 124 | 34,5x3,53   | M16x90                 | 4            | 4,47              | FK 25-5 42,4x8,0          |
|                 | 32              | 100                            | -   | 98  | 76  | 154 | 37,7x3,53   | M16x100                | 4            | 6,18              | FK 32-5 48,3x8,8          |
|                 | 40              | 120                            | -   | 118 | 92  | 190 | 50,17x5,33  | M20x120                | 4            | 11,4              | FK 40-5 60,3x11,0         |
|                 | 50              | 150                            | -   | 145 | 110 | 210 | 56,52x5,33  | M24x130                | 4            | 18,5              | FK 50-5 76,1x14,2         |
|                 | 65              | 180                            | -   | 175 | 135 | 262 | 75,57x5,33  | M30x150                | 4            | 33,0              | FK 65-5 101,6x20,0        |
|                 | 70              | 190                            | -   | 185 | 148 | 292 | 81,92x5,33  | M30x180                | 4            | 44,6              | FK 70-5 114,3x22,0        |
|                 | 80              | -                              | 245 | 200 | 172 | 292 | 92,5x5,33   | M24x170                | 8            | 54,1              | FK 80-5 139,7x28,0        |
|                 | 90 <sup>4</sup> | -                              | 300 | 245 | 205 | 372 | 103,0x5,33  | M30x200                | 8            | 96,7              | FK 90-5 152,4x30,0        |
|                 | 100             | -                              | 320 | 255 | 215 | 372 | 116,8x6,99  | M30x200                | 8            | 108,4             | FK 100-5 168,3x32,0       |
|                 | 125             | -                              | 390 | 315 | 273 | 392 | 147,5x6,99  | M36x220                | 8            | 181,2             | FK 125-5 219,1x45,0       |
| 6<br>PN 500     | 16              | 75                             | -   | 67  | 50  | 108 | 25,07x2,62  | M12x80 <sup>2,3</sup>  | 4            | 2,80              | FK 16-6 30,0x7,0          |
|                 | 20              | 90                             | -   | 84  | 63  | 128 | 31,34x3,53  | M16x100 <sup>2,3</sup> | 4            | 4,48              | FK 20-6 38,0x8,8          |
|                 | 25              | 120                            | -   | 101 | 76  | 158 | 37,69x3,53  | M20x120 <sup>2,3</sup> | 4            | 10,9              | FK 25-6 48,3x10,0         |
|                 | 32              | 140                            | -   | 125 | 90  | 178 | 44,04x3,53  | M24x140 <sup>2,3</sup> | 4            | 17,8              | FK 32-6 60,3x14,2         |
|                 | 40              | 150                            | -   | 142 | 110 | 208 | 56,52x5,33  | M24x150 <sup>2,3</sup> | 4            | 22,26             | FK 40-6 76,1x17,5         |
|                 | 50              | 180                            | -   | 168 | 125 | 228 | 62,87x5,33  | M30x180 <sup>2,3</sup> | 4            | 35,5              | FK 50-6 88,9x20,0         |
|                 | 65              | -                              | 245 | 188 | 154 | 268 | 75,57x5,33  | M24x180 <sup>2,3</sup> | 8            | 56,2              | FK 65-6 114,3x25,0        |
|                 | 80              | -                              | 315 | 228 | 182 | 328 | 97,79x5,33  | M36x210 <sup>2,3</sup> | 8            | 108,9             | FK 80-6 139,7x30,0        |
|                 | 100             | -                              | 360 | 264 | 218 | 378 | 116,84x6,99 | M36x240 <sup>2,3</sup> | 12           | 173,3             | FK 100-6 168,3x36,0       |
|                 | 125             | -                              | 420 | 330 | 275 | 412 | 132,72x6,99 | M42x260 <sup>2,3</sup> | 12           | 263,8             | FK 125-6 219,1x50,0       |
|                 | 150             | -                              | 490 | 395 | 340 | 468 | 177,17x6,99 | M42x280 <sup>2,3</sup> | 12           | 363,9             | FK 150-6 273,0x60,0       |

2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.

3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.

4 Frühere Größe DN 100! | Former size DN 100!





AVIT ≈ ISO 6164 <sup>1</sup>

- Mit 2 mm Sicherheits-Flansch-Zentrierung
  - Ausgelegt für schwellige Beanspruchungen
  - Leichte Montage durch Losflanschsystem
- 
- With 2 mm safety-flange-centring
  - Designed for dynamic loads
  - Easy assembly by flange clamp system

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-** |
|----------------------------------------------------|----------------------|
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FG 40-3 - daxs - 01  |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FG 40-3 - daxs - 02  |
| Stahl+N, phosphatiert / Steel+N, phosphatised; NBR | FG 40-3 - daxs - 11  |
| Stahl+N, phosphatiert / Steel+N, phosphatised; FKM | FG 40-3 - daxs - 12  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FG 40-3 - daxs - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FG 40-3 - daxs - 44  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description         |
|------|-----------------------------------|
| 2    | Gegenflanschbund / Counter flange |
| 3    | Losflansch / Flange clamp         |
| 5    | Schrauben / Bolts <sup>2</sup>    |
| 6    | Muttern / Nuts <sup>3</sup>       |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     |         | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT   | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|-----|-----|-----|---------|--------------------|--------------|---------------------|---------------------------|
| [bar]           | [mm] | LW                             | b   | d   | t   | d1  | l   | h       | Pos. 5             |              | [kg]                | TYP DN-Serie daxis        |
| 0<br>PN 64      | 25   | 24                             | 70  | -   | 64  | 46  | 50  | 19      | M12x55             | 4            | 0,82                | FG 25-0 33,7x2,6          |
|                 | 32   | 37                             | 80  | -   | 72  | 55  | 58  | 24      | M12x65             | 4            | 1,21                | FG 32-0 42,4x2,6          |
|                 | 40   | 41,5                           | 90  | -   | 80  | 60  | 62  | 29      | M16x80             | 4            | 2,03                | FG 40-0 48,3x2,6          |
|                 | 50   | 51                             | 100 | -   | 98  | 76  | 73  | 38      | M16x100            | 4            | 2,87                | FG 50-0 60,3x2,9          |
|                 | 65   | 70                             | 120 | -   | 118 | 92  | 92  | 48      | M20x120            | 4            | 4,94                | FG 65-0 76,1x2,9          |
|                 | 80   | 78,5                           | 150 | -   | 145 | 110 | 101 | 48      | M24x130            | 4            | 8,31                | FG 80-0 88,9x3,2          |
|                 | 90   | 87,5                           | 180 | -   | 175 | 135 | 127 | 58      | M30x150            | 4            | 10,3                | FG 90-0 101,6x7,1         |
|                 | 100  | 99                             | 180 | -   | 175 | 135 | 127 | 58      | M30x150            | 4            | 14,9                | FG 100-0 114,3x3,6        |
|                 | 125  | 124                            | -   | 245 | 200 | 168 | 142 | 68      | M24x170            | 8            | 22,2                | FG 125-0 139,7x8,0        |
| 150             | 148  | -                              | 300 | 245 | 205 | 182 | 78  | M30x200 | 8                  | 40,1         | FG 150-0 168,3x10,0 |                           |
| 2<br>PN 160     | 12   | 12                             | 50  | -   | 44  | 28  | 37  | 19      | M10x55             | 4            | 0,50                | FG 12-2 16,0x1,5          |
|                 | 16   | 15                             | 60  | -   | 54  | 38  | 44  | 19      | M10x55             | 4            | 0,65                | FG 16-2 20,0x2,5          |
|                 | 20   | 20                             | 60  | -   | 54  | 38  | 44  | 19      | M10x55             | 4            | 0,65                | FG 20-2 25,0x2,5          |
|                 | 25   | 24                             | 70  | -   | 64  | 46  | 50  | 19      | M12x55             | 4            | 0,92                | FG 25-2 30,0x3,0          |
|                 | 32   | 28,5                           | 80  | -   | 72  | 55  | 58  | 24      | M12x70             | 4            | 1,39                | FG 32-2 38,0x4,0          |
|                 | 40   | 40                             | 90  | -   | 80  | 60  | 62  | 29      | M16x80             | 4            | 2,07                | FG 40-2 48,3x4,0          |
|                 | 50   | 46                             | 100 | -   | 98  | 76  | 73  | 38      | M16x100            | 4            | 3,06                | FG 50-2 60,3x5,0          |
|                 | 65   | 62                             | 120 | -   | 118 | 92  | 92  | 48      | M20x120            | 4            | 5,33                | FG 65-2 76,1x6,3          |
|                 | 80   | 84                             | 180 | -   | 175 | 135 | 127 | 58      | M30x150            | 4            | 12,8                | FG 80-2 101,6x8,8         |
|                 | 100  | 94,5                           | 180 | -   | 175 | 135 | 127 | 58      | M30x150            | 4            | 15,7                | FG 100-2 114,3x10,0       |
|                 | 125  | 122                            | -   | 245 | 200 | 168 | 142 | 68      | M24x170            | 8            | 23,8                | FG 125-2 152,4x12,5       |
|                 | 150  | 144                            | -   | 300 | 245 | 205 | 182 | 78      | M30x200            | 8            | 43,1                | FG 150-2 177,8x16,0       |
|                 | 200  | 179                            | -   | 355 | 290 | 245 | 191 | 85      | M36x220            | 8            | 66,5                | FG 200-2 219,1x20,0       |

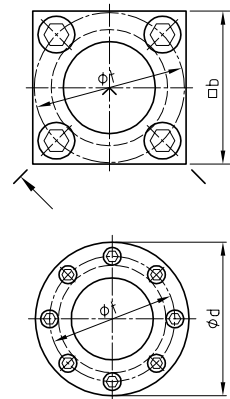
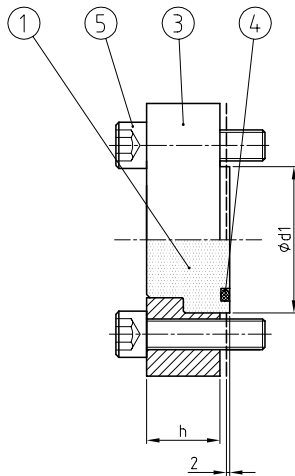
1 Lochbild der Serie 3 und 4 bis DN 80 gemäß Norm. | Hole pattern form series 3 and 4 to DN 80 according to standard.  
2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.  
3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung. | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     |     | SCHRAUBEN<br>BOLTS     | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|-----|-----|------------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm]            | LW                             | b   | d   | t   | d1  | l   | h   | Pos. 5                 |              | [kg]              | TYP DN-Serie daxis        |
| 3<br>PN 250     | 10              | 11                             | 50  | -   | 44  | 28  | 37  | 19  | M10x55                 | 4            | 0,51              | FG 10-3 16,0x2,0          |
|                 | 16              | 16                             | 60  | -   | 54  | 38  | 44  | 19  | M10x55                 | 4            | 0,68              | FG 16-3 21,3x2,6          |
|                 | 20              | 20                             | 70  | -   | 64  | 46  | 50  | 19  | M12x55                 | 4            | 0,93              | FG 20-3 26,9x3,6          |
|                 | 25              | 24,5                           | 80  | -   | 72  | 55  | 58  | 24  | M12x65                 | 4            | 1,39              | FG 25-3 33,7x4,5          |
|                 | 32              | 31                             | 90  | -   | 80  | 60  | 62  | 29  | M16x80                 | 4            | 2,20              | FG 32-3 42,4x5,6          |
|                 | 40              | 44,5                           | 100 | -   | 98  | 76  | 73  | 38  | M16x100                | 4            | 3,14              | FG 40-3 60,3x8,0          |
|                 | 50              | 54,5                           | 120 | -   | 118 | 92  | 92  | 48  | M20x120                | 4            | 5,70              | FG 50-3 76,1x10,0         |
|                 | 65              | 67                             | 150 | -   | 145 | 110 | 101 | 48  | M24x130                | 4            | 9,24              | FG 65-3 88,9x11,0         |
|                 | 80              | 76,5                           | 180 | -   | 175 | 135 | 127 | 58  | M30x150                | 4            | 16,8              | FG 80-3 101,6x12,5        |
|                 | 100             | 105                            | -   | 245 | 200 | 168 | 142 | 68  | M24x170                | 8            | 25,2              | FG 100-3 139,7x17,5       |
|                 | 125             | 128,5                          | -   | 300 | 245 | 205 | 182 | 78  | M30x200                | 8            | 45,1              | FG 125-3 168,3x20,0       |
|                 | 150             | 144                            | -   | 355 | 290 | 245 | 191 | 85  | M36x220                | 8            | 71,1              | FG 150-3 193,7x25,0       |
| 4<br>PN 315     | 175             | 184                            | -   | 450 | 370 | 320 | 214 | 105 | M36x260                | 8            | 120,7             | FG 175-3 244,5x30,0       |
|                 | 200             | 201                            | -   | 490 | 395 | 340 | 227 | 116 | M42x280                | 12           | 177,6             | FG 200-3 273,0x36,0       |
|                 | 10              | 11                             | 50  | -   | 44  | 28  | 37  | 19  | M10x55                 | 4            | 0,51              | FG 10-4 17,2x3,2          |
|                 | 16              | 17,5                           | 60  | -   | 54  | 38  | 44  | 19  | M10x55                 | 4            | 0,68              | FG 16-4 26,9x4,5          |
|                 | 20              | 22,5                           | 70  | -   | 64  | 46  | 50  | 19  | M12x55                 | 4            | 0,95              | FG 20-4 33,7x5,6          |
|                 | 25              | 28                             | 80  | -   | 72  | 55  | 58  | 24  | M12x65                 | 4            | 1,42              | FG 25-4 42,4x7,1          |
|                 | 32              | 32,5                           | 90  | -   | 80  | 60  | 62  | 29  | M16x80                 | 4            | 2,27              | FG 32-4 48,3x8,0          |
|                 | 40              | 40,5                           | 100 | -   | 98  | 76  | 73  | 38  | M16x100                | 4            | 3,26              | FG 40-4 60,3x10,0         |
|                 | 50              | 51                             | 120 | -   | 118 | 92  | 92  | 48  | M20x120                | 4            | 5,90              | FG 50-4 76,1x12,5         |
|                 | 65              | 60,5                           | 150 | -   | 145 | 110 | 101 | 48  | M24x130                | 4            | 9,65              | FG 65-4 88,9x14,2         |
|                 | 80              | 79,5                           | 180 | -   | 175 | 135 | 127 | 58  | M30x150                | 4            | 17,1              | FG 80-4 114,3x17,5        |
|                 | 100             | 95,5                           | -   | 245 | 200 | 168 | 142 | 68  | M24x170                | 8            | 26,5              | FG 100-4 139,7x22,2       |
| 5<br>PN 420     | 125             | 118                            | -   | 300 | 245 | 205 | 182 | 78  | M30x200                | 8            | 48,8              | FG 125-4 177,8x30,0       |
|                 | 150             | 147                            | -   | 355 | 290 | 245 | 191 | 85  | M36x220                | 8            | 74,9              | FG 150-4 219,1x36,0       |
|                 | 175             | 165                            | -   | 450 | 370 | 320 | 214 | 105 | M36x260                | 8            | 127,7             | FG 175-4 244,5x40,0       |
|                 | 200             | 183                            | -   | 490 | 395 | 340 | 227 | 116 | M42x280                | 12           | 187,4             | FG 200-4 273,0x45,0       |
|                 | 225             | 224                            | -   | 530 | 440 | 384 | 245 | 126 | M42x300                | 12           | 233,2             | FG 225-4 323,9x50,0       |
|                 | 250             | 246                            | -   | 580 | 480 | 424 | 263 | 136 | M42x320                | 12           | 271,8             | FG 250-4 355,6x55,0       |
|                 | 16              | 15,5                           | 70  | -   | 64  | 46  | 44  | 22  | M12x60                 | 4            | 1,02              | FG 16-5 26,9x5,6          |
|                 | 20              | 21                             | 80  | -   | 72  | 55  | 50  | 26  | M12x70                 | 4            | 1,46              | FG 20-5 33,7x6,3          |
|                 | 25              | 26,5                           | 90  | -   | 84  | 63  | 59  | 32  | M16x90                 | 4            | 2,47              | FG 25-5 42,4x8,0          |
|                 | 32              | 31                             | 100 | -   | 98  | 76  | 74  | 38  | M16x100                | 4            | 3,31              | FG 32-5 48,3x8,8          |
|                 | 40              | 38,5                           | 120 | -   | 118 | 92  | 92  | 48  | M20x120                | 4            | 6,14              | FG 40-5 60,3x11,0         |
|                 | 50              | 48                             | 150 | -   | 145 | 110 | 101 | 48  | M24x130                | 4            | 9,98              | FG 50-5 76,1x14,2         |
| 6<br>PN 500     | 65              | 61,5                           | 180 | -   | 175 | 135 | 127 | 58  | M30x150                | 4            | 17,9              | FG 65-5 101,6x20,0        |
|                 | 70              | 70                             | 190 | -   | 185 | 148 | 142 | 64  | M30x180                | 4            | 25,9              | FG 70-5 114,3x22,0        |
|                 | 80              | 83                             | -   | 245 | 200 | 172 | 142 | 68  | M24x170                | 8            | 28,1              | FG 80-5 139,7x28,0        |
|                 | 90 <sup>4</sup> | 92,5                           | -   | 300 | 245 | 205 | 182 | 78  | M30x200                | 8            | 52,3              | FG 90-5 152,4x30,0        |
|                 | 100             | 104                            | -   | 320 | 255 | 215 | 182 | 78  | M30x200                | 8            | 55,7              | FG 100-5 168,3x32,0       |
|                 | 125             | 129                            | -   | 390 | 315 | 273 | 192 | 86  | M36x220                | 8            | 93,9              | FG 125-5 219,1x45,0       |
|                 | 150             | 163                            | -   | 450 | 375 | 328 | 202 | 110 | M36x280                | 12           | 155,2             | FG 150-5 273,0x55,0       |
|                 | 200             | 193                            | -   | 570 | 476 | 426 | 292 | 140 | M42x340                | 12           | 300,8             | FG 200-5 323,9x65,0       |
|                 | 16              | 16                             | 75  | -   | 67  | 50  | 53  | 30  | M12x80 <sup>2,3</sup>  | 4            | 1,52              | FG 16-6 30,0x7,0          |
|                 | 20              | 20,5                           | 90  | -   | 84  | 63  | 63  | 37  | M16x100 <sup>2,3</sup> | 4            | 2,52              | FG 20-6 38,0x8,8          |
|                 | 25              | 28,5                           | 120 | -   | 101 | 76  | 78  | 47  | M20x120 <sup>2,3</sup> | 4            | 5,98              | FG 25-6 48,3x10,0         |
|                 | 32              | 32                             | 140 | -   | 125 | 90  | 88  | 55  | M24x140 <sup>2,3</sup> | 4            | 9,83              | FG 32-6 60,3x14,2         |
| 6<br>PN 500     | 40              | 41                             | 150 | -   | 142 | 110 | 103 | 60  | M24x150 <sup>2,3</sup> | 4            | 11,9              | FG 40-6 76,1x17,5         |
|                 | 50              | 49                             | 180 | -   | 168 | 125 | 113 | 68  | M30x180 <sup>2,3</sup> | 4            | 19,4              | FG 50-6 88,9x20,0         |
|                 | 65              | 64,5                           | -   | 245 | 188 | 154 | 133 | 74  | M24x180 <sup>2,3</sup> | 8            | 26,6              | FG 65-6 114,3x25,0        |
|                 | 80              | 80                             | -   | 315 | 228 | 182 | 163 | 82  | M36x210 <sup>2,3</sup> | 8            | 60,6              | FG 80-6 139,7x30,0        |
|                 | 100             | 98,5                           | -   | 360 | 264 | 218 | 188 | 98  | M36x240 <sup>2,3</sup> | 12           | 96,6              | FG 100-6 168,3x36,0       |
|                 | 125             | 119                            | -   | 420 | 330 | 275 | 202 | 105 | M42x260 <sup>2,3</sup> | 12           | 149,3             | FG 125-6 219,1x50,0       |
|                 | 150             | 163                            | -   | 490 | 395 | 340 | 231 | 116 | M42x280 <sup>2,3</sup> | 12           | 193,5             | FG 150-6 273,0x60,0       |

2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.

3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung. | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.

4 Frühere Größe DN 100! | Former size DN 100!



AVIT ≈ ISO 6164 <sup>1</sup>

- Für 2 mm Sicherheits-Flansch-Zentrierung
- Auch mit Messanschluss G 1/4" lieferbar
- For 2 mm safety-flange-centring
- Also available with diagnostic port thread G 1/4"

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-** |
|----------------------------------------------------|-----------------|
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FAB 40-4 - 01   |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FAB 40-4 - 02   |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FAB 40-4 - 41   |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FAB 40-4 - 44   |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

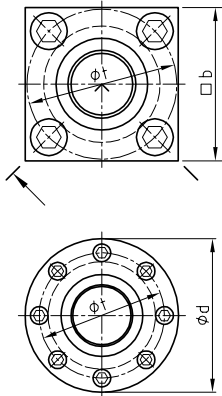
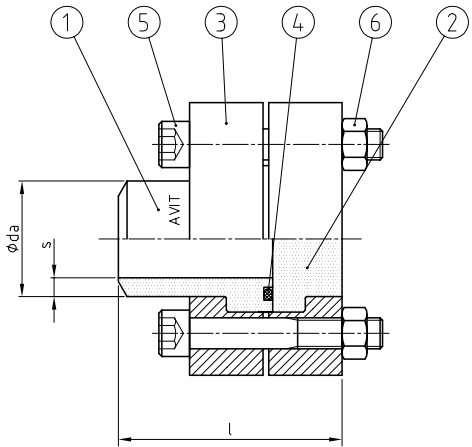
| Pos. | Bezeichnung / Description                                                 |
|------|---------------------------------------------------------------------------|
| 1    | Blindstopfen mit O-Ring Nut (nicht +N) / Plug with O-ring groove (not +N) |
| 3    | Losflansch / Flange clamp                                                 |
| 4    | O-Ring Dichtung / O-ring sealing                                          |
| 5    | Schrauben / Bolts <sup>2</sup>                                            |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |    | O-RING     | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|-----|----|------------|--------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm] | b                              | d   | t   | d1  | h  | Pos. 4     | Pos. 5             |              | [kg]              | TYP DN-Serie              |
| 0<br>PN 64      | 25   | 70                             | -   | 64  | 46  | 19 | 28,0x2,62  | M12x40             | 4            | 0,90              | FAB 25-0                  |
|                 | 32   | 80                             | -   | 72  | 55  | 24 | 43,0x3,00  | M12x45             | 4            | 1,40              | FAB 32-0                  |
|                 | 40   | 90                             | -   | 80  | 60  | 29 | 47,2x3,53  | M16x55             | 4            | 1,97              | FAB 40-0                  |
|                 | 50   | 100                            | -   | 98  | 76  | 38 | 56,7x3,53  | M16x60             | 4            | 2,89              | FAB 50-0                  |
|                 | 65   | 120                            | -   | 118 | 92  | 48 | 75,5x3,53  | M20x75             | 4            | 4,90              | FAB 65-0                  |
|                 | 80   | 150                            | -   | 145 | 110 | 48 | 85,1x5,30  | M24x80             | 4            | 8,23              | FAB 80-0                  |
|                 | 90   | 180                            | -   | 175 | 135 | 58 | 94,6x5,30  | M30x100            | 4            | 15,50             | FAB 90-0                  |
|                 | 100  | 180                            | -   | 175 | 135 | 58 | 106,0x5,33 | M30x100            | 4            | 14,74             | FAB 100-0                 |
|                 | 125  | -                              | 245 | 200 | 168 | 68 | 132,0x6,99 | M24x100            | 8            | 22,66             | FAB 125-0                 |
| 2<br>PN 160     | 150  | -                              | 300 | 245 | 205 | 78 | 157,5x6,99 | M30x120            | 8            | 40,67             | FAB 150-0                 |
|                 | 12   | 50                             | -   | 44  | 28  | 19 | 16,3x2,40  | M10x35             | 4            | 0,46              | FAB 12-2                  |
|                 | 16   | 60                             | -   | 54  | 38  | 19 | 20,3x2,40  | M10x35             | 4            | 0,62              | FAB 16-2                  |
|                 | 20   | 60                             | -   | 54  | 38  | 19 | 25,3x2,40  | M10x35             | 4            | 0,62              | FAB 20-2                  |
|                 | 25   | 70                             | -   | 64  | 46  | 19 | 28,0x2,62  | M12x40             | 4            | 0,89              | FAB 25-2                  |
|                 | 32   | 80                             | -   | 72  | 55  | 24 | 34,5x3,53  | M12x45             | 4            | 1,40              | FAB 32-2                  |
|                 | 40   | 90                             | -   | 80  | 60  | 29 | 46,2x3,53  | M16x55             | 4            | 2,02              | FAB 40-2                  |
|                 | 50   | 100                            | -   | 98  | 76  | 38 | 53,0x5,33  | M16x60             | 4            | 3,12              | FAB 50-2                  |
|                 | 65   | 120                            | -   | 118 | 92  | 48 | 69,0x5,33  | M20x75             | 4            | 5,38              | FAB 65-2                  |
|                 | 80   | 180                            | -   | 175 | 135 | 58 | 92,5x5,33  | M30x100            | 4            | 12,80             | FAB 80-2                  |
|                 | 100  | 180                            | -   | 175 | 135 | 58 | 106,0x5,33 | M30x100            | 4            | 15,71             | FAB 100-2                 |
|                 | 125  | -                              | 245 | 200 | 168 | 68 | 132,0x6,99 | M24x100            | 8            | 24,71             | FAB 125-2                 |
|                 | 150  | -                              | 300 | 245 | 205 | 78 | 157,5x6,99 | M30x120            | 8            | 44,21             | FAB 150-2                 |
|                 | 200  | -                              | 355 | 290 | 245 | 85 | 196,2x6,99 | M36x140            | 8            | 66,58             | FAB 200-2                 |

1 Lochbild der Serie 3 und 4 bis DN 80 gemäß Norm. | Hole pattern form series 3 and 4 to DN 80 according to standard.  
2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     | O-RING      | SCHRAUBEN<br>BOLTS   | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|-------------|----------------------|--------------|-------------------|---------------------------|
|                 |                 | b                              | d   | t   | d1  | h   |             |                      |              |                   |                           |
| [bar]           | [mm]            |                                |     |     |     |     | Pos. 4      | Pos. 5               |              | [kg]              | TYP DN-Serie              |
| 3<br>PN250      |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
|                 |                 |                                |     |     |     |     |             |                      |              |                   |                           |
| 4<br>PN 315     | 10              | 50                             | -   | 44  | 28  | 19  | 16,3x2,40   | M10x35               | 4            | 0,48              | FAB 10-4                  |
|                 | 16              | 60                             | -   | 54  | 38  | 19  | 22,4x2,62   | M10x35               | 4            | 0,70              | FAB 16-4                  |
|                 | 20              | 70                             | -   | 64  | 46  | 19  | 28,0x2,62   | M12x40               | 4            | 0,94              | FAB 20-4                  |
|                 | 25              | 80                             | -   | 72  | 55  | 24  | 34,5x3,53   | M12x45               | 4            | 1,45              | FAB 25-4                  |
|                 | 32              | 90                             | -   | 80  | 60  | 29  | 38,7x3,53   | M16x55               | 4            | 2,27              | FAB 32-4                  |
|                 | 40              | 100                            | -   | 98  | 76  | 38  | 53,0x5,33   | M16x60               | 4            | 3,37              | FAB 40-4                  |
|                 | 50              | 120                            | -   | 118 | 92  | 48  | 61,5x5,33   | M20x75               | 4            | 6,10              | FAB 50-4                  |
|                 | 65              | 150                            | -   | 145 | 110 | 48  | 75,57x5,33  | M24x80               | 4            | 9,30              | FAB 65-4                  |
|                 | 80              | 180                            | -   | 175 | 135 | 58  | 92,5x5,33   | M30x100              | 4            | 17,36             | FAB 80-4                  |
|                 | 100             | -                              | 245 | 200 | 168 | 68  | 115,0x6,99  | M24x100              | 8            | 28,13             | FAB 100-4                 |
|                 | 125             | -                              | 300 | 245 | 205 | 78  | 147,5x6,99  | M30x120              | 8            | 51,62             | FAB 125-4                 |
|                 | 150             | -                              | 355 | 290 | 245 | 85  | 170,0x6,99  | M36x140              | 8            | 78,46             | FAB 150-4                 |
|                 | 175             | -                              | 450 | 370 | 320 | 105 | 196,2x6,99  | M36x150              | 8            | 135,7             | FAB 175-4                 |
|                 | 200             | -                              | 490 | 395 | 340 | 116 | 215,3x6,99  | M42x170              | 12           | 194,6             | FAB 200-4                 |
|                 | 225             | -                              | 530 | 440 | 384 | 126 | 253,4x6,99  | M42x180              | 12           | 243,5             | FAB 225-4                 |
|                 | 250             | -                              | 580 | 480 | 424 | 136 | 278,77x6,99 | M42x190              | 12           | 284,0             | FAB 250-4                 |
| 5<br>PN 420     | 16              | 70                             | -   | 64  | 46  | 22  | 22,4x2,62   | M12x35               | 4            | 1,05              | FAB 16-5                  |
|                 | 20              | 80                             | -   | 72  | 55  | 26  | 28,0x2,62   | M12x40               | 4            | 1,48              | FAB 20-5                  |
|                 | 25              | 90                             | -   | 84  | 63  | 32  | 34,5x3,53   | M16x55               | 4            | 2,50              | FAB 25-5                  |
|                 | 32              | 100                            | -   | 98  | 76  | 38  | 37,7x3,53   | M16x60               | 4            | 3,41              | FAB 32-5                  |
|                 | 40              | 120                            | -   | 118 | 92  | 48  | 50,17x5,33  | M20x75               | 4            | 6,31              | FAB 40-5                  |
|                 | 50              | 150                            | -   | 145 | 110 | 48  | 56,52x5,33  | M24x80               | 4            | 10,23             | FAB 50-5                  |
|                 | 65              | 180                            | -   | 175 | 135 | 58  | 75,57x5,33  | M30x100              | 4            | 18,43             | FAB 65-5                  |
|                 | 70              | 190                            | -   | 185 | 148 | 64  | 81,92x5,33  | M30x100              | 4            | 21,05             | FAB 70-5                  |
|                 | 80              | -                              | 245 | 200 | 172 | 68  | 92,5x5,33   | M24x100              | 8            | 29,96             | FAB 80-5                  |
|                 | 90 <sup>3</sup> | -                              | 300 | 245 | 205 | 78  | 103,0x5,33  | M30x120              | 8            | 48,20             | FAB 90-5                  |
|                 | 100             | -                              | 320 | 255 | 215 | 78  | 116,8x6,99  | M30x120              | 8            | 58,80             | FAB 100-5                 |
|                 | 125             | -                              | 390 | 315 | 273 | 86  | 147,5x6,99  | M36x140              | 8            | 99,50             | FAB 125-5                 |
|                 | 150             | -                              | 450 | 375 | 328 | 110 | 177,17x6,99 | M36x160              | 12           | 154,5             | FAB 150-5                 |
|                 | 200             | -                              | 570 | 476 | 426 | 140 | 227,97x6,99 | M42x200              | 12           | 324,9             | FAB 200-5                 |
| 6<br>PN 500     | 16              | 75                             | -   | 67  | 50  | 30  | 25,07x2,62  | M12x50 <sup>2</sup>  | 4            | 1,52              | FAB 16-6                  |
|                 | 20              | 90                             | -   | 84  | 63  | 37  | 31,34x3,53  | M16x60 <sup>2</sup>  | 4            | 2,49              | FAB 20-6                  |
|                 | 25              | 120                            | -   | 101 | 76  | 47  | 37,69x3,53  | M20x75 <sup>2</sup>  | 4            | 5,99              | FAB 25-6                  |
|                 | 32              | 140                            | -   | 125 | 90  | 55  | 44,04x3,53  | M24x90 <sup>2</sup>  | 4            | 9,84              | FAB 32-6                  |
|                 | 40              | 150                            | -   | 142 | 110 | 60  | 56,52x5,33  | M24x95 <sup>2</sup>  | 4            | 12,25             | FAB 40-6                  |
|                 | 50              | 180                            | -   | 168 | 125 | 68  | 62,87x5,33  | M30x110 <sup>2</sup> | 4            | 19,66             | FAB 50-6                  |
|                 | 65              | -                              | 245 | 188 | 154 | 74  | 75,57x5,33  | M24x110 <sup>2</sup> | 8            | 30,80             | FAB 65-6                  |
|                 | 80              | -                              | 315 | 228 | 182 | 82  | 97,79x5,33  | M36x130 <sup>2</sup> | 8            | 60,58             | FAB 80-6                  |
|                 | 100             | -                              | 360 | 264 | 218 | 98  | 116,84x6,99 | M36x150 <sup>2</sup> | 12           | 96,95             | FAB 100-6                 |
|                 | 125             | -                              | 420 | 330 | 275 | 105 | 132,72x6,99 | M42x160 <sup>2</sup> | 12           | 144,3             | FAB 125-6                 |
|                 | 150             | -                              | 490 | 395 | 340 | 116 | 177,17x6,99 | M42x170 <sup>2</sup> | 12           | 201,7             | FAB 150-6                 |

2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.  
3 Frühere Größe DN 100! | Former size DN 100!



AVIT ≈ ISO 6164 <sup>1</sup>

- Mit 2 mm Sicherheits-Flansch-Zentrierung
- Auch mit Messanschluss G 1/4" lieferbar
- With 2 mm safety-flange-centring
- Also available with diagnostic port thread G 1/4"

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*  |
|----------------------------------------------------|----------------------|
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FKB 40-3 - daxs - 01 |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FKB 40-3 - daxs - 02 |
| Stahl+N, phosphatiert / Steel+N, phosphatised; NBR | FKB 40-3 - daxs - 11 |
| Stahl+N, phosphatiert / Steel+N, phosphatised; FKM | FKB 40-3 - daxs - 12 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FKB 40-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FKB 40-3 - daxs - 44 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                                |
|------|--------------------------------------------------------------------------|
| 1    | Flanschbund mit O-Ring Nut / Flange head with O-ring groove              |
| 2    | Gegenblindstopfen, glatt (nicht +N) / Counter blind plug, plain (not +N) |
| 3    | Losflansche / Flange clamps                                              |
| 4    | O-Ring Dichtung / O-ring sealing                                         |
| 5    | Schrauben / Bolts <sup>2</sup>                                           |
| 6    | Muttern / Nuts <sup>3</sup>                                              |

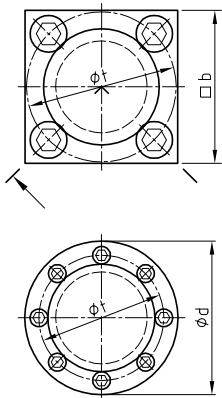
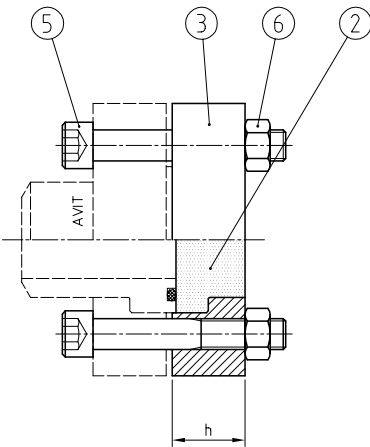
| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     | O-RING     | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|-----|------------|--------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm] | b                              | d   | t   | l   | Pos. 4     | Pos. 5             |              | [kg]              | TYP DN-Serie daxs         |
| 0<br>PN 64      | 25   | 70                             | -   | 64  | 73  | 28,0x2,62  | M12x55             | 4            | 1,38              | FKB 25-0 33,7x2,6         |
|                 | 32   | 80                             | -   | 72  | 86  | 43,0x3,00  | M12x65             | 4            | 2,17              | FKB 32-0 42,4x2,6         |
|                 | 40   | 90                             | -   | 80  | 95  | 47,2x3,53  | M16x80             | 4            | 3,49              | FKB 40-0 48,3x2,6         |
|                 | 50   | 100                            | -   | 98  | 116 | 56,7x3,53  | M16x100            | 4            | 5,23              | FKB 50-0 60,3x2,9         |
|                 | 65   | 120                            | -   | 118 | 144 | 75,5x3,53  | M20x120            | 4            | 8,79              | FKB 65-0 76,1x2,9         |
|                 | 80   | 150                            | -   | 145 | 155 | 85,1x5,33  | M24x130            | 4            | 14,8              | FKB 80-0 88,9x3,2         |
|                 | 90   | 180                            | -   | 175 | 191 | 94,6x5,33  | M30x150            | 4            | 15,5              | FKB 90-0 101,6x7,1        |
|                 | 100  | 180                            | -   | 175 | 191 | 106,0x5,33 | M30x150            | 4            | 26,3              | FKB 100-0 114,3x3,6       |
|                 | 125  | -                              | 245 | 200 | 216 | 132,0x6,99 | M24x170            | 8            | 40,9              | FKB 125-0 139,7x8,0       |
| 2<br>PN 160     | 150  | -                              | 300 | 245 | 266 | 157,5x6,99 | M30x200            | 8            | 73,2              | FKB 150-0 168,3x10,0      |
|                 | 12   | 50                             | -   | 44  | 60  | 16,3x2,40  | M10x55             | 4            | 0,82              | FKB 12-2 16,0x1,5         |
|                 | 16   | 60                             | -   | 54  | 67  | 20,3x2,40  | M10x55             | 4            | 1,14              | FKB 16-2 20,0x2,5         |
|                 | 20   | 60                             | -   | 54  | 67  | 25,3x2,40  | M10x55             | 4            | 1,14              | FKB 20-2 25,0x2,5         |
|                 | 25   | 70                             | -   | 64  | 73  | 28,0x2,62  | M12x55             | 4            | 1,61              | FKB 25-2 30,0x3,0         |
|                 | 32   | 80                             | -   | 72  | 86  | 34,5x3,53  | M12x70             | 4            | 2,57              | FKB 32-2 38,0x4,0         |
|                 | 40   | 90                             | -   | 80  | 95  | 46,2x3,53  | M16x80             | 4            | 3,60              | FKB 40-2 48,3x4,0         |
|                 | 50   | 100                            | -   | 98  | 116 | 53,0x5,33  | M16x100            | 4            | 5,65              | FKB 50-2 60,3x5,0         |
|                 | 65   | 120                            | -   | 118 | 144 | 69,0x5,33  | M20x120            | 4            | 9,67              | FKB 65-2 76,1x6,3         |
|                 | 80   | 180                            | -   | 175 | 191 | 92,5x5,33  | M30x150            | 4            | 22,3              | FKB 80-2 101,6x8,8        |
|                 | 100  | 180                            | -   | 175 | 191 | 106,0x5,33 | M30x150            | 4            | 28,1              | FKB 100-2 114,3x10,0      |
|                 | 125  | -                              | 245 | 200 | 216 | 132,0x6,99 | M24x170            | 8            | 44,7              | FKB 125-2 152,4x12,5      |
|                 | 150  | -                              | 300 | 245 | 266 | 157,5x6,99 | M30x200            | 8            | 80,0              | FKB 150-2 177,8x16,0      |
|                 | 200  | -                              | 355 | 290 | 283 | 196,2x6,99 | M36x220            | 8            | 122,0             | FKB 200-2 219,1x20,0      |

1 Lochbild der Serie 3 und 4 bis DN 80 gemäß Norm | Hole pattern form series 3 and 4 to DN 80 according to standard  
2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating  
3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     | O-RING      | SCHRAUBEN<br>BOLTS     | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-------------|------------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm]            | b                              | d   | t   | l   | Pos. 4      | Pos. 5                 |              | [kg]              | TYP DN-Serie daxis        |
| 3<br>PN 250     | 10              | 50                             | -   | 44  | 60  | 16,3x2,40   | M10x55                 | 4            | 0,85              | FKB 10-3 16,0x2,0         |
|                 | 16              | 60                             | -   | 54  | 67  | 22,4x2,62   | M10x55                 | 4            | 1,21              | FKB 16-3 21,3x2,6         |
|                 | 20              | 70                             | -   | 64  | 73  | 28,0x2,62   | M12x55                 | 4            | 1,64              | FKB 20-3 26,9x3,6         |
|                 | 25              | 80                             | -   | 72  | 86  | 34,5x3,53   | M12x65                 | 4            | 2,58              | FKB 25-3 33,7x4,5         |
|                 | 32              | 90                             | -   | 80  | 95  | 38,7x3,53   | M16x80                 | 4            | 3,88              | FKB 32-3 42,4x5,6         |
|                 | 40              | 100                            | -   | 98  | 116 | 53,0x5,33   | M16x100                | 4            | 5,82              | FKB 40-3 60,3x8,0         |
|                 | 50              | 120                            | -   | 118 | 144 | 61,5x5,33   | M20x120                | 4            | 10,5              | FKB 50-3 76,1x10,0        |
|                 | 65              | 150                            | -   | 145 | 155 | 75,57x5,33  | M24x130                | 4            | 16,9              | FKB 65-3 88,9x11,0        |
|                 | 80              | 180                            | -   | 175 | 191 | 92,5x5,33   | M30x150                | 4            | 30,6              | FKB 80-3 101,6x12,5       |
|                 | 100             | -                              | 245 | 200 | 216 | 115,0x6,99  | M24x170                | 8            | 47,8              | FKB 100-3 139,7x17,5      |
|                 | 125             | -                              | 300 | 245 | 266 | 147,5x6,99  | M30x200                | 8            | 84,3              | FKB 125-3 168,3x20,0      |
|                 | 150             | -                              | 355 | 290 | 283 | 170,0x6,99  | M36x220                | 8            | 132,0             | FKB 150-3 193,7x25,0      |
| 4<br>PN 315     | 175             | -                              | 450 | 370 | 323 | 196,2x6,99  | M36x260                | 8            | 234,0             | FKB 175-3 244,5x30,0      |
|                 | 200             | -                              | 490 | 395 | 351 | 215,3x6,99  | M42x280                | 12           | 331,0             | FKB 200-3 273,0x36,0      |
|                 | 10              | 50                             | -   | 44  | 60  | 16,3x2,40   | M10x55                 | 4            | 0,85              | FKB 10-4 17,2x3,2         |
|                 | 16              | 60                             | -   | 54  | 67  | 22,4x2,62   | M10x55                 | 4            | 1,23              | FKB 16-4 26,9x4,5         |
|                 | 20              | 70                             | -   | 64  | 73  | 28,0x2,62   | M12x55                 | 4            | 1,71              | FKB 20-4 33,7x5,6         |
|                 | 25              | 80                             | -   | 72  | 86  | 34,5x3,53   | M12x65                 | 4            | 2,65              | FKB 25-4 42,4x7,1         |
|                 | 32              | 90                             | -   | 80  | 95  | 38,7x3,53   | M16x80                 | 4            | 4,04              | FKB 32-4 48,3x8,0         |
|                 | 40              | 100                            | -   | 98  | 116 | 53,0x5,33   | M16x100                | 4            | 6,09              | FKB 40-4 60,3x10,0        |
|                 | 50              | 120                            | -   | 118 | 144 | 61,5x5,33   | M20x120                | 4            | 10,9              | FKB 50-4 76,1x12,5        |
|                 | 65              | 150                            | -   | 145 | 155 | 75,57x5,33  | M24x130                | 4            | 17,8              | FKB 65-4 88,9x14,2        |
|                 | 80              | 180                            | -   | 175 | 191 | 92,5x5,33   | M30x150                | 4            | 31,0              | FKB 80-4 114,3x17,5       |
|                 | 100             | -                              | 245 | 200 | 216 | 115,0x6,99  | M24x170                | 8            | 50,7              | FKB 100-4 139,7x22,2      |
| 5<br>PN 420     | 125             | -                              | 300 | 245 | 266 | 147,5x6,99  | M30x200                | 8            | 92,8              | FKB 125-4 177,8x30,0      |
|                 | 150             | -                              | 355 | 290 | 283 | 170,0x6,99  | M36x220                | 8            | 140,5             | FKB 150-4 219,1x36,0      |
|                 | 175             | -                              | 450 | 370 | 323 | 196,2x6,99  | M36x260                | 8            | 249,8             | FKB 175-4 244,5x40,0      |
|                 | 200             | -                              | 490 | 395 | 351 | 215,3x6,99  | M42x280                | 12           | 349,5             | FKB 200-4 273,0x45,0      |
|                 | 225             | -                              | 530 | 440 | 379 | 253,4x6,99  | M42x300                | 12           | 457,5             | FKB 225-4 323,9x50,0      |
|                 | 250             | -                              | 580 | 480 | 407 | 278,77x6,99 | M42x320                | 12           | 540,0             | FKB 250-4 355,6x55,0      |
|                 | 16              | 70                             | -   | 64  | 70  | 22,4x2,62   | M12x60                 | 4            | 1,84              | FKB 16-5 26,9x5,6         |
|                 | 20              | 80                             | -   | 72  | 80  | 28,0x2,62   | M12x70                 | 4            | 2,83              | FKB 20-5 33,7x6,3         |
|                 | 25              | 90                             | -   | 84  | 95  | 34,5x3,53   | M16x90                 | 4            | 4,47              | FKB 25-5 42,4x8,0         |
|                 | 32              | 100                            | -   | 98  | 116 | 37,7x3,53   | M16x100                | 4            | 6,18              | FKB 32-5 48,3x8,8         |
|                 | 40              | 120                            | -   | 118 | 144 | 50,17x5,33  | M20x120                | 4            | 11,4              | FKB 40-5 60,3x11,0        |
|                 | 50              | 150                            | -   | 145 | 155 | 56,52x5,33  | M24x130                | 4            | 18,5              | FKB 50-5 76,1x14,2        |
| 6<br>PN 500     | 65              | 180                            | -   | 175 | 191 | 75,57x5,33  | M30x150                | 4            | 33,0              | FKB 65-5 101,6x20,0       |
|                 | 70              | 190                            | -   | 185 | 216 | 81,92x5,33  | M30x100                | 4            | 28,7              | FKB 70-5 114,3x22,0       |
|                 | 80              | -                              | 245 | 200 | 216 | 92,5x5,33   | M24x170                | 8            | 54,1              | FKB 80-5 139,7x28,0       |
|                 | 90 <sup>4</sup> | -                              | 300 | 245 | 266 | 103,0x5,33  | M30x200                | 8            | 96,7              | FKB 90-5 152,4x30,0       |
|                 | 100             | -                              | 320 | 255 | 266 | 116,8x6,99  | M30x200                | 8            | 108,4             | FKB 100-5 168,3x32,0      |
|                 | 125             | -                              | 390 | 315 | 284 | 147,5x6,99  | M36x220                | 8            | 181,2             | FKB 125-5 219,1x45,0      |
|                 | 150             | -                              | 450 | 375 | 318 | 177,2x6,99  | M36x280                | 12           | 289,3             | FKB 150-5 273,0x55,0      |
|                 | 200             | -                              | 570 | 476 | 438 | 227,97x6,99 | M42x340                | 12           | 590,5             | FKB 200-5 325,0x65,0      |
|                 | 16              | 75                             | -   | 67  | 83  | 25,07x2,62  | M12x80 <sup>2,3</sup>  | 4            | 2,80              | FKB 16-6 30,0x7,0         |
|                 | 20              | 90                             | -   | 84  | 100 | 31,34x3,53  | M16x100 <sup>2,3</sup> | 4            | 4,48              | FKB 20-6 38,0x8,8         |
|                 | 25              | 120                            | -   | 101 | 125 | 37,69x3,53  | M20x120 <sup>2,3</sup> | 4            | 10,9              | FKB 25-6 48,3x10,0        |
|                 | 32              | 140                            | -   | 125 | 143 | 44,04x3,53  | M24x140 <sup>2,3</sup> | 4            | 17,8              | FKB 32-6 60,3x14,2        |
| 6<br>PN 500     | 40              | 150                            | -   | 142 | 163 | 56,52x5,33  | M24x150 <sup>2,3</sup> | 4            | 22,26             | FKB 40-6 76,1x17,5        |
|                 | 50              | 180                            | -   | 168 | 181 | 62,87x5,33  | M30x180 <sup>2,3</sup> | 4            | 35,5              | FKB 50-6 88,9x20,0        |
|                 | 65              | -                              | 245 | 188 | 207 | 75,57x5,33  | M24x180 <sup>2,3</sup> | 8            | 56,2              | FKB 65-6 114,3x25,0       |
|                 | 80              | -                              | 315 | 228 | 245 | 97,79x5,33  | M36x210 <sup>2,3</sup> | 8            | 108,9             | FKB 80-6 139,7x30,0       |
|                 | 100             | -                              | 360 | 264 | 286 | 116,84x6,99 | M36x240 <sup>2,3</sup> | 12           | 173,3             | FKB 100-6 168,3x36,0      |
|                 | 125             | -                              | 420 | 330 | 313 | 132,72x6,99 | M42x260 <sup>2,3</sup> | 12           | 263,8             | FKB 125-6 219,1x50,0      |
|                 | 150             | -                              | 490 | 395 | 351 | 177,17x6,99 | M42x280 <sup>2,3</sup> | 12           | 363,9             | FKB 150-6 273,0x60,0      |

2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.  
3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung. | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.  
4 Frühere Größe DN 100! | Former size DN 100!





AVIT ≈ ISO 6164 <sup>1</sup>

- Mit 2 mm Sicherheits-Flansch-Zentrierung
- Auch mit Messanschluss G 1/4" lieferbar
- With 2 mm safety-flange-centring
- Also available with diagnostic port thread G 1/4"

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface     |
|-----------------------------------------------|
| Stahl, phosphatiert / Steel, phosphatised     |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti |

BESTELLBEISPIEL  
ORDER EXAMPLE

| TYP DN-Serie-** |
|-----------------|
| FGB 40-4 - 01   |
| FGB 40-4 - 41   |

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                    |
|------|--------------------------------------------------------------|
| 2    | Gegenblindflansch (nicht +N) / Counter blind flange (not +N) |
| 3    | Losflansche / Flange clamps                                  |
| 5    | Schrauben / Bolts <sup>2</sup>                               |
| 6    | Muttern / Nuts <sup>3</sup>                                  |

| SERIE<br>SERIES | DN  | ABMESSUNGEN [mm]<br>DIMENSIONS |      |     |     |     | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----|--------------------------------|------|-----|-----|-----|--------------------|--------------|-------------------|---------------------------|
|                 |     | [bar]                          | [mm] | b   | d   | t   | d1                 | h            | Pos. 5            | TYP DN-Serie              |
| 0<br>PN 64      | 25  |                                | 70   | -   | 64  | 46  | 46                 | 19           | M12x55            | FGB 25-0                  |
|                 | 32  |                                | 80   | -   | 72  | 55  | 55                 | 24           | M12x65            | FGB 32-0                  |
|                 | 40  |                                | 90   | -   | 80  | 60  | 60                 | 29           | M16x80            | FGB 40-0                  |
|                 | 50  |                                | 100  | -   | 98  | 76  | 76                 | 38           | M16x100           | FGB 50-0                  |
|                 | 65  |                                | 120  | -   | 118 | 92  | 92                 | 48           | M20x120           | FGB 65-0                  |
|                 | 80  |                                | 150  | -   | 145 | 110 | 110                | 48           | M24x130           | FGB 80-0                  |
|                 | 90  |                                | 180  | -   | 175 | 135 | 135                | 58           | M30x150           | FGB 90-0                  |
|                 | 100 |                                | 180  | -   | 175 | 135 | 135                | 58           | M30x150           | FGB 100-0                 |
|                 | 125 |                                | -    | 245 | 200 | 168 | 168                | 68           | M24x170           | FGB 125-0                 |
|                 | 150 |                                | -    | 300 | 245 | 205 | 205                | 78           | M30x200           | FGB 150-0                 |
| 2<br>PN 160     | 12  |                                | 50   | -   | 44  | 28  | 28                 | 19           | M10x55            | FGB 12-2                  |
|                 | 16  |                                | 60   | -   | 54  | 38  | 38                 | 19           | M10x55            | FGB 16-2                  |
|                 | 20  |                                | 60   | -   | 54  | 38  | 38                 | 19           | M10x55            | FGB 20-2                  |
|                 | 25  |                                | 70   | -   | 64  | 46  | 46                 | 19           | M12x55            | FGB 25-2                  |
|                 | 32  |                                | 80   | -   | 72  | 55  | 55                 | 24           | M12x70            | FGB 32-2                  |
|                 | 40  |                                | 90   | -   | 80  | 60  | 60                 | 29           | M16x80            | FGB 40-2                  |
|                 | 50  |                                | 100  | -   | 98  | 76  | 76                 | 38           | M16x100           | FGB 50-2                  |
|                 | 65  |                                | 120  | -   | 118 | 92  | 92                 | 48           | M20x120           | FGB 65-2                  |
|                 | 80  |                                | 180  | -   | 175 | 135 | 135                | 58           | M30x150           | FGB 80-2                  |
|                 | 100 |                                | 180  | -   | 175 | 135 | 135                | 58           | M30x150           | FGB 100-2                 |
|                 | 125 |                                | -    | 245 | 200 | 168 | 168                | 68           | M24x170           | FGB 125-2                 |
|                 | 150 |                                | -    | 300 | 245 | 205 | 205                | 78           | M30x200           | FGB 150-2                 |
|                 | 200 |                                | -    | 355 | 290 | 245 | 245                | 85           | M36x220           | FGB 200-2                 |

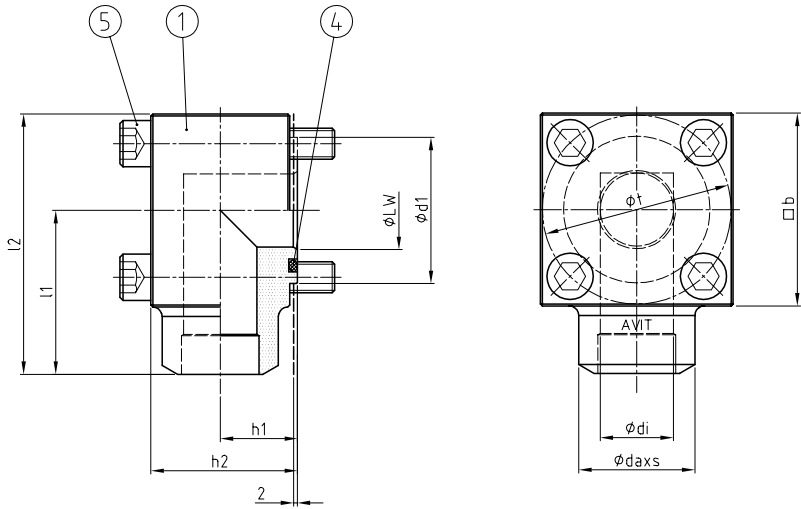
1 Lochbild der Serie 3 und 4 bis DN 80 gemäß Norm. | Hole pattern form series 3 and 4 to DN 80 according to standard.  
2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.  
3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung. | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     | SCHRAUBEN<br>BOLTS     | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|------------------------|--------------|-------------------|---------------------------|
| [bar]           | [mm]            | b                              | d   | t   | d1  | h   | Pos. 5                 |              | [kg]              | TYP DN-Serie              |
| 3<br>PN 250     |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
|                 |                 |                                |     |     |     |     |                        |              |                   |                           |
| 4<br>PN 315     | 10              | 50                             | -   | 44  | 28  | 19  | M10x55                 | 4            | 0,47              | FGB 10-4                  |
|                 | 16              | 60                             | -   | 54  | 38  | 19  | M10x55                 | 4            | 0,69              | FGB 16-4                  |
|                 | 20              | 70                             | -   | 64  | 46  | 19  | M12x55                 | 4            | 0,92              | FGB 20-4                  |
|                 | 25              | 80                             | -   | 72  | 55  | 24  | M12x65                 | 4            | 1,43              | FGB 25-4                  |
|                 | 32              | 90                             | -   | 80  | 60  | 29  | M16x80                 | 4            | 2,24              | FGB 32-4                  |
|                 | 40              | 100                            | -   | 98  | 76  | 38  | M16x100                | 4            | 3,43              | FGB 40-4                  |
|                 | 50              | 120                            | -   | 118 | 92  | 48  | M20x120                | 4            | 6,16              | FGB 50-4                  |
|                 | 65              | 150                            | -   | 145 | 110 | 48  | M24x130                | 4            | 9,40              | FGB 65-4                  |
|                 | 80              | 180                            | -   | 175 | 135 | 58  | M30x150                | 4            | 17,42             | FGB 80-4                  |
|                 | 100             | -                              | 245 | 200 | 168 | 68  | M24x170                | 8            | 28,12             | FGB 100-4                 |
|                 | 125             | -                              | 300 | 245 | 205 | 78  | M30x200                | 8            | 52,88             | FGB 125-4                 |
|                 | 150             | -                              | 355 | 290 | 245 | 85  | M36x220                | 8            | 79,82             | FGB 150-4                 |
|                 | 175             | -                              | 450 | 370 | 320 | 105 | M36x260                | 8            | 138,12            | FGB 175-4                 |
|                 | 200             | -                              | 490 | 395 | 340 | 116 | M42x280                | 12           | 198,12            | FGB 200-4                 |
|                 | 225             | -                              | 530 | 440 | 384 | 126 | M42x300                | 12           | 247,46            | FGB 225-4                 |
|                 | 250             | -                              | 580 | 480 | 424 | 136 | M42x320                | 12           | 286,76            | FGB 250-4                 |
| 5<br>PN 420     | 16              | 70                             | -   | 64  | 46  | 22  | M12x60                 | 4            | 1,04              | FGB 16-5                  |
|                 | 20              | 80                             | -   | 72  | 55  | 26  | M12x70                 | 4            | 1,48              | FGB 20-5                  |
|                 | 25              | 90                             | -   | 84  | 63  | 32  | M16x90                 | 4            | 2,55              | FGB 25-5                  |
|                 | 32              | 100                            | -   | 98  | 76  | 38  | M16x100                | 4            | 3,47              | FGB 32-5                  |
|                 | 40              | 120                            | -   | 118 | 92  | 48  | M20x120                | 4            | 6,37              | FGB 40-5                  |
|                 | 50              | 150                            | -   | 145 | 110 | 48  | M24x130                | 4            | 10,33             | FGB 50-5                  |
|                 | 65              | 180                            | -   | 175 | 135 | 58  | M30x150                | 4            | 18,49             | FGB 65-5                  |
|                 | 70              | 190                            | -   | 185 | 172 | 64  | M30x180                | 4            | 21,52             | FGB 70-5                  |
|                 | 80              | -                              | 245 | 200 | 172 | 68  | M24x170                | 8            | 28,73             | FGB 80-5                  |
|                 | 90 <sup>4</sup> | -                              | 300 | 245 | 205 | 78  | M30x200                | 8            | 47,91             | FGB 90-5                  |
|                 | 100             | -                              | 320 | 255 | 215 | 78  | M30x200                | 8            | 60,49             | FGB 100-5                 |
|                 | 125             | -                              | 390 | 315 | 273 | 86  | M36x220                | 8            | 101,47            | FGB 125-5                 |
|                 | 150             | -                              | 450 | 375 | 328 | 110 | M36x280                | 12           | 158,82            | FGB 150-5                 |
|                 | 200             | -                              | 570 | 476 | 426 | 140 | M42x340                | 12           | 332,00            | FGB 200-5                 |
| 6<br>PN 500     | 16              | 75                             | -   | 67  | 50  | 30  | M12x80 <sup>2,3</sup>  | 4            | 1,53              | FGB 16-6                  |
|                 | 20              | 90                             | -   | 84  | 63  | 37  | M16x100 <sup>2,3</sup> | 4            | 2,55              | FGB 20-6                  |
|                 | 25              | 120                            | -   | 101 | 76  | 47  | M20x120 <sup>2,3</sup> | 4            | 6,04              | FGB 25-6                  |
|                 | 32              | 140                            | -   | 125 | 90  | 55  | M24x140 <sup>2,3</sup> | 4            | 9,85              | FGB 32-6                  |
|                 | 40              | 150                            | -   | 142 | 110 | 60  | M24x150 <sup>2,3</sup> | 4            | 12,32             | FGB 40-6                  |
|                 | 50              | 180                            | -   | 168 | 125 | 68  | M30x180 <sup>2,3</sup> | 4            | 20,18             | FGB 50-6                  |
|                 | 65              | -                              | 245 | 188 | 154 | 74  | M24x180 <sup>2,3</sup> | 8            | 30,78             | FGB 65-6                  |
|                 | 80              | -                              | 315 | 228 | 182 | 82  | M36x210 <sup>2,3</sup> | 8            | 61,45             | FGB 80-6                  |
|                 | 100             | -                              | 360 | 264 | 218 | 98  | M36x240 <sup>2,3</sup> | 12           | 98,67             | FGB 100-6                 |
|                 | 125             | -                              | 420 | 330 | 275 | 105 | M42x260 <sup>2,3</sup> | 12           | 148,26            | FGB 125-6                 |
|                 | 150             | -                              | 490 | 395 | 340 | 116 | M42x280 <sup>2,3</sup> | 12           | 206,74            | FGB 150-6                 |

2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.

3 Serie 6: Muttern aus Stahl Festigkeitsklasse 10. Edelstahl mit Zinklamellenbeschichtung. | Series 6: All nuts made of steel with property class 10. Stainless steel with zinc flake coating.

4 Frühere Größe DN 100! | Former size DN 100!



AVIT ≈ ISO 6164 <sup>1</sup>

- Neue kompakte Kurzbauweise
  - Für 2 mm Sicherheits-Flansch-Zentrierung
  - Ausgelegt für schwellige Beanspruchungen
- New compact and short design
  - For 2 mm safety-flange-centring
  - Designed for dynamic loads

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*  |
|----------------------------------------------------|----------------------|
| Stahl / Steel; NBR                                 | WFA 40-3 - daxs - 01 |
| Stahl / Steel; FKM                                 | WFA 40-3 - daxs - 02 |
| Stahl+N / Steel+N; NBR                             | WFA 40-3 - daxs - 11 |
| Stahl+N / Steel+N; FKM                             | WFA 40-3 - daxs - 12 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | WFA 40-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | WFA 40-3 - daxs - 44 |

BESTELLBEISPIEL  
ORDER EXAMPLE

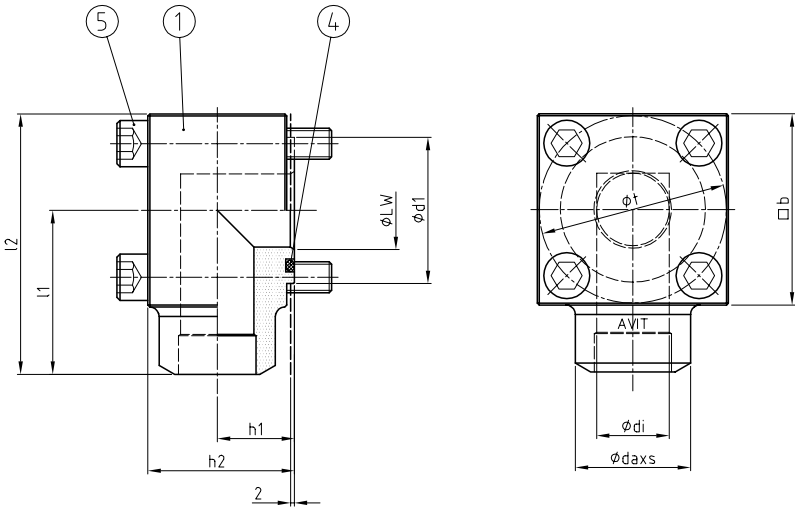
STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                      |
|------|----------------------------------------------------------------|
| 1    | Winkelflansch mit O-Ring Nut / Elbow flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                               |
| 5    | Schrauben / Bolts                                              |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |                 |     |     |      |     | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|-----|-----------------|-----|-----|------|-----|------------|--------------------|-------------------|---------------------------|
| [bar]           | [mm] | LW                             | b   | t   | d1  | di <sup>3</sup> | l1  | l2  | h1   | h2  | Pos. 4     | Pos. 5             | [kg]              | TYP DN-Serie-daxs         |
| 3<br>PN 250     | 10   | 11                             | 50  | 44  | 28  | 10              | 45  | 70  | 16,5 | 29  | 16,3x2,40  | M10x40             | 0,544             | WFA 10-3 16,0x2,0         |
|                 | 16   | 16                             | 60  | 54  | 38  | 16              | 50  | 80  | 22,5 | 41  | 22,4x2,62  | M10x50             | 1,057             | WFA 16-3 21,3x2,6         |
|                 | 20   | 20                             | 70  | 64  | 46  | 18              | 55  | 90  | 25,5 | 47  | 28,0x2,62  | M12x60             | 1,713             | WFA 20-3 26,9x3,6         |
|                 | 25   | 24,5                           | 80  | 72  | 55  | 23              | 65  | 105 | 30   | 56  | 34,5x3,53  | M12x70             | 2,582             | WFA 25-3 33,7x4,5         |
|                 | 32   | 31                             | 90  | 80  | 60  | 25              | 75  | 120 | 34   | 64  | 38,7x3,53  | M16x80             | 3,912             | WFA 32-3 42,4x5,6         |
|                 | 40   | 44,5                           | 100 | 98  | 76  | 38              | 85  | 135 | 40   | 79  | 53,0x5,33  | M16x100            | 5,454             | WFA 40-3 60,3x8,0         |
|                 | 50   | 54,5                           | 120 | 118 | 92  | 47,5            | 95  | 155 | 52   | 100 | 61,5x5,33  | M20x130            | 10,42             | WFA 50-3 76,1x10,0        |
|                 | 65   | 67                             | 150 | 145 | 110 | 63              | 115 | 190 | 59,5 | 115 | 75,57x5,33 | M24x140            | 17,87             | WFA 65-3 88,9x11,0        |
|                 | 80   | 76,5                           | 180 | 175 | 135 | 76              | 135 | 225 | 72   | 140 | 92,5x5,33  | M30x180            | 31,78             | WFA 80-3 101,6x12,5       |
| 4<br>PN 315     | 10   | 11                             | 50  | 44  | 28  | 10              | 45  | 70  | 16,5 | 29  | 16,3x2,40  | M10x40             | 0,552             | WFA 10-4 17,2x3,2         |
|                 | 16   | 17,5                           | 60  | 54  | 38  | 17              | 50  | 80  | 22,5 | 41  | 22,4x2,62  | M10x50             | 1,072             | WFA 16-4 26,9x4,5         |
|                 | 20   | 22,5                           | 70  | 64  | 46  | 18              | 55  | 90  | 25,5 | 47  | 28,0x2,62  | M12x60             | 1,721             | WFA 20-4 33,7x5,6         |
|                 | 25   | 28                             | 80  | 72  | 55  | 23              | 65  | 105 | 30   | 56  | 34,5x3,53  | M12x70             | 2,654             | WFA 25-4 42,4x7,1         |
|                 | 32   | 32,5                           | 90  | 80  | 60  | 25              | 75  | 120 | 34   | 64  | 38,7x3,53  | M16x80             | 3,994             | WFA 32-4 48,3x8,0         |
|                 | 40   | 40,5                           | 100 | 98  | 76  | 38              | 85  | 135 | 40   | 79  | 53,0x5,33  | M16x100            | 5,487             | WFA 40-4 60,3x10,0        |
|                 | 50   | 51                             | 120 | 118 | 92  | 47,5            | 95  | 155 | 52   | 100 | 61,5x5,33  | M20x130            | 10,49             | WFA 50-4 76,1x12,5        |
|                 | 65   | 60,5                           | 150 | 145 | 110 | 60,5            | 115 | 190 | 59,5 | 115 | 75,57x5,33 | M24x140            | 18,36             | WFA 65-4 88,9x14,2        |
|                 | 80   | 79,5                           | 180 | 175 | 135 | 76              | 135 | 225 | 72   | 140 | 92,5x5,33  | M30x180            | 32,36             | WFA 80-4 114,3x17,5       |

1 Lochbild bis DN 80 gemäß Norm. | Hole pattern to DN 80 according to standard.

3 Bitte beachten Sie, dass der Innendurchmesser (di) manchmal kleiner als da - 2x s ist! | Please notice that the inside diameter (di) is sometimes smaller than da - 2x s!



AVIT ≈ ISO 6164 <sup>1</sup>

- Neue kompakte Kurzbauweise
- Für 2 mm Sicherheits-Flansch-Zentrierung
- Ausgelegt für schwelende Beanspruchungen

- New compact and short design
- For 2 mm safety-flange-centring
- Designed for dynamic loads

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*  |
|----------------------------------------------------|----------------------|
| Stahl / Steel; NBR                                 | WFA 40-5 - daxs - 01 |
| Stahl / Steel; FKM                                 | WFA 40-5 - daxs - 02 |
| Stahl+N / Steel+N; NBR                             | WFA 40-5 - daxs - 11 |
| Stahl+N / Steel+N; FKM                             | WFA 40-5 - daxs - 12 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | WFA 40-5 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | WFA 40-5 - daxs - 44 |

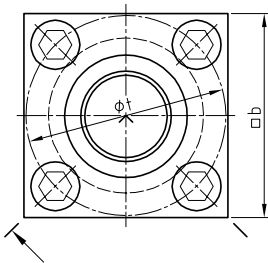
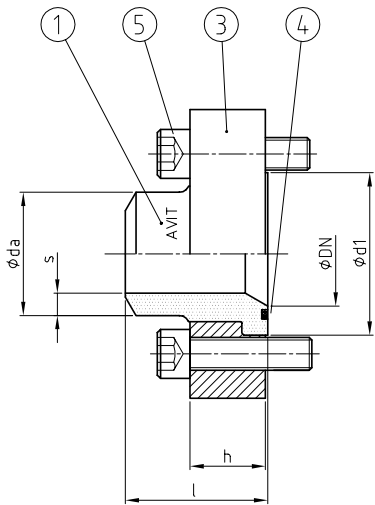
BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                      |
|------|----------------------------------------------------------------|
| 1    | Winkelflansch mit O-Ring Nut / Elbow flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                               |
| 5    | Schrauben / Bolts <sup>2</sup>                                 |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS               |     |     |     |                 |      |     |      |     | O-RING     | SCHRAUBEN<br>BOLTS   | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------|----------------------------------------------|-----|-----|-----|-----------------|------|-----|------|-----|------------|----------------------|-------------------|---------------------------|
| [bar]           | [mm] | LW                                           | b   | t   | d1  | di <sup>3</sup> | l1   | l2  | h1   | h2  | Pos. 4     | Pos. 5               | [kg]              | TYP DN-Serie-daxs         |
| 5<br>PN 420     | 16   | 15,5                                         | 70  | 64  | 46  | 15,5            | 55   | 90  | 25,5 | 47  | 22,4x2,62  | M12x60               | 1,737             | WFA 16-5 26,9x5,6         |
|                 | 20   | 21                                           | 80  | 72  | 55  | 21              | 65   | 105 | 30   | 56  | 28,0x2,62  | M12x70               | 2,652             | WFA 20-5 33,7x6,3         |
|                 | 25   | 26,5                                         | 90  | 84  | 63  | 25              | 75   | 120 | 34   | 64  | 34,5x3,53  | M16x80               | 3,950             | WFA 25-5 42,4x8,0         |
|                 | 32   | 31                                           | 100 | 98  | 76  | 30,5            | 85   | 135 | 40   | 79  | 37,7x3,53  | M16x100              | 5,660             | WFA 32-5 48,3x8,8         |
|                 | 40   | 38,5                                         | 120 | 118 | 92  | 38              | 95   | 155 | 53   | 100 | 50,17x5,33 | M20x130              | 10,85             | WFA 40-5 60,3x11,0        |
|                 | 50   | 48                                           | 150 | 145 | 110 | 47,5            | 115  | 190 | 60   | 115 | 56,52x5,33 | M24x140              | 19,43             | WFA 50-5 76,1x14,2        |
|                 | 65   | 61,5                                         | 180 | 175 | 135 | 61,5            | 135  | 225 | 73   | 140 | 75,57x5,33 | M30x180              | 30,38             | WFA 65-5 101,6x20,0       |
| 6<br>PN 500     | 16   | 16                                           | 75  | 67  | 50  | 16              | 62,5 | 100 | 27,5 | 51  | 25,07x2,62 | M12x60 <sup>2</sup>  | 2,175             | WFA 16-6 30,0x7,0         |
|                 | 20   | 20,5                                         | 90  | 84  | 63  | 20,5            | 75   | 120 | 34   | 64  | 31,34x3,53 | M16x80 <sup>2</sup>  | 3,908             | WFA 20-6 38,0x8,8         |
|                 | 25   | 28,5                                         | 120 | 101 | 76  | 28,5            | 95   | 155 | 40   | 76  | 37,69x3,53 | M20x100 <sup>2</sup> | 8,711             | WFA25-6 48,3x10,0         |
|                 | 32   | 32                                           | 140 | 125 | 90  | 32              | 105  | 175 | 52   | 100 | 44,04x3,53 | M24x130 <sup>2</sup> | 15,44             | WFA 32-6 60,3x14,2        |
|                 | 40   | 41                                           | 150 | 142 | 110 | 41              | 115  | 190 | 59,5 | 115 | 56,52x5,33 | M24x150 <sup>2</sup> | 20,01             | WFA 40-6 76,1x17,5        |
|                 | 50   | 49                                           | 180 | 168 | 125 | 49              | 135  | 225 | 72   | 140 | 62,87x5,33 | M30x180 <sup>2</sup> | 35,49             | WFA 50-6 88,9x20,0        |
|                 | 65   | Auf Anfrage lieferbar   Available on request |     |     |     |                 |      |     |      |     |            |                      |                   |                           |

1 Lochbild bis DN 80 gemäß Norm. | Hole pattern to DN 80 according to standard.  
 2 Serie 6: Stahl Schrauben Klasse 10.9. Edelstahl: Stahl Schrauben 10.9 mit Zinklamellenbeschichtung. | Series 6: Bolts property class 10.9. Stainless steel: bolts made of steel with zinc flake coating.  
 3 Bitte beachten Sie, dass der Innendurchmesser (di) manchmal kleiner als da - 2x s ist! | Please notice that the inside diameter (di) is sometimes smaller than da - 2x s!



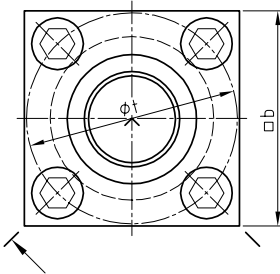
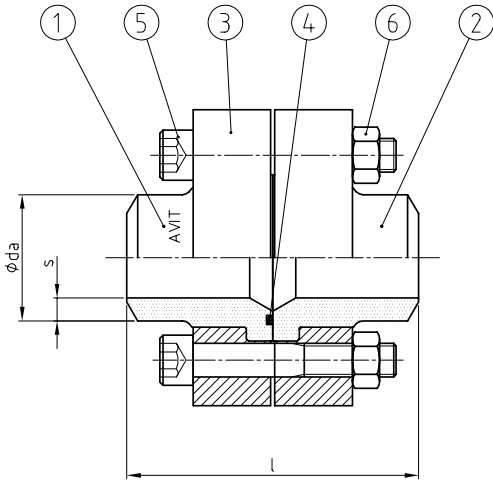
ISO 6164:2017

- Kompatibel mit SAE-Flanschbunden (bis DN38)
- Leichte Montage durch Losflanshsystem
- Compatible with SAE-flange heads (up to DN38)
- Easy assembly by flange clamp system

3  
FLANSCH  
FLANGES

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                      |
|----------------------------------------------------|----------------------------------|---------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP DN-daxs-**-                  | Pos. Bezeichnung / Description                                |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FFA 51 - daxs - 01               | 1 Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FFA 51 - daxs - 02               | 3 Losflansche / Flange clamps                                 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FFA 51 - daxs - 41               | 4 O-Ring Dichtung / O-ring sealing                            |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FFA 51 - daxs - 44               | 5 Schrauben / Bolts                                           |

| SERIE<br>SERIES | DN   |     |     |      |     |    | O-RING     | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|-----------------|------|-----|-----|------|-----|----|------------|--------------------|---------------------------|
| [bar]           | [mm] | b   | t   | d1   | l   | h  | Pos. 4     | Pos. 5             | TYP DN daxs               |
| 420             | 25   | 65  | 62  | 47,6 | 50  | 25 | 32,92x3,53 | M10x40             | FFA 25 33,7x6,3           |
|                 | 32   | 75  | 73  | 54   | 55  | 30 | 37,69x3,53 | M12x50             | FFA 32 42,4x8,0           |
|                 | 38   | 90  | 85  | 63,5 | 60  | 36 | 47,22x3,53 | M16x60             | FFA 38 48,3x8,0           |
|                 | 51   | 100 | 98  | 79,4 | 70  | 40 | 56,52x5,33 | M16x65             | FFA 51 60,3x10,0          |
|                 | 56   | 120 | 118 | 94,2 | 98  | 50 | 69,22x5,33 | M20x80             | FFA 56 76,1x12,5          |
|                 | 63   | 150 | 145 | 110  | 105 | 52 | 75,57x5,33 | M24x90             | FFA 63 88,9x17,5          |
|                 | 70   | 160 | 160 | 119  | 105 | 60 | 85,09x5,33 | M24x100            | FFA 70 101,6x16,0         |
|                 | 80   | 180 | 175 | 135  | 135 | 70 | 88,27x5,33 | M30x120            | FFA 80 114,3x17,5         |



**ISO 6164:2017**

- Kompatibel mit SAE-Flanschbunden (bis DN38)
- Leichte Montage durch Losflanschsystem

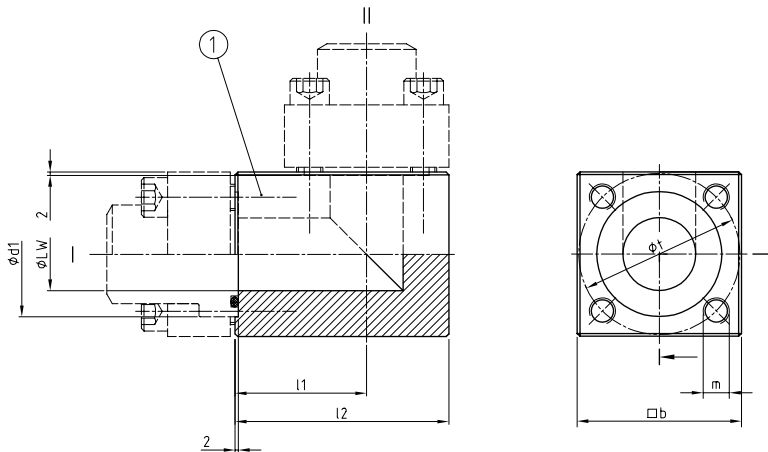
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- Compatible with SAE-flange heads (up to DN38)
- Easy assembly by flange clamp system

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                      |
|----------------------------------------------------|----------------------------------|---------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP DN-daxs-**-                  | Pos. Bezeichnung / Description                                |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | FFK 51 - daxs - 01               | 1 Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | FFK 51 - daxs - 02               | 2 Gegenflanschbund / Counter flange                           |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FFK 51 - daxs - 41               | 3 Vierkant-Losflansche / Square flange clamps                 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FFK 51 - daxs - 44               | 4 O-Ring Dichtung / O-ring sealing                            |
|                                                    |                                  | 5 Schrauben / Bolts                                           |
|                                                    |                                  | 6 Muttern / Nuts                                              |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     | O-RING     | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|-----------------|------|--------------------------------|-----|-----|------------|--------------------|---------------------------|
| [bar]           | [mm] | b                              | t   | l   | Pos. 4     | Pos. 5             | TYP DN daxs               |
| 420             | 25   | 65                             | 62  | 100 | 32,92x3,53 | M10x65             | FFK 25 33,7x6,3           |
|                 | 32   | 75                             | 73  | 110 | 37,69x3,53 | M12x75             | FFK 32 42,4x8,0           |
|                 | 38   | 90                             | 85  | 120 | 47,22x3,53 | M16x90             | FFK 38 48,3x8,0           |
|                 | 51   | 100                            | 98  | 140 | 56,52x5,33 | M16x100            | FFK 51 60,3x10,0          |
|                 | 56   | 120                            | 118 | 190 | 69,22x5,33 | M20x120            | FFK 56 76,1x12,5          |
|                 | 63   | 150                            | 145 | 210 | 75,57x5,33 | M24x130            | FFK 63 88,9x17,5          |
|                 | 70   | 160                            | 160 | 210 | 85,09x5,33 | M24x150            | FFK 70 101,6x16,0         |
|                 | 80   | 180                            | 175 | 270 | 88,27x5,33 | M30x180            | FFK 80 114,3x17,5         |





AVIT

Mit 2 mm Sicherheits-Flansch-Zentrierung

With 2 mm safety-flange-centring

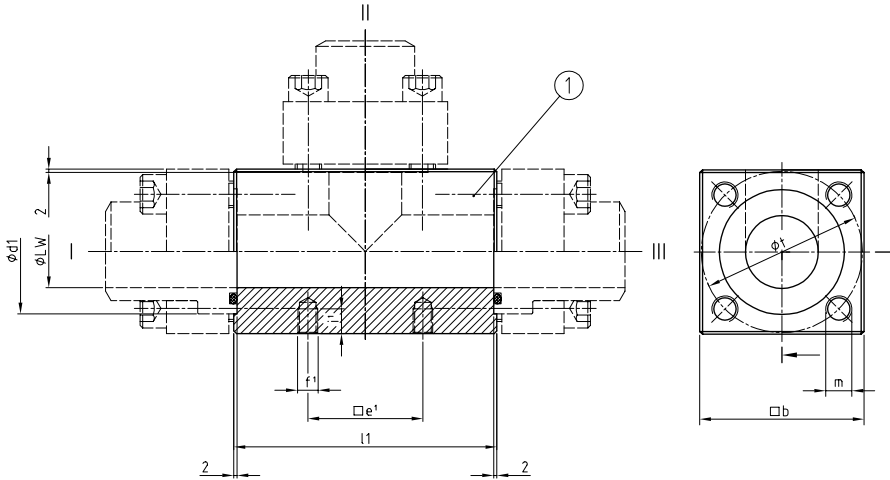
3

FLANSCH • ZUBEHÖR  
FLANGES • ACCESSORIES

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION | BESTELLBEISPIEL<br>ORDER EXAMPLE              | STÜCKLISTE<br>PARTS LIST          |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------|
| Werkstoff, Oberfläche / Material, Surface     | TYP I / II - **                               | Pos. Bezeichnung / Description    |
| Stahl, phosphatiert / Steel, phosphatised     | FVH I=DN-Serie daxis / II=DN-Serie daxis - 01 | 1 Verteilerblock / Manifold block |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti | FVH I=DN-Serie daxis / II=DN-Serie daxis - 41 |                                   |

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     | GEWINDE<br>THREAD | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|-----|-------------------|-------------------|---------------------------|
|                 |                 | [mm]                           | LW  | b   | t   | d1  | l1  |                   |                   |                           |
| 3<br>PN 250     | 20              | 20                             | 70  | 64  | 46  | 59  | 94  | 4/M12             | 3,2               | FVH 20-3 (26,9x3,6)       |
|                 | 25              | 25                             | 80  | 72  | 55  | 62  | 102 | 4/M12             | 4,5               | FVH 25-3 (33,7x4,5)       |
|                 | 32              | 31                             | 90  | 80  | 60  | 75  | 120 | 4/M16             | 6,5               | FVH 32-3 (42,4x5,6)       |
|                 | 40              | 45                             | 100 | 98  | 76  | 80  | 130 | 4/M16             | 10,5              | FVH 40-3 (60,3x8,0)       |
|                 | 50              | 55                             | 120 | 118 | 92  | 100 | 160 | 4/M20             | 14,4              | FVH 50-3 (76,1x10,0)      |
|                 | 65              | 67                             | 150 | 145 | 110 | 120 | 195 | 4/M24             | 28,0              | FVH 65-3 (88,9x11,0)      |
|                 | 80              | 77                             | 180 | 175 | 135 | 140 | 230 | 4/M30             | 48,0              | FVH 80-3 (101,6x12,5)     |
|                 | 100             | 105                            | 245 | 200 | 168 | 160 | 280 | 8/M24             | 111               | FVH 100-3 (139,7x17,5)    |
|                 | 125             | 129                            | 300 | 245 | 205 | 195 | 345 | 8/M30             | 205               | FVH 125-3 (168,3x20,0)    |
|                 | 150             | 144                            | 355 | 290 | 245 | 232 | 410 | 8/M36             | 404               | FVH 150-3 (193,7x25,0)    |
| 4<br>PN 315     | 20              | 23                             | 70  | 64  | 46  | 59  | 94  | 4/M12             | 3,1               | FVH 20-4 (33,7x5,6)       |
|                 | 25              | 28                             | 80  | 72  | 55  | 62  | 102 | 4/M12             | 4,4               | FVH 25-4 (42,4x7,1)       |
|                 | 32              | 33                             | 90  | 80  | 60  | 75  | 120 | 4/M16             | 6,4               | FVH 32-4 (48,3x8,0)       |
|                 | 40              | 40                             | 100 | 98  | 76  | 80  | 130 | 4/M16             | 10,7              | FVH 40-4 (60,3x10,0)      |
|                 | 50              | 51                             | 120 | 118 | 92  | 100 | 160 | 4/M20             | 14,8              | FVH 50-4 (76,1x12,5)      |
|                 | 65              | 60                             | 150 | 145 | 110 | 120 | 195 | 4/M24             | 28,8              | FVH 65-4 (88,9x14,2)      |
|                 | 80              | 80                             | 180 | 175 | 135 | 140 | 230 | 4/M30             | 47,5              | FVH 80-4 (114,3x17,5)     |
|                 | 100             | 96                             | 245 | 200 | 168 | 160 | 280 | 8/M24             | 114               | FVH 100-4 (139,7x22,2)    |
|                 | 125             | 118                            | 300 | 245 | 205 | 195 | 345 | 8/M30             | 210               | FVH 125-4 (177,8x30,0)    |
|                 | 150             | 147                            | 355 | 290 | 245 | 232 | 410 | 8/M36             | 403               | FVH 150-4 (219,1x36,0)    |
| 5<br>PN 420     | 32              | 31                             | 100 | 98  | 76  | 80  | 130 | 4/M16             | 8,9               | FVH 32-5 (48,3x8,8)       |
|                 | 40              | 38                             | 120 | 118 | 92  | 100 | 160 | 4/M20             | 15,5              | FVH 40-5 (60,3x11,0)      |
|                 | 50              | 48                             | 150 | 145 | 110 | 120 | 195 | 4/M24             | 30,1              | FVH 50-5 (76,1x14,2)      |
|                 | 65              | 62                             | 180 | 175 | 135 | 140 | 230 | 4/M30             | 50,5              | FVH 65-5 (101,6x20,0)     |
|                 | 80              | 83                             | 245 | 200 | 172 | 160 | 280 | 8/M24             | 117               | FVH 80-5 (139,7x28,0)     |
|                 | 90 <sup>1</sup> | 93                             | 300 | 245 | 205 | 195 | 345 | 8/M30             | 220               | FVH 90-5 (152,4x30,0)     |
|                 | 100             | 104                            | 315 | 255 | 215 | 195 | 350 | 8/M30             | 245               | FVH 100-5 (168,3x32,0)    |
|                 | 125             | 129                            | 390 | 315 | 273 | 245 | 440 | 8/M36             | 472               | FVH 125-5 (219,1x45,0)    |

1 Frühere Größe DN 100! | Former size DN 100!



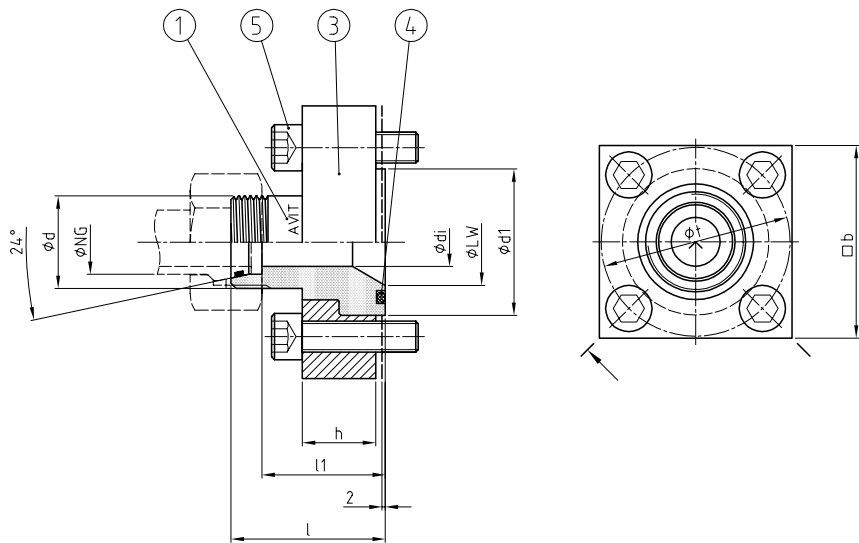
- AVIT**
- Mit 2 mm Sicherheits-Flansch-Zentrierung
  - Flanschverteiler können durch Flansch- oder Gewindeanschlüsse mit unterschiedlichen Nennweiten erweitert werden.
- With 2 mm safety-flange-centring
- Flange distributors can be extended with further connections of different sizes and types.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION | BESTELLBEISPIEL<br>ORDER EXAMPLE                                   | STÜCKLISTE<br>PARTS LIST          |
|-----------------------------------------------|--------------------------------------------------------------------|-----------------------------------|
| Werkstoff, Oberfläche / Material, Surface     | TYP I / II / III - **                                              | Pos. Bezeichnung / Description    |
| Stahl, phosphatiert / Steel, phosphatised     | FV I=DN-Serie daxis / II=DN-Serie daxis / III= DN-Serie daxis - 01 | 1 Verteilerblock / Manifold block |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti | FV I=DN-Serie daxis / II=DN-Serie daxis / III= DN-Serie daxis - 41 |                                   |

| SERIE<br>SERIES | DN              | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     | GEWINDE<br>THREAD | BEFESTIGUNGSGEWINDE <sup>1</sup><br>FASTENING THREADS <sup>1</sup> |    |     | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----------------|--------------------------------|-----|-----|-----|-----|-------------------|--------------------------------------------------------------------|----|-----|-------------------|---------------------------|
| [bar]           | [mm]            | LW                             | b   | t   | d1  | l1  | m                 | e                                                                  | i  | f   | [kg]              | TYP DN- Series (daxis)    |
| 3<br>PN 250     | 20              | 20                             | 70  | 64  | 46  | 118 | 4/M12             | 40                                                                 | 16 | M10 | 3,9               | FV 20-3 (26,9x3,6)        |
|                 | 25              | 25                             | 80  | 72  | 55  | 123 | 4/M12             | 50                                                                 | 16 | M10 | 5,4               | FV 25-3 (33,7x4,5)        |
|                 | 32              | 31                             | 90  | 80  | 60  | 140 | 4/M16             | 60                                                                 | 20 | M12 | 7,8               | FV 32-3 (42,4x5,6)        |
|                 | 40              | 45                             | 100 | 98  | 76  | 160 | 4/M16             | 70                                                                 | 20 | M12 | 9,5               | FV 40-3 (60,3x8,0)        |
|                 | 50              | 55                             | 120 | 118 | 92  | 180 | 4/M20             | 90                                                                 | 20 | M12 | 16,9              | FV 50-3 (76,1x10,0)       |
|                 | 65              | 67                             | 150 | 145 | 110 | 210 | 4/M24             | 100                                                                | 20 | M12 | 32,4              | FV 65-3 (88,9x11,0)       |
|                 | 80              | 77                             | 180 | 175 | 135 | 260 | 4/M30             | 120                                                                | 20 | M12 | 55,3              | FV 80-3 (101,6x12,5)      |
|                 | 100             | 105                            | 245 | 200 | 168 | 320 | 8/M24             | 200                                                                | 25 | M16 | 120               | FV 100-3 (139,7x17,5)     |
|                 | 125             | 129                            | 300 | 245 | 205 | 390 | 8/M30             | 250                                                                | 25 | M16 | 220               | FV 125-3 (168,3x20,0)     |
| 4<br>PN 315     | 150             | 144                            | 355 | 290 | 245 | 470 | 8/M36             | 300                                                                | 30 | M20 | 443               | FV 150-3 (193,7x25,0)     |
|                 | 20              | 23                             | 70  | 64  | 46  | 118 | 4/M12             | 40                                                                 | 16 | M10 | 3,8               | FV 20-4 (33,7x5,6)        |
|                 | 25              | 28                             | 80  | 72  | 55  | 123 | 4/M12             | 50                                                                 | 16 | M10 | 5,3               | FV 25-4 (42,4x7,1)        |
|                 | 32              | 33                             | 90  | 80  | 60  | 140 | 4/M16             | 60                                                                 | 20 | M12 | 7,5               | FV 32-4 (48,3x8,0)        |
|                 | 40              | 40                             | 100 | 98  | 76  | 160 | 4/M16             | 70                                                                 | 20 | M12 | 9,8               | FV 40-4 (60,3x10,0)       |
|                 | 50              | 51                             | 120 | 118 | 92  | 180 | 4/M20             | 90                                                                 | 20 | M12 | 17,5              | FV 50-4 (76,1x12,5)       |
|                 | 65              | 60                             | 150 | 145 | 110 | 210 | 4/M24             | 100                                                                | 20 | M12 | 33,8              | FV 65-4 (88,9x14,2)       |
|                 | 80              | 80                             | 180 | 175 | 135 | 260 | 4/M30             | 120                                                                | 20 | M12 | 55,4              | FV 80-4 (114,3x17,5)      |
|                 | 100             | 96                             | 245 | 200 | 168 | 320 | 8/M24             | 200                                                                | 25 | M16 | 124               | FV 100-4 (139,7x22,2)     |
| 5<br>PN 420     | 125             | 118                            | 300 | 245 | 205 | 390 | 8/M30             | 250                                                                | 25 | M16 | 225               | FV 125-4 (177,8x30,0)     |
|                 | 150             | 147                            | 355 | 290 | 245 | 470 | 8/M36             | 300                                                                | 30 | M20 | 440               | FV 150-4 (219,1x36,0)     |
|                 | 32              | 31                             | 100 | 98  | 76  | 160 | 4/M16             | 70                                                                 | 20 | M12 | 10,7              | FV 32-5 (48,3x8,8)        |
|                 | 40              | 38                             | 120 | 118 | 92  | 200 | 4/M20             | 90                                                                 | 20 | M12 | 19,0              | FV 40-5 (60,3x11,0)       |
|                 | 50              | 48                             | 150 | 145 | 110 | 240 | 4/M24             | 100                                                                | 20 | M12 | 36,1              | FV 50-5 (76,1x14,2)       |
|                 | 65              | 62                             | 180 | 175 | 135 | 280 | 4/M30             | 120                                                                | 20 | M12 | 59,5              | FV 65-5 (101,6x20,0)      |
|                 | 80              | 83                             | 245 | 200 | 172 | 320 | 8/M24             | 200                                                                | 25 | M16 | 129               | FV 80-5 (139,7x28,0)      |
|                 | 90 <sup>2</sup> | 93                             | 300 | 245 | 205 | 390 | 8/M30             | 250                                                                | 25 | M16 | 241               | FV 90-5 (152,4x30,0)      |
|                 | 100             | 104                            | 315 | 255 | 215 | 390 | 8/M30             | 260                                                                | 30 | M20 | 269               | FV 100-5 (168,3x32,0)     |
|                 | 125             | 129                            | 390 | 315 | 273 | 490 | 8/M36             | 340                                                                | 30 | M20 | 505               | FV 125-5 (219,1x45,0)     |

1 Bestellcode Variante: Mit 4 Befestigungsgewinden ... - BF | Order code option: 4 fastening threads ... - BF

2 Frühere Größe DN 100! | Former size DN 100!



#### AVIT ≈ ISO 6164, ISO 8434-1

- Zweiteilige Ausführung für 2 mm Sicherheits-Flansch-Zentrierung
- Gewindezapfen mit 24° Konus nach ISO 8434-1 mit metrischem Gewinde
- Two-piece design for 2 mm safety-flange-centring
- Screwed end with 24° conus acc. ISO 8434-1 with metric thread

#### WERKSTOFF-KOMBINATION MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-NG - **  |
|----------------------------------------------------|-----------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | FAM 40-S38 - 03 |
| Stahl, verzinkt / Steel, galvanised; FKM           | FAM 40-S38 - 04 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FAM 40-S38 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FAM 40-S38 - 44 |

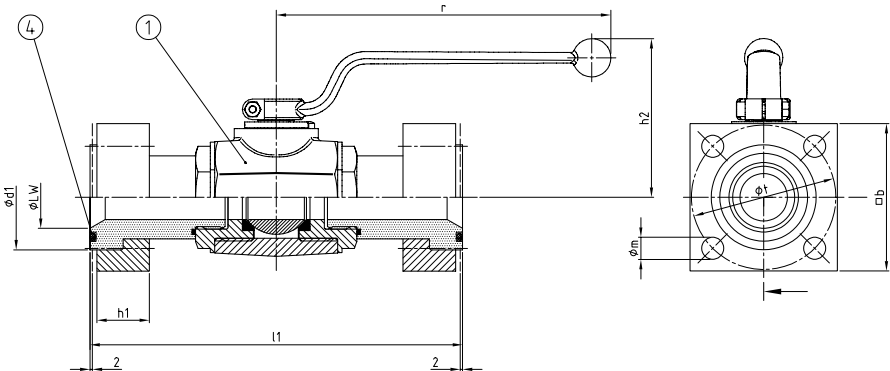
#### BESTELLBEISPIEL ORDER EXAMPLE

#### STÜCKLISTE PARTS LIST

| Pos. | Bezeichnung / Description                              |
|------|--------------------------------------------------------|
| 1    | Flanschanschluss mit 24° Konus / Flange with 24° conus |
| 3    | Vierkant-Losflansch / Square flange clamp              |
| 4    | O-Ring Dichtung / O-ring sealing                       |
| 5    | Schrauben / Bolts                                      |

| SERIE<br>SERIES | DN   | NG              | ABMESSUNGEN [mm]<br>DIMENSIONS |         |    |    |     |     |     |      | O-RING | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |             |
|-----------------|------|-----------------|--------------------------------|---------|----|----|-----|-----|-----|------|--------|--------------------|---------------------------|-------------|
| [bar]           | [mm] | [mm]            | LW                             | d       | di | d1 | b   | t   | l   | l1   | h      | Pos. 4             | Pos. 5                    | TYP DN - NG |
| 3<br>PN 250     | 10   | 10 <sup>1</sup> | 11                             | M18x1,5 | 7  | 28 | 50  | 44  | 43  | 35,5 | 19     | 16,3x2,4           | M10x35                    | FAM 10-S10  |
|                 |      | 12 <sup>1</sup> |                                | M20x1,5 | 8  |    |     |     | 47  | 39,5 |        |                    |                           | FAM 10-S12  |
|                 | 12   | 12              | 14                             | M20x1,5 | 8  | 38 | 60  | 54  | 54  | 46,5 | 19     | 20,3x2,4           | M10x35                    | FAM 12-S12  |
|                 |      | 16              |                                | M24x1,5 | 12 |    |     |     | 56  | 47,5 |        |                    |                           | FAM 12-S16  |
|                 | 16   | 16              | 16                             | M24x1,5 | 12 | 38 | 60  | 54  | 56  | 47,5 | 19     | 22,4x2,62          | M10x35                    | FAM 16-S16  |
|                 |      | 20 <sup>1</sup> |                                | M30x2,0 | 15 |    |     |     | 51  | 40,5 |        |                    |                           | FAM 16-S20  |
|                 | 20   | 20              | 20                             | M30x2,0 | 15 | 46 | 70  | 64  | 64  | 53,5 | 19     | 28,0x2,62          | M12x40                    | FAM 20-S20  |
|                 |      | 25 <sup>1</sup> |                                | M36x2,0 | 20 |    |     |     | 55  | 41   |        |                    |                           | FAM 20-S25  |
|                 | 25   | 25              | 24,5                           | M36x2,0 | 20 | 55 | 80  | 72  | 72  | 60   | 24     | 34,5x3,53          | M12x45                    | FAM 25-S25  |
|                 |      | 30              |                                | M42x2,0 | 25 |    |     |     | 73  | 59,5 |        |                    |                           | FAM 25-S30  |
|                 | 32   | 30              | 31,5                           | M42x2,0 | 25 | 60 | 90  | 80  | 83  | 69,5 | 29     | 38,7x3,53          | M16x55                    | FAM 32-S30  |
|                 |      | 38 <sup>1</sup> |                                | M52x2,0 | 30 |    |     |     | 73  | 57   |        |                    |                           | FAM 32-S38  |
|                 | 40   | 38              | 44,5                           | M52x2,0 | 30 | 76 | 100 | 98  | 98  | 82   | 38     | 53,0x5,33          | M16x60                    | FAM 40-S38  |
|                 |      | 50 <sup>1</sup> |                                | M68x2,0 | 40 |    |     |     | 91  | 73   |        |                    |                           | FAM 40-S50  |
|                 | 50   | 50              | 54,5                           | M68x2,0 | 38 | 92 | 120 | 118 | 118 | 100  | 48     | 61,5x5,33          | M20x75                    | FAM 50-S50  |

1 Einteilige Ausführung. | One-piece design.



**AVIT ≈ ISO 6164 <sup>1</sup>**

2/2 Wege Kugelhahn zum Absperrn eines Druckmit-  
telstroms in beiden Richtungen. Schalthebel gekröpft.

2/2 way ball valve is used to shut-off a pressure flow  
in both directions. With cranked lever.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                            |
|----------------------------------------------------|----------------------------------|-----------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP DN - **                      | Pos. Bezeichnung / Description                      |
| Stahl, verzinkt / Steel, galvanised; NBR           | BKF 40 - 01                      | 1 Kugelhahn mit Schalthebel / Ball valve with lever |
| Stahl, verzinkt / Steel, galvanised; FKM           | BKF 40 - 02                      | 4 O-Ring Dichtung / O-ring sealing                  |
| Stahl, phosphatiert / Steel, phosphatised; NBR     | BKF 40 - 04                      |                                                     |
| Stahl, phosphatiert / Steel, phosphatised; FKM     | BKF 40 - 05                      |                                                     |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | BKF 40 - 41                      |                                                     |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | BKF 40 - 42                      |                                                     |

| SERIE<br>SERIES | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS               |     |     |    |       |    |     |     |      | O-RING    | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|------|----------------------------------------------|-----|-----|----|-------|----|-----|-----|------|-----------|-------------------|---------------------------|
| [bar]           | [mm] | LW                                           | b   | t   | d1 | l1    | h1 | h2  | r   | m    | Pos. 4    | [kg]              | TYP DN                    |
| 4<br>PN 315     | 10   | Auf Anfrage lieferbar   Available on request |     |     |    |       |    |     |     |      |           |                   | BKF 10                    |
|                 | 12   |                                              |     |     |    |       |    |     |     |      |           |                   | BKF 12                    |
|                 | 16   |                                              |     |     |    |       |    |     |     |      |           |                   | BKF 16                    |
|                 | 20   | 22,5                                         | 70  | 64  | 46 | 183   | 19 | 95  | 183 | 13,5 | 28,0x2,62 | 3,1               | BKF 20                    |
|                 | 25   | 28                                           | 80  | 72  | 55 | 223   | 24 | 98  | 183 | 13,5 | 34,5x3,53 | 4,9               | BKF 25                    |
|                 | 32   | 32,5                                         | 90  | 80  | 60 | 237,5 | 29 | 112 | 227 | 17   | 38,7x3,53 | 6,2               | BKF 32                    |
|                 | 40   | 40,5                                         | 100 | 98  | 76 | 274   | 38 | 117 | 227 | 17   | 53,0x5,33 | 11,2              | BKF 40                    |
|                 | 50   | 51                                           | 120 | 118 | 92 | 312   | 48 | 125 | 227 | 21   | 61,5x5,33 | 17,9              | BKF 50                    |

2/2 Wege Kugelhahn mit optischer Stellungsanzeige auf der Betätigungs-  
ungswelle. Geeignet für Hydrauliksysteme mit Hydrauliköl auf Mine-  
ralölbasis. Druckflüssigkeitstemperatur von -10°C bis +80°C.

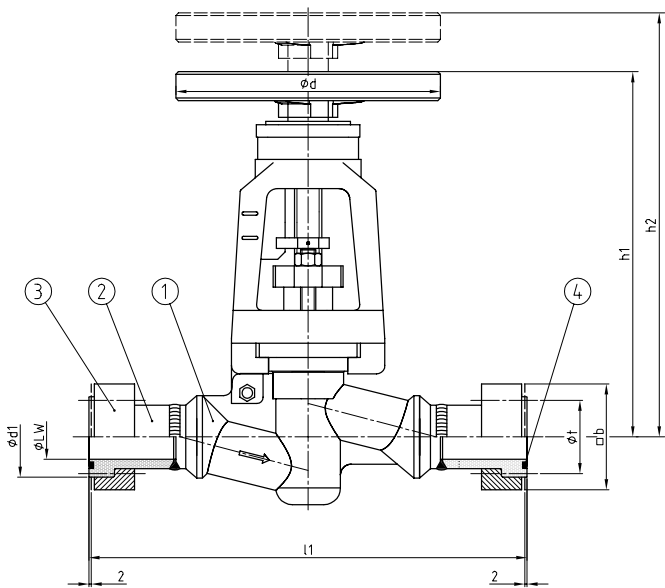
**BESTELLCODE VARIANTEN**

beidseitig mit Flanschanschluss (O-Ring) ..... **BKF**  
mit Flanschanschluss (O-Ring) und glattem Gegenflansch. .... **-AG**  
beidseitig mit glattem Gegenflansch ..... **-GG**  
mit Abschließvorrichtung und Schloss ..... **-SCH**  
mit Abschließvorrichtung ohne Schloss ..... **-SCHO**

2/2-way ball valve with optical position indicator.  
Suitable for hydraulic systems with mineral oil-based hydraulic oil.  
Fluid temperature from -10°C to +80°C

**ORDER CODE OPTIONS**

both ends with flange connection (O-ring) ..... **BKF**  
with flange connection (O-ring) and counter flange ..... **-AG**  
both ends with counter flange ..... **-GG**  
with locking device and padlock ..... **-SCH**  
with locking device but without padlock. .... **-SCHO**



- Einbaufertig mit Quadratflanschen bis PN 500 verschweißt.
- Zum Absperren eines Druckmittelstroms in einer Richtung. Mit optischer Stellungsanzeige.
- Ready to install with welded square flanges up to PN 500.
- To shut-off a pressure flow in one direction. With integrated position indicator

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION  | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                      |
|------------------------------------------------|----------------------------------|---------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface      | TYP DN-Serie-**-                 | Pos. Bezeichnung / Description                                |
| Stahl, phosphatiert / Steel, phosphatised; NBR | HVAP 40-3 - 01                   | 1 Absperrventil mit Handrad / Valve with handwheel            |
| Stahl, phosphatiert / Steel, phosphatised; FKM | HVAP 40-3 - 02                   | 2 Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
|                                                |                                  | 3 Losflansche / Flange clamps                                 |
|                                                |                                  | 4 O-Ring Dichtung / O-ring sealing                            |

| SERIE<br>SERIES | DN                                                                       | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     |     |     | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|--------------------------------------------------------------------------|--------------------------------|-----|-----|-----|-----|-----|-----|-----|------------|--------------------|-------------------|---------------------------|
| [bar]           | [mm]                                                                     | LW                             | b   | t   | d1  | l1  | d   | h1  | h2  | Pos. 4     | m                  | [kg]              | TYP DN-Serie              |
| 4<br>PN 315     | 10                                                                       | 11                             | 50  | 44  | 28  | 240 | 160 | 244 | 335 | 16,3x2,4   | M10                | 6,96              | HVAP 10-4                 |
|                 | 16                                                                       | 17,5                           | 60  | 54  | 38  | 254 | 160 | 244 | 335 | 22,4x2,62  | M10                | 7,40              | HVAP 16-4                 |
|                 | 20                                                                       | 22,5                           | 70  | 64  | 46  | 276 | 200 | 264 | 375 | 28,0x2,62  | M12                | 10,38             | HVAP 20-4                 |
|                 | 25                                                                       | 28                             | 80  | 72  | 55  | 292 | 200 | 264 | 375 | 34,5x3,53  | M12                | 11,40             | HVAP 25-4                 |
|                 | 32                                                                       | 32,5                           | 90  | 80  | 60  | 390 | 250 | 345 | 485 | 38,7x3,53  | M16                | 24,54             | HVAP 32-4                 |
|                 | 40                                                                       | 40,5                           | 100 | 98  | 76  | 414 | 250 | 345 | 485 | 53,0x5,33  | M16                | 26,74             | HVAP 40-4                 |
|                 | 50                                                                       | 51                             | 120 | 118 | 92  | 452 | 250 | 345 | 485 | 61,5x5,33  | M20                | 32,20             | HVAP 50-4                 |
|                 | 65                                                                       | 60,5                           | 150 | 145 | 110 | 524 | 315 | 415 | 590 | 75,6x5,33  | M24                | 51,60             | HVAP 65-4                 |
| 6<br>PN 500     | Weitere Größen auf Anfragen lieferbar   Other sizes available on request |                                |     |     |     |     |     |     |     |            |                    |                   |                           |
|                 | 20                                                                       | 20,5                           | 90  | 84  | 63  | 292 | 200 | 264 | 375 | 31,34x3,53 | M16                | 13,4              | HVAP 20-6                 |
|                 | 32                                                                       | 32                             | 140 | 125 | 76  | 414 | 250 | 345 | 485 | 44,04x3,53 | M24                | 39,6              | HVAP 32-6                 |
|                 | 50                                                                       | 49                             | 180 | 168 | 125 | 524 | 315 | 415 | 590 | 62,87x5,33 | M30                | 72,2              | HVAP 50-6                 |

Geeignet für Hydrauliksysteme mit Hydrauliköl auf Mineralölbasis, Wasser, Dampf, Gas und sonstige nicht aggressive Medien.

Suitable for hydraulic systems with mineral oil based hydraulic oil, water, steam, gas and other non-aggressive media.

BESTELLCODE VARIANTEN

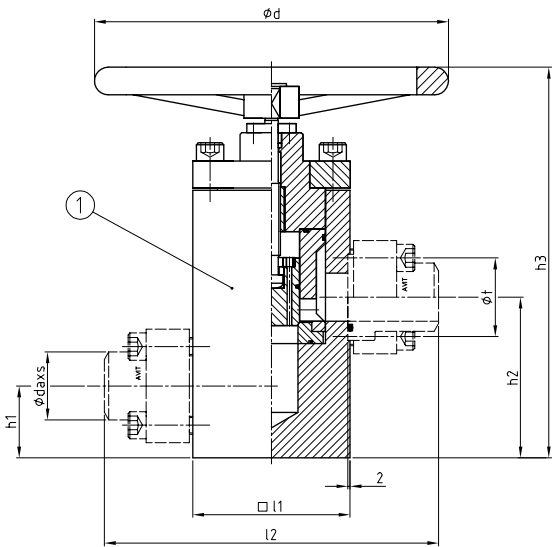
- beidseitig mit Flanschanschluss (O-Ring)..... HVAP  
mit Flanschanschluss (O-Ring) und glattem Gegenflansch..... -AG  
beidseitig mit glattem Gegenflansch ..... -GG

ORDER CODE OPTIONS

- both ends with flange connection (O-ring)..... HVAP  
with flange connection (O-ring) and counter flange ..... -AG  
both ends with counter flange..... -GG



- Anschlussfertig für AVIT Quadratflansche
  - Für wechselnde Strömungsrichtung und beliebig abzudichtende Druckseite
- 
- Ready to connect to AVIT square flanges
  - For changing flow directions and variable shut off pressure sides



WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface        | TYP DN-Serie-** |
|--------------------------------------------------|-----------------|
| Stahl / Steel; NBR                               | HVAL 40-3 - 01  |
| Edelstahl 1.4301 / Stainless steel AISI 304; NBR | HVAL 40-3 - 41  |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

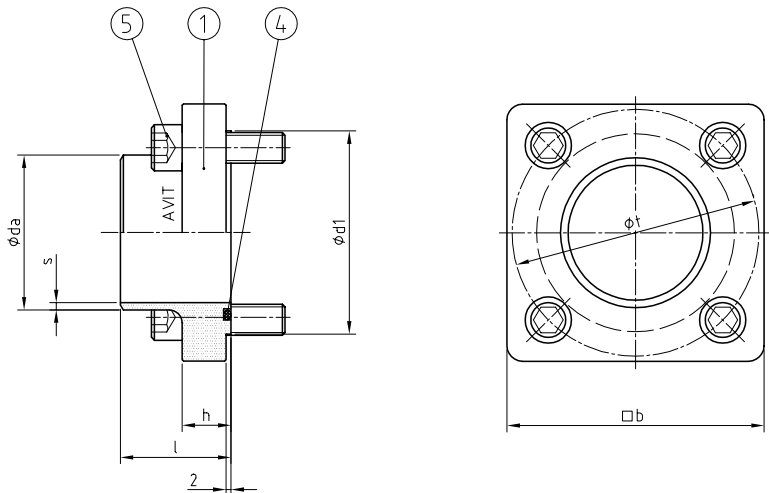
| Pos. | Bezeichnung / Description                                 |
|------|-----------------------------------------------------------|
| 1    | Absperrventil mit Handrad / Shut-off valve with handwheel |

| SERIE<br>SERIES | DN  | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |     |     |     | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-----------------|-----|--------------------------------|-----|-----|-----|-----|-----|-----|-------------------|---------------------------|
|                 |     | t                              | l1  | l2  | h1  | h2  | h3  | d   |                   |                           |
| 3<br>PN 250     | 40  | 98                             | 140 | 300 | 65  | 152 | 470 | 315 | 3,00              | HVAL 40-3                 |
|                 | 50  | 118                            | 140 | 340 | 65  | 152 | 470 | 315 | 5,20              | HVAL 50-3                 |
|                 | 65  | 145                            | 160 | 380 | 80  | 185 | 525 | 315 | 9,00              | HVAL 65-3                 |
|                 | 80  | 175                            | 200 | 470 | 105 | 220 | 565 | 315 | 16,50             | HVAL 80-3                 |
|                 | 100 | 200                            | 260 | 560 | 130 | 290 | 800 | 500 | 26,95             | HVAL 100-3                |
|                 | 125 | 245                            | 320 | 700 | 160 | 355 | 860 | 500 | 47,00             | HVAL 125-3                |
|                 | 150 | 290                            | 370 | 770 | 180 | 415 | 940 | 500 | 53,20             | HVAL 150-3                |
| 4<br>PN 315     | 40  | 98                             | 140 | 300 | 65  | 152 | 470 | 315 | 3,20              | HVAL 40-4                 |
|                 | 50  | 118                            | 140 | 340 | 65  | 152 | 470 | 315 | 5,60              | HVAL 50-4                 |
|                 | 65  | 145                            | 160 | 380 | 80  | 185 | 525 | 315 | 9,50              | HVAL 65-4                 |
|                 | 80  | 175                            | 200 | 470 | 105 | 220 | 565 | 315 | 17,60             | HVAL 80-4                 |
|                 | 100 | 200                            | 260 | 560 | 130 | 290 | 800 | 500 | 20,00             | HVAL 100-4                |
|                 | 125 | 245                            | 320 | 700 | 160 | 355 | 860 | 500 | 51,62             | HVAL 125-4                |
|                 | 150 | 290                            | 370 | 770 | 180 | 415 | 940 | 500 | 78,46             | HVAL 150-4                |

Geeignet für Hydrauliksysteme mit Hydrauliköl auf Mineralölbasis sowie Wasser oder Emulsion. Medium bitte bei Bestellung angeben. Das Ventil hat eine beliebige Einbaulage und ist auch bei vollem Arbeitsdruck leicht zu öffnen und zu schließen.

Suitable for hydraulic systems with mineral oil-based hydraulic oil, as well as water or emulsions. Please indicate the fluid when ordering. The valve can be installed in any position and is easy to open and close even at full operating pressure.





AVIT

Sehr kompakte Bauweise gegenüber herkömmlichen DIN- / EN-Vorschweißflanschen. Mit O-Ring Dichtung.

Very compact design compared to standard DIN-/EN-welding neck flanges. With O-ring sealing.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-**   |
|----------------------------------------------------|-------------|
| Stahl / Steel; NBR                                 | FAR 50 - 01 |
| Stahl / Steel; FKM                                 | FAR 50 - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FAR 50 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FAR 50 - 44 |

BESTELLBEISPIEL  
ORDER EXAMPLE

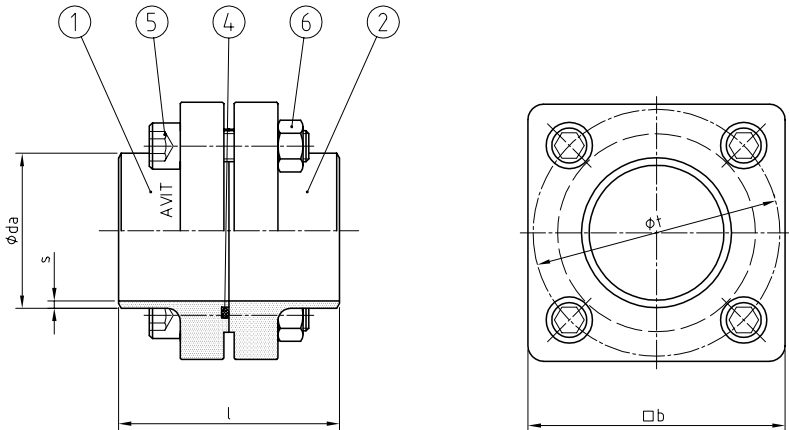
STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                          |
|------|----------------------------------------------------|
| 1    | Flansch mit O-Ring Nut / Flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                   |
| 5    | Schrauben / Bolts                                  |

| PN    | DN   | ABMESSUNGEN [mm] |     |     |     |    |    | O-RING    | SCHRAUBEN | STK. | GEWICHT | BESTELLCODE |
|-------|------|------------------|-----|-----|-----|----|----|-----------|-----------|------|---------|-------------|
|       |      | DIMENSIONS       |     |     |     |    |    |           | BOLTS     | PCS. | WEIGHT  | ORDER CODE  |
| [bar] | [mm] | da x s           | b   | t   | d1  | l  | h  | Pos. 4    | Pos. 5    |      | kg      | TYP DN      |
| 16    | 40   | 48,3x2,6         | 90  | 85  | 68  | 40 | 19 | 49,0x3,0  | M12x30    | 4    | 1,06    | FAR 40      |
|       | 50   | 60,3x2,9         | 100 | 96  | 79  | 43 | 19 | 61,0x3,5  | M12x30    | 4    | 1,23    | FAR 50      |
|       | 65   | 76,1x2,9         | 120 | 112 | 95  | 45 | 20 | 78,0x3,5  | M12x35    | 4    | 1,74    | FAR 65      |
|       | 80   | 88,9x3,2         | 140 | 136 | 113 | 50 | 23 | 90,0x4,0  | M16x40    | 4    | 2,77    | FAR 80      |
|       | 100  | 114,3x3,6        | 150 | 162 | 139 | 60 | 26 | 115,0x4,0 | M16x40    | 4    | 3,75    | FAR 100     |
|       | 125  | 139,7x4,0        | 190 | 187 | 164 | 70 | 30 | 140,0x4,0 | M16x45    | 4    | 5,71    | FAR 125     |
|       | 150  | 168,3x4,5        | 220 | 226 | 197 | 80 | 35 | 168,0x5,0 | M20x60    | 4    | 8,67    | FAR 150     |

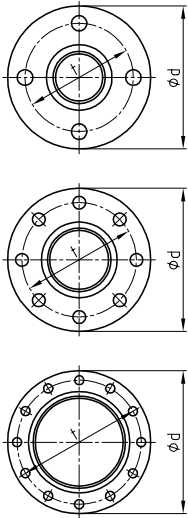
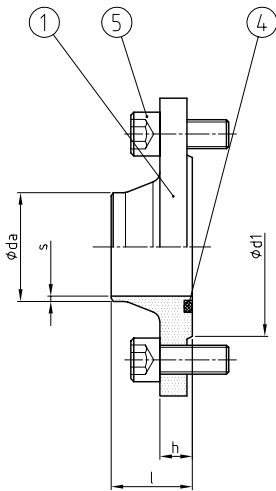


**AVIT**  
Sehr kompakte Bauweise gegenüber herkömmlichen DIN- / EN-Vorschweißflanschen. Mit O-Ring Dichtung.  
  
Very compact design compared to standard DIN-/EN-welding neck flanges. With O-ring sealing.



| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                             |
|----------------------------------------------------|----------------------------------|------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP DN-**                        | Pos. Bezeichnung / Description                       |
| Stahl / Steel; NBR                                 | FKR 50 - 01                      | 1 Flansch mit O-Ring Nut / Flange with O-ring groove |
| Stahl / Steel; FKM                                 | FKR 50 - 02                      | 2 Flansch / Flange                                   |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | FKR 50 - 41                      | 4 O-Ring Dichtung / O-ring sealing                   |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | FKR 50 - 44                      | 5 Schrauben / Bolts                                  |
|                                                    |                                  | 6 Muttern / Nuts                                     |

| PN    | DN   | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     | O-RING    | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------|------|--------------------------------|-----|-----|-----|-----------|--------------------|--------------|-------------------|---------------------------|
| [bar] | [mm] | da x s                         | b   | t   | l   | Pos. 4    | Pos. 5             |              | kg                | TYP DN                    |
| 16    | 40   | 48,3x2,6                       | 90  | 85  | 80  | 49,0x3,0  | M12x55             | 4            | 2,19              | FKR 40                    |
|       | 50   | 60,3x2,9                       | 100 | 96  | 86  | 61,0x3,5  | M12x55             | 4            | 2,41              | FKR 50                    |
|       | 65   | 76,1x2,9                       | 120 | 112 | 90  | 78,0x3,5  | M12x55             | 4            | 3,40              | FKR 65                    |
|       | 80   | 88,9x3,2                       | 140 | 136 | 100 | 90,0x4,0  | M16x65             | 4            | 5,38              | FKR 80                    |
|       | 100  | 114,3x3,6                      | 150 | 162 | 120 | 115,0x4,0 | M16x70             | 4            | 7,32              | FKR 100                   |
|       | 125  | 139,7x4,0                      | 190 | 187 | 140 | 140,0x4,0 | M16x80             | 4            | 11,41             | FKR 125                   |
|       | 150  | 168,3x4,5                      | 220 | 226 | 160 | 168,0x5,0 | M20x100            | 4            | 17,10             | FKR 150                   |



EN 1092-1 TYP 11 PN 16 (DIN 2633)

Für Hydraulikanlagen durch eine O-Ring Dichtung optimiert.  
Auch als Blindflansch erhältlich (DFAB Typ 05).

For hydraulic systems optimised by an O-ring sealing.  
Also available as a blind flange (DFAB type 05).

3  
FLANSCH • NIEDERDRUCK  
FLANGES • LOW PRESSURE

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-**   |
|----------------------------------------------------|-------------|
| Stahl 1.0460+N / P250GH / Steel; NBR               | DFA 50 - 01 |
| Stahl 1.0460+N / P250GH / Steel; FKM               | DFA 50 - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | DFA 50 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | DFA 50 - 44 |

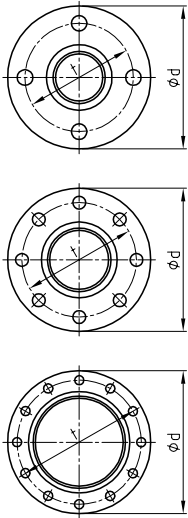
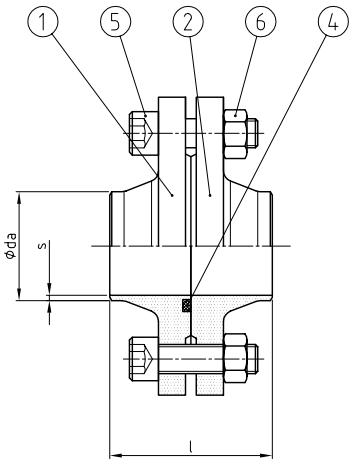
BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                              |
|------|------------------------------------------------------------------------|
| 1    | Vorschweißflansch mit O-Ring Nut / Weld neck flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                                       |
| 5    | Schrauben / Bolts                                                      |

| PN    | DN   | ABMESSUNGEN [mm] |     |     |     |    |    | O-RING    | SCHRAUBEN | STK.  | GEWICHT | BESTELLCODE |
|-------|------|------------------|-----|-----|-----|----|----|-----------|-----------|-------|---------|-------------|
|       |      | DIMENSIONS       |     |     |     |    |    |           | BOLTS     | PCS.  | WEIGHT  | ORDER CODE  |
| [bar] | [mm] | da x s           | d   | t   | d1  | h  | l  | Pos. 4    | Pos. 5    |       | kg      | TYP DN      |
| 40    | 32   | 42,4x2,6         | 140 | 100 | 78  | 18 | 42 | 53,3x5,3  | M16x35    | 4     | 2,03    | DFA 32      |
|       | 40   | 48,3x2,6         | 150 | 110 | 88  | 18 | 45 | 56,5x5,3  | M16x35    | 4     | 2,20    | DFA 40      |
| 16    | 50   | 60,3x2,9         | 165 | 125 | 102 | 18 | 45 | 69,2x5,3  | M16x35    | 4     | 2,87    | DFA 50      |
|       | 65   | 76,1x2,9         | 185 | 145 | 122 | 18 | 45 | 88,3x5,3  | M16x35    | 8 (4) | 3,71    | DFA 65      |
|       | 80   | 88,9x3,2         | 200 | 160 | 138 | 20 | 50 | 110,5x5,3 | M16x35    | 8     | 4,60    | DFA 80      |
|       | 100  | 114,3x3,6        | 220 | 180 | 158 | 20 | 52 | 132,7x7,0 | M16x35    | 8     | 5,30    | DFA 100     |
|       | 125  | 139,7x4,0        | 250 | 210 | 188 | 22 | 55 | 158,1x7,0 | M16x40    | 8     | 7,03    | DFA 125     |
|       | 150  | 168,3x4,5        | 285 | 240 | 212 | 22 | 55 | 183,5x7,0 | M20x45    | 8     | 9,05    | DFA 150     |
|       | 200  | 219,1x6,3        | 340 | 295 | 268 | 24 | 62 | 227,9x6,9 | M20x45    | 12    | 13,36   | DFA 200     |
|       | 250  | 273,0x6,3        | 405 | 355 | 320 | 26 | 70 | 278,7x6,9 | M24x50    | 12    | 20,30   | DFA 250     |
|       | 300  | 323,9x7,1        | 460 | 410 | 378 | 28 | 78 | 329,5x6,9 | M24x50    | 12    | 25,70   | DFA 300     |

Die in Klammern aufgeführten Werte entsprechen der alten DIN 2633. | The values in brackets refer to the former DIN 2633.



**EN 1092-1 TYP 11 PN 16 (DIN 2633)**  
Für Hydraulikanlagen durch eine O-Ring Dichtung optimiert.  
*For hydraulic systems optimised by an O-ring sealing.*

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION      |             | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                               |
|----------------------------------------------------|-------------|----------------------------------|------------------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface          | TYP DN-**   | Pos. Bezeichnung / Description   |                                                                        |
| Stahl 1.0460+N / P250GH / Steel; NBR               | DFK 50 - 01 | 1                                | Vorschweißflansch mit O-Ring Nut / Weld neck flange with O-ring groove |
| Stahl 1.0460+N / P250GH / Steel; FKM               | DFK 50 - 02 | 2                                | Vorschweißflansch / Weld neck flange                                   |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | DFK 50 - 41 | 4                                | O-Ring Dichtung / O-ring sealing                                       |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | DFK 50 - 44 | 5                                | Schrauben / Bolts                                                      |
|                                                    |             | 6                                | Muttern / Nuts                                                         |

| PN DN |      | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     | O-RING    | SCHRAUBEN<br>BOLTS | STK.<br>PCS. | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------|------|--------------------------------|-----|-----|-----|-----------|--------------------|--------------|-------------------|---------------------------|
| [bar] | [mm] | da x s                         | d   | t   | l   | Pos. 4    | Pos. 5             |              | [kg]              | TYP DN                    |
| 40    | 32   | 42,4x2,6                       | 140 | 100 | 84  | 53,3x5,3  | M16x50             | 4            | 3,90              | DFK 32                    |
|       | 40   | 48,3x2,6                       | 150 | 110 | 90  | 56,5x5,3  | M16x55             | 4            | 4,30              | DFK 40                    |
|       | 50   | 60,3x2,9                       | 165 | 125 | 90  | 69,2x5,3  | M16x55             | 4            | 5,70              | DFK 50                    |
|       | 65   | 76,1x2,9                       | 185 | 145 | 90  | 88,3x5,3  | M16x55             | 8 (4)        | 6,90              | DFK 65                    |
|       | 80   | 88,9x3,2                       | 200 | 160 | 100 | 110,5x5,3 | M16x60             | 8            | 8,80              | DFK 80                    |
| 16    | 100  | 114,3x3,6                      | 220 | 180 | 104 | 132,7x7,0 | M16x60             | 8            | 10,20             | DFK 100                   |
|       | 125  | 139,7x4,0                      | 250 | 210 | 110 | 158,1x7,0 | M16x65             | 8            | 13,50             | DFK 125                   |
|       | 150  | 168,3x4,5                      | 285 | 240 | 110 | 183,5x7,0 | M20x70             | 8            | 17,38             | DFK 150                   |
|       | 200  | 219,1x6,3                      | 340 | 295 | 124 | 227,9x6,9 | M20x70             | 12           | 25,60             | DFK 200                   |
|       | 250  | 273,0x6,3                      | 405 | 355 | 140 | 278,7x6,9 | M24x80             | 12           | 37,72             | DFK 250                   |
|       | 300  | 323,9x7,1                      | 460 | 410 | 156 | 329,5x6,9 | M24x90             | 12           | 48,70             | DFK 300                   |

Die in Klammern aufgeführten Werte entsprechen der alten DIN 2633. | The values in brackets refer to the former DIN 2633.

## STANDARD LIEFERUMFANG

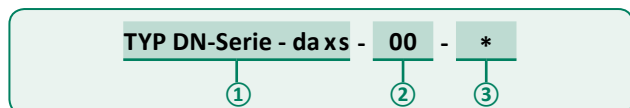
Wir liefern vormontierte Flansche komplett mit Schrauben (ISO 4762) und Muttern (ISO 4032) und O-Ring Dichtungen aus NBR.

Bei **Stahl SAE-Flanschen** sind die Oberflächen der Flanschbunde aus S355J2 (1.0577) metallisch blank und mit einem Korrosionsschutzöl versehen. SAE-Halb- und Vollflansche sind Chrom VI frei verzinkt.

Die zugehörigen Schrauben (Muttern) liefern wir in der Festigkeitsklasse 8.8 (8) verzinkt. Bei **Edelstahl SAE-Flanschen** (Flanschbunde aus 1.4571) sind die Oberflächen metallisch blank und die Schrauben (Muttern) aus der Festigkeitsklasse A2-70 (A2).

## BESTELLBEZEICHNUNG

Unser alphanumerischer Bestellcode ① definiert die Bauform **TYP**, Nennweite **DN**, Druckstufe **Serie** sowie eine mögliche Rohrabmessung **da xs**. Die Werkstoff- und Elastomerkombination wird durch die Kennziffer ② festgelegt. Optionen werden durch Ihre Angabe ③ gesteuert.



Bestellbezeichnung | Principle of the order designation

### ① BESTELLCODE

|                                              |                           |
|----------------------------------------------|---------------------------|
| Bauform, Nennweite, Serie .....              | <b>TYP DN-Serie</b>       |
| Rohrabmessung bei Schweißenden .....         | <b>TYP DN-Serie daxis</b> |
| Anschluss mit Halbflanschen (Standard) ..... | <b>AFA DN-Serie</b>       |
| Anschluss mit Vollflansch .....              | <b>FAV DN-Serie</b>       |
| Kupplung mit Vollflanschen (Standard) .....  | <b>AFKV DN-Serie</b>      |
| Kupplung mit Halb- und Vollflansch .....     | <b>AFK DN-Serie</b>       |

### ② KENNZIFFER WERKSTOFF-KOMBINATION

|                                                     |                          |
|-----------------------------------------------------|--------------------------|
| Stahl (1.0577), verzinkt, O-Ring NBR .....          | <b>TYP DN-Serie - 01</b> |
| Stahl (1.0577), verzinkt, O-Ring FKM .....          | <b>- 02</b>              |
| Stahl (1.0577), verzinkt, Kantseal-Ring PUR .....   | <b>- 03</b>              |
| Stahl (1.0577+N), verzinkt, O-Ring NBR .....        | <b>- 04</b>              |
| Stahl (1.0577+N), verzinkt, O-Ring FKM .....        | <b>- 05</b>              |
| Stahl (1.0577+N), verzinkt, Kantseal-Ring PUR ..... | <b>- 06</b>              |
| Edelstahl (1.4571), O-Ring NBR .....                | <b>- 41</b>              |
| Edelstahl (1.4571), O-Ring FKM .....                | <b>- 42</b>              |

### ③ OPTIONEN

|                                                        |                         |
|--------------------------------------------------------|-------------------------|
| Lieferung ohne Schrauben und Dichtung .....            | <b>TYP DN-Serie - A</b> |
| Lieferung ohne Schrauben .....                         | <b>- B</b>              |
| Lieferung ohne Dichtung .....                          | <b>- C</b>              |
| Vollflansch mit metr. Gewindebohrungen .....           | <b>- D</b>              |
| Nur Flanschbund und Dichtung .....                     | <b>- E</b>              |
| Bei Größe 32-6 Lieferung mit / für Schrauben M12 ..... | <b>(M12)</b>            |

## ZEUGNISSE

Druckführende Bauteile und alle Schweißteile können kostenpflichtig mit entsprechenden Zeugnissen belegt und nachverfolgt werden. Die Bescheinigungsart muss bei Bestellung angegeben werden.

3.2 Abnahmen werden durch das Kurzzeichen der Klassifikationsgesellschaft (zum Beispiel: DNV GL, LR) gekennzeichnet.

|                              |                                     |
|------------------------------|-------------------------------------|
| Abnahmeprüfzeugnis 3.2 ..... | <b>TYP DN-Serie daxis - 3.2 DNV</b> |
| Abnahmeprüfzeugnis 3.1 ..... | <b>- 3.1</b>                        |
| Werkszeugnis .....           | <b>- 2.2</b>                        |
| Werksbescheinigung .....     | <b>- 2.1</b>                        |

## SCOPE OF DELIVERY

We supply pre-assembled flanges complete with bolts (ISO 4762) and nuts (ISO 4032) and O-ring sealings made of NBR.

At **SAE-steel flanges** the surfaces of the flange heads made of S355J2 (1.0577) are metallic bright and coated with an oil film to protect against corrosion. SAE-split and one-piece flange clamps are galvanised.

The bolts (nuts) are delivered in property class 8.8 (8) galvanised.

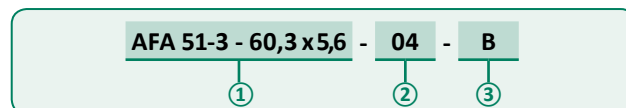
All **SAE-stainless steel flanges** (flange heads made of 1.4571) surfaces are metallic bright. Bolts (nuts) are delivered in property class A2-70 (A2).

## ORDER DESIGNATION

Our alphanumeric order code ① defines the **type**, nominal diameter **DN**, pressure **series** and a possible pipe dimension **da xs**.

Materials and elastomer are specified by the reference number ②.

Options have to be clearly specified ③ by your information.



Bestellbeispiel | Order example

### ① ORDER CODE

|                                                                 |                             |
|-----------------------------------------------------------------|-----------------------------|
| Type, nominal diameter, series .....                            | <b>TYPE DN-Series</b>       |
| Pipe dimension with weld-on ends .....                          | <b>TYPE DN-Series daxis</b> |
| Connection with split flange clamp pair (standard) .....        | <b>AFA DN-Series</b>        |
| Connection with one-piece flange clamp .....                    | <b>FAV DN-Series</b>        |
| Coupling with two one-piece flange clamps (standard) .....      | <b>AFKV DN-Series</b>       |
| Coupling with one-piece f. c. and split flange clamp pair ..... | <b>AFK DN-Series</b>        |

### ② REFERENCE NUMBER MATERIAL-COMBINATION

|                                                       |                            |
|-------------------------------------------------------|----------------------------|
| Steel (1.0577), galvanised, O-ring NBR .....          | <b>TYPE DN-Series - 01</b> |
| Steel (1.0577), galvanised, O-ring FKM .....          | <b>- 02</b>                |
| Steel (1.0577), galvanised, Kantseal-ring PUR .....   | <b>- 03</b>                |
| Steel (1.0577+N), galvanised, O-ring NBR .....        | <b>- 04</b>                |
| Steel (1.0577+N), galvanised, O-ring FKM .....        | <b>- 05</b>                |
| Steel (1.0577+N), galvanised, Kantseal-ring PUR ..... | <b>- 06</b>                |
| Stainless steel (1.4571), O-ring NBR .....            | <b>- 41</b>                |
| Stainless steel (1.4571), O-ring FKM .....            | <b>- 42</b>                |

### ③ OPTIONS

|                                                    |                           |
|----------------------------------------------------|---------------------------|
| Supplied without bolts and sealing .....           | <b>TYPE DN-Series - A</b> |
| Supplied without bolts .....                       | <b>- B</b>                |
| Supplied without sealing .....                     | <b>- C</b>                |
| Metric threaded one-piece flange clamp .....       | <b>- D</b>                |
| Only flange head and sealing .....                 | <b>- E</b>                |
| For size 32-6: delivery with / for screw M12 ..... | <b>(M12)</b>              |

## APPROVALS AND CERTIFICATES

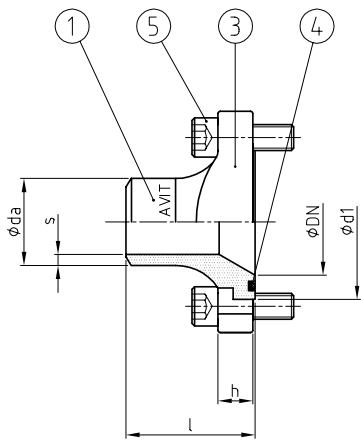
Pressure retaining components and all weldable parts can be attested and traced regarding the raw material with additional costs. The type of certification has to be specified when the order is placed.

3.2 approvals are designated by the abbreviations used by their classification societies (for example DNV GL, LR).

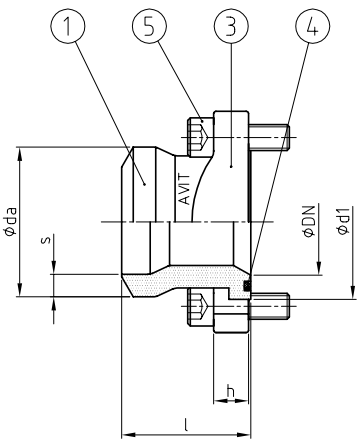
|                                            |                                 |
|--------------------------------------------|---------------------------------|
| Inspection certificate 3.2 .....           | <b>TYPE DN-Series - 3.2 DNV</b> |
| Inspection certificate 3.1 .....           | <b>- 3.1</b>                    |
| Test report .....                          | <b>- 2.2</b>                    |
| Declaration of compliance with order ..... | <b>- 2.1</b>                    |



Reduzierung | Reducer



Tulpenform | Tulip shape



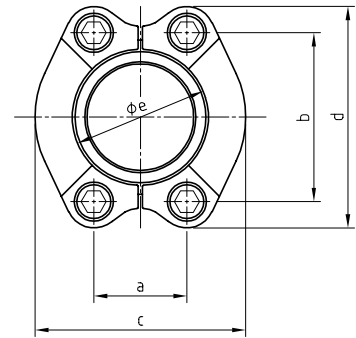
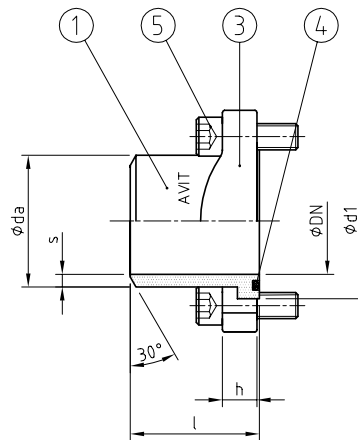
Die folgenden Tabellen enthalten nur die Standard Rohrabmessungen (da xs) für die jeweilige Druckstufe. Wir liefern fast jede mögliche Reduzierung. Bitte fragen Sie bei Bedarf spezifiziert an.

The following tables contain only the standard pipe dimensions (da xs) for given pressure ratings. We supply suitable reduced flange heads. In case of demand for special reduction please enquire in detail.

| PN <sup>1</sup> | DN [mm]<br>SIZE [inch] | 13<br>½"  | 19<br>¾"  | 25<br>1"  | 32<br>1 ¼" | 38<br>1 ½" | 51<br>2"  | 64<br>2 ½" | 76<br>3"  | 89<br>3 ½" | 102<br>4" | 127<br>5" |
|-----------------|------------------------|-----------|-----------|-----------|------------|------------|-----------|------------|-----------|------------|-----------|-----------|
| [bar]           | da xs                  | 3000 6000 | 3000 6000 | 3000 6000 | 3000 6000  | 3000 6000  | 3000 6000 | 3000 6000  | 3000 6000 | 3000 6000  | 3000 6000 | 3000 6000 |
| 250             | 16,0x2,0               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 16,0x3,0               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 17,2x2,3               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 17,2x3,2               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 20,0x2,5               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 20,0x4,0               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 21,3x2,6               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 21,3x4,5               | o o       | o o       | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 25,0x3,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 25,0x5,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 26,9x3,6               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 26,9x5,6               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 30,0x4,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 30,0x6,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 33,7x4,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 33,7x7,1               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 38,0x5,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 38,0x7,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 42,4x3,2               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 42,4x6,3               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 48,3x6,3               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 48,3x10,0              | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 50,0x6,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 50,0x8,0               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 250             | 60,3x5,6               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 420             | 60,3x12,5              | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 175             | 76,1x3,2               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 315             | 76,1x7,1               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 140             | 88,9x3,2               | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 315             | 88,9x10,0              | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 35              | 114,3x2,6              | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |
| 35              | 139,7x4,0              | •         | o         | o o       | o o        | o o        | o o       | o o        | o o       | o o        | o o       | o o       |

• Zur Druckstufe empfohlene Rohrabmessung! | According to the pressure range recommended tube/pipe dimension!  
o Mögliche Reduzierung. | Possible reduction.  
1 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).



AVIT, ISO 6162-1/2 <sup>1</sup>

- Leichte Montage durch Losflanschsystem
- Ausgelegt für statische Beanspruchungen
- Verwendung mit Vollflansch empfohlen (AFAV)

- Easy assembly by flange clamp system
- Designed for static loads
- Recommended use with one-piece flange clamp AFAV

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*  |
|----------------------------------------------------|----------------------|
| Stahl+N, verzinkt / Steel+N, galvanised; NBR       | AFA 51-3 - daxs - 04 |
| Stahl+N, verzinkt / Steel+N, galvanised; FKM       | AFA 51-3 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFA 51-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFA 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                                   |
|------|-----------------------------------------------------------------------------|
| 1    | Flanschbund mit O-Ring Nut / Flange head with O-ring groove                 |
| 3    | Voll- oder Halbflansche / One-piece flange clamp or split flange clamp pair |
| 4    | O-Ring Dichtung / O-ring sealing                                            |
| 5    | Schrauben / Bolts                                                           |

| SERIE<br>SERIES         | PN <sup>2</sup><br>[psi] | DN<br>[mm] | SIZE<br>[inch] | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |       |     |     |       | O-RING<br>Pos. 4 | SCHRAUBEN<br>BOLTS<br>Pos. 5 | GEWICHT<br>WEIGHT<br>[kg] | BESTELLCODE<br>ORDER CODE<br>TYP DN-Serie daxs |
|-------------------------|--------------------------|------------|----------------|--------------------------------|----|----|------|-------|-----|-----|-------|------------------|------------------------------|---------------------------|------------------------------------------------|
|                         |                          |            |                | d1                             | l  | h  | a    | b     | c   | d   | e     |                  |                              |                           |                                                |
| „3000“<br>ISO<br>6162-1 | 350                      | 13         | ½"             | 30,2                           | 30 | 13 | 17,5 | 38,1  | 46  | 54  | 24,3  | 18,64x3,53       | M8x25                        | 0,26                      | AFA 13-3 21,3x2,6                              |
|                         | 350                      | 19         | ¾"             | 38,1                           | 35 | 14 | 22,2 | 47,6  | 52  | 65  | 32,1  | 24,99x3,53       | M10x30                       | 0,41                      | AFA 19-3 26,9x3,6                              |
|                         | 315                      | 25         | 1"             | 44,4                           | 40 | 16 | 26,2 | 52,4  | 59  | 70  | 38,5  | 32,92x3,53       | M10x30                       | 0,49                      | AFA 25-3 33,7x3,6                              |
|                         | 280                      | 32         | 1¼"            | 50,8                           | 45 | 14 | 30,2 | 58,7  | 73  | 80  | 43,7  | 37,69x3,53       | M10x30                       | 0,65                      | AFA 32-3 42,4x3,2                              |
|                         | 210                      | 38         | 1½"            | 60,3                           | 50 | 16 | 35,7 | 69,9  | 83  | 94  | 50,8  | 47,22x3,53       | M12x35                       | 0,98                      | AFA 38-3 48,3x4,5                              |
|                         | 210                      | 51         | 2"             | 71,4                           | 57 | 16 | 42,9 | 77,8  | 97  | 102 | 62,7  | 56,74x3,53       | M12x35                       | 1,27                      | AFA 51-3 60,3x5,6                              |
|                         | 175                      | 64         | 2½"            | 84,1                           | 58 | 19 | 50,8 | 88,9  | 109 | 115 | 74,9  | 69,44x3,53       | M12x40                       | 1,69                      | AFA 64-3 76,1x3,2 <sup>3</sup>                 |
|                         | 160                      | 76         | 3"             | 101,6                          | 60 | 22 | 61,9 | 106,4 | 131 | 135 | 90,9  | 85,32x3,53       | M16x50                       | 2,73                      | AFA 76-3 88,9x4,0                              |
|                         | 35                       | 89         | 3½"            | 114,3                          | 60 | 23 | 69,9 | 120,7 | 140 | 152 | 102,3 | 98,02x3,53       | M16x50                       | 3,02                      | AFA 89-3 101,6x3,6                             |
|                         | 35                       | 102        | 4"             | 127                            | 60 | 25 | 77,8 | 130,2 | 150 | 160 | 115,0 | 110,72x3,53      | M16x50                       | 3,44                      | AFA 102-3 114,3x3,6                            |
| „6000“<br>ISO<br>6162-2 | 35                       | 127        | 5"             | 152,4                          | 60 | 28 | 92,1 | 152,4 | 180 | 183 | 140,5 | 136,12x3,53      | M16x55                       | 4,77                      | AFA 127-3 139,7x4,0                            |
|                         | 420                      | 13         | ½"             | 31,7                           | 34 | 16 | 18,2 | 40,5  | 48  | 57  | 24,6  | 18,64x3,53       | M8x30                        | 0,33                      | AFA 13-6 21,3x4,0                              |
|                         | 420                      | 19         | ¾"             | 41,3                           | 38 | 19 | 23,8 | 50,8  | 60  | 72  | 32,5  | 24,99x3,53       | M10x35                       | 0,64                      | AFA 19-6 26,9x5,6                              |
|                         | 420                      | 25         | 1"             | 47,6                           | 40 | 24 | 27,8 | 57,2  | 70  | 81  | 38,9  | 32,92x3,53       | M12x45                       | 1,01                      | AFA 25-6 33,7x6,3                              |
|                         | 420                      | 32         | 1¼"            | 54                             | 45 | 27 | 31,8 | 66,7  | 78  | 96  | 44,5  | 37,69x3,53       | M12x45                       | 1,55                      | AFA 32-6 42,4x8,0 M12                          |
|                         | 420                      | 32         | 1¼"            | 54                             | 45 | 27 | 31,8 | 66,7  | 78  | 96  | 44,5  | 37,69x3,53       | M14x45                       | 1,58                      | AFA 32-6 42,4x8,0                              |
|                         | 420                      | 38         | 1½"            | 63,5                           | 50 | 30 | 36,5 | 79,4  | 96  | 113 | 51,6  | 47,22x3,53       | M16x55                       | 2,40                      | AFA 38-6 48,3x8,8                              |
|                         | 420                      | 51         | 2"             | 79,4                           | 58 | 37 | 44,5 | 96,8  | 114 | 134 | 67,6  | 56,74x3,53       | M20x70                       | 4,10                      | AFA 51-6 60,3x12,5                             |
|                         | 315                      | 64         | 2½"            | 107,7                          | 80 | 48 | 58,7 | 123,8 | 150 | 175 | 89,5  | 69,44x3,53       | M24x80                       | 8,11                      | AFA 64-6 76,1x12,5                             |
|                         | 315                      | 76         | 3"             | 131,7                          | 90 | 58 | 71,4 | 152,4 | 178 | 210 | 114,5 | 85,32x3,53       | M30x100                      | 14,41                     | AFA 76-6 88,9x14,2                             |

## BESTELLCODE VARIANTEN

Anschluss mit Halbflanschen (Standard) .....AFA

Anschluss mit Vollflansch .....AFAV

## ORDER CODE OPTIONS

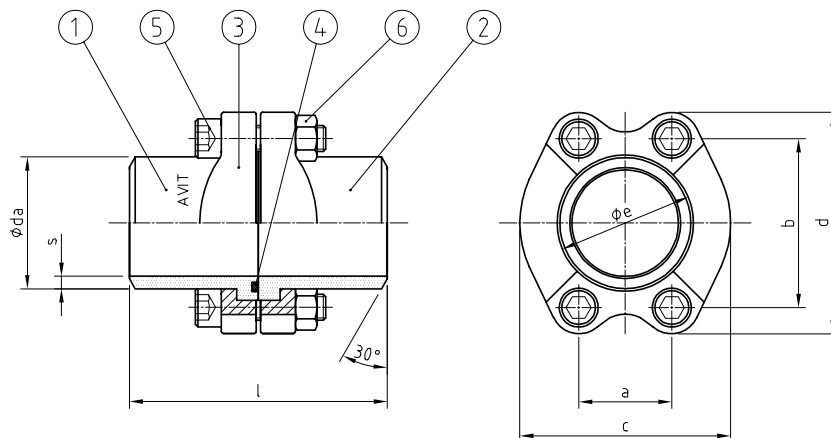
Connection with split flange clamp pair (standard).....AFA

Connection with one-piece flange clamp .....AFAV

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

3 Der Flanschbund muss bei Verwendung mit Vollflansch auf Ø 74,5 mm reduziert werden. | If using a one-piece flange clamp, the flange head has to be reduced to Ø 74.5 mm.

AVIT, ISO 6162-1/2 <sup>1</sup>

- Leichte Montage durch Losflanschsystem
- Ausgelegt für statische Beanspruchungen
- Easy assembly by flange clamp system
- Designed for static loads

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*   |
|----------------------------------------------------|-----------------------|
| Stahl+N, verzinkt / Steel+N, galvanised; NBR       | AFKV 51-3 - daxs - 04 |
| Stahl+N, verzinkt / Steel+N, galvanised; FKM       | AFKV 51-3 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFKV 51-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFKV 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                                            |
|------|--------------------------------------------------------------------------------------|
| 1    | Flanschbund mit O-Ring Nut / Flange head with O-ring groove                          |
| 2    | Gegenflanschbund / Counter flange                                                    |
| 3    | Vollflansche oder Halb- und Vollflansch / One-piece flange or split- and solidflange |
| 4    | O-Ring Dichtung / O-ring sealing                                                     |
| 5    | Schrauben / Bolts                                                                    |
| 6    | Muttern / Nuts                                                                       |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN    | SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |       |       |     |       |             | O-RING      | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT    | BESTELLCODE<br>ORDER CODE       |
|-------------------------|-----------------|-------|------|--------------------------------|-------|-------|-----|-------|-------------|-------------|--------------------|----------------------|---------------------------------|
|                         | [psi]           | [bar] | [mm] | [inch]                         | l     | a     | b   | c     | d           | e           | Pos. 4             | Pos. 5               | [kg]                            |
| „3000“<br>ISO<br>6162-1 | 350             | 13    | ½"   | 60                             | 17,5  | 38,1  | 46  | 54    | 24,3        | 18,64x3,53  | M8x40              | 0,52                 | AFKV 13-3 21,3x2,6              |
|                         | 350             | 19    | ¾"   | 70                             | 22,2  | 47,6  | 52  | 65    | 32,1        | 24,99x3,53  | M10x45             | 0,80                 | AFKV 19-3 26,9x3,6              |
|                         | 315             | 25    | 1"   | 80                             | 26,2  | 52,4  | 59  | 70    | 38,5        | 32,92x3,53  | M10x50             | 0,96                 | AFKV 25-3 33,7x3,6              |
|                         | 280             | 32    | 1¼"  | 90                             | 30,2  | 58,7  | 73  | 80    | 43,7        | 37,69x3,53  | M10x45             | 1,27                 | AFKV 32-3 42,4x3,2              |
|                         | 210             | 38    | 1½"  | 100                            | 35,7  | 69,9  | 83  | 94    | 50,8        | 47,22x3,53  | M12x50             | 1,90                 | AFKV 38-3 48,3x4,5              |
|                         | 210             | 51    | 2"   | 114                            | 42,9  | 77,8  | 97  | 102   | 62,7        | 56,74x3,53  | M12x50             | 2,49                 | AFKV 51-3 60,3x5,6              |
|                         | 175             | 64    | 2½"  | 116                            | 50,8  | 88,9  | 109 | 115   | 74,9        | 69,44x3,53  | M12x60             | 3,31                 | AFKV 64-3 76,1x3,2 <sup>3</sup> |
|                         | 160             | 76    | 3"   | 120                            | 61,9  | 106,4 | 131 | 135   | 90,9        | 85,32x3,53  | M16x70             | 5,44                 | AFKV 76-3 88,9x4,0              |
|                         | 35              | 89    | 3½"  | 120                            | 69,9  | 120,7 | 140 | 152   | 102,3       | 98,02x3,53  | M16x70             | 5,88                 | AFKV 89-3 101,6x3,6             |
|                         | 35              | 102   | 4"   | 120                            | 77,8  | 130,2 | 150 | 160   | 115,0       | 110,72x3,53 | M16x70             | 6,72                 | AFKV 102-3 114,3x3,6            |
| 35                      | 127             | 5"    | 120  | 92,1                           | 152,4 | 180   | 183 | 140,5 | 136,12x3,53 | M16x80      | 9,32               | AFKV 127-3 139,7x4,0 |                                 |
| „6000“<br>ISO<br>6162-2 | 420             | 13    | ½"   | 68                             | 18,2  | 40,5  | 48  | 57    | 24,6        | 18,64x3,53  | M8x45              | 0,66                 | AFKV 13-6 21,3x4,0              |
|                         | 420             | 19    | ¾"   | 76                             | 23,8  | 50,8  | 60  | 72    | 32,5        | 24,99x3,53  | M10x50             | 1,25                 | AFKV 19-6 26,9x5,6              |
|                         | 420             | 25    | 1"   | 80                             | 27,8  | 57,2  | 70  | 81    | 38,9        | 32,92x3,53  | M12x65             | 1,34                 | AFKV 25-6 33,7x6,3              |
|                         | 420             | 32    | 1¼"  | 90                             | 31,8  | 66,7  | 78  | 96    | 44,5        | 37,69x3,53  | M12x70             | 3,03                 | AFKV 32-6 42,4x8,0 M12          |
|                         | 420             | 32    | 1¼"  | 90                             | 31,8  | 66,7  | 78  | 96    | 44,5        | 37,69x3,53  | M14x70             | 3,06                 | AFKV 32-6 42,4x8,0              |
|                         | 420             | 38    | 1½"  | 100                            | 36,5  | 79,4  | 96  | 113   | 51,6        | 47,22x3,53  | M16x80             | 4,66                 | AFKV 38-6 48,3x8,8              |
|                         | 420             | 51    | 2"   | 116                            | 44,5  | 96,8  | 114 | 134   | 67,6        | 56,74x3,53  | M20x100            | 7,94                 | AFKV 51-6 60,3x12,5             |
|                         | 315             | 64    | 2½"  | 160                            | 58,7  | 123,8 | 150 | 175   | 89,5        | 69,44x3,53  | M24x120            | 15,68                | AFKV 64-6 76,1x12,5             |
|                         | 315             | 76    | 3"   | 180                            | 71,4  | 152,4 | 178 | 210   | 114,5       | 85,32x3,53  | M30x150            | 27,42                | AFKV 76-6 88,9x14,2             |

## BESTELLCODE VARIANTEN

Kupplung mit Vollflanschen (Standard) ..... **AFKV**  
 Kupplung mit Halb- und Vollflansch ..... **AFK**

## ORDER CODE OPTIONS

Coupling with two one-piece flange clamps (standard) ..... **AFKV**  
 Coupling with one-piece f. c. and split flange clamp pair ..... **AFK**

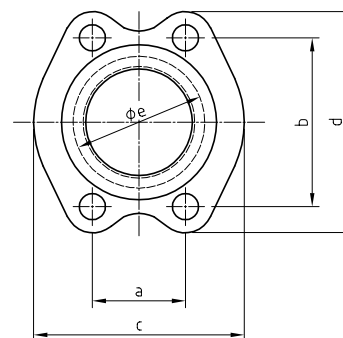
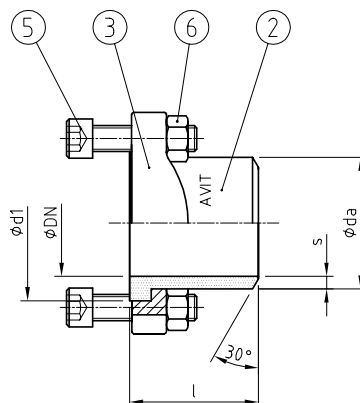
1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

3 Der Flanschbund muss bei Verwendung mit Vollflansch auf Ø 74,5 mm reduziert werden. | If using a one-piece flange clamp, the flange head has to be reduced to Ø 74.5 mm.

AVIT, ISO 6162-1/2 <sup>1</sup>

- Leichte Montage durch Losflanschsystem
- Ausgelegt für statische Beanspruchungen
- Easy assembly by flange clamp system
- Designed for static loads

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*  |
|----------------------------------------------------|----------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AFG 51-3 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | AFG 51-3 - daxs - 02 |
| Stahl+N, verzinkt / Steel+N, galvanised; NBR       | AFG 51-3 - daxs - 04 |
| Stahl+N, verzinkt / Steel+N, galvanised; FKM       | AFG 51-3 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFG 51-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFG 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description              |
|------|----------------------------------------|
| 2    | Gegenflanschbund / Counter flange head |
| 3    | Vollflansch / One-piece flange clamp   |
| 5    | Schrauben / Bolts                      |
| 6    | Muttern / Nuts                         |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |      |       |       |     |       |        | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT   | BESTELLCODE<br>ORDER CODE      |
|-------------------------|-----------------|------|--------|--------------------------------|----|------|-------|-------|-----|-------|--------|--------------------|---------------------|--------------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | d1                             | l  | h    | a     | b     | c   | d     | e      | Pos. 5             | [kg]                | TYP DN-Serie daxs              |
| „3000“<br>ISO<br>6162-1 | 350             | 13   | ½"     | 30,2                           | 30 | 13   | 17,5  | 38,1  | 46  | 54    | 24,3   | M8x40              | 0,33                | AFG 13-3 21,3x2,6              |
|                         | 350             | 19   | ¾"     | 38,1                           | 35 | 14   | 22,2  | 47,6  | 52  | 65    | 32,1   | M10x45             | 0,51                | AFG 19-3 26,9x3,6              |
|                         | 315             | 25   | 1"     | 44,4                           | 40 | 16   | 26,2  | 52,4  | 59  | 70    | 38,5   | M10x50             | 0,59                | AFG 25-3 33,7x3,6              |
|                         | 280             | 32   | 1¼"    | 50,8                           | 45 | 14   | 30,2  | 58,7  | 73  | 80    | 43,7   | M10x45             | 0,74                | AFG 32-3 42,4x3,2              |
|                         | 210             | 38   | 1½"    | 60,3                           | 50 | 16   | 35,7  | 69,9  | 83  | 94    | 50,8   | M12x50             | 1,11                | AFG 38-3 48,3x4,5              |
|                         | 210             | 51   | 2"     | 71,4                           | 57 | 16   | 42,9  | 77,8  | 97  | 102   | 62,7   | M12x50             | 1,41                | AFG 51-3 60,3x5,6              |
|                         | 175             | 64   | 2½"    | 84,1                           | 58 | 19   | 50,8  | 88,9  | 109 | 115   | 74,9   | M12x60             | 1,83                | AFG 64-3 76,1x3,2 <sup>3</sup> |
|                         | 160             | 76   | 3"     | 101,6                          | 60 | 22   | 61,9  | 106,4 | 131 | 135   | 90,9   | M16x70             | 3,15                | AFG 76-3 88,9x4,0              |
|                         | 35              | 89   | 3½"    | 114,3                          | 60 | 23   | 69,9  | 120,7 | 140 | 152   | 102,3  | M16x70             | 3,30                | AFG 89-3 101,6x3,6             |
|                         | 35              | 102  | 4"     | 127                            | 60 | 25   | 77,8  | 130,2 | 150 | 160   | 115,0  | M16x70             | 3,75                | AFG 102-3 114,3x3,6            |
| 35                      | 127             | 5"   | 152,4  | 60                             | 28 | 92,1 | 152,4 | 180   | 183 | 140,5 | M16x80 | 5,06               | AFG 127-3 139,7x4,0 |                                |
| „6000“<br>ISO<br>6162-2 | 420             | 13   | ½"     | 31,7                           | 34 | 16   | 18,2  | 40,5  | 48  | 57    | 24,6   | M8x45              | 0,40                | AFG 13-6 21,3x4,0              |
|                         | 420             | 19   | ¾"     | 41,3                           | 38 | 19   | 23,8  | 50,8  | 60  | 72    | 32,5   | M10x50             | 0,74                | AFG 19-6 26,9x5,6              |
|                         | 420             | 25   | 1"     | 47,6                           | 40 | 24   | 27,8  | 57,2  | 70  | 81    | 38,9   | M12x65             | 1,16                | AFG 25-6 33,7x6,3              |
|                         | 420             | 32   | 1¼"    | 54                             | 45 | 27   | 31,8  | 66,7  | 78  | 96    | 44,5   | M12x70             | 1,78                | AFG 32-6 42,4x8,0 M12          |
|                         | 420             | 32   | 1¼"    | 54                             | 45 | 27   | 31,8  | 66,7  | 78  | 96    | 44,5   | M14x70             | 1,81                | AFG 32-6 42,4x8,0              |
|                         | 420             | 38   | 1½"    | 63,5                           | 50 | 30   | 36,5  | 79,4  | 96  | 113   | 51,6   | M16x80             | 2,73                | AFG 38-6 48,3x8,8              |
|                         | 420             | 51   | 2"     | 79,4                           | 58 | 37   | 44,5  | 96,8  | 114 | 134   | 67,6   | M20x100            | 4,75                | AFG 51-6 60,3x12,5             |
|                         | 315             | 64   | 2½"    | 107,7                          | 80 | 48   | 58,7  | 123,8 | 150 | 175   | 89,5   | M24x120            | 9,27                | AFG 64-6 76,1x12,5             |
|                         | 315             | 76   | 3"     | 131,7                          | 90 | 58   | 71,4  | 152,4 | 178 | 210   | 114,5  | M30x150            | 16,3                | AFG 76-6 88,9x14,2             |

## BESTELLCODE VARIANTEN

Gegenflansch mit Vollflansch (Standard) ..... AFG

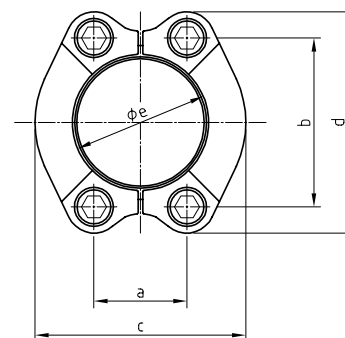
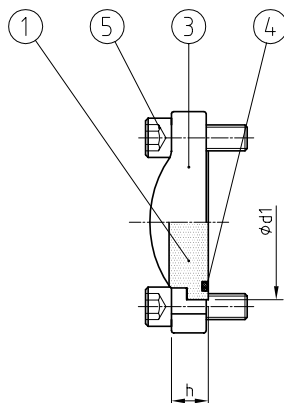
Gegenflansch mit Halbflanschen ..... AFGH

## ORDER CODE OPTIONS

Counter flange with one-piece flange clamp (standard) ..... AFG

Counter flange with split flange clamp pair ..... AFGH

<sup>1</sup> Lochbild gemäß Norm. | Hole pattern according to ISO standard.<sup>2</sup> Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).<sup>3</sup> Der Flanschbund muss bei Verwendung mit Vollflansch auf Ø 74,5 mm reduziert werden. | If using a one-piece flange clamp, the flange head has to be reduced to Ø 74.5 mm.

AVIT, ISO 6162-1/2<sup>1</sup>

- Auch mit Messanschluss G 1/4" lieferbar
- Verwendung mit Vollflansch empfohlen
- Also available with test point thread G 1/4"
- Recommended use with one-piece flange clamp

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-** |
|----------------------------------------------------|-----------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AFAB 51-3 - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | AFAB 51-3 - 02  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFAB 51-3 - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFAB 51-3 - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                                   |
|------|-----------------------------------------------------------------------------|
| 1    | Blindstopfen mit O-Ring Nut / Lock plug with O-ring groove                  |
| 3    | Voll- oder Halbflansche / One-piece flange clamp or split flange clamp pair |
| 4    | O-Ring Dichtung / O-ring sealing                                            |
| 5    | Schrauben / Bolts                                                           |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN    | SIZE  | ABMESSUNGEN [mm]<br>DIMENSIONS |      |       |       |     |       |             | O-RING      | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----------------|-------|-------|--------------------------------|------|-------|-------|-----|-------|-------------|-------------|--------------------|-------------------|---------------------------|
|                         | [psi]           | [bar] | [mm]  | [inch]                         | d1   | h     | a     | b   | c     | d           | e           | Pos. 4             | Pos. 5            | [kg]                      |
| „3000“<br>ISO<br>6162-1 | 350             | 13    | ½"    | 30,2                           | 13   | 17,5  | 38,1  | 46  | 54    | 24,3        | 18,64x3,53  | M8x25              | 0,26              | AFAB 13-3                 |
|                         | 350             | 19    | ¾"    | 38,1                           | 14   | 22,2  | 47,6  | 52  | 65    | 32,1        | 24,99x3,53  | M10x30             | 0,41              | AFAB 19-3                 |
|                         | 315             | 25    | 1"    | 44,4                           | 16   | 26,2  | 52,4  | 59  | 70    | 38,5        | 32,92x3,53  | M10x30             | 0,49              | AFAB 25-3                 |
|                         | 280             | 32    | 1¼"   | 50,8                           | 14   | 30,2  | 58,7  | 73  | 80    | 43,7        | 37,69x3,53  | M10x30             | 0,65              | AFAB 32-3                 |
|                         | 210             | 38    | 1½"   | 60,3                           | 16   | 35,7  | 69,9  | 83  | 94    | 50,8        | 47,22x3,53  | M12x35             | 0,98              | AFAB 38-3                 |
|                         | 210             | 51    | 2"    | 71,4                           | 16   | 42,9  | 77,8  | 97  | 102   | 62,7        | 56,74x3,53  | M12x35             | 1,27              | AFAB 51-3                 |
|                         | 175             | 64    | 2½"   | 84,1                           | 19   | 50,8  | 88,9  | 109 | 115   | 74,9        | 69,44x3,53  | M12x40             | 1,69              | AFAB 64-3                 |
|                         | 160             | 76    | 3"    | 101,6                          | 22   | 61,9  | 106,4 | 131 | 135   | 90,9        | 85,32x3,53  | M16x50             | 2,73              | AFAB 76-3                 |
|                         | 35              | 89    | 3½"   | 114,3                          | 23   | 69,9  | 120,7 | 140 | 152   | 102,3       | 98,02x3,53  | M16x50             | 3,02              | AFAB 89-3                 |
|                         | 35              | 102   | 4"    | 127                            | 25   | 77,8  | 130,2 | 150 | 160   | 115,0       | 110,72x3,53 | M16x50             | 3,44              | AFAB 102-3                |
| 35                      | 127             | 5"    | 152,4 | 28                             | 92,1 | 152,4 | 180   | 183 | 140,5 | 136,12x3,53 | M16x55      | 4,77               | AFAB 127-3        |                           |
| „6000“<br>ISO<br>6162-2 | 420             | 13    | ½"    | 31,7                           | 16   | 18,2  | 40,5  | 48  | 57    | 24,6        | 18,64x3,53  | M8x30              | 0,33              | AFAB 13-6                 |
|                         | 420             | 19    | ¾"    | 41,3                           | 19   | 23,8  | 50,8  | 60  | 72    | 32,5        | 24,99x3,53  | M10x35             | 0,64              | AFAB 19-6                 |
|                         | 420             | 25    | 1"    | 47,6                           | 24   | 27,8  | 57,2  | 70  | 81    | 38,9        | 32,92x3,53  | M12x45             | 1,01              | AFAB 25-6                 |
|                         | 420             | 32    | 1¼"   | 54                             | 27   | 31,8  | 66,7  | 78  | 96    | 44,5        | 37,69x3,53  | M12x45             | 1,55              | AFAB 32-6 M12             |
|                         | 420             | 32    | 1¼"   | 54                             | 27   | 31,8  | 66,7  | 78  | 96    | 44,5        | 37,69x3,53  | M14x45             | 1,58              | AFAB 32-6                 |
|                         | 420             | 38    | 1½"   | 63,5                           | 30   | 36,5  | 79,4  | 96  | 113   | 51,6        | 47,22x3,53  | M16x55             | 2,40              | AFAB 38-6                 |
|                         | 420             | 51    | 2"    | 79,4                           | 37   | 44,5  | 96,8  | 114 | 134   | 67,6        | 56,74x3,53  | M20x70             | 4,10              | AFAB 51-6                 |
|                         | 315             | 64    | 2½"   | 107,7                          | 48   | 58,7  | 123,8 | 150 | 175   | 89,5        | 69,44x3,53  | M24x80             | 8,11              | AFAB 64-6                 |
|                         | 315             | 76    | 3"    | 131,7                          | 58   | 71,4  | 152,4 | 178 | 210   | 114,5       | 85,32x3,53  | M30x100            | 14,41             | AFAB 76-6                 |

## BESTELLCODE VARIANTEN

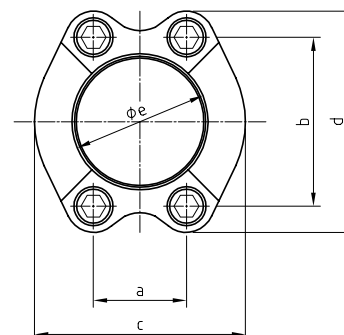
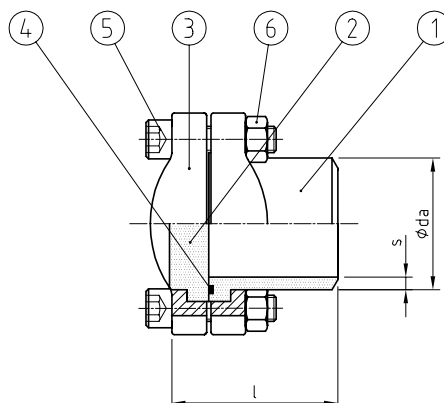
Blindstopfen mit Halbflanschen (Standard) ..... AFAB  
Blindstopfen mit Vollflansch ..... AFABV

## ORDER CODE OPTIONS

Lock plug with split flange clamp pair (standard) ..... AFAB  
Lock plug with one-piece flange clamp ..... AFABV

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

AVIT, ISO 6162-1/2 <sup>1</sup>

- Leichte Montage durch Losflanschsystem
- Ausgelegt für statische Beanspruchungen

- Easy assembly by flange clamp system
- Designed for static loads

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-daxs-*    |
|----------------------------------------------------|------------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AFKBV 51-3 - daxs - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | AFKBV 51-3 - daxs - 02 |
| Stahl+N, verzinkt / Steel+N, galvanised; NBR       | AFKBV 51-3 - daxs - 04 |
| Stahl+N, verzinkt / Steel+N, galvanised; FKM       | AFKBV 51-3 - daxs - 05 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFKBV 51-3 - daxs - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFKBV 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                                            |
|------|--------------------------------------------------------------------------------------|
| 1    | Flanschbund mit O-Ring Nut / Flange head with O-ring groove                          |
| 2    | Gegenblindstopfen, glatt (nicht +N) / Counter blind plug, plain (not +N)             |
| 3    | Vollflansche oder Halb- und Vollflansch / One-piece flange or split- and solidflange |
| 4    | O-Ring Dichtung / O-ring sealing                                                     |
| 5    | Schrauben / Bolts                                                                    |
| 6    | Muttern / Nuts                                                                       |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |       |       |     |       |        | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT     | BESTELLCODE<br>ORDER CODE        |
|-------------------------|-----------------|------|--------|--------------------------------|-------|-------|-----|-------|--------|--------------------|-----------------------|----------------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | l                              | a     | b     | c   | d     | e      | Pos. 5             | [kg]                  | TYP DN-Serie daxis               |
| „3000“<br>ISO<br>6162-1 | 350             | 13   | ½"     | 43                             | 17,5  | 38,1  | 46  | 54    | 24,3   | M8x40              | 0,51                  | AFKBV 13-3 21,3x2,6              |
|                         | 350             | 19   | ¾"     | 50                             | 22,2  | 47,6  | 52  | 65    | 32,1   | M10x45             | 0,79                  | AFKBV 19-3 26,9x3,6              |
|                         | 315             | 25   | 1"     | 57                             | 26,2  | 52,4  | 59  | 70    | 38,5   | M10x50             | 0,85                  | AFKBV 25-3 33,7x3,6              |
|                         | 280             | 32   | 1¼"    | 60                             | 30,2  | 58,7  | 73  | 80    | 43,7   | M10x45             | 1,26                  | AFKBV 32-3 42,4x3,2              |
|                         | 210             | 38   | 1½"    | 67                             | 35,7  | 69,9  | 83  | 94    | 50,8   | M12x50             | 1,88                  | AFKBV 38-3 48,3x4,5              |
|                         | 210             | 51   | 2"     | 74                             | 42,9  | 77,8  | 97  | 102   | 62,7   | M12x50             | 2,47                  | AFKBV 51-3 60,3x5,6              |
|                         | 175             | 64   | 2½"    | 78                             | 50,8  | 88,9  | 109 | 115   | 74,9   | M12x60             | 3,29                  | AFKBV 64-3 76,1x3,2 <sup>3</sup> |
|                         | 160             | 76   | 3"     | 83                             | 61,9  | 106,4 | 131 | 135   | 90,9   | M16x70             | 5,42                  | AFKBV 76-3 88,9x4,0              |
|                         | 35              | 89   | 3½"    | 84                             | 69,9  | 120,7 | 140 | 152   | 102,3  | M16x70             | 5,86                  | AFKBV 89-3 101,6x3,6             |
|                         | 35              | 102  | 4"     | 86                             | 77,8  | 130,2 | 150 | 160   | 115,0  | M16x70             | 6,70                  | AFKBV 102-3 114,3x3,6            |
| 35                      | 127             | 5"   | 89     | 92,1                           | 152,4 | 180   | 183 | 140,5 | M16x80 | 9,30               | AFKBV 127-3 139,7x4,0 |                                  |
| „6000“<br>ISO<br>6162-2 | 420             | 13   | ½"     | 51                             | 18,2  | 40,5  | 48  | 57    | 24,6   | M8x45              | 0,65                  | AFKBV 13-6 21,3x4,0              |
|                         | 420             | 19   | ¾"     | 58                             | 23,8  | 50,8  | 60  | 72    | 32,5   | M10x50             | 1,24                  | AFKBV 19-6 26,9x5,6              |
|                         | 420             | 25   | 1"     | 65                             | 27,8  | 57,2  | 70  | 81    | 38,9   | M12x65             | 1,33                  | AFKBV 25-6 33,7x6,3              |
|                         | 420             | 32   | 1¼"    | 73                             | 31,8  | 66,7  | 78  | 96    | 44,5   | M12x70             | 3,02                  | AFKBV 32-6 42,4x8,0 M12          |
|                         | 420             | 32   | 1¼"    | 73                             | 31,8  | 66,7  | 78  | 96    | 44,5   | M14x70             | 3,04                  | AFKBV 32-6 42,4x8,0              |
|                         | 420             | 38   | 1½"    | 81                             | 36,5  | 79,4  | 96  | 113   | 51,6   | M16x80             | 4,64                  | AFKBV 38-6 48,3x8,8              |
|                         | 420             | 51   | 2"     | 96                             | 44,5  | 96,8  | 114 | 134   | 67,6   | M20x100            | 7,92                  | AFKBV 51-6 60,3x10,0             |
|                         | 315             | 64   | 2½"    | 129                            | 58,7  | 123,8 | 150 | 175   | 89,5   | M24x120            | 15,66                 | AFKBV 64-6 76,1x12,5             |
|                         | 315             | 76   | 3"     | 149                            | 71,4  | 152,4 | 178 | 210   | 114,5  | M30x150            | 27,40                 | AFKBV 76-6 88,9x14,2             |

## BESTELLCODE VARIANTEN

Kupplung mit Vollflanschen (Standard) ..... **AFKBV**  
Kupplung mit Halb- und Vollflansch ..... **AFKB**

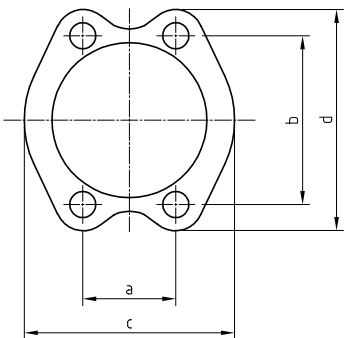
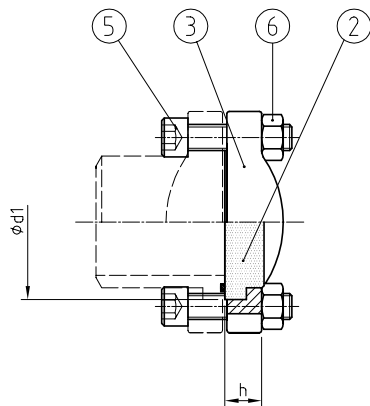
## ORDER CODE OPTIONS

Coupling with two one-piece flange clamps (standard) ..... **AFKBV**  
Coupling with one-piece f. c. and split flange clamp pair ..... **AFKB**

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

3 Der Flanschbund muss bei Verwendung mit Vollflansch auf Ø 74,5 mm reduziert werden. | If using a one-piece flange clamp, the flange head has to be reduced to Ø 74.5 mm.



#### AVIT, ISO 6162-1/2 <sup>1</sup>

Drucksicheres Verschließen von SAE Flanschanschlüssen nach ISO 6162-1/2.

Pressure-proof closing of SAE-flange connections acc. ISO 6162-1/2.

#### WERKSTOFF-KOMBINATION MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-** |
|----------------------------------------------------|-----------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AFGB 51-3 - 01  |
| Stahl, verzinkt / Steel, galvanised; FKM           | AFGB 51-3 - 02  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFGB 51-3 - 41  |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFGB 51-3 - 42  |

#### BESTELLBEISPIEL ORDER EXAMPLE

#### STÜCKLISTE PARTS LIST

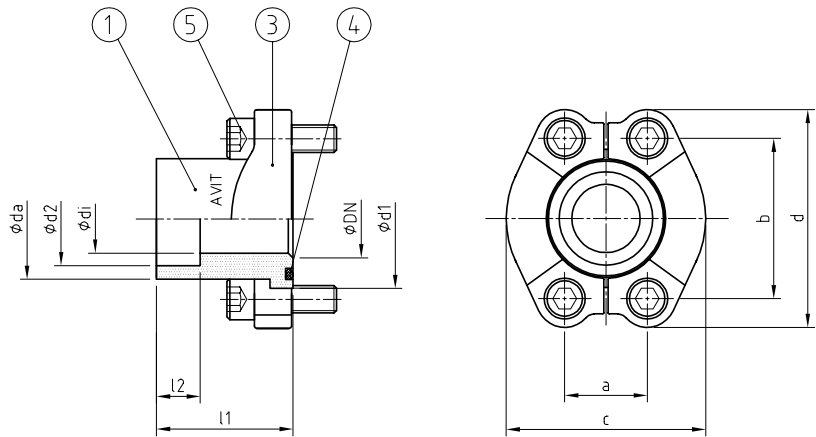
| Pos. | Bezeichnung / Description                            |
|------|------------------------------------------------------|
| 2    | Gegenblindstopfen, glatt / Counter blind plug, plain |
| 3    | Vollflansch / One-piece flange clamp                 |
| 5    | Schrauben / Bolts                                    |
| 6    | Muttern / Nuts                                       |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |       |       |     |        | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----------------|------|--------|--------------------------------|------|-------|-------|-----|--------|--------------------|-------------------|---------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | d1                             | h    | a     | b     | c   | d      | Pos. 5             | [kg]              | TYP DN-Serie              |
| „3000“<br>ISO<br>6162-1 | 350             | 13   | ½"     | 30,2                           | 13   | 17,5  | 38,1  | 46  | 54     | M8x40              | 0,26              | AFGB 13-3                 |
|                         | 350             | 19   | ¾"     | 38,1                           | 14   | 22,2  | 47,6  | 52  | 65     | M10x45             | 0,41              | AFGB 19-3                 |
|                         | 315             | 25   | 1"     | 44,4                           | 16   | 26,2  | 52,4  | 59  | 70     | M10x50             | 0,49              | AFGB 25-3                 |
|                         | 280             | 32   | 1¼"    | 50,8                           | 14   | 30,2  | 58,7  | 73  | 80     | M10x45             | 0,65              | AFGB 32-3                 |
|                         | 210             | 38   | 1½"    | 60,3                           | 16   | 35,7  | 69,9  | 83  | 94     | M12x50             | 0,98              | AFGB 38-3                 |
|                         | 210             | 51   | 2"     | 71,4                           | 16   | 42,9  | 77,8  | 97  | 102    | M12x50             | 1,27              | AFGB 51-3                 |
|                         | 175             | 64   | 2½"    | 84,1                           | 19   | 50,8  | 88,9  | 109 | 115    | M12x60             | 1,69              | AFGB 64-3                 |
|                         | 160             | 76   | 3"     | 101,6                          | 22   | 61,9  | 106,4 | 131 | 135    | M16x70             | 2,73              | AFGB 76-3                 |
|                         | 35              | 89   | 3½"    | 114,3                          | 23   | 69,9  | 120,7 | 140 | 152    | M16x70             | 3,02              | AFGB 89-3                 |
|                         | 35              | 102  | 4"     | 127                            | 25   | 77,8  | 130,2 | 150 | 160    | M16x70             | 3,44              | AFGB 102-3                |
| 35                      | 127             | 5"   | 152,4  | 28                             | 92,1 | 152,4 | 180   | 183 | M16x80 | 4,77               | AFGB 127-3        |                           |
| „6000“<br>ISO<br>6162-2 | 420             | 13   | ½"     | 31,7                           | 16   | 18,2  | 40,5  | 48  | 57     | M8x45              | 0,33              | AFGB 13-6                 |
|                         | 420             | 19   | ¾"     | 41,3                           | 19   | 23,8  | 50,8  | 60  | 72     | M10x50             | 0,64              | AFGB 19-6                 |
|                         | 420             | 25   | 1"     | 47,6                           | 24   | 27,8  | 57,2  | 70  | 81     | M12x65             | 1,01              | AFGB 25-6                 |
|                         | 420             | 32   | 1¼"    | 54                             | 27   | 31,8  | 66,7  | 78  | 96     | M12x70             | 1,55              | AFGB 32-6 M12             |
|                         | 420             | 32   | 1¼"    | 54                             | 27   | 31,8  | 66,7  | 78  | 96     | M14x70             | 1,58              | AFGB 32-6                 |
|                         | 420             | 38   | 1½"    | 63,5                           | 30   | 36,5  | 79,4  | 96  | 113    | M16x80             | 2,40              | AFGB 38-6                 |
|                         | 420             | 51   | 2"     | 79,4                           | 37   | 44,5  | 96,8  | 114 | 134    | M20x100            | 4,10              | AFGB 51-6                 |
|                         | 315             | 64   | 2½"    | 107,7                          | 48   | 58,7  | 123,8 | 150 | 175    | M24x120            | 8,11              | AFGB 64-6                 |
|                         | 315             | 76   | 3"     | 131,7                          | 58   | 71,4  | 152,4 | 178 | 210    | M30x150            | 14,41             | AFGB 76-6                 |

<sup>1</sup> Lochbild gemäß Norm. | Hole pattern according to ISO standard.

<sup>2</sup> Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).





AVIT, ISO 6162-1/2 <sup>1</sup>

- Leichte Montage durch Losflanshsystem
- Ausgelegt für statische Beanspruchungen

- Flange clamp design
- Designed for static loads

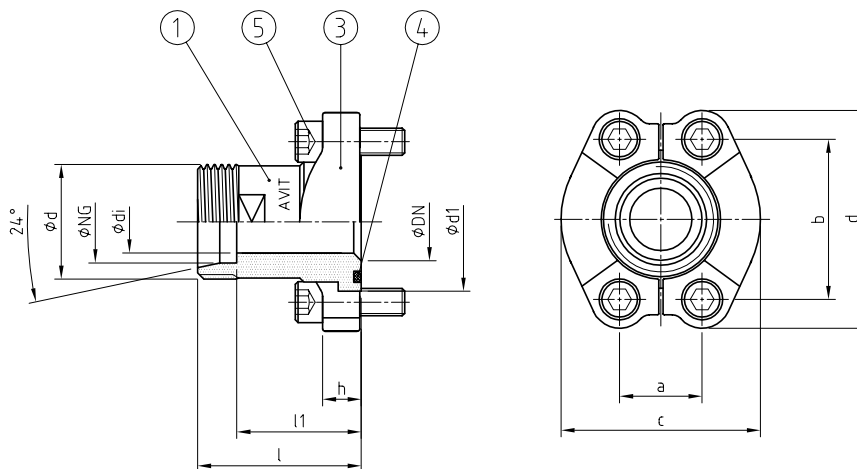
3  
SAE-FLANSCH  
SAE-FLANGES

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION                 | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                                                      |
|---------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface                     | TYP DN-Serie-d2-**               | Pos. Bezeichnung / Description                                                |
| Stahl blank, Flansch verzinkt / Steel, Flange galvanised; NBR | AFAL 51-3-50- 01                 | 1 Flanschbund mit O-Ring Nut / Flange head with O-ring groove                 |
| Stahl blank, Flansch verzinkt / Steel, Flange galvanised; FKM | AFAL 51-3-50 - 02                | 3 Voll- oder Halbflansche / One-piece flange clamp or split flange clamp pair |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR            | AFAL 51-3-50 - 41                | 4 O-Ring Dichtung / O-ring sealing                                            |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM            | AFAL 51-3-50 - 42                | 5 Schrauben / Bolts                                                           |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |      |                      |      |    |    |      |      |    |     | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE                       |
|-------------------------|-----------------|------|--------|--------------------------------|------|----------------------|------|----|----|------|------|----|-----|------------|--------------------|-------------------|-------------------------------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | d1                             | di   | d2                   | da   | l1 | l2 | a    | b    | c  | d   | Pos. 4     | Pos. 5             | [kg]              | TYP DN-Serie d2                                 |
| „3000“<br>ISO<br>6162-1 | 160<br>(315)    | 13   | ½"     | 30,2                           | 12,5 | 16,5<br>17,6         | 24   | 30 | 12 | 17,5 | 38,1 | 46 | 54  | 18,64x3,53 | M8x25              | 0,31              | AFAL 13-3<br>AFAL 13-3<br>AFAL 19-3             |
|                         |                 | 19   | ¾"     | 38,1                           | 15   | 20,5<br>21,7<br>25,5 | 31,5 | 35 | 13 | 22,2 | 47,6 | 52 | 65  | 24,99x3,53 | M10x30             | 0,53              | AFAL 19-3<br>AFAL 19-3<br>AFAL 25-3             |
|                         |                 | 25   | 1"     | 44,4                           | 20   | 25,5<br>27,3<br>30,5 | 38   | 40 | 14 | 26,2 | 52,4 | 59 | 70  | 32,92x3,53 | M10x30             | 0,65              | AFAL 25-3<br>AFAL 25-3<br>AFAL 32-3             |
|                         |                 | 32   | 1¼"    | 50,8                           | 25   | 30,5<br>34,2<br>38,5 | 43   | 45 | 16 | 30,2 | 58,7 | 73 | 80  | 37,69x3,53 | M10x30             | 0,89              | AFAL 32-3<br>AFAL 32-3<br>AFAL 38-3             |
|                         | 160<br>(210)    | 38   | 1½"    | 60,3                           | 32   | 38,5<br>42,4<br>49   | 50   | 50 | 18 | 35,7 | 69,9 | 83 | 94  | 47,22x3,53 | M12x35             | 1,34              | AFAL 38-3<br>AFAL 38-3<br>AFAL 51-3             |
|                         |                 | 51   | 2"     | 71,4                           | 38   | 49<br>50,7           | 62   | 60 | 20 | 42,9 | 77,8 | 97 | 102 | 56,74x3,53 | M12x35             | 1,75              | AFAL 51-3<br>AFAL 51-3                          |
|                         | 160<br>(420)    | 13   | ½"     | 31,7                           | 11   | 16,5<br>17,6         | 24   | 35 | 13 | 18,2 | 40,5 | 48 | 57  | 18,64x3,53 | M8x30              | 0,33              | AFAL 13-6<br>AFAL 13-6<br>AFAL 19-6             |
|                         |                 | 19   | ¾"     | 41,3                           | 15   | 20,5<br>21,7         | 31,8 | 40 | 13 | 23,8 | 50,8 | 60 | 72  | 24,99x3,53 | M10x35             | 0,80              | AFAL 19-6<br>AFAL 19-6<br>AFAL 25-6             |
|                         |                 | 25   | 1"     | 47,6                           | 20   | 25,5<br>27,3         | 38   | 45 | 13 | 27,8 | 57,2 | 70 | 81  | 32,92x3,53 | M12x45             | 0,98              | AFAL 25-6<br>AFAL 25-6<br>AFAL 32-6 (M12)       |
|                         |                 | 32   | 1¼"    | 54                             | 24   | 30,5<br>34,2         | 44   | 50 | 16 | 31,8 | 66,7 | 78 | 96  | 37,69x3,53 | M14(12)x45         | 1,44              | AFAL 32-6 (M12)<br>AFAL 32-6 (M12)<br>AFAL 38-6 |
| „6000“<br>ISO<br>6162-2 | 160<br>(420)    | 38   | 1½"    | 63,5                           | 31   | 38,5<br>42,4         | 51   | 55 | 18 | 36,5 | 79,4 | 96 | 113 | 47,22x3,53 | M16x55             | 2,14              | AFAL 38-6<br>AFAL 38-6                          |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Druckeinschränkung wegen Kehlnaht! Je nach Anwendung sind höhere Drücke möglich. | Pressure restriction due to fillet weld! Depending on the application, higher pressures are possible.



AVIT, ISO 6162-1/2<sup>1</sup>

- Leichte Montage durch Losflanschsystem
- Gewindezapfen mit 24° Konus-Anschluss mit metrischem Gewinde nach ISO 8434-1

- Easy assembly by flange clamp system
- Screwed end with 24° conus with metric thread acc. ISO 8434-1

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

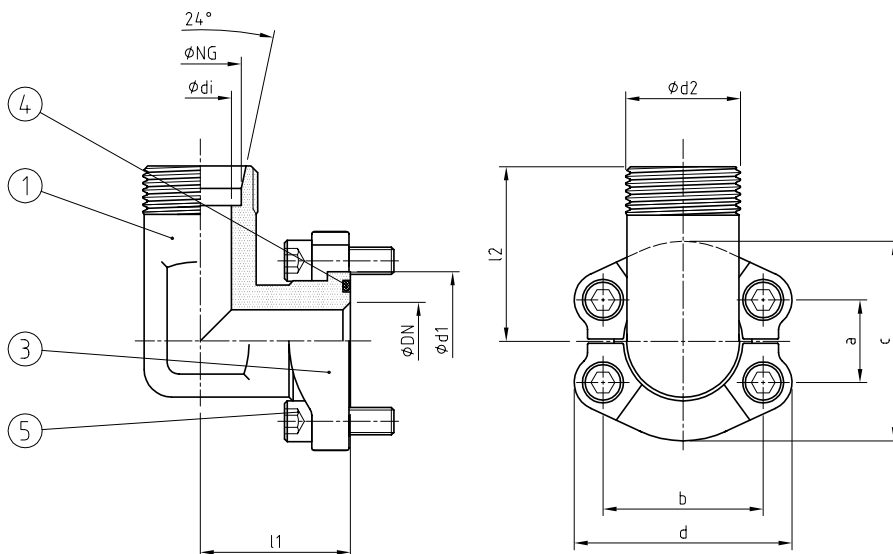
| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-NG-**  |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AFAM 25-3 - 25 - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | AFAM 25-3 - 25 - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFAM 25-3 - 25 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFAM 25-3 - 25 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                     |
|------|-----------------------------------------------|
| 1    | Flansch mit 24° Konus / Flange with 24° conus |
| 3    | Halbflansche / Split flange clamp pair        |
| 4    | O-Ring Dichtung / O-ring sealing              |
| 5    | Schrauben / Bolts                             |

| SERIE<br>SERIES         | PN <sup>2</sup>         | DN   | SIZE   | NG   | ABMESSUNGEN [mm] |         |      |    |      |      |      |    |     | O-RING     |            | SCHRAUBEN | GEWICHT            | BESTELLCODE        |
|-------------------------|-------------------------|------|--------|------|------------------|---------|------|----|------|------|------|----|-----|------------|------------|-----------|--------------------|--------------------|
|                         |                         |      |        |      | DIMENSIONS       |         |      |    |      |      |      |    |     |            |            | BOLTS     | WEIGHT             | ORDER CODE         |
| [psi]                   | [bar]                   | [mm] | [inch] | [mm] | d                | di      | d1   | l  | l1   | a    | b    | c  | d   | Pos. 4     | Pos. 5     | [kg]      | TYP DN-Serie-NG    |                    |
| „3000“<br>ISO<br>6162-1 | 350                     | 13   | ½"     | 12   | M20x1,5          | 8       |      | 42 | 34,5 |      |      |    |     |            |            |           |                    | AFAM 13-3-12       |
|                         |                         |      |        | 15L  | M22x1,5          | 11      | 30,2 | 42 | 40   | 17,5 | 38,1 | 46 | 54  | 18,64x3,53 | M8x25      | 0,31      | AFAM 13-3-15       |                    |
|                         |                         |      |        | 16   | M24x1,5          | 12      |      | 44 | 38,5 |      |      |    |     |            |            |           | AFAM 13-3-16       |                    |
|                         | 350                     | 19   | ¾"     | 16   | M24x1,5          | 12      |      | 47 | 38,5 |      |      |    |     |            |            |           |                    | AFAM 19-3-16       |
|                         |                         |      |        | 20   | M30x2,0          | 16      | 38,1 | 49 | 38,5 | 22,2 | 47,6 | 52 | 65  | 24,99x3,53 | M10x30     | 0,53      | AFAM 19-3-20       |                    |
|                         |                         |      |        | 22L  | M30x2,0          | 18      |      | 47 | 39,5 |      |      |    |     |            |            |           | AFAM 19-3-22       |                    |
|                         | 315                     | 25   | 1"     | 20   | M30x2,0          | 15      |      | 55 | 44,5 |      |      |    |     |            |            |           |                    | AFAM 25-3-20       |
|                         |                         |      |        | 25   | M36x2,0          | 20      | 44,4 | 57 | 45   | 26,2 | 52,4 | 59 | 70  | 32,92x3,53 | M10x30     | 0,65      | AFAM 25-3-25       |                    |
|                         |                         |      |        | 28L  | M36x2,0          | 23      |      | 53 | 45,5 |      |      |    |     |            |            |           | AFAM 25-3-28       |                    |
|                         | 280                     | 32   | 1¼"    | 25   | M36x2,0          | 20      |      | 55 | 43   |      |      |    |     |            |            |           |                    | AFAM 32-3-25       |
|                         |                         |      |        | 30   | M42x2,0          | 25      | 50,8 | 57 | 43,5 | 30,2 | 58,7 | 73 | 80  | 37,69x3,53 | M10x30     | 0,89      | AFAM 32-3-30       |                    |
|                         |                         |      |        | 35L  | M45x2,0          | 30      |      | 53 | 42,5 |      |      |    |     |            |            |           | AFAM 32-3-35       |                    |
|                         | 210                     | 38   | 1½"    | 35L  | M45x2,0          | 30      |      | 56 | 45,5 |      |      |    |     |            |            |           |                    | AFAM 38-3-35       |
|                         |                         |      |        | 38   | M52x2,0          | 30      | 60,3 | 62 | 46   | 35,7 | 69,9 | 83 | 94  | 47,22x3,53 | M12x35     | 1,34      | AFAM 38-3-38       |                    |
|                         |                         |      |        | 42L  | M52x2,0          | 36      |      | 56 | 45   |      |      |    |     |            |            |           | AFAM 38-3-42       |                    |
|                         | 210                     | 51   | 2"     | 38   | M52x2,0          | 30      |      | 66 | 50   |      |      |    |     |            |            |           |                    | AFAM 51-3-38       |
|                         |                         |      |        | 42L  | M52x2,0          | 36      | 71,4 | 60 | 49   | 42,9 | 77,8 | 97 | 102 | 56,74x3,53 | M12x35     | 1,75      | AFAM 51-3-42       |                    |
|                         | „6000“<br>ISO<br>6162-2 | 420  | 13     | ½"   | 12               | M20x1,5 | 8    |    | 45   | 37,5 |      |    |     |            |            |           |                    |                    |
| 16                      |                         |      |        |      | M24x1,5          | 12      | 31,7 | 47 | 38,5 | 18,2 | 40,5 | 48 | 57  | 18,64x3,53 | M8x30      | 0,33      | AFAM 13-6-16       |                    |
| 420                     |                         | 19   | ¾"     | 16   | M24x1,5          | 12      |      | 53 | 44,5 |      |      |    |     |            |            |           | AFAM 19-6-16       |                    |
|                         |                         |      |        | 20   | M30x2,0          | 15      | 41,3 | 55 | 44,5 | 23,8 | 50,8 | 60 | 72  | 24,99x3,53 | M10x35     | 0,80      | AFAM 19-6-20       |                    |
| 420                     |                         | 25   | 1"     | 20   | M30x2,0          | 15      |      | 64 | 48   |      |      |    |     |            |            |           | AFAM 25-6-20       |                    |
|                         |                         |      |        | 25   | M36x2,0          | 19      | 47,6 | 66 | 54   | 27,8 | 57,2 | 70 | 81  | 32,92x3,53 | M12x45     | 0,98      | AFAM 25-6-25       |                    |
| 420                     |                         | 32   | 1¼"    | 25   | M36x2,0          | 19      |      | 71 | 59   |      |      |    |     |            |            |           |                    | AFAM 32-6-25 (M12) |
|                         |                         |      |        | 30   | M42x2,0          | 25      | 54   | 73 | 59,5 | 31,8 | 66,7 | 78 | 96  | 37,69x3,53 | M14(12)x45 | 1,44      | AFAM 32-6-30 (M12) |                    |
| 420                     |                         | 38   | 1½"    | 30   | M42x2,0          | 25      |      | 78 | 64,5 |      |      |    |     |            |            |           |                    | AFAM 38-6-30       |
|                         |                         |      |        | 38   | M52x2,0          | 30      | 63,5 | 80 | 64   | 36,5 | 79,4 | 96 | 113 | 47,22x3,53 | M16x55     | 2,14      | AFAM 38-6-38       |                    |

Fußnoten siehe Seite 3.48 | Footnotes see on page 3.48

AVIT, ISO 6162-1/2<sup>1</sup>

- Leichte Montage und richtungseinstellbar durch Losflanshsystem
- Gewindezapfen mit 24° Konus-Anschluss mit metrischem Gewinde nach ISO 8434-1
- Easy assembly by flange clamp system
- Screwed end with 24° conus with metric thread acc. ISO 8434-1

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface          | TYP DN-Serie-NG-**  |
|----------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR           | AFWA 25-3 - 25 - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM           | AFWA 25-3 - 25 - 02 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; NBR | AFWA 25-3 - 25 - 41 |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti; FKM | AFWA 25-3 - 25 - 42 |

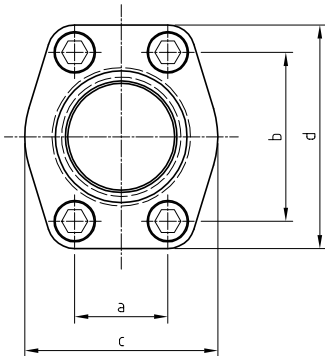
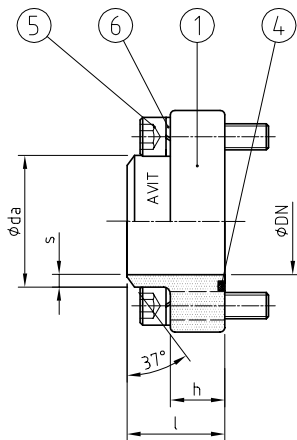
BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                     |
|------|-----------------------------------------------|
| 1    | Flansch mit 24° Konus / Flange with 24° conus |
| 3    | Halbflansche / Split flange clamp pair        |
| 4    | O-Ring Dichtung / O-ring sealing              |
| 5    | Schrauben / Bolts                             |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN  | SIZE | NG      | ABMESSUNGEN [mm]<br>DIMENSIONS |       |      |        |      |      |      |    |            | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |                    |              |
|-------------------------|-----------------|-----|------|---------|--------------------------------|-------|------|--------|------|------|------|----|------------|------------|--------------------|-------------------|---------------------------|--------------------|--------------|
|                         |                 |     |      |         | [psi]                          | [bar] | [mm] | [inch] | [mm] | d2   | dI   | d1 | l1         |            |                    |                   |                           | l2                 | a            |
| „3000“<br>ISO<br>6162-1 | 210             | 13  | ½"   | 12      | M20x1,5                        | 8     |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 13-3-12       |              |
|                         |                 |     |      | 15L     | M22x1,5                        | 11    | 30,2 | 44     | 50   | 17,5 | 38,1 | 46 | 57         | 18,64x3,53 | M8x25              | 0,43              | AFWA 13-3-15              |                    |              |
|                         |                 |     |      | 16      | M24x1,5                        | 12    |      |        |      |      |      |    |            |            |                    |                   | AFWA 13-3-16              |                    |              |
|                         | 210             | 19  | ¾"   | 16      | M24x1,5                        | 12    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 19-3-16       |              |
|                         |                 |     |      | 20      | M30x2,0                        | 16    | 38,1 | 53     | 64   | 22,2 | 47,6 | 52 | 68         | 24,99x3,53 | M10x30             | 0,84              | AFWA 19-3-20              |                    |              |
|                         |                 |     |      | 22L     | M30x2,0                        | 18    |      |        |      |      |      |    |            |            |                    |                   | AFWA 19-3-22              |                    |              |
|                         | 210             | 25  | 1"   | 20      | M30x2,0                        | 15    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 25-3-20       |              |
|                         |                 |     |      | 25      | M36x2,0                        | 20    | 44,4 | 60     | 65   | 26,2 | 52,4 | 59 | 74         | 32,92x3,53 | M10x30             | 1,02              | AFWA 25-3-25              |                    |              |
|                         |                 |     |      | 28L     | M36x2,0                        | 23    |      |        |      |      |      |    |            |            |                    |                   | AFWA 25-3-28              |                    |              |
|                         | 210             | 32  | 1¼"  | 25      | M36x2,0                        | 20    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 32-3-25       |              |
|                         |                 |     |      | 30      | M42x2,0                        | 25    | 50,8 | 55     | 64   | 30,2 | 58,7 | 73 | 81         | 37,69x3,53 | M10x30             | 1,55              | AFWA 32-3-30              |                    |              |
|                         |                 |     |      | 35L     | M45x2,0                        | 30    |      |        |      |      |      |    |            |            |                    |                   | AFWA 32-3-35              |                    |              |
| 210                     | 38              | 1½" | 35L  | M45x2,0 | 30                             |       |      |        |      |      |      |    |            |            |                    |                   | AFWA 38-3-35              |                    |              |
|                         |                 |     | 38   | M52x2,0 | 30                             | 60,3  | 66   | 78     | 35,7 | 69,9 | 83   | 95 | 47,22x3,53 | M12x35     | 2,12               | AFWA 38-3-38      |                           |                    |              |
|                         |                 |     | 42L  | M52x2,0 | 36                             |       |      |        |      |      |      |    |            |            |                    | AFWA 38-3-42      |                           |                    |              |
| „6000“<br>ISO<br>6162-2 | 420             | 13  | ½"   | 12      | M20x1,5                        | 8     |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 13-6-12       |              |
|                         |                 |     |      | 16      | M24x1,5                        | 12    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 13-6-16       |              |
|                         | 420             | 19  | ¾"   | 16      | M24x1,5                        | 12    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 19-6-16       |              |
|                         |                 |     |      | 20      | M30x2,0                        | 15    | 41,3 | 53     | 64   | 23,8 | 50,8 | 60 | 72         | 24,99x3,53 | M10x35             | 1,09              | AFWA 19-6-20              |                    |              |
|                         | 420             | 25  | 1"   | 20      | M30x2,0                        | 15    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 25-6-20       |              |
|                         |                 |     |      | 25      | M36x2,0                        | 20    | 47,6 | 60     | 62   | 27,8 | 57,2 | 70 | 82         | 32,92x3,53 | M12x45             | 1,70              | AFWA 25-6-25              |                    |              |
|                         | 420             | 32  | 1¼"  | 25      | M36x2,0                        | 20    |      |        |      |      |      |    |            |            |                    |                   |                           | AFWA 32-6-25 (M12) |              |
|                         |                 |     |      | 30      | M42x2,0                        | 25    | 54   | 70     | 72   | 31,8 | 66,7 | 78 | 95         | 37,69x3,53 | M14(12)x45         | 2,32              | AFWA 32-6-30 (M12)        |                    |              |
|                         | 420             | 38  | 1½"  | 30      | M42x2,0                        | 25    |      |        |      |      |      |    |            |            |                    |                   |                           |                    | AFWA 38-6-30 |
|                         |                 |     |      | 38      | M52x2,0                        | 30    | 63,5 | 80     | 84   | 36,5 | 79,4 | 96 | 110        | 47,22x3,53 | M16x55             | 3,55              | AFWA 38-6-38              |                    |              |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).



ISO 6162-1/2 <sup>1</sup>

Einfache, einteilige Ausführung

Simple one-piece design

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-daxs-*   |
|---------------------------------------------------|-----------------------|
| Stahl / Steel ; NBR                               | AFSA 51-3 - daxs - 01 |
| Stahl / Steel; FKM                                | AFSA 51-3 - daxs - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFSA 51-3 - daxs - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFSA 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                          |
|------|----------------------------------------------------|
| 1    | Flansch mit O-Ring Nut / Flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                   |
| 5    | Schrauben / Bolts                                  |
| 6    | Federringe / Spring lock washers                   |

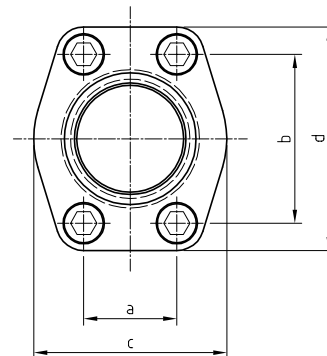
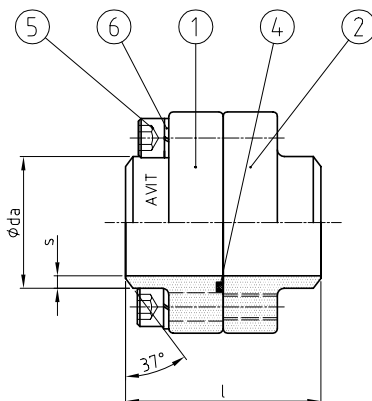
| SERIE<br>SERIES         | PN <sup>2</sup><br>[psi] | DN<br>[bar] | SIZE<br>[mm] | [inch] | ABMESSUNGEN [mm]<br>DIMENSIONS |      |       |     |     | O-RING<br>Pos. 4 | SCHRAUBEN<br>BOLTS<br>Pos. 5 | GEWICHT<br>WEIGHT<br>[kg] | BESTELLCODE<br>ORDER CODE<br>TYP DN-Serie daxs |
|-------------------------|--------------------------|-------------|--------------|--------|--------------------------------|------|-------|-----|-----|------------------|------------------------------|---------------------------|------------------------------------------------|
|                         |                          |             |              |        | l                              | h    | a     | b   | c   |                  |                              |                           |                                                |
| „3000“<br>ISO<br>6162-1 | 350                      | 13          | ½"           | 36     | 16                             | 17,5 | 38,1  | 47  | 57  | 18,64x3,53       | M8x30                        | 0,31                      | AFSA 13-3 21,3x2,6                             |
|                         | 350                      | 19          | ¾"           | 36     | 18                             | 22,2 | 47,6  | 49  | 66  | 24,99x3,53       | M10x35                       | 0,47                      | AFSA 19-3 26,9x3,6                             |
|                         | 315                      | 25          | 1"           | 36     | 18                             | 26,2 | 52,4  | 53  | 71  | 32,92x3,53       | M10x35                       | 0,54                      | AFSA 25-3 33,7x3,2                             |
|                         | 280                      | 32          | 1¼"          | 41     | 21                             | 30,2 | 58,7  | 69  | 80  | 37,69x3,53       | M10x35                       | 0,72                      | AFSA 32-3 42,4x3,2                             |
|                         | 210                      | 38          | 1½"          | 44     | 25                             | 35,7 | 69,9  | 77  | 94  | 47,22x3,53       | M12x45                       | 1,12                      | AFSA 38-3 48,3x4,5                             |
|                         | 210                      | 51          | 2"           | 45     | 25                             | 42,9 | 77,8  | 89  | 103 | 56,74x3,53       | M12x45                       | 1,29                      | AFSA 51-3 60,3x5,6                             |
|                         | 175                      | 64          | 2½"          | 50     | 25                             | 50,8 | 88,9  | 101 | 115 | 69,44x3,53       | M12x45                       | 1,50                      | AFSA 64-3 76,1x2,9                             |
|                         | 160                      | 76          | 3"           | 50     | 27                             | 61,9 | 106,4 | 124 | 135 | 85,32x3,53       | M16x50                       | 2,37                      | AFSA 76-3 88,9x3,6                             |
|                         | 35                       | 89          | 3½"          | 50     | 27                             | 69,9 | 120,7 | 136 | 152 | 98,02x3,53       | M16x50                       | 3,38                      | AFSA 89-3 101,6x3,6                            |
|                         | 35                       | 102         | 4"           | 50     | 27                             | 77,8 | 130,2 | 146 | 162 | 110,72x3,53      | M16x50                       | 3,02                      | AFSA 102-3 114,3x3,6                           |
| „6000“<br>ISO<br>6162-2 | 35                       | 127         | 5"           | 50     | 28                             | 92,1 | 152,4 | 180 | 184 | 136,12x3,53      | M16x55                       | 3,53                      | AFSA 127-3 139,7x4,0                           |
|                         | 420                      | 13          | ½"           | 36     | 16                             | 18,2 | 40,5  | 47  | 57  | 18,64x3,53       | M8x30                        | 0,34                      | AFSA 13-6 21,3x4,5                             |
|                         | 420                      | 19          | ¾"           | 36     | 19                             | 23,8 | 50,8  | 53  | 71  | 24,99x3,53       | M10x35                       | 0,56                      | AFSA 19-6 26,9x5,6                             |
|                         | 420                      | 25          | 1"           | 44     | 24                             | 27,8 | 57,2  | 69  | 80  | 32,92x3,53       | M12x45                       | 1,00                      | AFSA 25-6 33,7x7,1                             |
|                         | 420                      | 32          | 1¼"          | 44     | 27                             | 31,8 | 66,7  | 77  | 94  | 37,69x3,53       | M12x50                       | 1,33                      | AFSA 32-6 42,4x8,0 M12                         |
|                         | 420                      | 32          | 1¼"          | 44     | 27                             | 31,8 | 66,7  | 77  | 94  | 37,69x3,53       | M14x50                       | 1,36                      | AFSA 32-6 42,4x8,0                             |
|                         | 420                      | 38          | 1½"          | 51     | 30                             | 36,5 | 79,4  | 89  | 106 | 47,22x3,53       | M16x55                       | 2,04                      | AFSA 38-6 48,3x8,8                             |
|                         | 420                      | 51          | 2"           | 70     | 37                             | 44,5 | 96,8  | 116 | 135 | 56,74x3,53       | M20x70                       | 4,01                      | AFSA 51-6 60,3x10,0                            |
|                         | 315                      | 64          | 2½"          | 75     | 45                             | 58,7 | 123,8 | 150 | 166 | 69,44x3,53       | M24x80                       | 6,57                      | AFSA 64-6 76,1x12,5                            |
|                         | 315                      | 76          | 3"           | 90     | 55                             | 71,4 | 152,4 | 178 | 208 | 85,32x3,53       | M30x100                      | 14,51                     | AFSA 76-6 88,9x14,2                            |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

ISO 6162-1/2<sup>1</sup>

Einfache, einteilige Ausführung

Simple one-piece design

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-daxs-*   |
|---------------------------------------------------|-----------------------|
| Stahl / Steel ; NBR                               | AFSK 51-3 - daxs - 01 |
| Stahl / Steel; FKM                                | AFSK 51-3 - daxs - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFSK 51-3 - daxs - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFSK 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

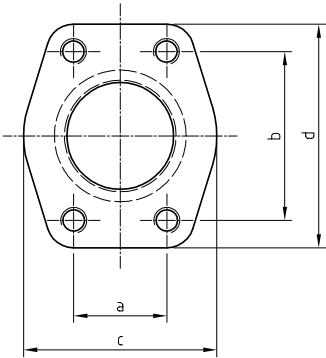
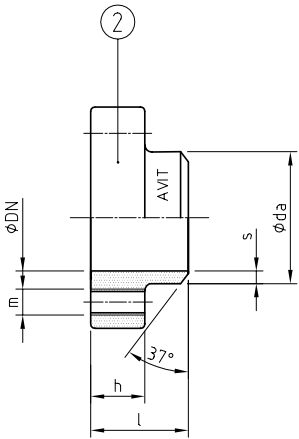
| Pos. | Bezeichnung / Description                          |
|------|----------------------------------------------------|
| 1    | Flansch mit O-Ring Nut / Flange with O-ring groove |
| 2    | Gegenflansch / Counter flange                      |
| 4    | O-Ring Dichtung / O-ring sealing                   |
| 5    | Schrauben / Bolts                                  |
| 6    | Federringe / Spring lock washers                   |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |       |       |     |             | O-RING      | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT    | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----------------|------|--------|--------------------------------|-------|-------|-----|-------------|-------------|--------------------|----------------------|---------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | l                              | a     | b     | c   | d           | Pos. 4      | Pos. 5             | [kg]                 | TYP DN-Serie daxs         |
| „3000“<br>ISO<br>6162-1 | 350             | 13   | ½"     | 72                             | 17,5  | 38,1  | 47  | 57          | 18,64x3,53  | M8x30              | 0,58                 | AFSK 13-3 21,3x2,6        |
|                         | 350             | 19   | ¾"     | 72                             | 22,2  | 47,6  | 49  | 66          | 24,99x3,53  | M10x35             | 0,87                 | AFSK 19-3 26,9x3,6        |
|                         | 315             | 25   | 1"     | 76                             | 26,2  | 52,4  | 53  | 71          | 32,92x3,53  | M10x35             | 1,01                 | AFSK 25-3 33,7x3,2        |
|                         | 280             | 32   | 1¼"    | 82                             | 30,2  | 58,7  | 69  | 80          | 37,69x3,53  | M10x35             | 1,14                 | AFSK 32-3 42,4x3,2        |
|                         | 210             | 38   | 1½"    | 88                             | 35,7  | 69,9  | 77  | 94          | 47,22x3,53  | M12x45             | 2,11                 | AFSK 38-3 48,3x4,5        |
|                         | 210             | 51   | 2"     | 90                             | 42,9  | 77,8  | 89  | 103         | 56,74x3,53  | M12x45             | 2,47                 | AFSK 51-3 60,3x5,6        |
|                         | 175             | 64   | 2½"    | 100                            | 50,8  | 88,9  | 101 | 115         | 69,44x3,53  | M12x45             | 2,86                 | AFSK 64-3 76,1x2,9        |
|                         | 160             | 76   | 3"     | 100                            | 61,9  | 106,4 | 124 | 135         | 85,32x3,53  | M16x50             | 4,43                 | AFSK 76-3 88,9x3,6        |
|                         | 35              | 89   | 3½"    | 100                            | 69,9  | 120,7 | 136 | 152         | 98,02x3,53  | M16x50             | 6,45                 | AFSK 89-3 101,6x3,6       |
|                         | 35              | 102  | 4"     | 100                            | 77,8  | 130,2 | 146 | 162         | 110,72x3,53 | M16x50             | 5,72                 | AFSK 102-3 114,3x3,6      |
| 35                      | 127             | 5"   | 100    | 92,1                           | 152,4 | 180   | 184 | 136,12x3,53 | M16x55      | 6,71               | AFSK 127-3 139,7x4,0 |                           |
| „6000“<br>ISO<br>6162-2 | 420             | 13   | ½"     | 72                             | 18,2  | 40,5  | 47  | 57          | 18,64x3,53  | M8x30              | 0,66                 | AFSK 13-6 21,3x4,5        |
|                         | 420             | 19   | ¾"     | 72                             | 23,8  | 50,8  | 53  | 71          | 24,99x3,53  | M10x35             | 1,05                 | AFSK 19-6 26,9x5,6        |
|                         | 420             | 25   | 1"     | 88                             | 27,8  | 57,2  | 69  | 80          | 32,92x3,53  | M12x45             | 1,86                 | AFSK 25-6 33,7x7,1        |
|                         | 420             | 32   | 1¼"    | 88                             | 31,8  | 66,7  | 77  | 94          | 37,69x3,53  | M12x50             | 2,44                 | AFSK 32-6 42,4x8,0 M12    |
|                         | 420             | 32   | 1¼"    | 88                             | 31,8  | 66,7  | 77  | 94          | 37,69x3,53  | M14x50             | 2,47                 | AFSK 32-6 42,4x8,0        |
|                         | 420             | 38   | 1½"    | 102                            | 36,5  | 79,4  | 89  | 106         | 47,22x3,53  | M16x55             | 3,76                 | AFSK 38-6 48,3x8,8        |
|                         | 420             | 51   | 2"     | 140                            | 44,5  | 96,8  | 116 | 135         | 56,74x3,53  | M20x70             | 7,36                 | AFSK 51-6 60,3x10,0       |
|                         | 315             | 64   | 2½"    | 150                            | 58,7  | 123,8 | 150 | 166         | 69,44x3,53  | M24x80             | 13,90                | AFSK 64-6 76,1x12,5       |
|                         | 315             | 76   | 3"     | 180                            | 71,4  | 152,4 | 178 | 208         | 85,32x3,53  | M30x100            | 26,63                | AFSK 76-6 88,9x14,2       |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).





ISO 6162-1/2 <sup>1</sup>

Einfache, einteilige Ausführung

Simple one-piece design

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         |
|---------------------------------------------------|
| Stahl / Steel ; NBR                               |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR |

BESTELLBEISPIEL  
ORDER EXAMPLE

| TYP DN-Serie-daxs-**  |
|-----------------------|
| AFSG 51-3 - daxs - 01 |
| AFSG 51-3 - daxs - 41 |

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description     |
|------|-------------------------------|
| 2    | Gegenflansch / Counter flange |

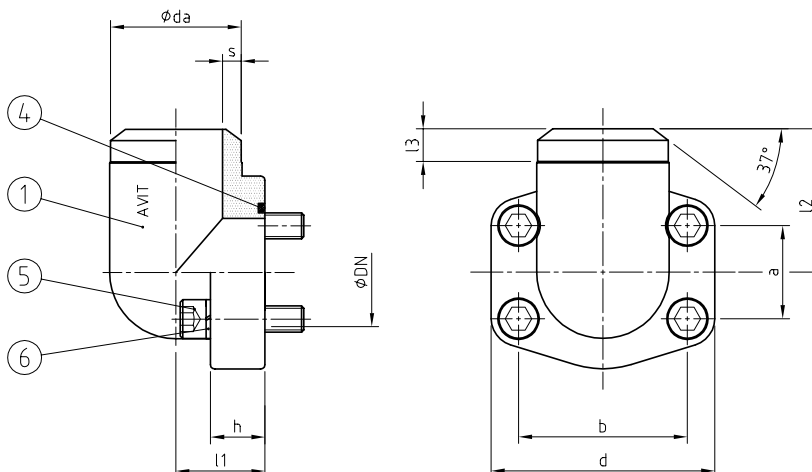
| SERIE<br>SERIES         | PN <sup>2</sup><br>[psi] | DN<br>[bar] | SIZE<br>[mm] | [inch] | ABMESSUNGEN [mm]<br>DIMENSIONS |      |       |     |     | GEWINDE<br>THREAD | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|--------------------------|-------------|--------------|--------|--------------------------------|------|-------|-----|-----|-------------------|-------------------|---------------------------|
|                         |                          |             |              |        | l                              | h    | a     | b   | c   |                   |                   |                           |
| „3000“<br>ISO<br>6162-1 | 350                      | 13          | ½"           | 36     | 16                             | 17,5 | 38,1  | 47  | 57  | M8                | 0,25              | AFSG 13-3 21,3x2,6        |
|                         | 350                      | 19          | ¾"           | 36     | 18                             | 22,2 | 47,6  | 49  | 66  | M10               | 0,36              | AFSG 19-3 26,9x3,6        |
|                         | 315                      | 25          | 1"           | 36     | 18                             | 26,2 | 52,4  | 53  | 71  | M10               | 0,43              | AFSG 25-3 33,7x3,2        |
|                         | 280                      | 32          | 1¼"          | 41     | 21                             | 30,2 | 58,7  | 69  | 80  | M10               | 0,63              | AFSG 32-3 42,4x3,2        |
|                         | 210                      | 38          | 1½"          | 44     | 25                             | 35,7 | 69,9  | 77  | 94  | M12               | 0,94              | AFSG 38-3 48,3x4,5        |
|                         | 210                      | 51          | 2"           | 45     | 25                             | 42,9 | 77,8  | 89  | 103 | M12               | 1,12              | AFSG 51-3 60,3x5,6        |
|                         | 175                      | 64          | 2½"          | 50     | 25                             | 50,8 | 88,9  | 101 | 115 | M12               | 1,31              | AFSG 64-3 76,1x2,9        |
|                         | 160                      | 76          | 3"           | 50     | 27                             | 61,9 | 106,4 | 124 | 135 | M16               | 1,95              | AFSG 76-3 88,9x3,6        |
|                         | 35                       | 89          | 3½"          | 50     | 27                             | 69,9 | 120,7 | 136 | 152 | M16               | 2,96              | AFSG 89-3 101,6x3,6       |
|                         | 35                       | 102         | 4"           | 50     | 27                             | 77,8 | 130,2 | 146 | 162 | M16               | 2,58              | AFSG 102-3 114,3x3,6      |
| „6000“<br>ISO<br>6162-2 | 35                       | 127         | 5"           | 50     | 28                             | 92,1 | 152,4 | 180 | 184 | M16               | 3,06              | AFSG 127-3 139,7x4,0      |
|                         | 420                      | 13          | ½"           | 36     | 16                             | 18,2 | 40,5  | 47  | 57  | M8                | 0,28              | AFSG 13-6 21,3x4,5        |
|                         | 420                      | 19          | ¾"           | 36     | 19                             | 23,8 | 50,8  | 53  | 71  | M10               | 0,45              | AFSG 19-6 26,9x5,6        |
|                         | 420                      | 25          | 1"           | 44     | 24                             | 27,8 | 57,2  | 69  | 80  | M12               | 0,80              | AFSG 25-6 33,7x7,1        |
|                         | 420                      | 32          | 1¼"          | 44     | 27                             | 31,8 | 66,7  | 77  | 94  | M12               | 1,07              | AFSG 32-6 42,4x8,0 M12    |
|                         | 420                      | 32          | 1¼"          | 44     | 27                             | 31,8 | 66,7  | 77  | 94  | M14               | 1,08              | AFSG 32-6 42,4x8,0        |
|                         | 420                      | 38          | 1½"          | 51     | 30                             | 36,5 | 79,4  | 89  | 106 | M16               | 1,60              | AFSG 38-6 48,3x8,8        |
|                         | 420                      | 51          | 2"           | 70     | 37                             | 44,5 | 96,8  | 116 | 135 | M20               | 3,13              | AFSG 51-6 60,3x10,0       |
|                         | 315                      | 64          | 2½"          | 75     | 45                             | 58,7 | 123,8 | 150 | 166 | M24               | 5,97              | AFSG 64-6 76,1x12,5       |
|                         | 315                      | 76          | 3"           | 90     | 55                             | 71,4 | 152,4 | 178 | 208 | M30               | 11,32             | AFSG 76-6 88,9x14,2       |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

ISO 6162-1/2<sup>1</sup>

Sehr kompakte und einfache, einteilige Ausführung.

Very compact and simple one-piece design.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-daxs-** |
|---------------------------------------------------|----------------------|
| Stahl / Steel; NBR                                | AFW 51-3 - daxs - 01 |
| Stahl / Steel; FKM                                | AFW 51-3 - daxs - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFW 51-3 - daxs - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFW 51-3 - daxs - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                      |
|------|----------------------------------------------------------------|
| 1    | Winkelflansch mit O-Ring Nut / Elbow flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                               |
| 5    | Schrauben / Bolts                                              |
| 6    | Federringe / Spring lock washers                               |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN    | SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |    |      |      |     | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----------------|-------|------|--------------------------------|----|----|----|------|------|-----|------------|--------------------|-------------------|---------------------------|
|                         | [psi]           | [bar] | [mm] | [inch]                         | l1 | l2 | l3 | h    | a    | b   | d          | Pos. 4             | Pos. 5            | [kg]                      |
| „3000“<br>ISO<br>6162-1 | 350             | 13    | ½"   | 18                             | 40 | 12 | 17 | 17,5 | 38,1 | 57  | 18,64x3,53 | M8x30              | 0,45              | AFW 13-3 21,3x2,6         |
|                         | 350             | 19    | ¾"   | 22                             | 41 | 12 | 18 | 22,2 | 47,6 | 66  | 24,99x3,53 | M10x35             | 0,63              | AFW 19-3 26,9x3,6         |
|                         | 315             | 25    | 1"   | 28                             | 50 | 13 | 24 | 26,2 | 52,4 | 71  | 32,92x3,53 | M10x35             | 0,74              | AFW 25-3 33,7x3,2         |
|                         | 280             | 32    | 1¼"  | 30                             | 57 | 13 | 22 | 30,2 | 58,7 | 80  | 37,69x3,53 | M10x35             | 0,93              | AFW 32-3 42,4x3,2         |
|                         | 210             | 38    | 1½"  | 36                             | 66 | 14 | 25 | 35,7 | 69,9 | 94  | 47,22x3,53 | M12x45             | 1,22              | AFW 38-3 48,3x4,5         |
|                         | 210             | 51    | 2"   | 41                             | 66 | 15 | 25 | 42,9 | 77,8 | 103 | 56,74x3,53 | M12x45             | 1,70              | AFW 51-3 60,3x5,6         |
|                         | 175             | 64    | 2½"  | 50                             | 77 | 25 | 25 | 50,8 | 88,9 | 115 | 69,44x3,53 | M12x45             | 2,70              | AFW 64-3 76,1x2,9         |
| „6000“<br>ISO<br>6162-2 | 420             | 13    | ½"   | 18                             | 40 | 12 | 17 | 18,2 | 40,5 | 57  | 18,64x3,53 | M8x30              | 0,40              | AFW 13-6 21,3x4,5         |
|                         | 420             | 19    | ¾"   | 28                             | 50 | 12 | 24 | 23,8 | 50,8 | 71  | 24,99x3,53 | M10x35             | 0,53              | AFW 19-6 26,9x5,6         |
|                         | 420             | 25    | 1"   | 30                             | 57 | 13 | 24 | 27,8 | 57,2 | 80  | 32,92x3,53 | M12x45             | 0,83              | AFW 25-6 33,7x7,1         |
|                         | 420             | 32    | 1¼"  | 36                             | 66 | 13 | 25 | 31,8 | 66,7 | 94  | 37,69x3,53 | M12x50             | 1,80              | AFW 32-6 42,4x8,0 M12     |
|                         | 420             | 32    | 1¼"  | 36                             | 66 | 13 | 25 | 31,8 | 66,7 | 94  | 37,69x3,53 | M14x50             | 1,83              | AFW 32-6 42,4x8,0         |
|                         | 420             | 38    | 1½"  | 41                             | 65 | 15 | 26 | 36,5 | 79,4 | 106 | 47,22x3,53 | M16x55             | 1,90              | AFW 38-6 48,3x8,8         |
|                         | 420             | 51    | 2"   | 45                             | 75 | 15 | 35 | 44,5 | 96,8 | 135 | 56,74x3,53 | M20x70             | 3,10              | AFW 51-6 60,3x10,0        |

## HINWEIS

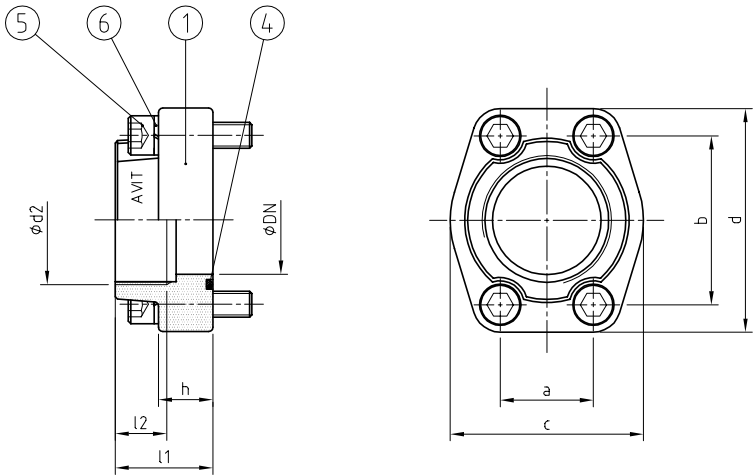
Bitte beachten Sie, dass bei Blockmontage die gesamte Gegenfläche (Abmessung c, d) eine entsprechende Oberflächengüte haben muss.

## INFORMATION

Please note that the entire mating surface (dimension c, d) of a machined block must have an appropriate surface finish.

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).



ISO 6162-1/2 <sup>1</sup>

Mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1. Auch als glatte Gegenflanschausführung mit Gewindebohrungen erhältlich (Typ AFEg).

With cylindrical BSP thread acc. ISO 228-1.  
Also available as counter flange design without O-ring groove with threaded holes (Typ AFEg).

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-** |
|---------------------------------------------------|-----------------|
| Stahl / Steel ; NBR                               | AFE 51-3 - 01   |
| Stahl / Steel; FKM                                | AFE 51-3 - 02   |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFE 51-3 - 41   |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFE 51-3 - 42   |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                          |
|------|--------------------------------------------------------------------|
| 1    | Gewindeflansch mit O-Ring Nut / Threaded flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                                   |
| 5    | Schrauben / Bolts                                                  |
| 6    | Federringe / Spring lock washers                                   |

| SERIE<br>SERIES         | PN <sup>2</sup><br>[psi] | DN<br>[mm] | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |    |      |       |     |     | O-RING<br>Pos. 4 | SCHRAUBEN<br>BOLTS<br>Pos. 5 | GEWICHT<br>WEIGHT<br>[kg] | BESTELLCODE<br>ORDER CODE<br>TYP DN-Serie |
|-------------------------|--------------------------|------------|--------------------------------|----|----|----|------|-------|-----|-----|------------------|------------------------------|---------------------------|-------------------------------------------|
|                         |                          |            | d2                             | l1 | l2 | h  | a    | b     | c   | d   |                  |                              |                           |                                           |
| „3000“<br>ISO<br>6162-1 | 350                      | 13         | G 1/2                          | 36 | 15 | 16 | 17,5 | 38,1  | 47  | 57  | 18,64x3,53       | M8x30                        | 0,35                      | AFE 13-3                                  |
|                         | 350                      | 19         | G 3/4                          | 36 | 18 | 18 | 22,2 | 47,6  | 49  | 66  | 24,99x3,53       | M10x35                       | 0,50                      | AFE 19-3                                  |
|                         | 315                      | 25         | G 1                            | 38 | 20 | 18 | 26,2 | 52,4  | 53  | 71  | 32,92x3,53       | M10x35                       | 0,57                      | AFE 25-3                                  |
|                         | 280                      | 32         | G 1 1/4                        | 41 | 22 | 21 | 30,2 | 58,7  | 69  | 80  | 37,69x3,53       | M10x35                       | 0,81                      | AFE 32-3                                  |
|                         | 210                      | 38         | G 1 1/2                        | 44 | 24 | 25 | 35,7 | 69,9  | 77  | 94  | 47,22x3,53       | M12x45                       | 1,23                      | AFE 38-3                                  |
|                         | 210                      | 51         | G 2                            | 45 | 26 | 25 | 42,9 | 77,8  | 89  | 103 | 56,74x3,53       | M12x45                       | 1,33                      | AFE 51-3                                  |
|                         | 175                      | 64         | G 2 1/2                        | 50 | 30 | 25 | 50,8 | 88,9  | 101 | 115 | 69,44x3,53       | M12x45                       | 1,67                      | AFE 64-3                                  |
|                         | 160                      | 76         | G 3                            | 50 | 30 | 27 | 61,9 | 106,4 | 124 | 135 | 85,32x3,53       | M16x50                       | 2,60                      | AFE 76-3                                  |
|                         | 35                       | 89         | G 3 1/2                        | 50 | 27 | 27 | 69,9 | 120,7 | 136 | 152 | 98,02x3,53       | M16x50                       | 3,54                      | AFE 89-3                                  |
|                         | 35                       | 102        | G 4                            | 50 | 30 | 27 | 77,8 | 130,2 | 146 | 162 | 110,72x3,53      | M16x50                       | 3,32                      | AFE 102-3                                 |
| „6000“<br>ISO<br>6162-2 | 35                       | 127        | G 5                            | 50 | 30 | 28 | 92,1 | 152,4 | 180 | 184 | 136,12x3,53      | M16x55                       | 3,84                      | AFE 127-3                                 |
|                         | 420                      | 13         | G 1/2                          | 36 | 15 | 16 | 18,2 | 40,5  | 47  | 57  | 18,64x3,53       | M8x30                        | 0,36                      | AFE 13-6                                  |
|                         | 420                      | 19         | G 3/4                          | 36 | 18 | 19 | 23,8 | 50,8  | 53  | 71  | 24,99x3,53       | M10x35                       | 0,62                      | AFE 19-6                                  |
|                         | 420                      | 25         | G 1                            | 44 | 20 | 24 | 27,8 | 57,2  | 69  | 80  | 32,92x3,53       | M12x45                       | 1,02                      | AFE 25-6                                  |
|                         | 420                      | 32         | G 1 1/4                        | 44 | 22 | 27 | 31,8 | 66,7  | 77  | 94  | 37,69x3,53       | M12x50                       | 1,41                      | AFE 32-6 M12                              |
|                         | 420                      | 32         | G 1 1/4                        | 44 | 22 | 27 | 31,8 | 66,7  | 77  | 94  | 37,69x3,53       | M14x50                       | 1,44                      | AFE 32-6                                  |
|                         | 420                      | 38         | G 1 1/2                        | 51 | 24 | 30 | 36,5 | 79,4  | 89  | 106 | 47,22x3,53       | M16x55                       | 2,12                      | AFE 38-6                                  |
|                         | 420                      | 51         | G 2                            | 70 | 33 | 37 | 44,5 | 96,8  | 116 | 135 | 56,74x3,53       | M20x70                       | 4,01                      | AFE 51-6                                  |
|                         | 315                      | 64         | G 2 1/2                        | 75 | 35 | 45 | 58,7 | 123,8 | 150 | 166 | 69,44x3,53       | M24x80                       | 6,75                      | AFE 64-6                                  |
|                         | 315                      | 76         | G 3                            | 90 | 40 | 55 | 71,4 | 152,4 | 178 | 208 | 85,32x3,53       | M30x100                      | 14,86                     | AFE 76-6                                  |

HINWEIS

Bitte beachten Sie, dass bei Blockmontage die gesamte Gegenfläche (Abmessung c, d) eine entsprechende Oberflächengüte haben muss.

INFORMATION

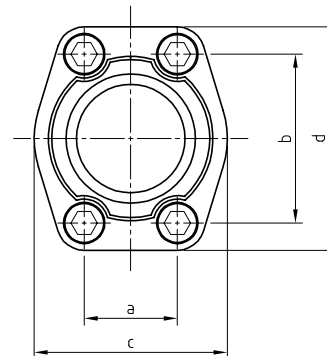
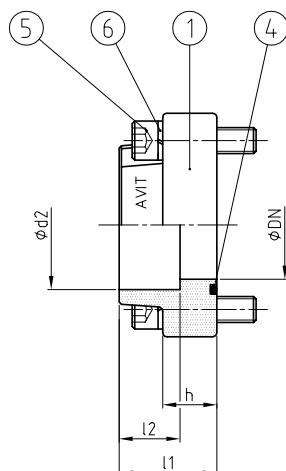
Please note that the entire mating surface (dimension c, d) of a machined block must have an appropriate surface finish.

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

ISO 6162-1/2 <sup>1</sup>

Einfache, einteilige Ausführung.  
Auch als Gegenflansch erhältlich (AFLG)

Simple one-piece design.  
Also available as counter flange (AFLG)

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-d2-*   |
|---------------------------------------------------|---------------------|
| Stahl / Steel; NBR                                | AFLA 51-3 - 61 - 01 |
| Stahl / Steel; FKM                                | AFLA 51-3 - 61 - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFLA 51-3 - 61 - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFLA 51-3 - 61 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                          |
|------|----------------------------------------------------|
| 1    | Flansch mit O-Ring Nut / Flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                   |
| 5    | Schrauben / Bolts                                  |
| 6    | Federringe / Spring lock washers                   |

| SERIE<br>SERIES         | PN <sup>2</sup><br>[psi] | DN<br>[mm] | SIZE<br>[inch] | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |    |      |       |     |     | O-RING<br>Pos. 4 | SCHRAUBEN<br>BOLTS<br>Pos. 5 | BESTELLCODE<br>ORDER CODE<br>TYP DN-Serie d2 |
|-------------------------|--------------------------|------------|----------------|--------------------------------|----|----|----|------|-------|-----|-----|------------------|------------------------------|----------------------------------------------|
|                         |                          |            |                | d2                             | l1 | l2 | h  | a    | b     | c   | d   |                  |                              |                                              |
| „3000“<br>ISO<br>6162-1 | 160<br>(315)             | 13         | ½"             | 21,6                           | 36 | 18 | 16 | 17,5 | 38,1  | 47  | 57  | 18,64x3,53       | M8x30                        | AFLA 13-3                                    |
|                         |                          | 19         | ¾"             | 27,2                           | 36 | 18 | 18 | 22,2 | 47,6  | 49  | 66  | 24,99x3,53       | M10x35                       | AFLA 19-3                                    |
|                         |                          | 25         | 1"             | 34,1                           | 36 | 18 | 18 | 26,2 | 52,4  | 53  | 71  | 32,92x3,53       | M10x35                       | AFLA 25-3                                    |
|                         |                          | 32         | 1¼"            | 42,8                           | 41 | 18 | 21 | 30,2 | 58,7  | 69  | 80  | 37,69x3,53       | M10x35                       | AFLA 32-3                                    |
|                         | 160<br>(210)             | 38         | 1½"            | 48,6                           | 44 | 20 | 25 | 35,7 | 69,9  | 77  | 94  | 47,22x3,53       | M12x45                       | AFLA 38-3                                    |
|                         |                          | 51         | 2"             | 61                             | 45 | 22 | 25 | 42,9 | 77,8  | 89  | 103 | 56,74x3,53       | M12x45                       | AFLA 51-3                                    |
|                         |                          | 64         | 2½"            | 76,6                           | 50 | 24 | 25 | 50,8 | 88,9  | 101 | 115 | 69,44x3,53       | M12x45                       | AFLA 64-3                                    |
|                         |                          | 76         | 3"             | 90,5                           | 50 | 28 | 27 | 61,9 | 106,4 | 124 | 135 | 85,32x3,53       | M16x50                       | AFLA 76-3                                    |
|                         | 35                       | 89         | 3½"            | 103                            | 50 | 28 | 27 | 69,9 | 120,7 | 136 | 152 | 98,02x3,53       | M16x50                       | AFLA 89-3                                    |
|                         |                          | 102        | 4"             | 115,3                          | 50 | 28 | 27 | 77,8 | 130,2 | 146 | 162 | 110,72x3,53      | M16x50                       | AFLA 102-3                                   |
|                         |                          | 127        | 5"             | 142                            | 50 | 28 | 28 | 92,1 | 152,4 | 180 | 184 | 136,12x3,53      | M16x55                       | AFLA 127-3                                   |
|                         |                          |            |                |                                |    |    |    |      |       |     |     |                  |                              |                                              |
| „6000“<br>ISO<br>6162-2 | 160<br>(420)             | 13         | ½"             | 21,6                           | 36 | 18 | 16 | 18,2 | 40,5  | 47  | 57  | 18,64x3,53       | M8x30                        | AFLA 13-6                                    |
|                         |                          | 19         | ¾"             | 27,2                           | 36 | 20 | 19 | 23,8 | 50,8  | 53  | 71  | 24,99x3,53       | M10x35                       | AFLA 19-6                                    |
|                         |                          | 25         | 1"             | 34,1                           | 44 | 22 | 24 | 27,8 | 57,2  | 69  | 80  | 32,92x3,53       | M12x45                       | AFLA 25-6                                    |
|                         |                          | 32         | 1¼"            | 42,8                           | 44 | 22 | 27 | 31,8 | 66,7  | 77  | 94  | 37,69x3,53       | M12x50                       | AFLA 32-6 M12                                |
|                         |                          | 32         | 1¼"            | 42,8                           | 44 | 22 | 27 | 31,8 | 66,7  | 77  | 94  | 37,69x3,53       | M14x50                       | AFLA 32-6                                    |
|                         |                          | 38         | 1½"            | 48,6                           | 51 | 24 | 30 | 36,5 | 79,4  | 89  | 106 | 47,22x3,53       | M16x55                       | AFLA 38-6                                    |
|                         |                          | 51         | 2"             | 61                             | 70 | 25 | 37 | 44,5 | 96,8  | 116 | 135 | 56,74x3,53       | M20x70                       | AFLA 51-6                                    |
|                         |                          |            |                |                                |    |    |    |      |       |     |     |                  |                              |                                              |

## HINWEIS

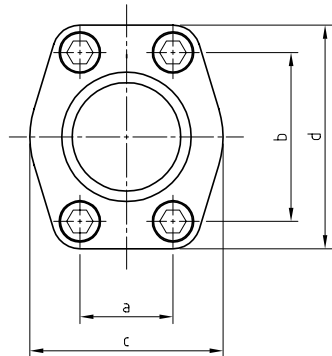
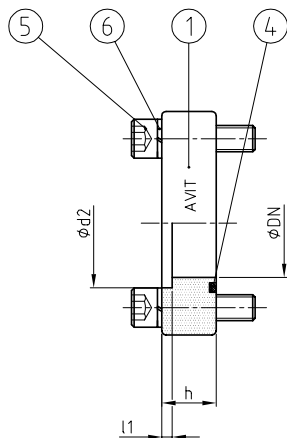
Bitte beachten Sie, dass bei Blockmontage die gesamte Gegenfläche (Abmessung c, d) eine entsprechende Oberflächengüte haben muss.

## INFORMATION

Please note that the entire mating surface (dimension c, d) of a machined block must have an appropriate surface finish.

<sup>1</sup> Lochbild gemäß Norm. | Hole pattern according to ISO standard.

<sup>2</sup> Druckeinschränkung wegen Kehlnaht! Je nach Anwendung sind höhere Drücke möglich. | Pressure restriction due to fillet weld! Depending on the application, higher pressures are possible..



ISO 6162-1/2<sup>1</sup>

Flache Ausführung

Flat design

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-d2-*    |
|---------------------------------------------------|----------------------|
| Stahl / Steel ; NBR                               | AFLAF 51-3 - 61 - 01 |
| Stahl / Steel; FKM                                | AFLAF 51-3 - 61 - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFLAF 51-3 - 61 - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFLAF 51-3 - 61 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                          |
|------|----------------------------------------------------|
| 1    | Flansch mit O-Ring Nut / Flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                   |
| 5    | Schrauben / Bolts                                  |
| 6    | Federringe / Spring lock washers                   |

| SERIE<br>SERIES         | PN           | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |       |     |     | O-RING      | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|-------------------------|--------------|------|--------|--------------------------------|----|----|------|-------|-----|-----|-------------|--------------------|---------------------------|
| [psi]                   | [bar]        | [mm] | [inch] | d2                             | l1 | h  | a    | b     | c   | d   | Pos. 4      | Pos. 5             | TYP DN-Serie d2           |
| „3000“<br>ISO<br>6162-1 | 160<br>(315) | 13   | ½"     | 21,6                           | 3  | 16 | 17,5 | 38,1  | 47  | 57  | 18,64x3,53  | M8x30              | AFLAF 13-3                |
|                         |              | 19   | ¾"     | 27,2                           | 4  | 18 | 22,2 | 47,6  | 49  | 66  | 24,99x3,53  | M10x35             | AFLAF 19-3                |
|                         |              | 25   | 1"     | 34,5                           | 4  | 19 | 26,2 | 52,4  | 53  | 71  | 32,92x3,53  | M10x35             | AFLAF 25-3                |
|                         |              | 32   | 1¼"    | 42,8                           | 4  | 21 | 30,2 | 58,7  | 69  | 80  | 37,69x3,53  | M10x35             | AFLAF 32-3                |
|                         | 160<br>(210) | 38   | 1½"    | 48,6                           | 4  | 25 | 35,7 | 69,9  | 77  | 94  | 47,22x3,53  | M12x45             | AFLAF 38-3                |
|                         |              | 51   | 2"     | 61                             | 4  | 25 | 42,9 | 77,8  | 89  | 103 | 56,74x3,53  | M12x45             | AFLAF 51-3                |
|                         |              | 64   | 2½"    | 76,6                           | 5  | 25 | 50,8 | 88,9  | 101 | 115 | 69,44x3,53  | M12x45             | AFLAF 64-3                |
|                         |              | 76   | 3"     | 90,5                           | 5  | 27 | 61,9 | 106,4 | 124 | 135 | 85,32x3,53  | M16x50             | AFLAF 76-3                |
|                         | 35           | 89   | 3½"    | 103                            | 5  | 27 | 69,9 | 120,7 | 136 | 152 | 98,02x3,53  | M16x50             | AFLAF 89-3                |
|                         |              | 102  | 4"     | 115,5                          | 6  | 27 | 77,8 | 130,2 | 146 | 162 | 110,72x3,53 | M16x50             | AFLAF 102-3               |
|                         |              | 127  | 5"     | 142,5                          | 6  | 28 | 92,1 | 152,4 | 180 | 184 | 136,12x3,53 | M16x55             | AFLAF 127-3               |
|                         |              |      |        |                                |    |    |      |       |     |     |             |                    |                           |
| „6000“<br>ISO<br>6162-2 | 160<br>(420) | 13   | ½"     | 21,6                           | 4  | 16 | 18,2 | 40,5  | 47  | 57  | 18,64x3,53  | M8x30              | AFLAF 13-6                |
|                         |              | 19   | ¾"     | 27,2                           | 4  | 19 | 23,8 | 50,8  | 53  | 71  | 24,99x3,53  | M10x35             | AFLAF 19-6                |
|                         |              | 25   | 1"     | 34,5                           | 4  | 24 | 27,8 | 57,2  | 69  | 80  | 32,92x3,53  | M12x45             | AFLAF 25-6                |
|                         |              | 32   | 1¼"    | 42,8                           | 4  | 27 | 31,8 | 66,7  | 77  | 94  | 37,69x3,53  | M12x50             | AFLAF 32-6 M12            |
|                         |              | 32   | 1¼"    | 42,8                           | 4  | 27 | 31,8 | 66,7  | 77  | 94  | 37,69x3,53  | M14x50             | AFLAF 32-6                |
|                         |              | 38   | 1½"    | 48,6                           | 4  | 30 | 36,5 | 79,4  | 89  | 106 | 47,22x3,53  | M16x55             | AFLAF 38-6                |
|                         |              | 51   | 2"     | 61                             | 4  | 37 | 44,5 | 96,8  | 116 | 135 | 56,74x3,53  | M20x70             | AFLAF 51-6                |
|                         |              |      |        |                                |    |    |      |       |     |     |             |                    |                           |

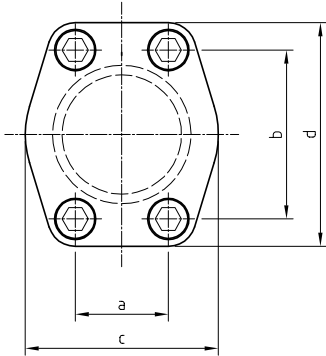
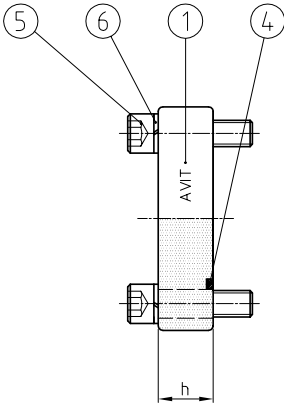
HINWEIS

Bitte beachten Sie, dass bei Blockmontage die gesamte Gegenfläche (Abmessung c, d) eine entsprechende Oberflächengüte haben muss.

INFORMATION

Please note that the entire mating surface (dimension c, d) of a machined block must have an appropriate surface finish.

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Druckeinschränkung wegen Kehlnaht! Je nach Anwendung sind höhere Drücke möglich. | Pressure restriction due to fillet weld! Depending on the application, higher pressures are possible.



ISO 6162-1/2<sup>1</sup>

Auch mit Messanschluss G 1/4" lieferbar.

Also available with test point thread G 1/4".

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-* |
|---------------------------------------------------|----------------|
| Stahl / Steel; NBR                                | AFB 51-3 - 01  |
| Stahl / Steel; FKM                                | AFB 51-3 - 02  |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFB 51-3 - 41  |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFB 51-3 - 42  |

BESTELLBEISPIEL  
ORDER EXAMPLE

| TYP DN-Serie-* |
|----------------|
| AFB 51-3 - 01  |
| AFB 51-3 - 02  |
| AFB 51-3 - 41  |
| AFB 51-3 - 42  |

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                     |
|------|---------------------------------------------------------------|
| 1    | Blindflansch mit O-Ring Nut / Blind flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                              |
| 5    | Schrauben / Bolts                                             |
| 6    | Federringe / Spring lock washers                              |

| SERIE<br>SERIES         | PN <sup>2</sup><br>[psi] | DN<br>[bar] | SIZE<br>[mm] | h<br>[inch] | ABMESSUNGEN [mm]<br>DIMENSIONS |       |     |     | O-RING<br>Pos. 4 | SCHRAUBEN<br>BOLTS<br>Pos. 5 | GEWICHT<br>WEIGHT<br>[kg] | BESTELLCODE<br>ORDER CODE<br>TYP DN-Serie |
|-------------------------|--------------------------|-------------|--------------|-------------|--------------------------------|-------|-----|-----|------------------|------------------------------|---------------------------|-------------------------------------------|
| „3000“<br>ISO<br>6162-1 | 350                      | 13          | ½"           | 16          | 17,5                           | 38,1  | 47  | 57  | 18,64x3,53       | M8x30                        | 0,18                      | AFB 13-3                                  |
|                         | 350                      | 19          | ¾"           | 18          | 22,2                           | 47,6  | 49  | 66  | 24,99x3,53       | M10x35                       | 0,26                      | AFB 19-3                                  |
|                         | 315                      | 25          | 1"           | 18          | 26,2                           | 52,4  | 53  | 71  | 32,92x3,53       | M10x35                       | 0,34                      | AFB 25-3                                  |
|                         | 280                      | 32          | 1¼"          | 21          | 30,2                           | 58,7  | 69  | 80  | 37,69x3,53       | M10x35                       | 0,66                      | AFB 32-3                                  |
|                         | 210                      | 38          | 1½"          | 25          | 35,7                           | 69,9  | 77  | 94  | 47,22x3,53       | M12x45                       | 1,07                      | AFB 38-3                                  |
|                         | 210                      | 51          | 2"           | 25          | 42,9                           | 77,8  | 89  | 103 | 56,74x3,53       | M12x45                       | 1,33                      | AFB 51-3                                  |
|                         | 175                      | 64          | 2½"          | 25          | 50,8                           | 88,9  | 101 | 115 | 69,44x3,53       | M12x45                       | 1,74                      | AFB 64-3                                  |
|                         | 160                      | 76          | 3"           | 27          | 61,9                           | 106,4 | 124 | 135 | 85,32x3,53       | M16x50                       | 2,98                      | AFB 76-3                                  |
|                         | 35                       | 89          | 3½"          | 27          | 69,9                           | 120,7 | 136 | 152 | 98,02x3,53       | M16x50                       | 3,80                      | AFB 89-3                                  |
|                         | 35                       | 102         | 4"           | 27          | 77,8                           | 130,2 | 146 | 162 | 110,72x3,53      | M16x50                       | 4,24                      | AFB 102-3                                 |
| „6000“<br>ISO<br>6162-2 | 35                       | 127         | 5"           | 28          | 92,1                           | 152,4 | 180 | 184 | 136,12x3,53      | M16x55                       | 5,02                      | AFB 127-3                                 |
|                         | 420                      | 13          | ½"           | 16          | 18,2                           | 40,5  | 47  | 57  | 18,64x3,53       | M8x30                        | 0,23                      | AFB 13-6                                  |
|                         | 420                      | 19          | ¾"           | 19          | 23,8                           | 50,8  | 53  | 71  | 24,99x3,53       | M10x35                       | 0,44                      | AFB 19-6                                  |
|                         | 420                      | 25          | 1"           | 24          | 27,8                           | 57,2  | 69  | 80  | 32,92x3,53       | M12x45                       | 0,76                      | AFB 25-6                                  |
|                         | 420                      | 32          | 1¼"          | 27          | 31,8                           | 66,7  | 77  | 94  | 37,69x3,53       | M12x50                       | 1,11                      | AFB 32-6 M12                              |
|                         | 420                      | 32          | 1¼"          | 27          | 31,8                           | 66,7  | 77  | 94  | 37,69x3,53       | M14x50                       | 1,14                      | AFB 32-6                                  |
|                         | 420                      | 38          | 1½"          | 30          | 36,5                           | 79,4  | 89  | 106 | 47,22x3,53       | M16x55                       | 1,60                      | AFB 38-6                                  |
|                         | 420                      | 51          | 2"           | 37          | 44,5                           | 96,8  | 116 | 135 | 56,74x3,53       | M20x70                       | 3,32                      | AFB 51-6                                  |
|                         | 315                      | 64          | 2½"          | 45          | 58,7                           | 123,8 | 150 | 166 | 69,44x3,53       | M24x80                       | 6,02                      | AFB 64-6                                  |
|                         | 315                      | 76          | 3"           | 55          | 71,4                           | 152,4 | 178 | 208 | 85,32x3,53       | M30x100                      | 12,45                     | AFB 76-6                                  |

HINWEIS

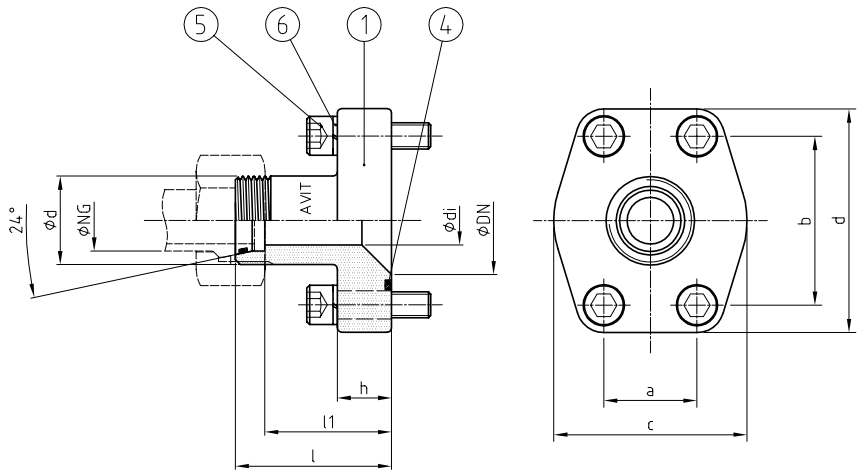
Bitte beachten Sie, dass bei Blockmontage die gesamte Gegenfläche (Abmessung c, d) eine entsprechende Oberflächengüte haben muss.

INFORMATION

Please note that the entire mating surface (dimension c, d) of a machined block must have an appropriate surface finish.

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Der max. Arbeitsdruck ist abhängig von der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the bolts used (8.8 / 10.9).





**ISO 6162-1/2** <sup>1,3</sup>  
Gewindezapfen mit 24° Konus-Anschluss mit metrischem Gewinde nach ISO 8434-1.  
  
Screwed end with 24° conus with metric thread acc. ISO 8434-1.

3  
SAE-FLANSCH • EINTEILIG  
SAE-FLANGES • ONE-PIECE DESIGN

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION     | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                        |
|---------------------------------------------------|----------------------------------|-------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-NG-*                | Pos. Bezeichnung / Description                  |
| Stahl, verzinkt / Steel, galvanised; NBR          | AFM 25-3 - 25 - 01               | 1 Flansch mit 24° Konus / Flange with 24° conus |
| Stahl, verzinkt / Steel, galvanised; FKM          | AFM 25-3 - 25 - 02               | 4 O-Ring Dichtung / O-ring sealing              |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFM 25-3 - 25 - 41               | 5 Schrauben / Bolts                             |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFM 25-3 - 25 - 42               | 6 Federringe / Spring lock washers              |

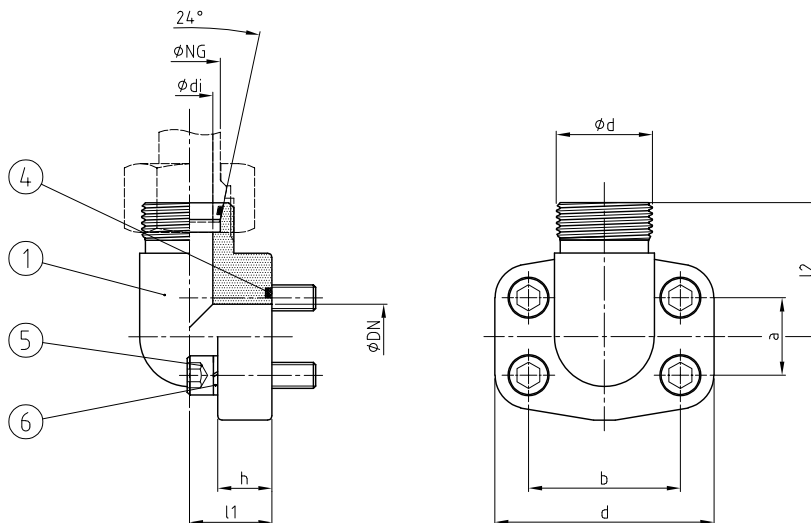
| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | NG   | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |      |    |      |      |    |     |            | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----------------|------|--------|------|--------------------------------|----|----|------|----|------|------|----|-----|------------|------------|--------------------|-------------------|---------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | [mm] | d2                             | d1 | l  | l1   | h  | a    | b    | c  | d   | Pos. 4     | Pos. 5     | [kg]               | TYP DN-Serie-NG   |                           |
| „3000“<br>ISO<br>6162-1 | 350             | 13   | ½"     | 12   | M20x1,5                        | 8  | 47 | 39,5 | 16 | 17,5 | 38,1 | 46 | 54  | 18,64x3,53 | M8x30      | 0,31               | AFM 13-3-12       |                           |
|                         |                 |      |        | 15L  | M22x1,5                        | 11 |    | 40   |    |      |      |    |     |            |            |                    | AFM 13-3-15       |                           |
|                         |                 |      |        | 16   | M24x1,5                        | 12 |    | 38,5 |    |      |      |    |     |            |            |                    | AFM 13-3-16       |                           |
|                         | 350             | 19   | ¾"     | 16   | M24x1,5                        | 12 | 52 | 43,5 | 18 | 22,2 | 47,6 | 52 | 65  | 24,99x3,53 | M10x35     | 0,53               | AFM 19-3-16       |                           |
|                         |                 |      |        | 20   | M30x2,0                        | 16 |    | 41,5 |    |      |      |    |     |            |            |                    | AFM 19-3-20       |                           |
|                         |                 |      |        | 22L  | M30x2,0                        | 18 |    | 44,5 |    |      |      |    |     |            |            |                    | AFM 19-3-22       |                           |
|                         | 315             | 25   | 1"     | 20   | M30x2,0                        | 15 | 55 | 44,5 | 18 | 26,2 | 52,4 | 59 | 70  | 32,92x3,53 | M10x35     | 0,65               | AFM 25-3-20       |                           |
|                         |                 |      |        | 25   | M36x2,0                        | 20 |    | 43   |    |      |      |    |     |            |            |                    | AFM 25-3-20       |                           |
|                         |                 |      |        | 28L  | M36x2,0                        | 23 |    | 47,5 |    |      |      |    |     |            |            |                    | AFM 25-3-25       |                           |
|                         | 280             | 32   | 1¼"    | 25   | M36x2,0                        | 20 | 60 | 48   | 21 | 30,2 | 58,7 | 73 | 80  | 37,69x3,53 | M10x35     | 0,89               | AFM 25-3-28       |                           |
|                         |                 |      |        | 30   | M42x2,0                        | 25 |    | 46,5 |    |      |      |    |     |            |            |                    | AFM 32-3-25       |                           |
|                         |                 |      |        | 35L  | M45x2,0                        | 30 |    | 49,5 |    |      |      |    |     |            |            |                    | AFM 32-3-30       |                           |
|                         | 210             | 38   | 1½"    | 35L  | M45x2,0                        | 30 | 70 | 59,5 | 25 | 35,7 | 69,9 | 83 | 94  | 47,22x3,53 | M12x45     | 1,34               | AFM 32-3-35       |                           |
|                         |                 |      |        | 38   | M52x2,0                        | 30 |    | 54   |    |      |      |    |     |            |            |                    | AFM 38-3-35       |                           |
|                         |                 |      |        | 42L  | M52x2,0                        | 36 |    | 59   |    |      |      |    |     |            |            |                    | AFM 38-3-38       |                           |
|                         | 210             | 51   | 2"     | 38   | M52x2,0                        | 30 | 72 | 56   | 25 | 42,9 | 77,8 | 97 | 102 | 56,74x3,53 | M12x45     | 1,75               | AFM 38-3-42       |                           |
|                         |                 |      |        | 42L  | M52x2,0                        | 36 |    | 61   |    |      |      |    |     |            |            |                    | AFM 51-3-38       |                           |
| „6000“<br>ISO<br>6162-2 | 420             | 13   | ½"     | 12   | M20x1,5                        | 8  | 47 | 39,5 | 16 | 18,2 | 40,5 | 48 | 57  | 18,64x3,53 | M8x30      | 0,33               | AFM 51-3-42       |                           |
|                         |                 |      |        | 16   | M24x1,5                        | 12 |    | 38,5 |    |      |      |    |     |            |            |                    | AFM 13-6-12       |                           |
|                         | 420             | 19   | ¾"     | 16   | M24x1,5                        | 12 | 52 | 43,5 | 18 | 23,8 | 50,8 | 60 | 72  | 24,99x3,53 | M10x35     | 0,80               | AFM 13-6-16       |                           |
|                         |                 |      |        | 20   | M30x2,0                        | 15 |    | 41,5 |    |      |      |    |     |            |            |                    | AFM 19-6-16       |                           |
|                         | 420             | 25   | 1"     | 20   | M30x2,0                        | 15 | 60 | 49,5 | 21 | 27,8 | 57,2 | 70 | 81  | 32,92x3,53 | M12x45     | 0,98               | AFM 19-6-20       |                           |
|                         |                 |      |        | 25   | M36x2,0                        | 20 |    | 48   |    |      |      |    |     |            |            |                    | AFM 25-6-20       |                           |
|                         | 420             | 32   | 1¼"    | 25   | M36x2,0                        | 20 | 68 | 56   | 24 | 31,8 | 66,7 | 78 | 96  | 37,69x3,53 | M14(12)x50 | 1,44               | AFM 25-6-25       |                           |
|                         |                 |      |        | 30   | M42x2,0                        | 25 |    | 54,5 |    |      |      |    |     |            |            |                    | AFM 32-6-25 (M12) |                           |
|                         | 420             | 38   | 1½"    | 30   | M42x2,0                        | 25 | 72 | 58,5 | 27 | 36,5 | 79,4 | 96 | 113 | 47,22x3,53 | M16x55     | 2,14               | AFM 32-6-30 (M12) |                           |
|                         |                 |      |        | 38   | M52x2,0                        | 30 |    | 56   |    |      |      |    |     |            |            |                    | AFM 38-6-30       |                           |

Fußnoten siehe Seite 3.58 | Footnotes see on page 3.58

ISO 6162-1/2<sup>1,3</sup>

Gewindezapfen mit 24° Konus-Anschluss mit metrischem Gewinde nach ISO 8434-1.

Screwed end with 24° conus with metric thread acc. ISO 8434-1.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-NG-*   |
|---------------------------------------------------|---------------------|
| Stahl, verzinkt / Steel, galvanised; NBR          | AFMW 25-3 - 25 - 01 |
| Stahl, verzinkt / Steel, galvanised; FKM          | AFMW 25-3 - 25 - 02 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFMW 25-3 - 25 - 41 |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFMW 25-3 - 25 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

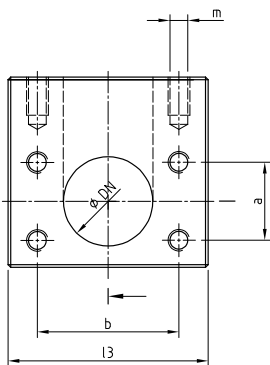
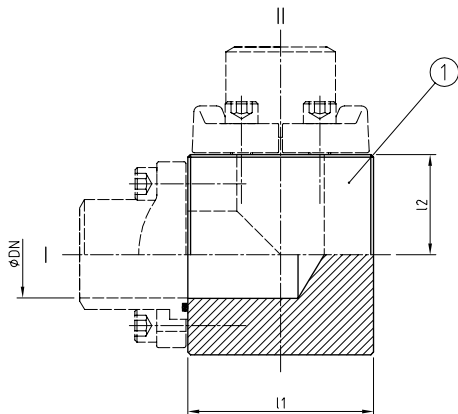
| Pos. | Bezeichnung / Description                                   |
|------|-------------------------------------------------------------|
| 1    | Winkelanschluss mit 24° Konus / Elbow flange with 24° conus |
| 4    | O-Ring Dichtung / O-ring sealing                            |
| 5    | Schrauben / Bolts                                           |
| 6    | Federringe / Spring lock washers                            |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | NG      | ABMESSUNGEN [mm] |    |    |    |      |      |      |            | O-RING     | SCHRAUBEN<br>BOLTS | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |              |
|-------------------------|-----------------|------|--------|---------|------------------|----|----|----|------|------|------|------------|------------|--------------------|-------------------|---------------------------|--------------|
|                         |                 |      |        |         | DIMENSIONS       |    |    |    |      |      |      |            |            |                    |                   |                           |              |
| [psi]                   | [bar]           | [mm] | [inch] | [mm]    | d2               | d1 | l1 | l2 | h    | a    | b    | d          | Pos. 4     | Pos. 5             | [kg]              | TYP DN-Serie -NG          |              |
| „3000“<br>ISO<br>6162-1 | 350             | 13   | ½“     | 12      | M20x1,5          | 8  |    |    |      |      |      |            |            |                    |                   | AFMW 13-3-12              |              |
|                         |                 |      |        | 15L     | M22x1,5          | 11 | 18 | 36 | 19   | 17,5 | 38,1 | 57         | 18,64x3,53 | M8x30              | 0,36              | AFMW 13-3-15              |              |
|                         |                 |      |        | 16      | M24x1,5          | 12 |    |    |      |      |      |            |            |                    |                   | AFMW 13-3-16              |              |
|                         | 350             | 19   | ¾“     | 16      | M24x1,5          | 12 |    |    |      |      |      |            |            |                    |                   | AFMW 19-3-16              |              |
|                         |                 |      |        | 20      | M30x2,0          | 16 | 22 | 38 | 22   | 22,2 | 47,6 | 68         | 24,99x3,53 | M10x35             | 0,55              | AFMW 19-3-20              |              |
|                         |                 |      |        | 22L     | M30x2,0          | 18 |    |    |      |      |      |            |            |                    |                   | AFMW 19-3-22              |              |
|                         | 315             | 25   | 1“     | 20      | M30x2,0          | 15 |    |    |      |      |      |            |            |                    |                   | AFMW 25-3-20              |              |
|                         |                 |      |        | 25      | M36x2,0          | 20 | 28 | 42 | 24   | 26,2 | 52,4 | 74         | 32,92x3,53 | M10x35             | 0,75              | AFMW 25-3-25              |              |
|                         |                 |      |        | 28L     | M36x2,0          | 23 |    |    |      |      |      |            |            |                    |                   | AFMW 25-3-28              |              |
|                         | 280             | 32   | 1¼“    | 25      | M36x2,0          | 20 |    |    |      |      |      |            |            |                    |                   | AFMW 32-3-25              |              |
|                         |                 |      |        | 30      | M42x2,0          | 25 | 30 | 50 | 22   | 30,2 | 58,7 | 81         | 37,69x3,53 | M10x35             | 1,09              | AFMW 32-3-30              |              |
|                         |                 |      |        | 35L     | M45x2,0          | 30 |    |    |      |      |      |            |            |                    |                   | AFMW 32-3-35              |              |
| 210                     | 38              | 1½“  | 35L    | M45x2,0 | 30               |    |    |    |      |      |      |            |            |                    | AFMW 38-3-35      |                           |              |
|                         |                 |      | 38     | M52x2,0 | 30               | 36 | 58 | 25 | 35,7 | 69,9 | 95   | 47,22x3,53 | M12x45     | 1,61               | AFMW 38-3-38      |                           |              |
|                         |                 |      | 42L    | M52x2,0 | 36               |    |    |    |      |      |      |            |            |                    | AFMW 38-3-42      |                           |              |
| „6000“<br>ISO<br>6162-2 | 420             | 13   | ½“     | 12      | M20x1,5          | 8  |    |    |      |      |      |            |            |                    |                   | AFMW 13-6-12              |              |
|                         |                 |      |        | 16      | M24x1,5          | 12 | 20 | 36 | 16   | 18,2 | 40,5 | 57         | 18,64x3,53 | M8x30              | 0,34              | AFMW 13-6-16              |              |
|                         | 420             | 19   | ¾“     | 16      | M24x1,5          | 12 |    |    |      |      |      |            |            |                    |                   | AFMW 19-6-16              |              |
|                         |                 |      |        | 20      | M30x2,0          | 15 | 26 | 41 | 19   | 23,8 | 50,8 | 72         | 24,99x3,53 | M10x35             | 1,61              | AFMW 19-6-20              |              |
|                         | 420             | 25   | 1“     | 20      | M30x2,0          | 15 |    |    |      |      |      |            |            |                    |                   | AFMW 25-6-20              |              |
|                         |                 |      |        | 25      | M36x2,0          | 20 | 30 | 50 | 24   | 27,8 | 57,2 | 82         | 32,92x3,53 | M12x45             | 1,42              | AFMW 25-6-25              |              |
|                         | 420             | 32   | 1¼“    | 25      | M36x2,0          | 20 |    |    |      |      |      |            |            |                    |                   | AFMW 32-6-25 (M12)        |              |
|                         |                 |      |        | 30      | M42x2,0          | 25 | 36 | 58 | 27   | 31,8 | 66,7 | 95         | 37,69x3,53 | M14(12)x50         | 1,88              | AFMW 32-6-30 (M12)        |              |
|                         | 420             | 38   | 1½“    | 30      | M42x2,0          | 25 |    |    |      |      |      |            |            |                    |                   |                           | AFMW 38-6-30 |
|                         |                 |      |        | 38      | M52x2,0          | 30 | 41 | 65 | 30   | 36,5 | 79,4 | 110        | 47,22x3,53 | M16x55             | 2,71              | AFMW 38-6-38              |              |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

2 Der max. Arbeitsdruck ist abhängig vom tatsächlichen Rohr und der Schraubenfestigkeit (8.8 / 10.9). | The maximum working pressure depends on the pipe dimension and on the bolts used (8.8 / 10.9).

3 Bei Blockmontage muss die gesamte Gegenfläche (c, d) eine entsprechende Oberflächengüte haben. | The entire mating surface (c, d) of a machined block must have an appropriate surface finish.



AVIT ≈ ISO 6162-1/2 <sup>1</sup>

Flanschverteiler können durch Flansch- oder Gewindeanschlüsse mit unterschiedlichen Nennweiten erweitert werden.

Flange distributors can be extended with further connections of different sizes and types.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

Werkstoff, Oberfläche / Material, Surface

Stahl, verzinkt / Steel, galvanised

Edelstahl / Stainless steel

BESTELLBEISPIEL  
ORDER EXAMPLE

TYP DN-Serie - \*\*

SFVH 51-3 - 01

SFVH 51-3 - 41

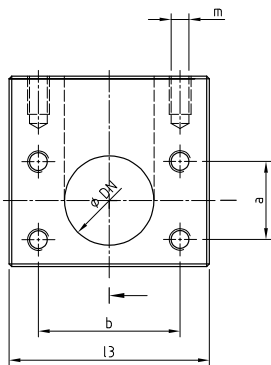
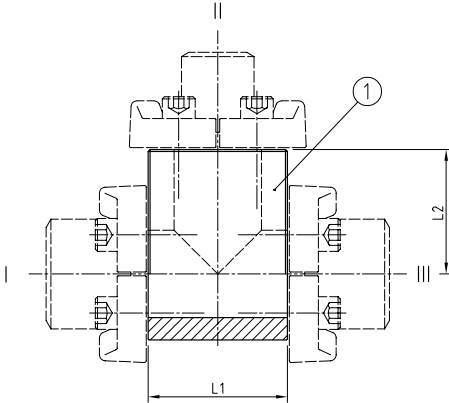
STÜCKLISTE  
PARTS LIST

Pos. Bezeichnung / Description

1 Verteilerblock / Manifold block

| SERIE<br>SERIES         | PN  | DN  | SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |      |       | GEWINDE<br>THREAD | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----|-----|------|--------------------------------|-----|-----|------|-------|-------------------|-------------------|---------------------------|
|                         |     |     |      | l1                             | l2  | l3  | a    | b     |                   |                   |                           |
| „3000“<br>ISO<br>6162-1 | 350 | 13  | ½"   | 38                             | 33  | 50  | 17,5 | 38,1  | M8                | 1,15              | SFVH 13-3                 |
|                         | 350 | 19  | ¾"   | 50                             | 45  | 70  | 22,2 | 47,6  | M10               | 2,06              | SFVH 19-3                 |
|                         | 315 | 25  | 1"   | 50                             | 45  | 70  | 26,2 | 52,4  | M10               | 3,01              | SFVH 25-3                 |
|                         | 280 | 32  | 1¼"  | 55                             | 50  | 80  | 30,2 | 58,7  | M10               | 4,44              | SFVH 32-3                 |
|                         | 210 | 38  | 1½"  | 65                             | 57  | 90  | 35,7 | 69,9  | M12               | 6,04              | SFVH 38-3                 |
|                         | 210 | 51  | 2"   | 72                             | 60  | 100 | 42,9 | 77,8  | M12               | 7,89              | SFVH 51-3                 |
|                         | 175 | 64  | 2½"  | 88                             | 63  | 110 | 50,8 | 88,9  | M12               | 9,56              | SFVH 64-3                 |
|                         | 160 | 76  | 3"   | 105                            | 80  | 140 | 61,9 | 106,4 | M16               | 15,3              | SFVH 76-3                 |
|                         | 35  | 89  | 3½"  | 120                            | 85  | 150 | 69,9 | 120,7 | M16               | 22,1              | SFVH 89-3                 |
|                         | 35  | 102 | 4"   | 130                            | 95  | 170 | 77,8 | 130,2 | M16               | 25,2              | SFVH 102-3                |
| „6000“<br>ISO<br>6162-2 | 35  | 127 | 5"   | 160                            | 105 | 190 | 92,1 | 152,4 | M16               | 33,6              | SFVH 127-3                |
|                         | 420 | 13  | ½"   | 38                             | 38  | 60  | 18,2 | 40,5  | M8                | 1,38              | SFVH 13-6                 |
|                         | 420 | 19  | ¾"   | 50                             | 44  | 70  | 23,8 | 50,8  | M10               | 2,73              | SFVH 19-6                 |
|                         | 420 | 25  | 1"   | 58                             | 52  | 80  | 27,8 | 57,2  | M12               | 3,95              | SFVH 25-6                 |
|                         | 420 | 32  | 1¼"  | 63                             | 55  | 90  | 31,8 | 66,7  | M12               | 6,18              | SFVH 32-6 M12             |
|                         | 420 | 32  | 1¼"  | 63                             | 55  | 90  | 31,8 | 66,7  | M14               | 6,18              | SFVH 32-6                 |
|                         | 420 | 38  | 1½"  | 70                             | 62  | 100 | 36,5 | 79,3  | M16               | 10,6              | SFVH 38-6                 |
|                         | 420 | 51  | 2"   | 89                             | 80  | 130 | 44,5 | 96,8  | M20               | 16,9              | SFVH 51-6                 |
|                         | 315 | 64  | 2½"  | 110                            | 90  | 160 | 58,7 | 123,8 | M24               | 37,1              | SFVH 64-6                 |
|                         | 315 | 76  | 3"   | 135                            | 110 | 200 | 71,4 | 152,4 | M30               | 66,8              | SFVH 76-6                 |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.



AVIT ≈ ISO 6162-1/2 <sup>1</sup>

ECO-Ausführung - 50% weniger Materialeinsatz.  
Flanschverteiler können mit reduzierten AVIT Flansch-  
bunden kombiniert werden.

ECO design - over 50% material reduction.  
Flange distributors can be extended with further con-  
nections of different sizes and types.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

Werkstoff, Oberfläche / Material, Surface

Stahl, verzinkt / Steel, galvanised

Edelstahl / Stainless steel

BESTELLBEISPIEL  
ORDER EXAMPLE

TYP DN-Serie - \*\*

SFV 51-3 - 01

SFV 51-3 - 41

STÜCKLISTE  
PARTS LIST

Pos. Bezeichnung / Description

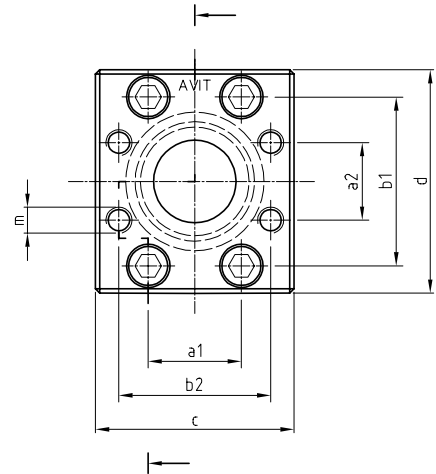
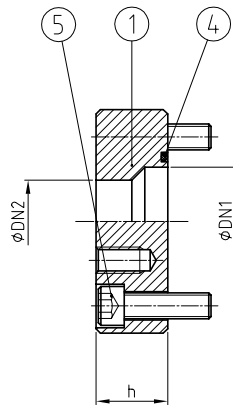
1 Verteilerblock / Manifold block

| SERIE<br>SERIES         | PN  | DN  | SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |      |       | GEWINDE<br>THREAD | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----|-----|------|--------------------------------|-----|-----|------|-------|-------------------|-------------------|---------------------------|
|                         |     |     |      | L1                             | L2  | L3  | a    | b     |                   |                   |                           |
| „3000“<br>ISO<br>6162-1 | 350 | 13  | ½"   | 38                             | 33  | 50  | 17,5 | 38,1  | M8                | 0,59              | SFV 13-3                  |
|                         | 350 | 19  | ¾"   | 50                             | 45  | 70  | 22,2 | 47,6  | M10               | 1,56              | SFV 19-3                  |
|                         | 315 | 25  | 1"   | 50                             | 45  | 70  | 26,2 | 52,4  | M10               | 1,43              | SFV 25-3                  |
|                         | 280 | 32  | 1¼"  | 55                             | 50  | 80  | 30,2 | 58,7  | M10               | 2,00              | SFV 32-3                  |
|                         | 210 | 38  | 1½"  | 65                             | 57  | 90  | 35,7 | 69,9  | M12               | 2,91              | SFV 38-3                  |
|                         | 210 | 51  | 2"   | 72                             | 60  | 100 | 42,9 | 77,8  | M12               | 3,62              | SFV 51-3                  |
|                         | 175 | 64  | 2½"  | 88                             | 63  | 110 | 50,8 | 88,9  | M12               | 4,89              | SFV 64-3                  |
|                         | 160 | 76  | 3"   | 105                            | 80  | 140 | 61,9 | 106,4 | M16               | 10,00             | SFV 76-3                  |
|                         | 35  | 89  | 3½"  | 120                            | 85  | 150 | 69,9 | 120,7 | M16               | 12,27             | SFV 89-3                  |
|                         | 35  | 102 | 4"   | 130                            | 95  | 170 | 77,8 | 130,2 | M16               | 17,06             | SFV 102-3                 |
| „6000“<br>ISO<br>6162-2 | 35  | 127 | 5"   | 160                            | 105 | 190 | 92,1 | 152,4 | M16               | 23,29             | SFV 127-3                 |
|                         | 420 | 13  | ½"   | 38                             | 38  | 60  | 18,2 | 40,5  | M8                | 0,89              | SFV 13-6                  |
|                         | 420 | 19  | ¾"   | 50                             | 44  | 70  | 23,8 | 50,8  | M10               | 1,56              | SFV 19-6                  |
|                         | 420 | 25  | 1"   | 58                             | 52  | 80  | 27,8 | 57,2  | M12               | 2,25              | SFV 25-6                  |
|                         | 420 | 32  | 1¼"  | 63                             | 55  | 90  | 31,8 | 66,7  | M12               | 2,96              | SFV 32-6 M12              |
|                         | 420 | 32  | 1¼"  | 63                             | 55  | 90  | 31,8 | 66,7  | M14               | 2,96              | SFV 32-6                  |
|                         | 420 | 38  | 1½"  | 70                             | 62  | 100 | 36,5 | 79,3  | M16               | 3,91              | SFV 38-6                  |
|                         | 420 | 51  | 2"   | 89                             | 80  | 130 | 44,5 | 96,8  | M20               | 8,37              | SFV 51-6                  |
|                         | 315 | 64  | 2½"  | 110                            | 90  | 160 | 58,7 | 123,8 | M24               | 16,19             | SFV 64-6                  |
|                         | 315 | 76  | 3"   | 135                            | 110 | 200 | 71,4 | 152,4 | M30               | 31,93             | SFV 76-6                  |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.



Ausführung kann je nach Variante variieren! | Design may vary depending on the size

AVIT ≈ ISO 6162-1/2 <sup>1</sup>

Diese Tabelle enthält nur Standardreduzierungen.  
Andere Ausführungen, auch serienübergreifend, sind  
ebenfalls kurzfristig lieferbar.

Only the standards are indicated in the table. Other  
sizes and combinations across the series are deliver-  
able in short time.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

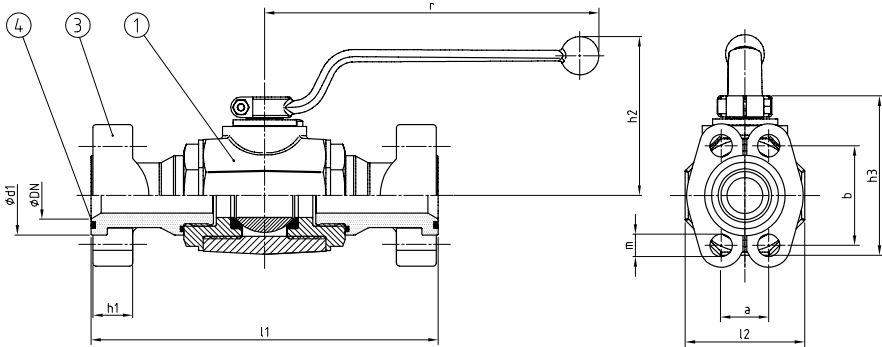
| Werkstoff, Oberfläche / Material, Surface      | TYP DN1>DN2 - **     |
|------------------------------------------------|----------------------|
| Stahl, phosphatiert / Steel, phosphatised; NBR | AFR 51-3 > 38-3 - 01 |
| Stahl, phosphatiert / Steel, phosphatised; FKM | AFR 51-3 > 38-3 - 02 |
| Edelstahl / Stainless steel; NBR               | AFR 51-3 > 38-3 - 41 |
| Edelstahl / Stainless steel; FKM               | AFR 51-3 > 38-3 - 42 |

BESTELLBEISPIEL  
ORDER EXAMPLESTÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                          |
|------|--------------------------------------------------------------------|
| 1    | Reduzierflansch mit O-Ring Nut / Adapter flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                                   |
| 5    | Schrauben / Bolts                                                  |

1 Lochbild gemäß Norm | Hole pattern according to ISO standard

| SERIE<br>SERIES         | PN       | DN1>DN2  | SIZE      | ABMESSUNGEN [mm]<br>DIMENSIONS |       |       |       |       |     |     |             | O-RING     | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|-------------------------|----------|----------|-----------|--------------------------------|-------|-------|-------|-------|-----|-----|-------------|------------|--------------------|---------------------------|
| [psi]                   | [bar]    | [mm]     | [inch]    | h                              | a1    | b1    | a2    | b2    | c   | d   | m           | Pos. 4     | Pos. 5             | TYP DN1>DN2               |
| „3000“<br>ISO<br>6162-1 | 315      | 25 > 19  | 1" > ¾"   | 28                             | 26,2  | 52,4  | 22,2  | 47,6  | 62  | 72  | M10         | 32,92x3,53 | M10x25             | AFR 25-3>19-3             |
|                         | 280      | 32 > 25  | 1¼" > 1"  | 28                             | 30,2  | 58,7  | 26,2  | 52,4  | 73  | 80  | M10         | 37,69x3,53 | M10x30             | AFR 32-3>25-3             |
|                         | 210      | 38 > 32  | 1½" > 1¼" | 32                             | 35,7  | 69,9  | 30,2  | 58,7  | 80  | 94  | M10         | 47,22x3,53 | M12x35             | AFR 38-3>32-3             |
|                         |          | 38 > 25  | 1½" > 1"  |                                |       |       | 26,2  | 52,4  |     |     |             |            |                    | AFR 38-3>25-3             |
|                         | 210      | 51 > 38  | 2" > 1½"  | 32                             | 42,9  | 77,8  | 35,7  | 69,9  | 97  | 102 | M12         | 56,74x3,53 | M12x35             | AFR 51-3>38-3             |
|                         |          | 51 > 32  | 2" > 1¼"  |                                |       |       | 30,2  | 58,7  |     |     |             |            |                    | M10                       |
|                         | 175      | 64 > 51  | 2½" > 2"  | 36                             | 50,8  | 88,9  | 42,9  | 77,8  | 109 | 115 | M12         | 69,44x3,53 | M12x40             | AFR 64-3>51-3             |
|                         |          | 64 > 38  | 2½" > 1½" |                                |       |       | 35,7  | 69,9  |     |     |             |            |                    | M12                       |
|                         | 160      | 76 > 64  | 3" > 2½"  | 40                             | 61,9  | 106,4 | 50,8  | 88,9  | 131 | 135 | M12         | 85,32x3,53 | M16x50             | AFR 76-3>64-3             |
|                         |          | 76 > 51  | 3" > 2"   |                                |       |       | 42,9  | 77,8  |     |     |             |            |                    | M12                       |
|                         | 35       | 89 > 76  | 3½" > 3"  | 40                             | 69,9  | 120,7 | 61,9  | 106,4 | 140 | 152 | M16         | 98,02x3,53 | M16x50             | AFR 89-3>76-3             |
|                         |          | 89 > 64  | 3½" > 2½" |                                |       |       | 50,8  | 88,9  |     |     |             |            |                    | M12                       |
| 35                      | 102 > 76 | 4" > 3"  | 50        | 77,8                           | 130,2 | 61,9  | 106,4 | 152   | 162 | M16 | 110,72x3,53 | M16x50     | AFR 102-3>76-3     |                           |
| 35                      | 127 > 76 | 5" > 3"  | 58        | 92,1                           | 152,4 | 61,9  | 106,4 | 180   | 185 | M16 | 136,12x3,53 | M16x60     | AFR 127-3>76-3     |                           |
| „6000“<br>ISO<br>6162-2 | 420      | 25 > 19  | 1" > ¾"   | 32                             | 27,8  | 57,2  | 23,8  | 50,8  | 70  | 81  | M10         | 32,92x3,53 | M12x25             | AFR 25-6>19-6             |
|                         | 420      | 32 > 19  | 1¼" > ¾"  | 38                             | 31,8  | 66,7  | 23,8  | 50,8  | 78  | 96  | M10         | 37,69x3,53 | M14(12)x40         | AFR 32-6 (M12) >19-6      |
|                         |          | 32 > 25  | 1¼" > 1"  |                                |       |       | 27,8  | 57,2  |     |     |             |            |                    | M12                       |
|                         | 420      | 38 > 25  | 1½" > 1"  | 44                             | 36,5  | 79,4  | 27,8  | 57,2  | 96  | 113 | M12         | 47,22x3,53 | M16x50             | AFR 38-6>25-6             |
|                         |          | 38 > 32  | 1½" > 1¼" |                                |       |       | 31,8  | 66,7  |     |     |             |            |                    | M14(M12)                  |
|                         | 420      | 51 > 32  | 2" > 1¼"  | 48                             | 44,5  | 96,8  | 31,8  | 66,7  | 114 | 134 | M14(M12)    | 56,74x3,53 | M20x50             | AFR 51-6>32-6 (M12)       |
|                         |          | 51 > 38  | 2" > 1½"  |                                |       |       | 36,5  | 79,4  |     |     |             |            |                    | M16                       |
|                         | 315      | 64 > 38  | 2½" > 1½" | 48                             | 58,7  | 123,8 | 36,5  | 79,4  | 150 | 175 | M16         | 69,44x3,53 | M24x50             | AFR 64-6>38-6             |
|                         |          | 64 > 51  | 2½" > 2"  |                                |       |       | 44,5  | 96,8  |     |     |             |            |                    | M20                       |
|                         | 315      | 76 > 51  | 3" > 2"   | 80                             | 71,4  | 152,4 | 44,5  | 96,8  | 178 | 210 | M20         | 85,32x3,53 | M30x70             | AFR 76-6>51-6             |
| 76 > 64                 |          | 3" > 2½" | 58,7      |                                |       |       | 123,8 | M24   |     |     |             |            |                    | AFR 76-6>64-6             |



**ISO 6162-1/2 <sup>1</sup>**  
2/2 Wege Kugelhahn zum Absperren eines Druckmit-  
telstroms in beiden Richtungen. Schalthebel gekröpft.  
  
2/2 way ball valve is used to shut-off a pressure flow  
in both directions. With cranked lever.

| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION | BESTELLBEISPIEL<br>ORDER EXAMPLE | STÜCKLISTE<br>PARTS LIST                            |
|-----------------------------------------------|----------------------------------|-----------------------------------------------------|
| Werkstoff, Oberfläche / Material, Surface     | TYP DN-Serie-**                  | Pos. Bezeichnung / Description                      |
| Stahl, verzinkt / Steel, galvanised, NBR      | BKS 51-3 - 21                    | 1 Kugelhahn mit Schalthebel / Ball valve with lever |
| Stahl, verzinkt / Steel, galvanised, FKM      | BKS 51-3 - 22                    | 3 Halbfansche / Split flanges                       |
| Edelstahl / Stainless steel; NBR              | BKS 51-3 - 41                    | 4 O-Ring Dichtung / O-ring sealing                  |
| Edelstahl / Stainless steel; FKM              | BKS 51-3 - 42                    |                                                     |

| SERIE<br>SERIES         | PN<br>[psi] | DN<br>[bar] | SIZE<br>[mm] [inch] | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |    |     |     |      |      |      | O-RING     | BESTELLCODE<br>ORDER CODE |
|-------------------------|-------------|-------------|---------------------|--------------------------------|-----|-----|----|-----|-----|------|------|------|------------|---------------------------|
|                         |             |             |                     | l1                             | l2  | r   | h1 | h2  | h3  | a    | b    | m    | Pos. 4     | TYP DN-Serie              |
| „3000“<br>ISO<br>6162-1 | 350         | 13          | ½"                  | 167                            | 40  | 163 | 13 | 80  | 62  | 17,5 | 38,1 | 9    | 18,64x3,53 | BKS 13-3                  |
|                         | 350         | 19          | ¾"                  | 183                            | 49  | 183 | 14 | 92  | 75  | 22,2 | 47,6 | 11   | 24,99x3,53 | BKS 19-3                  |
|                         | 315         | 25          | 1"                  | 213                            | 58  | 183 | 16 | 95  | 82  | 26,2 | 52,4 | 11   | 32,92x3,53 | BKS 25-3                  |
|                         | 280         | 32          | 1¼"                 | 200                            | 82  | 227 | 14 | 108 | 106 | 30,2 | 58,7 | 11,5 | 37,69x3,53 | BKS 32-3                  |
|                         | 210         | 38          | 1½"                 | 250                            | 94  | 227 | 16 | 115 | 118 | 35,7 | 69,9 | 13,5 | 47,22x3,53 | BKS 38-3                  |
|                         | 210         | 51          | 2"                  | 260                            | 111 | 227 | 16 | 120 | 134 | 42,9 | 77,8 | 13,5 | 56,74x3,53 | BKS 51-3                  |
| „6000“<br>ISO<br>6162-2 | 420         | 13          | ½"                  | 167                            | 40  | 163 | 16 | 80  | 62  | 18,2 | 40,5 | 9    | 18,64x3,53 | BKS 13-6                  |
|                         | 420         | 19          | ¾"                  | 191                            | 49  | 183 | 19 | 92  | 75  | 23,8 | 50,8 | 11   | 24,99x3,53 | BKS 19-6                  |
|                         | 420         | 25          | 1"                  | 227                            | 58  | 183 | 24 | 95  | 82  | 27,8 | 57,2 | 13   | 32,92x3,53 | BKS 25-6                  |
|                         | 420         | 32          | 1¼"                 | 235                            | 82  | 227 | 27 | 108 | 106 | 31,8 | 66,7 | 13   | 37,69x3,53 | BKS 32-6 M12              |
|                         | 420         | 32          | 1¼"                 | 235                            | 82  | 227 | 27 | 108 | 106 | 31,8 | 66,7 | 15   | 37,69x3,53 | BKS 32-6                  |
|                         | 420         | 38          | 1½"                 | 266                            | 94  | 227 | 30 | 115 | 118 | 36,5 | 79,4 | 17   | 47,22x3,53 | BKS 38-6                  |
|                         | 420         | 51          | 2"                  | 302                            | 111 | 227 | 37 | 120 | 134 | 44,5 | 96,8 | 21   | 56,74x3,53 | BKS 51-6                  |

BESTELLCODE VARIANTEN

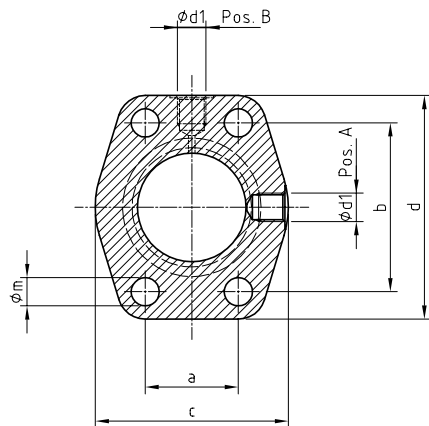
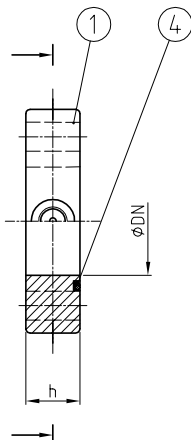
beidseitig mit Flanschanschluss (O-Ring) ..... **BKS**  
mit Flanschanschluss (O-Ring) und glattem Gegenflansch ..... **-AG**  
beidseitig mit glattem Gegenflansch ..... **-GG**  
mit Abschließvorrichtung und Schloss ..... **-SCH**  
mit Abschließvorrichtung ohne Schloss ..... **-SCHO**

ORDER CODE OPTIONS

both ends with flange connection (O-ring) ..... **BKS**  
with flange connection (O-ring) and counter flange ..... **-AG**  
both ends with counter flange ..... **-GG**  
with locking device and padlock ..... **-SCH**  
with locking device but without padlock ..... **-SCHO**

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.





ISO 6162-1/2 <sup>1</sup>

Zwischenflansch mit O-Ring Dichtung mit G 1/8 oder G 1/4 Innengewinde für Messkupplungen. <sup>2</sup>  
Bitte geben Sie die gewünschte Gewindeposition entsprechend an ( A = Standard)

Intermediate flange with O-ring sealing with G 1/4" internal thread for test couplings. <sup>2</sup>  
A = Standard position for internal thread.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff, Oberfläche / Material, Surface         | TYP DN-Serie-Pos.-** |
|---------------------------------------------------|----------------------|
| Stahl / Steel ; NBR                               | AFZ 51-3 - A - 01    |
| Stahl / Steel; FKM                                | AFZ 51-3 - A - 02    |
| Edelstahl 1.4404 / Stainless steel AISI 316L; NBR | AFZ 51-3 - A - 41    |
| Edelstahl 1.4404 / Stainless steel AISI 316L; FKM | AFZ 51-3 - A - 42    |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

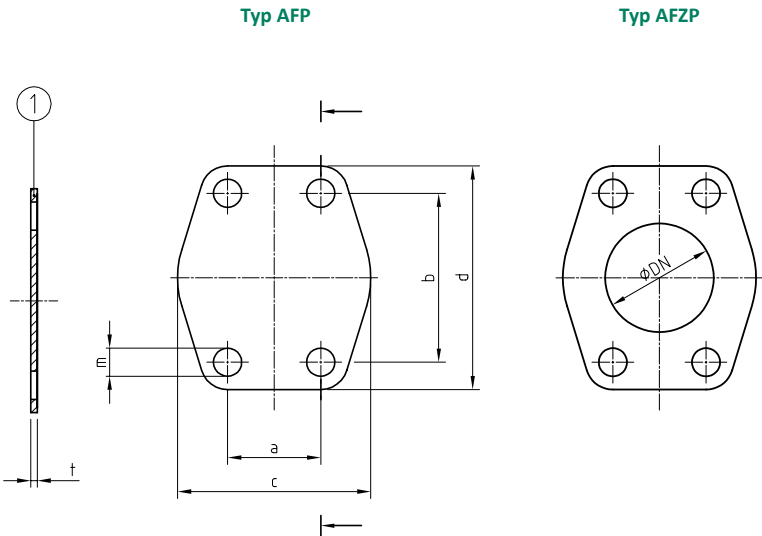
| Pos. | Bezeichnung / Description                                               |
|------|-------------------------------------------------------------------------|
| 1    | Zwischenflansch mit O-Ring Nut / Intermediate flange with O-ring groove |
| 4    | O-Ring Dichtung / O-ring sealing                                        |

| SERIE<br>SERIES         | PN <sup>2</sup> | DN   | SIZE   | ABMESSUNGEN [mm]<br>DIMENSIONS |       |      |       |     |     |      | O-RING      | BESTELLCODE<br>ORDER CODE |
|-------------------------|-----------------|------|--------|--------------------------------|-------|------|-------|-----|-----|------|-------------|---------------------------|
| [psi]                   | [bar]           | [mm] | [inch] | h                              | d1    | a    | b     | c   | d   | m    | Pos. 4      | TYP DN-Serie              |
| „3000“<br>ISO<br>6162-1 | 315             | 25   | 1“     | 18                             | G 1/8 | 26,2 | 52,4  | 53  | 71  | 11   | 32,92x3,53  | AFZ 25-3                  |
|                         | 280             | 32   | 1¼“    | 20                             | G 1/8 | 30,2 | 58,7  | 69  | 80  | 11,5 | 37,69x3,53  | AFZ 32-3                  |
|                         | 210             | 38   | 1½“    | 24                             | G 1/4 | 35,7 | 69,9  | 77  | 94  | 13,5 | 47,22x3,53  | AFZ 38-3                  |
|                         | 210             | 51   | 2“     | 24                             | G 1/4 | 42,9 | 77,8  | 89  | 103 | 13,5 | 56,74x3,53  | AFZ 51-3                  |
|                         | 175             | 64   | 2½“    | 24                             | G 1/4 | 50,8 | 88,9  | 101 | 115 | 13,5 | 69,44x3,53  | AFZ 64-3                  |
|                         | 160             | 76   | 3“     | 26                             | G 1/4 | 61,9 | 106,4 | 124 | 135 | 17   | 85,32x3,53  | AFZ 76-3                  |
|                         | 35              | 89   | 3½“    | 26                             | G 1/4 | 69,9 | 120,7 | 136 | 152 | 17   | 98,02x3,53  | AFZ 89-3                  |
|                         | 35              | 102  | 4“     | 26                             | G 1/4 | 77,8 | 130,2 | 146 | 162 | 17   | 110,72x3,53 | AFZ 102-3                 |
|                         | 35              | 127  | 5“     | 27                             | G 1/4 | 92,1 | 152,4 | 180 | 184 | 17   | 136,12x3,53 | AFZ 127-3                 |
| „6000“<br>ISO<br>6162-2 | 420             | 25   | 1“     | 23                             | G 1/8 | 27,8 | 57,2  | 69  | 80  | 13   | 32,92x3,53  | AFZ 25-6                  |
|                         | 420             | 32   | 1¼“    | 26                             | G 1/4 | 31,8 | 66,7  | 77  | 94  | 13   | 37,69x3,53  | AFZ 32-6 M12              |
|                         | 420             | 32   | 1¼“    | 26                             | G 1/4 | 31,8 | 66,7  | 77  | 94  | 15   | 37,69x3,53  | AFZ 32-6                  |
|                         | 420             | 38   | 1½“    | 29                             | G 1/4 | 36,5 | 79,4  | 89  | 106 | 17   | 47,22x3,53  | AFZ 38-6                  |
|                         | 420             | 51   | 2“     | 36                             | G 1/4 | 44,5 | 96,8  | 116 | 135 | 21   | 56,74x3,53  | AFZ 51-6                  |
|                         | 315             | 64   | 2½“    | 44                             | G 1/4 | 58,7 | 123,8 | 150 | 166 | 25   | 69,44x3,53  | AFZ 64-6                  |
|                         | 315             | 76   | 3“     | 54                             | G 1/4 | 71,4 | 152,4 | 178 | 208 | 32   | 85,32x3,53  | AFZ 76-6                  |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.  
2 Eine Messkupplung ist nicht im Lieferumfang enthalten und muss separat bestellt werden. | The test coupling is not part of the scope of delivery and must be ordered separately.



**ISO 6162-1/2 <sup>1</sup>**  
Auch als Zwischenplatte mit Bohrung erhältlich  
(Typ AFZP).  
  
Available as intermediate flange plate with bore (Typ  
AFZP)



| WERKSTOFF-KOMBINATION<br>MATERIAL COMBINATION | BESTELLBEISPIEL<br>ORDER EXAMPLE |
|-----------------------------------------------|----------------------------------|
| Werkstoff, Oberfläche / Material, Surface     | TYP DN - **                      |
| Stahl / Steel                                 | AFP 51-3 - 01                    |
| Stahl, verzinkt / Steel, galvanised           | AFP 51-3 - 21                    |
| Edelstahl 1.4301 / Stainless steel AISI 304   | AFP 51-3 - 41                    |

| STÜCKLISTE<br>PARTS LIST       |
|--------------------------------|
| Pos. Bezeichnung / Description |
| 1 Blindplatte / Blind plate    |

| SERIE<br>SERIES         | PN | DN  | SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |      |       |     |     |      | BESTELLCODE<br>ORDER CODE |               |
|-------------------------|----|-----|------|--------------------------------|------|-------|-----|-----|------|---------------------------|---------------|
|                         |    |     |      | t                              | a    | b     | c   | d   | m    | TYP DN-Serie              | TYP DN-Serie  |
| „3000“<br>ISO<br>6162-1 | -  | 13  | ½"   | 3                              | 17,5 | 38,1  | 47  | 57  | 9    | AFP 13-3                  | AFZP 13-3     |
|                         | -  | 19  | ¾"   | 3                              | 22,2 | 47,6  | 49  | 66  | 11   | AFP 19-3                  | AFZP 19-3     |
|                         | -  | 25  | 1"   | 3                              | 26,2 | 52,4  | 53  | 71  | 11   | AFP 25-3                  | AFZP 25-3     |
|                         | -  | 32  | 1¼"  | 3                              | 30,2 | 58,7  | 69  | 80  | 11,5 | AFP 32-3                  | AFZP 32-3     |
|                         | -  | 38  | 1½"  | 3                              | 35,7 | 69,9  | 77  | 94  | 13,5 | AFP 38-3                  | AFZP 38-3     |
|                         | -  | 51  | 2"   | 3                              | 42,9 | 77,8  | 89  | 103 | 13,5 | AFP 51-3                  | AFZP 51-3     |
|                         | -  | 64  | 2½"  | 3                              | 50,8 | 88,9  | 101 | 115 | 13,5 | AFP 64-3                  | AFZP 64-3     |
|                         | -  | 76  | 3"   | 4                              | 61,9 | 106,4 | 124 | 135 | 17   | AFP 76-3                  | AFZP 76-3     |
|                         | -  | 89  | 3½"  | 4                              | 69,9 | 120,7 | 136 | 152 | 17   | AFP 89-3                  | AFZP 89-3     |
|                         | -  | 102 | 4"   | 4                              | 77,8 | 130,2 | 146 | 162 | 17   | AFP 102-3                 | AFZP 102-3    |
| „6000“<br>ISO<br>6162-2 | -  | 127 | 5"   | 4                              | 92,1 | 152,4 | 180 | 184 | 17   | AFP 127-3                 | AFZP 127-3    |
|                         | -  | 13  | ½"   | 4                              | 18,2 | 40,5  | 47  | 57  | 9    | AFP 13-6                  | AFZP 13-6     |
|                         | -  | 19  | ¾"   | 4                              | 23,8 | 50,8  | 53  | 71  | 11   | AFP 19-6                  | AFZP 19-6     |
|                         | -  | 25  | 1"   | 4                              | 27,8 | 57,2  | 69  | 80  | 13   | AFP 25-6                  | AFZP 25-6     |
|                         | -  | 32  | 1¼"  | 4                              | 31,8 | 66,7  | 77  | 94  | 13   | AFP 32-6 M12              | AFZP 32-6 M12 |
|                         | -  | 32  | 1¼"  | 4                              | 31,8 | 66,7  | 77  | 94  | 15   | AFP 32-6                  | AFZP 32-6     |
|                         | -  | 38  | 1½"  | 4                              | 36,5 | 79,4  | 89  | 106 | 17   | AFP 38-6                  | AFZP 38-6     |
|                         | -  | 51  | 2"   | 4                              | 44,5 | 96,8  | 116 | 135 | 21   | AFP 51-6                  | AFZP 51-6     |
|                         | -  | 64  | 2½"  | 4                              | 58,7 | 123,8 | 150 | 166 | 25   | AFP 64-6                  | AFZP 64-6     |
|                         | -  | 76  | 3"   | 4                              | 71,4 | 152,4 | 178 | 208 | 32   | AFP 76-6                  | AFZP 76-6     |

1 Lochbild gemäß Norm. | Hole pattern according to ISO standard.

# ROHRDREHGELENKE UND MEHRKANALDREHDURCHFÜHRUNGEN

## *SWIVEL JOINTS AND MULTI-PORT SWIVEL UNITS*

WIR VERBINDEN. SICHER!  
WE CONNECT. SECURELY!

#### **FUNKTIONSPRINZIP ROHRDREHGELENKE**

AVIT Rohrdrehgelenke sind unter Druck bewegliche Rohrleitungskomponenten für starre Rohrleitungen. Sie können aber auch als Torsionsentlastung für Schlauchverbindungen eingesetzt werden.

Ein Schwenken und eine endlose Rotation mit niedriger Geschwindigkeit in beiden Richtungen ist bei allen Drehgelenken möglich. Bei Drehgelenken Typ DKG ist zusätzlich ein Winkelausgleich von bis zu 7,5° entlang der Drehachse möglich.

AVIT Rohrdrehgelenke finden Anwendung in unterschiedlichsten Industriebereichen und eignen sich für flüssige oder gasförmige Medien. Je nach Ausführung können hohe Innendrucke oder Vakuum sicher abgedichtet werden. Standardmäßig liegt die max. Temperatur bei 80°C.



Rohrdrehgelenksschere | Pipe swivel joint shear

#### **ROHRDREHGELENKSSCHEREN**

Durch Arrangieren mehrerer Rohrdrehgelenke in verschiedenen Ebenen sind beliebige Leitungswege im Raum möglich. Da Gewinde-, Flansch- oder Schweißanschlüsse möglich sind, sind den Kombinationsmöglichkeiten z.B. mit Rohrbögen, Verschraubungen und Flanschen keine Grenzen gesetzt.

#### **DREHDURCHFÜHRUNGEN**

Wenn mehrere Medien (flüssig oder gasförmig) getrennt voneinander durchgeleitet werden müssen, kommen Mehrkanaldrehdurchführungen zum Einsatz. Diese können einteilige (Typ DG) oder segmentierte Gehäuse (Typ DS) haben.

#### **FUNCTIONAL PRINCIPLE OF PIPE SWIVEL JOINTS**

AVIT pipe swivel joints are pipe components that can move under pressure. They are suitable for use with rigid pipework or can be used with hose connections that require protection against torsional loads.

All types allow a continuous rotation and swivelling in either direction at low speed. The DKG type swivel joint features additional angle compensation of up to 7.5° along the axis of rotation.

AVIT pipe swivel joints are used in various industrial applications and are suitable for liquid or gaseous media. Different versions ensure a reliable seal in use with high internal pressures or vacuum. The standard maximum temperature is 80°C.



Mehrkanaldrehdurchführung | Multi-channel rotary unit

#### **PIPE SWIVEL JOINT SHEARS**

By arranging several pipe swivel joints in different levels it is possible to achieve virtually any routing configuration. Due to the different connection options – threaded, flanged or welded with elbows, couplings and flanges - the possibilities are nearly unlimited.

#### **MULTI-CHANNEL ROTARY UNITS**

If different media (whether liquid or gaseous) have to be conveyed separately, multi-channel rotary units can be used. These can have either one-piece (type DG) or segmented housings (type DS).



|                     |      |
|---------------------|------|
| INFORMATIONEN ..... | 4.05 |
| <i>INFORMATION</i>  |      |

#### HOCHDRUCKBAUREIHE | HIGH PRESSURE LINE

|                                                                                    |                                                   |      |
|------------------------------------------------------------------------------------|---------------------------------------------------|------|
|   | GERADES DREHGELENK MIT 24° KONUS. .... <b>DVG</b> | 4.07 |
|                                                                                    | STRAIGHT SWIVEL JOINT WITH 24° CONUS              |      |
|   | WINKELDREHGELENK MIT 24° KONUS ..... <b>DVW</b>   | 4.08 |
|                                                                                    | ELBOW SWIVEL JOINT WITH 24° CONUS                 |      |
|   | ROHRDREHGELENK MIT INNENGEWINDE ..... <b>DVL</b>  | 4.09 |
|                                                                                    | SWIVEL JOINT WITH INSIDE THREAD                   |      |
|   | ROHRDREHGELENK MIT SCHWEISSENDEN ..... <b>DGA</b> | 4.10 |
|                                                                                    | SWIVEL JOINT WITH WELD-ON ENDS                    |      |
|   | KUGELROHRDREHGELENK..... <b>DKG</b>               | 4.11 |
|                                                                                    | BALL-TYPE ROTARY PIPE JOINT                       |      |
|  | MEHRKANALDREHDURCHFÜHRUNGEN..... <b>DG/DS</b>     | 4.12 |
|                                                                                    | MULTI-CHANNEL ROTARY UNITS                        |      |

#### NIEDERDRUCKBAUREIHE | LOW-PRESSURE LINE

|                                                                                     |                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|
|  | ROHRDREHGELENK MIT SCHWEISSENDEN . . . . <b>DGN-S</b> 4.14 |
|                                                                                     | <i>SWIVEL JOINT WITH WELD-ON ENDS</i>                      |
|  | ROHRDREHGELENK MIT INNENGEWINDE . . . . <b>DGN-T</b> 4.15  |
|                                                                                     | <i>SWIVEL JOINT WITH INSIDE THREAD</i>                     |
|  | ROHRDREHGELENK MIT FLANSCHANSCHLUSS . . <b>DGN-F</b> 4.16  |
|                                                                                     | <i>SWIVEL JOINT WITH FLANGE CONNECTION</i>                 |



## STANDARD LIEFERUMFANG

Wir liefern verschiedene bewährte Rohrdrehgelenke für die unterschiedlichsten Einsatzgebiete. Standardmedien sind Hydrauliköl, Druckluft und Gase. Wasser, Schmutzwasser, Chemikalien und Lebensmittel sind nach genauer Spezifikation ebenso möglich.

**AVIT Stahl Rohrdrehgelenke** werden aus geeigneten Qualitätsstählen hergestellt. Die Oberflächen werden zum Korrosionsschutz wärmebehandelt und gehärtet.

**AVIT Edelstahl Rohrdrehgelenke** (1.4571) der Hochdruckbaureihe werden wärmebehandelt, um die Festigkeit zu erhöhen.

## DREHZAHL, DRUCK UND TEMPERATUREN

AVIT Rohrdrehgelenke sind für langsame Drehbewegungen  $n_{\max} = 20\text{--}30 \text{ min}^{-1}$  ausgelegt und haben einen zulässigen Betriebstemperaturbereich von  $0^{\circ}\text{C}$  bis  $+80^{\circ}\text{C}$ . Bitte beachten Sie mögliche Druckabschläge bei höheren Temperaturen!

**AVIT Rohrdrehgelenke - Hochdruckbaureihe** sind durch spezielle Lagerung in Verbindung mit Profildichtungen für hohe Drücke und entsprechende Beanspruchungen ausgelegt. Je nach Rohrdrehgelenktyp können diese statisch bis 420 bar belastet werden. Bei schwellender Druckbeanspruchung sind max. 315 bar möglich. Druckspitzen in der Hydraulikanlage dürfen den maximal zulässigen Druck nicht überschreiten.

**AVIT Rohrdrehgelenke - Niederdruckbaureihe** sind für einen Betriebsdruck bis 40 bar ausgelegt. Der für den Einsatzfall zulässige Betriebsdruck ist durch das Verbindungsteil zur Rohrleitung bestimmt und kann dadurch geringer sein als der für das Drehgelenk genannte Maximaldruck (z.B. Niederdruckverschraubungen oder -vorschweißflansche).

## DICHTUNGEN

Für die Auslegung der passenden Dichtungstechnologie ist es sehr wichtig, die Betriebsbedingungen des Rohrdrehgelenkes zu kennen, damit wir einen problemlosen Betrieb gewährleisten können. Daher müssen Sie uns die Angaben der Spezifikation (Seite 4.06) mit Ihrer Anfrage zur Verfügung stellen.

## ZEUGNISSE

Die Bescheinigungsart muss generell mit der Bestellung angegeben werden. Zeugniskosten sind in unseren Artikelpreisen nicht enthalten.

Abnahmeprüfzeugnis 3.1 ..... TYP DN - **3.1**  
Werkszeugnis 2.2 ..... **- 2.2**  
Werksbescheinigung 2.1 ..... **- 2.1**

## SERVICE

Bei den Kugellagern wird ein alterungsbeständiges Fett verwendet, welches einen ca. 3 bis 5 jährigen wartungsfreien Einsatz ermöglicht. Für Rohrdrehgelenke ab DN 50 kann eine Instandsetzung eine wirtschaftliche Alternative zum Neuteil sein. Wenn Sie Interesse an einer kostenpflichtigen Überprüfung haben, setzen Sie sich bitte dazu mit unseren Technikern in Verbindung.

## SCOPE OF DELIVERY

We provide various proven swivel joints for various applications. The standard media are hydraulic oil, compressed air and gases. Water, waste water, chemicals and foods are also possible with more detailed specifications.

**AVIT steel swivel joints** are manufactured of high-grade steel. The surfaces are heat-treated and hardened for anti-corrosive protection.

**AVIT stainless steel swivel joints** (1.4571) of the high pressure line are heat-treated to increase solidity.

## PRESSURE, TEMPERATURES

AVIT swivel joints are designed for slow rotating movements  $n_{\max} = 20\text{--}30 \text{ rpm}^{-1}$  with a permissible operating temperature range of  $0^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ . Please pay attention to the pressure reductions due to high temperatures!

**AVIT swivel joints - high-pressure line** are designed with special bearings in combination with profile seals for high pressures and corresponding stresses. Depending on the types of swivel joints, they can be subjected to static loads of up to 420 bar. A maximum dynamic pressure load of 315 bar is possible. Pressure surges in the hydraulic system may not exceed the maximum permissible pressure.

**AVIT swivel joints - low-pressure line** are designed for an operating pressure of up to 40 bar. The operating pressure permissible for the application is determined by the connecting part to the pipeline and can actually be lower than the maximum pressure mentioned for the swivel joint (e.g. low-pressure screw connections or welding neck flanges).

## SEALINGS

It is important to know the operating conditions of the swivel joint in order to choose the optimal sealing technology for failure-free operation. Therefore, you must provide us the details by filling in the specification (page 4.06) with your request.

## CERTIFICATES

The type of certification should generally be specified when the order is placed. The costs of certificates are not included in our item prices.

Inspection certificate 3.1 ..... TYPE DN - **3.1**  
Test report ..... **- 2.2**  
Declaration of compliance with order. .... **- 2.1**

## SERVICE

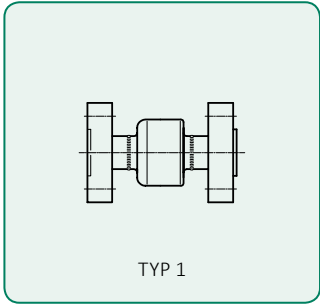
The ball bearing is provided with an anti-ageing grease. This enables maintenance-free use for approximately three to five years.

For swivel joints from DN 50 on, a repair can be an economical alternative to new parts. If you are interested in an inspection subject to a charge, please contact our engineers for further information.

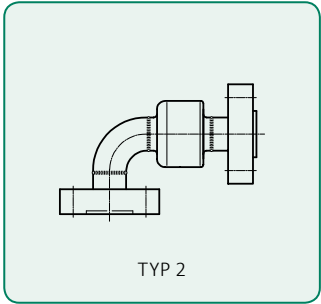
BAUFORM

AVIT Rohrdrehgelenke liefern wir einzeln zum Einbauen oder einbaufertig konfektioniert mit Rohrverschraubungen oder Flanschen aller Typen entsprechend der Bauform und Ihrer Spezifikation.

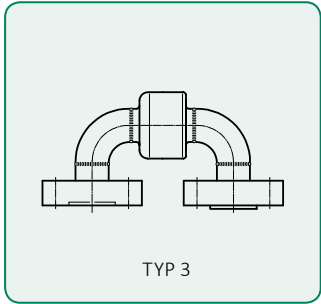
Durch die Kombination mit Rohren, Rohrbögen und Flanschen sind verschiedene Standardformen von Gelenkscheren für Ihren Einsatzfall auslegbar. Alle Rohrdrehgelenke sind in diesen Bauformen lieferbar.



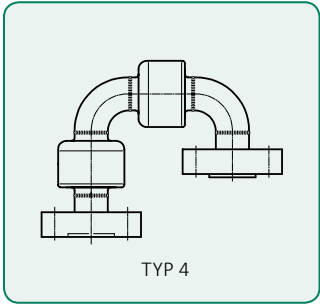
TYP 1



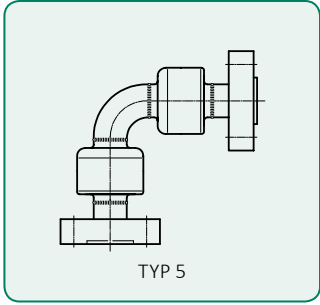
TYP 2



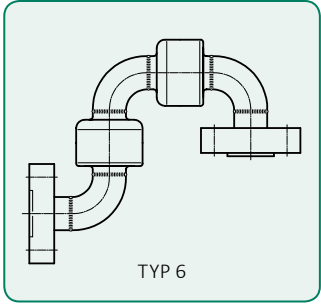
TYP 3



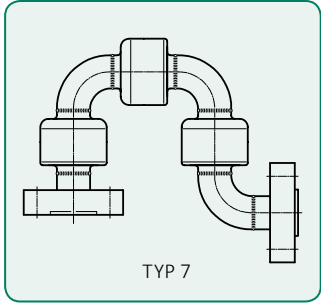
TYP 4



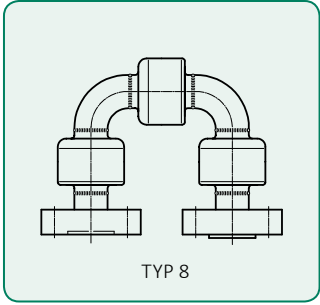
TYP 5



TYP 6



TYP 7



TYP 8

SPEZIFIKATION

Für die Auslegung der Rohrdrehgelenke ist es wichtig, einige Werte zu kennen. Bitte geben Sie bereits bei Ihrer Anfrage folgende Daten an:

Einsatzbereich .....

Bauform .....

Medium, Viskosität .....

Werkstoff .....

Rohranschlussmaß da x s ..... [mm]

Betriebsdruck - Statisch ..... [bar]

Betriebsdruck - Schwellend ..... [bar]

Betriebstemperatur ..... [°C]

Umgebungstemperatur ..... [°C]

Geschwindigkeit ..... [U/min]

Dreh- / Schwenkbewegung .....

Axial Kraft ..... [kN]

Radial Kraft ..... [kN]

Zugbelastung ..... [kN]

Abnahmen .....

Diese Spezifikation finden Sie auch auf unserer Webseite [www.avit.de](http://www.avit.de).

CONFIGURATION

AVIT swivel joints are provided individually for installation or pre-assembled with pipe screw connections or flanges of all types, ready for installation, according to the design and your specifications.

With the combination of pipes, elbows and flanges, various standard forms of joint shears can be designed for your application. All swivel joints are available in these designs.

SPECIFICATION

It is important to know some values for the layout of the swivel joints. Please have the following data ready when contacting us with your enquiry:

Range of application .....

Configuration .....

Medium, viscosity .....

Material .....

Dimension of the pipe connection da x s ..... [mm]

Operating pressure - statical ..... [bar]

Operating pressure - dynamic ..... [bar]

Operating temperature ..... [°C]

Ambient temperature ..... [°C]

Speed ..... [rpm]

Rotary motion .....

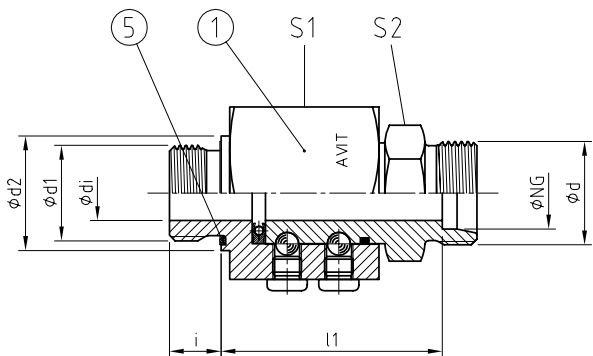
Axial force ..... [kN]

Radial force ..... [kN]

Tensile load ..... [kN]

Certification .....

This specification is also available on our website [www.avit.de](http://www.avit.de).



AVIT

- Gewindezapfen mit 24° Konus nach ISO 8434-1 mit metrischem Gewinde
  - Einschraubzapfen mit U-Ring Dichtung (ED) nach ISO 1179-2 mit zylindrischem Whitworth Rohrgewinde ISO 228-1
- 
- Screwed end with 24° conus acc. ISO 8434-1 with metric thread
  - Stud end with U-ring sealing acc. ISO 1179-2 with cylindrical BSP thread ISO 228-1

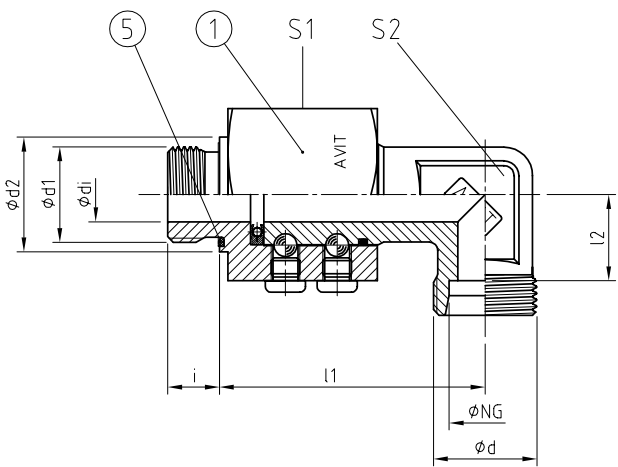
4

DREHGELENKE • HOCHDRUCKBAUREIHE  
SWIVEL JOINTS • HIGH PRESSURE LINE

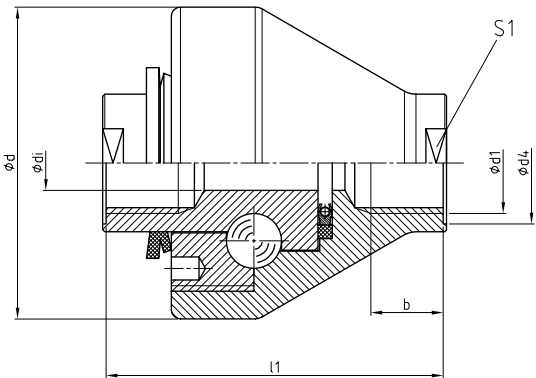
| PN    | NG   | ABMESSUNGEN [mm] |    |      |    |         |      |    |    | BESTELLCODE |    |
|-------|------|------------------|----|------|----|---------|------|----|----|-------------|----|
|       |      | DIMENSIONS       |    |      |    |         |      |    |    | ORDER CODE  |    |
| [bar] | [mm] | d1               | di | d2   | i  | d       | l1   | S1 | S2 | TYP         | NG |
| 160   | 10   | G 3/8 A          | 7  | 21,9 | 12 | M18x1,5 | 59,5 | 46 | 22 | DVG         | 10 |
|       | 12   | G 3/8 A          | 7  | 21,9 | 12 | M20x1,5 | 61,5 | 46 | 22 | DVG         | 12 |
|       | 16   | G 1/2 A          | 12 | 26,9 | 14 | M24x1,5 | 66,5 | 50 | 27 | DVG         | 16 |
|       | 20   | G 3/4 A          | 15 | 31,9 | 16 | M30x2,0 | 68,5 | 50 | 32 | DVG         | 20 |
|       | 25   | G 1 A            | 19 | 39,9 | 18 | M36x2,0 | 77,0 | 60 | 41 | DVG         | 25 |
|       | 30   | G 1 1/4 A        | 24 | 49,9 | 20 | M42x2,0 | 85,5 | 65 | 50 | DVG         | 30 |
|       | 38   | G 1 1/2 A        | 30 | 54,9 | 22 | M52x2,0 | 91,5 | 70 | 55 | DVG         | 38 |



- AVIT**
- Gewindezapfen mit 24° Konus nach ISO 8434-1 mit metrischem Gewinde
  - Einschraubzapfen mit U-Ring Dichtung (ED) nach ISO 1179-2 mit zylindrischem Whitworth Rohrgewinde ISO 228-1
- 
- Screwed end with 24° conus acc. ISO 8434-1 with metric thread
  - Stud end with U-ring sealing acc. ISO 1179-2 with cylindrical BSP thread ISO 228-1



| PN    | NG   | ABMESSUNGEN [mm] |    |      |    |         |       |      |    |    | BESTELLCODE |    |
|-------|------|------------------|----|------|----|---------|-------|------|----|----|-------------|----|
|       |      | DIMENSIONS       |    |      |    |         |       |      |    |    | ORDER CODE  |    |
| [bar] | [mm] | d1               | di | d2   | i  | d       | l1    | l2   | S1 | S2 | TYP         | NG |
| 160   | 10   | G 3/8 A          | 7  | 21,9 | 12 | M18x1,5 | 66,0  | 22,5 | 46 | 22 | DVW         | 10 |
|       | 12   | G 3/8 A          | 7  | 21,9 | 12 | M20x1,5 | 66,0  | 22,5 | 46 | 24 | DVW         | 12 |
|       | 16   | G 1/2 A          | 12 | 26,9 | 14 | M24x1,5 | 74,0  | 27,5 | 50 | 30 | DVW         | 16 |
|       | 20   | G 3/4 A          | 15 | 31,9 | 16 | M30x2,0 | 76,0  | 26,5 | 50 | 36 | DVW         | 20 |
|       | 25   | G 1 A            | 19 | 39,9 | 18 | M36x2,0 | 92,5  | 33,0 | 60 | 46 | DVW         | 25 |
|       | 30   | G 1 1/4 A        | 24 | 49,9 | 20 | M42x2,0 | 101,5 | 34,5 | 65 | 50 | DVW         | 30 |
|       | 38   | G 1 1/2 A        | 30 | 54,9 | 22 | M52x2,0 | 110,0 | 42,0 | 70 | 60 | DVW         | 38 |



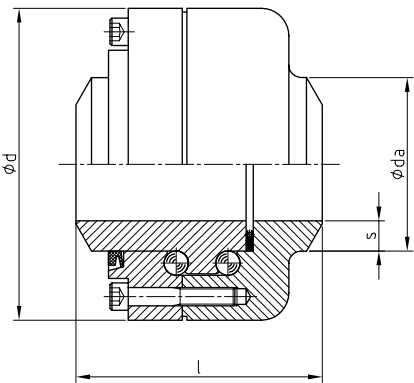
AVIT

- Zur Kombination mit Geraden- und Winkel-Einschraubverschraubungen
- Einschraubloch TYPE N (schmal) ISO 1179-1 mit zylindrischem Whitworth Rohrgewinde ISO 228-1
- For combination with straight and elbow screw couplings
- Port TYPE N (narrow) acc. ISO 1179-1 with cylindrical BSP thread acc. ISO 228-1

4

DREHGELENKE • HOCHDRUCKBAUREIHE  
SWIVEL JOINTS • HIGH PRESSURE LINE

| PN    | DN   |         | ABMESSUNGEN [mm] |    |     |    |     |    | GEWICHT | BESTELLCODE |
|-------|------|---------|------------------|----|-----|----|-----|----|---------|-------------|
|       |      |         | DIMENSIONS       |    |     |    |     |    | WEIGHT  | ORDER CODE  |
| [bar] | [mm] | d1      | d4               | di | d   | b  | l1  | S1 | [kg]    | TYP DN      |
| 315   | 10   | G 1/4   | 22               | 6  | 49  | 15 | 60  | 19 | 0,450   | DVL 10      |
|       | 12   | G 3/8   | 24               | 8  | 56  | 15 | 65  | 22 | 0,590   | DVL 12      |
|       | 16   | G 1/2   | 30               | 12 | 68  | 17 | 75  | 27 | 0,970   | DVL 16      |
|       | 20   | G 3/4   | 40               | 15 | 78  | 19 | 87  | 36 | 1,720   | DVL 20      |
|       | 25   | G 1     | 46               | 19 | 88  | 21 | 95  | 41 | 2,200   | DVL 25      |
|       | 30   | G 1 1/4 | 54               | 24 | 98  | 23 | 110 | 50 | 3,300   | DVL 30      |
|       | 38   | G 1 1/2 | 60               | 30 | 108 | 25 | 120 | 55 | 4,000   | DVL 38      |
|       | 50   | G 2     | 75               | 38 | 128 | 30 | 140 | 70 | 7,000   | DVL 50      |

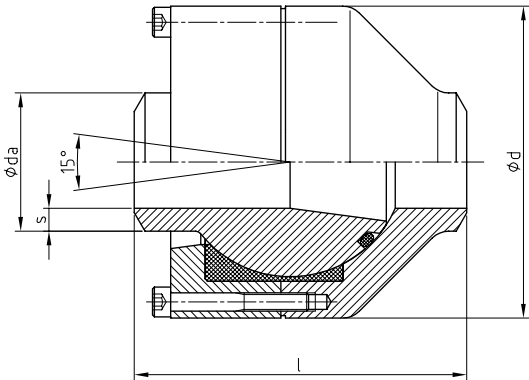


AVIT

- Rohrdrehgelenk mit speziellem Doppel-Schrägrillenkugellager
  - Vormontierte Lieferung zur Selbstmontage
  - Dichtungen sind vor dem Verschweißen auszubauen
- 
- Swivel joint with special double angular contact ball bearing
  - Pre-assembled for self installation
  - Seals have to be dismantled before welding

| PN    | DN   | ABMESSUNGEN [mm]                             |     |     | BESTELLCODE  |
|-------|------|----------------------------------------------|-----|-----|--------------|
|       |      | DIMENSIONS                                   |     |     | ORDER CODE   |
| [bar] | [mm] | da x s                                       | d   | l   | TYP DN daxs  |
| 160   | 20   | 25,0 x 3,0                                   | 88  | 90  | DGA 20 daxs  |
|       | 25   | 30,0 x 4,0                                   | 103 | 98  | DGA 25 daxs  |
|       | 32   | 38,0 x 5,0                                   | 118 | 103 | DGA 32 daxs  |
|       | 40   | 48,3 x 5,0                                   | 128 | 110 | DGA 40 daxs  |
|       | 50   | 60,3 x 6,3                                   | 145 | 120 | DGA 50 daxs  |
|       | 65   | 76,1 x 7,1                                   | 175 | 145 | DGA 65 daxs  |
|       | 80   | 101,6 x 8,8                                  | 205 | 162 | DGA 80 daxs  |
|       | 100  | 114,3 x 10,0                                 | 226 | 176 | DGA 100 daxs |
|       | 125  | 139,7 x 8,0                                  | 226 | 192 | DGA 125 daxs |
|       | 150  | Auf Anfrage lieferbar   Available on request |     |     | DGA 150 daxs |
|       | 175  |                                              |     |     | DGA 175 daxs |
|       | 200  |                                              |     |     | DGA 200 daxs |
| 315   | 20   | 30,0 x 5,0                                   | 88  | 90  | DGA 20 daxs  |
|       | 25   | 42,4 x 7,1                                   | 103 | 98  | DGA 25 daxs  |
|       | 32   | 48,3 x 8,0                                   | 118 | 103 | DGA 32 daxs  |
|       | 40   | 60,3 x 10,0                                  | 128 | 110 | DGA 40 daxs  |
|       | 50   | 76,1 x 12,5                                  | 145 | 120 | DGA 50 daxs  |
|       | 65   | 88,9 x 14,2                                  | 175 | 145 | DGA 65 daxs  |
|       | 80   | 114,3 x 20,0                                 | 205 | 162 | DGA 80 daxs  |
|       | 100  | 139,7 x 22,2                                 | 226 | 176 | DGA 100 daxs |
|       | 125  | 177,8 x 30,0                                 | 226 | 192 | DGA 125 daxs |
|       | 150  | Auf Anfrage lieferbar   Available on request |     |     | DGA 150 daxs |
|       | 175  |                                              |     |     | DGA 175 daxs |
|       | 200  |                                              |     |     | DGA 200 daxs |





AVIT

- Zusätzlich zur herkömmlichen Drehung bei Rohrdrehgeelenken ist beim Kugelrohrdrehgeelenk eine Winkeländerung der Drehachse um +/- 7,5° möglich
  - Vormontierte Lieferung zur Selbstmontage
  - Dichtungen sind vor dem Verschweißen auszubauen
- Additionally to the normal rotation of swivel joints, the ball-type rotary pipe joint allows an angular change of the rotation axis of +/- 7.5°
- Pre-assembled for self installation
  - Seals have to be dismantled before welding

4  
DREHGELENKE • HOCHDRUCKBAUREIHE  
SWIVEL JOINTS • HIGH PRESSURE LINE

| PN    | DN   | ABMESSUNGEN [mm] |            |     | BESTELLCODE   |
|-------|------|------------------|------------|-----|---------------|
|       |      |                  | DIMENSIONS |     | ORDER CODE    |
| [bar] | [mm] | da x s           | d          | l   | TYP DN daxis  |
| 160   | 20   | 25,0 x 3,0       | 88         | 90  | DKG 20 daxis  |
|       | 25   | 30,0 x 4,0       | 98         | 108 | DKG 25 daxis  |
|       | 32   | 38,0 x 5,0       | 108        | 122 | DKG 32 daxis  |
|       | 40   | 48,3 x 5,0       | 138        | 145 | DKG 40 daxis  |
|       | 50   | 60,3 x 6,3       | 162        | 180 | DKG 50 daxis  |
|       | 65   | 76,1 x 7,1       | 188        | 198 | DKG 65 daxis  |
|       | 80   | 101,6 x 8,8      | 238        | 250 | DKG 80 daxis  |
|       | 100  | 114,3 x 10,0     | 298        | 300 | DKG 100 daxis |
|       | 125  | 139,7 x 8,0      | 336        | 350 | DKG 125 daxis |
| 315   | 20   | 30,0 x 5,0       | 88         | 90  | DKG 20 daxis  |
|       | 25   | 42,4 x 7,1       | 98         | 108 | DKG 25 daxis  |
|       | 32   | 48,3 x 8,0       | 108        | 122 | DKG 32 daxis  |
|       | 40   | 60,3 x 10,0      | 138        | 145 | DKG 40 daxis  |
|       | 50   | 76,1 x 12,5      | 162        | 180 | DKG 50 daxis  |
|       | 65   | 88,9 x 14,2      | 188        | 198 | DKG 65 daxis  |
|       | 80   | 114,3 x 20,0     | 238        | 250 | DKG 80 daxis  |
|       | 100  | 139,0 x 22,2     | 298        | 300 | DKG 100 daxis |
|       | 125  | 177,8 x 30,0     | 336        | 350 | DKG 125 daxis |

Type DG



Type DS



#### AVIT

Kunden individuelles Produkt

*Customer-specific product*

#### PRODUKTINFORMATION

Wir fertigen, basierend auf den uns vorliegenden Betriebsparametern, speziell auf den Kunden zugeschnittene Drehdurchführungen. Je nach Anwendungsfall kommen einteilige Außengehäuse (Typ „DG“) oder solche in Segmentbauform (Typ „DS“) zum Einsatz. Abhängig von der Art der Lagerung sind Drehzahlen bis 30 U/min möglich.

Der Drehwinkel beträgt 360° und eine konstante Rotation ist möglich. Die Betriebstemperatur sollte standardmäßig ca. 70°C nicht überschreiten. Mit entsprechenden Abschlüssen bei der Druckfestigkeit sind auch höhere Temperaturen realisierbar.

Die Dichtungen werden ebenfalls auf den Betriebsfall ausgelegt und sind zumeist aus einem PTFE-Kohle Compound oder Polyurethan.

Der Maximaldruck beträgt je nach Dichtungsausführung und Werkstoff 160 bis 250 bar.

Die Dichtungen sind für saubere Flüssigkeiten ohne Feststoffpartikel geeignet. Wir empfehlen eine Filtrationsrate von 30 bis 60 Mikrometer in den Zuleitungen der Drehdurchführungen sicherzustellen.

Wir haben in der Vergangenheit bereits Dichtungskonzepte für Medien wie beispielsweise Hydrauliköl, Wasser, Erdgas, Argon, Luft, – aber auch für Vakuum, entwickelt.

Die Abmessungen und Anschlussstellen sind im Rahmen der möglichen Geometrie frei wählbar. Beispielsweise Einschraubgewinde analog ISO 1179-1 oder SAE Flanschanschlüsse mit Lochbild nach ISO 6162-1/2 in axialer bzw. radialer Richtung wurden oft ausgeführt.

Wellendurchmesser bis 385 mm und –längen bis ca. 900 mm wurden bereits gefertigt. Als Werkstoffe kommen 42CrMo4 (1.7225) bzw. St52 oder Edelstahl 1.4571 zum Einsatz. Wenn besondere Verschleißfestigkeit benötigt wird, können die dynamischen Dichtungsflächen auf der Welle mit besonderen Beschichtungen versehen werden.

#### PRODUCT INFORMATION

*We manufacture multi-channel rotary units based on the customer-specific operating parameters.*

*Depending on the application, the external housing is of one-piece (Type “DG”) or segmented (type “DS”) design. Depending on the type of bearing, rotating speeds of up to 30 rpm are possible.*

*The rotating angle is 360° and constant rotation is possible.*

*The operating temperature should not exceed about 70°C. With appropriate reductions in the pressure resistance, higher temperatures can also be realised.*

*The seals are also designed according to the application and are usually made of a PTFE carbon compound or polyurethane.*

*The maximum pressure depending on the seal design and material is 160 to 250 bar.*

*The seals are suitable for clean fluids without solid particles.*

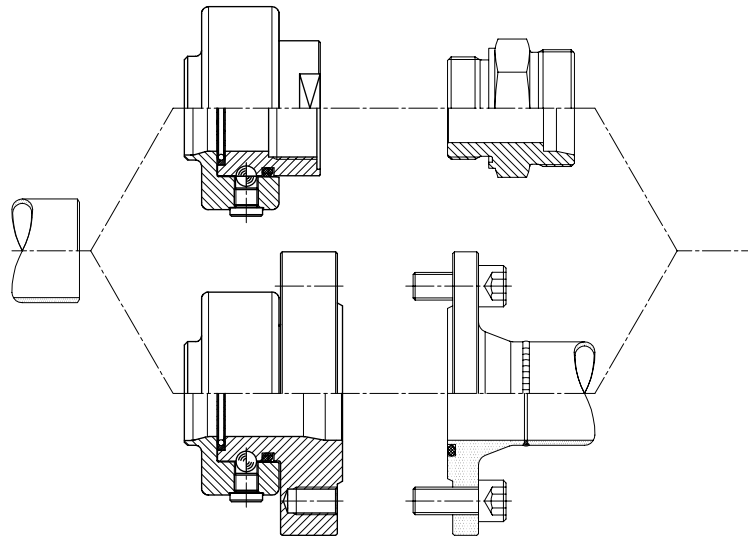
*We recommend assuring a filtration rate of 30 to 60 micrometres in the supply lines of the swivel units.*

*In the past we have developed seal concepts for media such as hydraulic oil, water, natural gas, argon, air – and even vacuum.*

*The dimensions and connection points can be freely selected in the scope of the possible geometry. For example, threaded ends analogous to DIN 3852-2 or SAE flange connections with a hole pattern acc. ISO 6162-1/2 have often been designed in the axial or radial direction.*

*Shaft diameters up to 385 mm and lengths up to approximately 900 mm have been produced. The materials that are used are 42CrMo4 (1.7225) and/or St52 or stainless steel 1.4571.*

*If especially high wear resistance is required, the dynamic seal surfaces on the shaft can be provided with special coatings.*

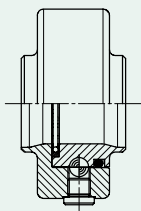


#### PRODUKTFINFORMATION

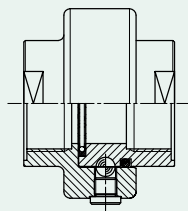
Bewährte und leichtgängige Rohrdrehgeelenke für niedrige Drücke mit frei wählbaren Anschlussenden. Standardmäßig in der Ausführung mit Schweißenden (-S), mit Innengewinde (-T) und Flanschanschluss (-F) lieferbar.

#### PRODUCT INFORMATION

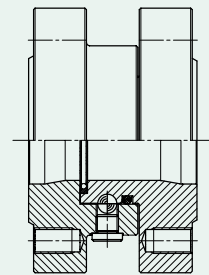
Reliable and smooth-running swivel joints for low pressures with freely selectable connection ends. The default version has welding ends (-S). Versions with internal threads (-T) and flange (-F) are available.



DGN-S



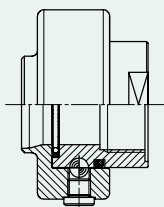
DGN-T



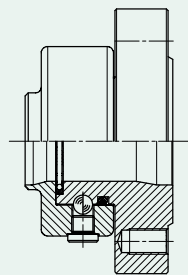
DGN-F

Durch die modulare Kombinationsmöglichkeit können variable Anschlussformen mit unterschiedlichen Anschlussseiten mit Schweißen (-S), mit Innengewinde (-T) und Flanschanschluss (-F) untereinander variabel kombiniert und zusammengesetzt werden.

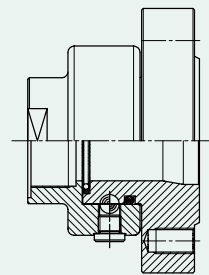
Due to the combination possibilities among the standardised parts, different connection ends like welding end (-S), inside thread (-T) and flanged ends (-F) can be realised easily.



DGN-ST



DGN-SF

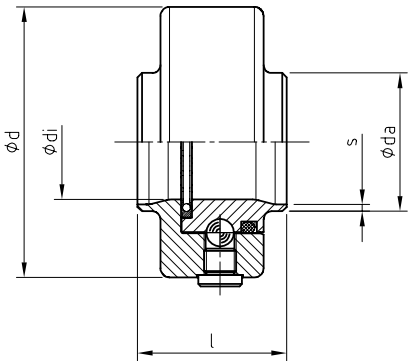


DGN-TF

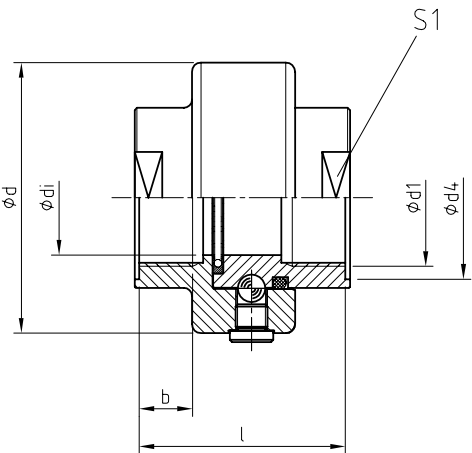


- AVIT
- Niederdruck Rohrdrehgelenk mit Schweißenden
  - Vormontierte Lieferung zur Selbstmontage
  - Dichtungen sind vor dem Verschweißen auszubauen

- Low pressure swivel joint with weld-on ends
  - Pre-assembled for self assembly
  - Seals have to be dismantled before welding



| PN    | DN   | ABMESSUNGEN [mm] |     |       |      | BESTELLCODE |
|-------|------|------------------|-----|-------|------|-------------|
|       |      | DIMENSIONS       |     |       |      | ORDER CODE  |
| [bar] | [mm] | da x s           | d   | di    | l    | TYP DN daxs |
| 16    | 20   | 26,9 x 2,3       | 74  | 22,3  | 52   | DGNS 20     |
|       | 25   | 33,7 x 2,6       | 78  | 28,5  | 52   | DGNS 25     |
|       | 32   | 42,4 x 2,6       | 88  | 37,2  | 56   | DGNS 32     |
|       | 40   | 48,3 x 2,6       | 107 | 41    | 60   | DGNS 40     |
|       | 50   | 60,3 x 2,9       | 118 | 50    | 65   | DGNS 50     |
|       | 65   | 76,1 x 2,9       | 133 | 61    | 70   | DGNS 65     |
|       | 80   | 88,9 x 3,2       | 152 | 82,5  | 75   | DGNS 80     |
|       | 100  | 114,3 x 3,6      | 181 | 104   | 76,5 | DGNS 100    |
|       | 125  | 139,7 x 4,0      | 208 | 131   | 90   | DGNS 125    |
|       | 150  | 168,3 x 4,5      | 243 | 159,3 | 120  | DGNS 150    |
|       | 200  | 219,1 x 6,3      | 302 | 206,5 | 132  | DGNS 200    |



AVIT

- Niederdruck Rohrdrehgelenk mit zylindrischem Whitworth Rohrgewinde nach ISO 228-1
- Einbaufertig zur Kombination mit Einschraubverschraubungen
- Einschraubloch bis DN 50 TYPE N (schmal) ISO 1179-1

4

DREHGELENKE • NIEDERDRUCKBAUREIHE

SWIVEL JOINTS • LOW PRESSURE LINE

• Low pressure swivel joint with cylindrical BSP thread acc. ISO 228-1

• Ready to install with screw couplings

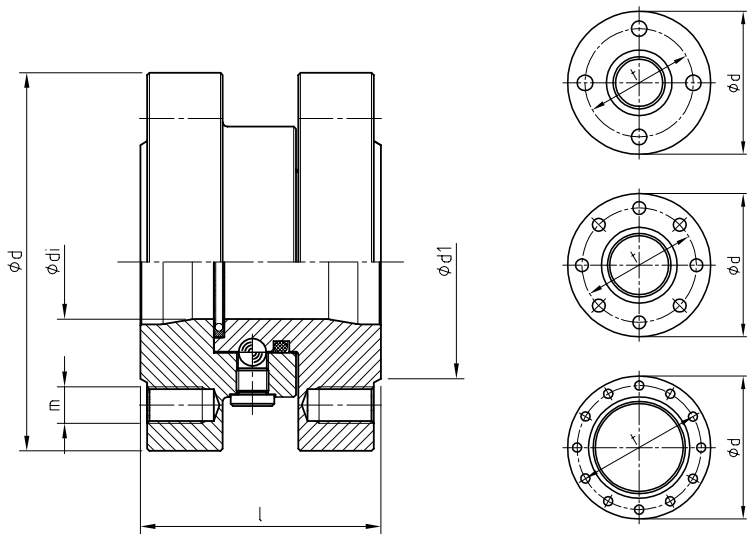
• Up to DN 50 Port TYPE N (narrow) acc. ISO 1179-1

| PN    | DN   | ABMESSUNGEN [mm] |                                              |     |      |     |    |    | BESTELLCODE |
|-------|------|------------------|----------------------------------------------|-----|------|-----|----|----|-------------|
|       |      | DIMENSIONS       |                                              |     |      |     |    |    | ORDER CODE  |
| [bar] | [mm] | d1               | d4                                           | d   | di   | l   | b  | S1 | TYP DN d1   |
| 16    | 20   | G 3/4            | 33                                           | 74  | 22,3 | 75  | 19 | 36 | DGNT 20     |
|       | 25   | G 1              | 41                                           | 78  | 28,5 | 72  | 20 | 46 | DGNT 25     |
|       | 32   | G 1 1/4          | 51                                           | 88  | 37,2 | 77  | 20 | 50 | DGNT 32     |
|       | 40   | G 1 1/2          | 56                                           | 107 | 41   | 82  | 26 | 60 | DGNT 40     |
|       | 50   | G 2              | 71                                           | 118 | 50   | 94  | 26 | 70 | DGNT 50     |
|       | 65   | G 2 1/2          | -                                            | 133 | 61   | 97  | 30 | -  | DGNT 65     |
|       | 80   | G 3              | -                                            | 152 | 82,5 | 100 | 30 | -  | DGNT 80     |
|       | 100  | G 4              | -                                            | 181 | 104  | 109 | 30 | -  | DGNT 100    |
|       | 125  | G 5              | Auf Anfrage lieferbar   Available on request |     |      |     |    |    | DGNT 125    |
|       | 150  | G 6              |                                              |     |      |     |    |    | DGNT 150    |



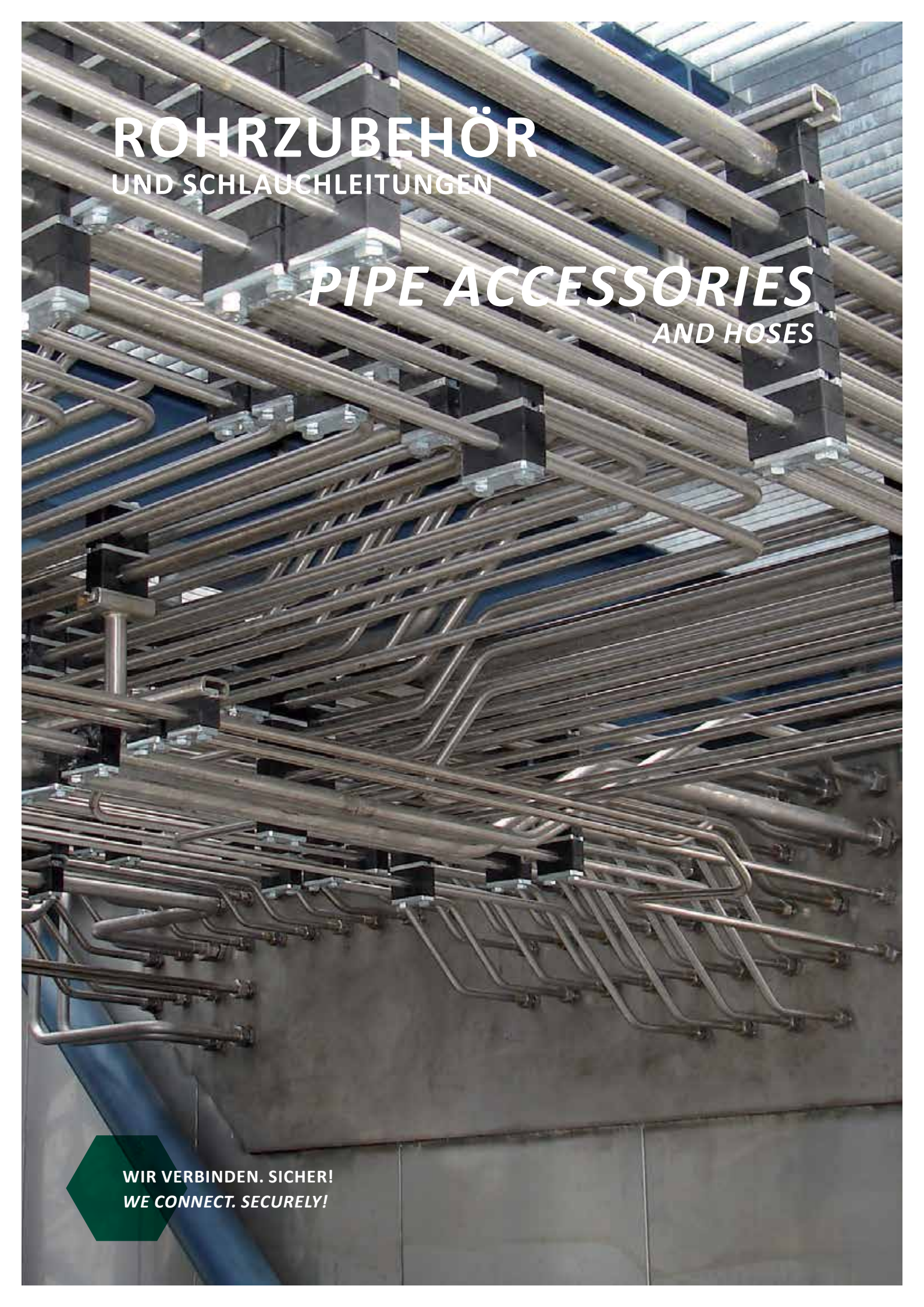
AVIT

- Niederdruck Rohrdrehgeelenk mit Flanschanschluss  
EN 1092-1 TYP 11 PN 16 (DIN 2633)
- Einbaufertig zur Kombination mit Vorschweißflan-  
schen
- Low pressure swivel joint with flange connection EN  
1092-1 TYP 11 PN 16 (DIN 2633)
- Ready to install with welding neck flanges



| PN    | DN          | FÜR FLANSCH<br>FOR FLANGE | ABMESSUNGEN [mm]<br>DIMENSIONS |     |       |     |     | GEWINDE<br>THREAD | STK.<br>PCS. | BESTELLCODE<br>ORDER CODE |
|-------|-------------|---------------------------|--------------------------------|-----|-------|-----|-----|-------------------|--------------|---------------------------|
| [bar] | [mm]        | da x s                    | d                              | d1  | di    | l   | t   | m                 | l            | TYP DN                    |
| 16    | 32          | 42,4 x 2,6                | 140                            | 78  | 37,2  | 95  | 100 | M16               | 4            | DGNF 32                   |
|       | 40          | 48,3 x 2,6                | 150                            | 88  | 41    | 105 | 110 | M16               | 4            | DGNF 40                   |
|       | 50          | 60,3 x 2,9                | 165                            | 102 | 50    | 105 | 125 | M16               | 4            | DGNF 50                   |
|       | 65          | 76,1 x 2,9                | 185                            | 122 | 61    | 110 | 145 | M16               | 8            | DGNF 65                   |
|       | 80          | 88,9 x 3,2                | 200                            | 138 | 82,5  | 115 | 160 | M16               | 8            | DGNF 80                   |
|       | 100         | 114,3 x 3,6               | 220                            | 158 | 104   | 120 | 180 | M16               | 8            | DGNF 100                  |
|       | 125         | 139,7 x 4,0               | 250                            | 188 | 131   | 132 | 210 | M16               | 8            | DGNF 125                  |
|       | 150         | 168,3 x 4,5               | 285                            | 212 | 159,3 | 150 | 240 | M20               | 8            | DGNF 150                  |
|       | 200         | 219,1 x 6,3               | 340                            | 268 | 206,5 | 155 | 295 | M20               | 12           | DGNF 200                  |
|       | 250         | 273,0 x 6,3               | 405                            | 320 | 260   | 160 | 355 | M24               | 12           | DGNF 250                  |
| 300   | 323,9 x 7,1 | 460                       | 378                            | 310 | 175   | 410 | M24 | 12                | DGNF 300     |                           |





**ROHRZUBEHÖR**  
UND SCHLAUCHLEITUNGEN

**PIPE ACCESSORIES**  
AND HOSES

**WIR VERBINDEN. SICHER!**  
**WE CONNECT. SECURELY!**

ROHRE | TUBES AND PIPES

|                                                                                    |                                         |      |
|------------------------------------------------------------------------------------|-----------------------------------------|------|
|   | NAHTLOSES PRÄZISIONS-STAHLSROHR..... RO | 5.03 |
|                                                                                    | SEAMLESS PRECISION STEEL TUBE           |      |
|   | NAHTLOSE ROHRBOGEN..... RB              | 5.04 |
|                                                                                    | SEAMLESS PRECISION TUBE ELBOW           |      |
|   | KONZENTRISCHES REDUZIERSTÜCK..... KOR   | 5.05 |
|                                                                                    | CONCENTRIC REDUCER                      |      |
|   | ROHRBOGEN..... RBD                      | 5.06 |
|                                                                                    | ELBOW                                   |      |
|   | T-STÜCK..... T                          | 5.07 |
|                                                                                    | TEE FITTING                             |      |
|   | SCHWEISSMUFFE..... SM                   | 5.08 |
|                                                                                    | WELDING SOCKET                          |      |
|   | WINKEL SCHWEISSMUFFE..... SMW           | 5.09 |
|                                                                                    | WELDING ELBOW SOCKET                    |      |
|  | T-SCHWEISSMUFFE..... SMT                | 5.10 |
|                                                                                    | WELDING T-SOCKET                        |      |

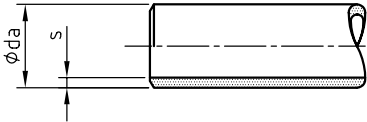
ROHRSCHELLEN | PIPE CLAMPS

|                                                                                     |                                   |      |
|-------------------------------------------------------------------------------------|-----------------------------------|------|
|                                                                                     | INFORMATIONEN.....                | 5.11 |
|                                                                                     | INFORMATION                       |      |
|  | ROHRSCHELLE..... RS               | 5.12 |
|                                                                                     | PIPE CLAMP                        |      |
|  | TRAGSCHIENEN ROHRSCHELLE..... TRS | 5.13 |
|                                                                                     | PIPE CLAMP FOR MOUNTING RAIL      |      |
|  | TRAGSCHIENE..... STS              | 5.14 |
|                                                                                     | MOUNTING RAIL                     |      |
|  | AUFBAUSCHELLE..... AS             | 5.15 |
|                                                                                     | BUILD-UP CLAMP                    |      |
|                                                                                     | TECHNISCHER ANHANG.....           | 5.16 |
|                                                                                     | TECHNICAL ANNEXE                  |      |

SCHLAUCHLEITUNGEN | HOSE LINES

|                                                                                     |                                          |      |
|-------------------------------------------------------------------------------------|------------------------------------------|------|
|                                                                                     | INFORMATIONEN.....                       | 5.17 |
|                                                                                     | INFORMATION                              |      |
|    | MIT 24° DICHTKEGEL..... AOS              | 5.19 |
|                                                                                     | WITH 24° SEAL CONE END                   |      |
|    | MIT 24° KONUS..... HS                    | 5.20 |
|                                                                                     | WITH 24° CONUS                           |      |
|    | MIT 90° BOGEN..... BS                    | 5.21 |
|                                                                                     | WITH 90° ELBOW                           |      |
|    | MIT QUADRATFLANSCHANSCHLUSS..... FAS     | 5.23 |
|                                                                                     | WITH SQUARE FLANGE CONNECTION            |      |
|    | MIT 90° QUADRATFLANSCHANSCHLUSS..... FBS | 5.24 |
|                                                                                     | WITH 90° SQUARE FLANGE CONNECTION        |      |
|    | MIT SAE-FLANSCHANSCHLUSS..... SFS        | 5.25 |
|                                                                                     | WITH SAE-FLANGE CONNECTION               |      |
|  | MIT 90° SAE-FLANSCHANSCHLUSS..... SBS    | 5.26 |
|                                                                                     | WITH 90° SAE-FLANGE CONNECTION           |      |





EN 10305-4 (DIN 2391)

- Lieferlänge ca. 6,0 m
- Normal gegläht (NBK), phosphatiert und geölt
- Andere Abmessungen auf Anfrage lieferbar!

- Standard length approx. 6,0 m
- Tubes are annealed, phosphatised and oiled
- Other dimensions available on request!

Empfohlene Biegeradien

Für das Kaltbiegen von Rohren mit Biegevorrichtung wird ein Biegeradius von 3xd<sub>a</sub> (Rohr außen-durchmesser) empfohlen.

5

ZUBEHÖR  
ACCESSORIES

| da   | s    | DIN 2413<br>I <sup>1</sup> | DIN 2413<br>III <sup>2</sup> | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|------|------|----------------------------|------------------------------|-------------------|---------------------------|
| [mm] | [mm] | [bar]                      | [bar]                        | [kg/m]            | TYP d <sub>axs</sub>      |
| 6    | 1,0  | 409                        | 391                          | 0,166             | RO 6x1                    |
|      | 1,5  | 567                        | 551                          | 0,166             | RO 6x1,5                  |
| 8    | 1,5  | 452                        | 433                          | 0,240             | RO 8x1,5                  |
|      | 2,0  | 576                        | 551                          | 0,296             | RO 8x2                    |
| 10   | 1,0  | 282                        | 248                          | 0,222             | RO 10x1                   |
|      | 1,5  | 373                        | 357                          | 0,314             | RO 10x1,5                 |
|      | 2,0  | 478                        | 458                          | 0,395             | RO 10x2                   |
|      | 2,5  | 576                        | 551                          | 0,462             | RO 10x2,5                 |
| 12   | 1,5  | 353                        | 303                          | 0,388             | RO 12x1,5                 |
|      | 2,0  | 409                        | 391                          | 0,493             | RO 12x2                   |
|      | 2,5  | 495                        | 475                          | 0,586             | RO 12x2,5                 |
|      | 3,0  | 576                        | 551                          | 0,586             | RO 12x3                   |
| 15   | 1,5  | 282                        | 248                          | 0,345             | RO 15x1,5                 |
|      | 2,0  | 336                        | 321                          | 0,641             | RO 15x2                   |
|      | 2,5  | 409                        | 391                          | 0,771             | RO 15x2,5                 |
| 16   | 1,5  | 336                        | 321                          | 0,536             | RO 16x1,5                 |
|      | 2,0  | 353                        | 303                          | 0,691             | RO 16x2                   |
|      | 2,5  | 386                        | 370                          | 0,832             | RO 16x2,5                 |
|      | 3,0  | 452                        | 433                          | 0,962             | RO 16x3                   |
| 18   | 1,5  | 235                        | 209                          | 0,610             | RO 18x1,5                 |
|      | 2,0  | 313                        | 273                          | 0,789             | RO 18x2                   |
|      | 2,5  | 348                        | 333                          | 0,956             | RO 18x2,5                 |
| 20   | 2,0  | 282                        | 248                          | 0,888             | RO 20x2                   |
|      | 2,5  | 353                        | 303                          | 1,079             | RO 20x2,5                 |
|      | 3,0  | 373                        | 357                          | 1,258             | RO 20x3                   |
|      | 4,0  | 478                        | 458                          | 1,578             | RO 20x4                   |

| da   | s    | DIN 2413<br>I <sup>1</sup> | DIN 2413<br>III <sup>2</sup> | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |
|------|------|----------------------------|------------------------------|-------------------|---------------------------|
| [mm] | [mm] | [bar]                      | [bar]                        | [kg/m]            | TYP d <sub>axs</sub>      |
| 22   | 2,0  | 256                        | 227                          | 0,986             | RO 22x2                   |
|      | 2,5  | 315                        | 278                          | 1,202             | RO 22x2,5                 |
|      | 3,0  | 343                        | 328                          | 1,406             | RO 22x3                   |
| 25   | 2,5  | 226                        | 201                          | 1,387             | RO 25x2,5                 |
|      | 3,0  | 338                        | 292                          | 1,628             | RO 25x3                   |
|      | 4,0  | 394                        | 378                          | 2,072             | RO 25x4                   |
|      | 5,0  | 478                        | 458                          | 2,466             | RO 25x5                   |
| 28   | 2,0  | 201                        | 181                          | 1,282             | RO 28x2                   |
|      | 2,5  | 252                        | 223                          | 1,572             | RO 28x2,5                 |
|      | 3,0  | 302                        | 264                          | 1,850             | RO 28x3                   |
| 30   | 3,0  | 282                        | 248                          | 1,998             | RO 30x3                   |
|      | 4,0  | 363                        | 321                          | 2,565             | RO 30x4                   |
|      | 5,0  | 409                        | 391                          | 3,083             | RO 30x5                   |
|      | 6,0  | 478                        | 458                          | 3,551             | RO 30x6                   |
| 35   | 2,5  | 201                        | 181                          | 2,004             | RO 35x2,5                 |
|      | 3,0  | 242                        | 215                          | 2,368             | RO 35x3                   |
|      | 4,0  | 322                        | 280                          | 3,058             | RO 35x4                   |
| 38   | 4,0  | 297                        | 260                          | 3,354             | RO 38x4                   |
|      | 5,0  | 332                        | 318                          | 4,069             | RO 38x5                   |
|      | 6,0  | 390                        | 373                          | 4,735             | RO 38x6                   |
|      | 8,0  | 446                        | 427                          | 5,919             | RO 38x8                   |
| 42   | 3,0  | 201                        | 181                          | 2,885             | RO 42x3                   |
|      | 4,0  | 269                        | 237                          | 3,749             | RO 42x4                   |
| 50   | 5,0  | 282                        | 248                          | 5,549             | RO 50x5                   |
|      | 6,0  | 338                        | 292                          | 6,511             | RO 50x6                   |
|      | 8,0  | 394                        | 378                          | 8,286             | RO 50x8                   |
|      | 10,0 | 434                        | 415                          | 9,865             | RO 50x10                  |

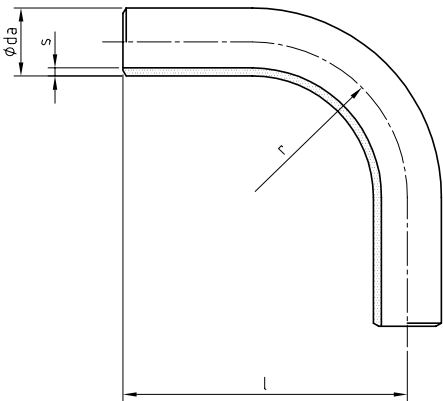
KENNWERTE

Werkstoff . . . . . Stahl, E 235 +N (St 37.4) EN 10305-4 (DIN 2391)  
Zugfestigkeit . . . . . 350 - 480 N/mm<sup>2</sup>  
Streckgrenze . . . . . min. 235 N/mm<sup>2</sup>  
Bruchdehnung . . . . . A5 min 25%

- 1 Geltungsbereich I = Ruhende Beanspruchung | Case I = static load  
2 Geltungsbereich III = Schwellende Beanspruchung | Case III = dynamic load

CHARACTERISTICS

Material . . . . . Steel, E 235 +N, EN 10305-4  
Tensile strength . . . . . 350 - 480 N/mm<sup>2</sup>  
Yield point . . . . . min. 235 N/mm<sup>2</sup>  
Elongation at rupture . . . . . A 5 min 25%



AVIT

- Geringer Strömungsverlust
- Auch für Orbitalerschweißverfahren lieferbar (-OF)

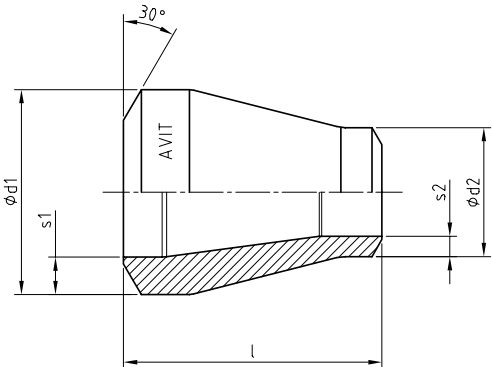
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- Minimal flow loss
- Also available for orbital welding system (-OF)

| da   | s    | ABMESSUNGEN [mm] |     | GEWICHT | BESTELLCODE |
|------|------|------------------|-----|---------|-------------|
|      |      | DIMENSIONS       |     | WEIGHT  | ORDER CODE  |
| [mm] | [mm] | l                | r   | [kg]    | TYP daxis   |
| 10   | 1,5  | 57               | 20  | 0,036   | RB 10x1,5   |
|      | 2,0  |                  |     | 0,045   | RB 10x2     |
| 12   | 2,0  | 65               | 30  | 0,056   | RB 12x2     |
|      | 3,0  |                  |     | 0,075   | RB 12x3     |
| 16   | 2,0  | 70               | 32  | 0,076   | RB 16x2     |
|      | 2,5  |                  |     | 0,091   | RB 16x2,5   |
| 20   | 2,0  | 88               | 45  | 0,137   | RB 20x2     |
|      | 2,5  |                  |     | 0,166   | RB 20x2,5   |
|      | 3,0  |                  |     | 0,194   | RB 20x3     |
|      | 4,0  |                  |     | 0,243   | RB 20x4     |
| 25   | 2,5  | 100              | 60  | 0,235   | RB 25x2,5   |
|      | 3,0  |                  |     | 0,275   | RB 25x3     |
|      | 4,0  |                  |     | 0,349   | RB 25x4     |
|      | 5,0  |                  |     | 0,414   | RB 25x5     |
| 30   | 3,0  | 140              | 75  | 0,436   | RB 30x3     |
|      | 4,0  |                  |     | 0,558   | RB 30x4     |
|      | 5,0  |                  |     | 0,669   | RB 30x5     |
|      | 6,0  |                  |     | 0,768   | RB 30x6     |
| 38   | 4,0  | 165              | 90  | 0,927   | RB 38x4     |
|      | 5,0  |                  |     | 1,120   | RB 38x5     |
|      | 6,0  |                  |     | 1,300   | RB 38x6     |
|      | 8,0  |                  |     | 1,620   | RB 38x8     |
| 50   | 5,0  | 235              | 195 | 3,250   | RB 50x5     |
|      | 6,0  |                  |     | 3,840   | RB 50x6     |
|      | 8,0  |                  |     | 4,800   | RB 50x8     |
|      | 10,0 |                  |     | 5,800   | RB 50x10    |

| LIEFERVERARIANTEN                             | BESTELLBEISPIEL |
|-----------------------------------------------|-----------------|
| DELIVERY OPTIONS                              | ORDER EXAMPLE   |
| Werkstoff / Material                          | TYP daxis       |
| Stahl, E 235+N (St 37.4) / Steel, E 235+N     | RB 25x3         |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti | ERB 25x3        |

Bitte ergänzen Sie den Bestellcode für die gewünschte Liefervariante. | Please, complete the order code for the requested delivery option.



**AVIT ≈ DIN EN 10253-2 (DIN 2616-2)**

- Über 1.000 Varianten kurzfristig lieferbar
- DIN und ASME Maße (daxs) gerundet

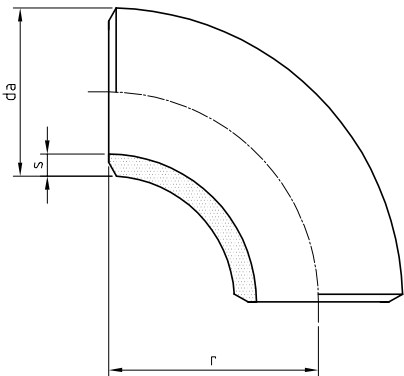
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- Over 1.000 dimensions deliverable in short time
- DIN und ASME dimensions (daxs) are rounded

5  
ZUBEHÖR  
ACCESSORIES

| DN1 | BESTELLCODE<br>ORDER CODE |                          | WANDDICKE / WALL THICKNESS s1<br>Series: DIN 3,4,5, (AVIT), ANSI B36.10 |     |       |               |            |                |                | >   | DN2    | NPS     | d2      | WANDDICKE / WALL THICKNESS s2<br>Series: DIN 3,4,5, (AVIT), ANSI B36.10 |       |              |               |                |                |      | I   |
|-----|---------------------------|--------------------------|-------------------------------------------------------------------------|-----|-------|---------------|------------|----------------|----------------|-----|--------|---------|---------|-------------------------------------------------------------------------|-------|--------------|---------------|----------------|----------------|------|-----|
|     | [mm]                      | TYP                      | d1                                                                      | 3   | STD40 | 4             | XS80       | 5              | 160            |     |        |         |         | XXS                                                                     | [mm]  | [inch]       | [mm]          | 3              | STD40          | 4    |     |
| 32  | KOR                       | 42,2<br>42,4<br>(1 1/4") | 2,6                                                                     | 3,6 | 3,6   | 4,8<br>(5,6)  | 4          | 6,3<br>(7,1)   | 9,7            |     | 15     | 1/2"    | 21,3    | 2                                                                       | 2,7   | 3,2          | 3,7           | 4              | 4,8            | 7,5  | 50  |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 20  | 3/4"   | 26,7(9) | 2,3     | 2,9                                                                     | 3,2   | 3,9          | 4             | 5,6            | 7,8            |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 25  | 1"     | 33,4(7) | 2,6     | 3,4                                                                     | 3,2   | 4,5          | 5,6           | 6,4            | 9,1            |      |     |
| 40  | KOR                       | 48,3<br>(1 1/2")         | 2,6                                                                     | 3,6 | 4     | 4,5           | 5,1        | 7,1<br>(8)     | 10,2           |     | 20     | 3/4"    | 26,7(9) | 2,3                                                                     | 2,9   | 3,2          | 3,9           | 4              | 5,6            | 7,8  | 64  |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 25  | 1"     | 33,4(7) | 2,6     | 3,4                                                                     | 3,2   | 4,5          | 5,6           | 6,4            | 9,1            |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 32  | 1 1/4" | 42,2(4) | 2,6     | 3,6                                                                     | -     | 4,8<br>(5,6) | 7,1           | 9,7            |                |      |     |
| 50  | KOR                       | 60,3<br>(2")             | 2,9                                                                     | 3,9 | 4,5   | 5,5<br>(5)    | 6,3<br>(8) | 8,7<br>(10)    | 11,0<br>(12,5) |     | 20     | 3/4"    | 26,7(9) | 2,3                                                                     | 2,9   | 3,2          | 3,9           | 4              | 5,6            | 7,8  | 76  |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 25  | 1"     | 33,4(7) | 2,6     | 3,4                                                                     | 3,2   | 4,5          | 5,6           | 6,4            | 9,1            |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 32  | 1 1/4" | 42,2(4) | 2,6     | 3,6                                                                     | -     | 4,8<br>(5,6) | 7,1           | 9,7            |                |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                |     | 40     | 1 1/2"  | 48,3    | 2,6                                                                     | 3,6   | 4            | 4,5           | 5,1            | 7,1            | 10,2 |     |
| 65  | KOR                       | 76,1<br>(2 1/2")         | 2,9                                                                     | 4,5 | 5     | 6,3           | 7,1        | 10             | 12,5<br>(14,5) |     | 25     | 1"      | 33,4(7) | 2,6                                                                     | 3,4   | 3,2          | 4,5           | 5,6            | 6,4            | 9,1  | 90  |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 32  | 1 1/4" | 42,2(4) | 2,6     | 3,6                                                                     | -     | 4,8<br>(5,6) | 7,1           | 9,7            |                |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 40  | 1 1/2" | 48,3    | 2,6     | 3,6                                                                     | 4     | 4,5          | 5,1           | 7,1            | 10,2           |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                |     | 50     | 2"      | 60,3    | 2,9                                                                     | 3,9   | 4,5          | 5             | 8<br>(10)      | 12,5<br>(12,5) |      |     |
| 80  | KOR                       | 88,9<br>(3")             | 3,2                                                                     | 5,5 | 5,6   | 7,6           | 8<br>(8,8) | 11,0<br>(14,2) | 15,2<br>(17,5) |     | 32     | 1 1/4"  | 42,2(4) | 2,6                                                                     | 3,6   | -            | 4,8<br>(5,6)  | 7,1            | 9,7            |      | 90  |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 40  | 1 1/2" | 48,3    | 2,6     | 3,6                                                                     | 4     | 4,5          | 5,1           | 7,1            | 10,2           |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 50  | 2"     | 60,3    | 2,9     | 3,9                                                                     | 4,5   | 5            | 8<br>(10)     | 12,5<br>(12,5) |                |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                |     | 65     | 2 1/2"  | 76,1    | 2,9                                                                     | 4,5   | 5            | 6,3           | 7,1            | 10             | 12,5 |     |
| -   | KOR                       | 101,6<br>(3 1/2")        | -                                                                       | 5,7 | (7,1) | (8,8)         | (12,5)     | (16)           | (20)           |     | 40     | 1 1/2"  | 48,3    | 2,6                                                                     | 3,6   | 4            | 4,5           | 5,1            | 7,1            | 10,2 | 100 |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 50  | 2"     | 60,3    | 2,9     | 3,9                                                                     | 4,5   | 5            | 8<br>(10)     | 12,5<br>(12,5) |                |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 65  | 2 1/2" | 76,1    | 2,9     | 4,5                                                                     | 5     | 6,3          | 7,1           | 10             | 12,5           |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                |     | 80     | 3"      | 88,9    | 3,2                                                                     | 5,5   | 5,6          | 7,6           | 8<br>(14,2)    | 17,5<br>(17,5) |      |     |
| 100 | KOR                       | 114,3<br>(4")            | 3,6                                                                     | -   | 6,3   | 8,8<br>(14,2) | (17,5)     | (20)           |                |     | 50     | 2"      | 60,3    | 2,9                                                                     | 3,9   | 4,5          | 5             | 8<br>(10)      | 12,5<br>(12,5) |      | 100 |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 65  | 2 1/2" | 76,1    | 2,9     | 4,5                                                                     | 5     | 6,3          | 7,1           | 10             | 12,5           |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 80  | 3"     | 88,9    | 3,2     | 5,5                                                                     | 5,6   | 7,6          | 8<br>(14,2)   | 17,5<br>(17,5) |                |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                |     | -      | 3 1/2"  | 101,6   | -                                                                       | 5,7   | (7,1)        | (8,8)         | (12,5)         | (16)           | (20) |     |
| 125 | KOR                       | 139,7<br>(5")            | 4                                                                       | -   | 6,3   | (8)           | 10         | (17,5)         | (22,2)         |     | 65     | 2 1/2"  | 76,1    | 2,9                                                                     | 4,5   | 5            | 6,3           | 7,1            | 10             | 12,5 | 127 |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 80  | 3"     | 88,9    | 3,2     | 5,5                                                                     | 5,6   | 7,6          | 8<br>(14,2)   | 17,5<br>(17,5) |                |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                | -   | 3 1/2" | 101,6   | -       | 5,7                                                                     | (7,1) | (8,8)        | (12,5)        | (16)           | (20)           |      |     |
|     |                           |                          |                                                                         |     |       |               |            |                |                |     | 100    | 4"      | 114,3   | 3,6                                                                     | -     | 6,3          | 8,8<br>(14,5) | (17,5)         | (20)           |      |     |
| 150 | KOR                       | 168,3<br>(6")            | 4,5                                                                     | -   | 7,1   | -             | 11         | (17,5)         | (22,2)         |     | 100    | 4"      | 114,3   | 3,6                                                                     | -     | 6,3          | 8,8<br>(14,5) | (17,5)         | (20)           |      | 140 |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 125 | 5"     | 139,7   | 4       | -                                                                       | 6,3   | -            | 10<br>(17,5)  | (22,2)         |                |      |     |
| 200 | KOR                       | 219,1<br>(8")            | 4,5                                                                     | 6,3 | 8     | 12,5          | 20         | -              | (36)           |     | 100    | 4"      | 114,3   | 3,6                                                                     | -     | 6,3          | 8,8<br>(14,5) | (17,5)         | (20)           |      | 152 |
|     |                           |                          |                                                                         |     |       |               |            |                |                | 150 | 6"     | 168,3   | 4,5     | -                                                                       | 7,1   | -            | 11<br>(17,5)  | (22,2)         |                |      |     |

| LIEFERVARIANTEN<br>DELIVERY OPTIONS                                           | BESTELLBEISPIEL<br>ORDER EXAMPLE    |
|-------------------------------------------------------------------------------|-------------------------------------|
| Werkstoff / Material                                                          | TYP daxs ...                        |
| Stahl / Steel; P235GH (1.0345) - für Dünnwandausführung / for thin wall size  | KOR 60,3x2,9 > 48,3x2,6 - P235GH1C1 |
| Stahl / Steel; S355J2 (1.0577) - für Dickwandausführung / for thick wall size | KOR 60,3x8,0 > 48,3x5,6 - S355J2    |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti                                 | EKOR 60,3x8,0 > 48,3x5,6 - 1.4571   |



DIN EN 10253 TYP A (TYPE 2D, 3D, 5D)

(DIN 2605-1 BAUART 2, 3, 5)

Die Tabelle enthält nur einen Auszug aus unserem Lieferprogramm. Bitte fragen Sie spezifiziert an.

The following table contains only an extract of our scope of delivery. Please enquire in detail.

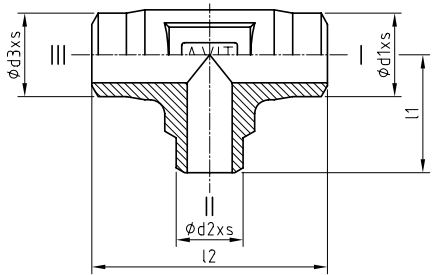
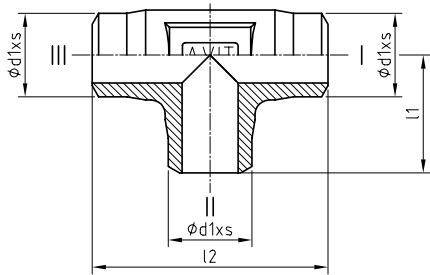
| DN                        |     |                  |      | BAUART / TYPE - DIN 2605 / EN 10253 |      |        |      |        |      | DN                        |     |                   |      | BAUART / TYPE - DIN 2605 / EN 10253 |      |        |      |        |       |
|---------------------------|-----|------------------|------|-------------------------------------|------|--------|------|--------|------|---------------------------|-----|-------------------|------|-------------------------------------|------|--------|------|--------|-------|
| BESTELLCODE<br>ORDER CODE |     |                  |      | 2 / 2D                              |      | 3 / 3D |      | 5 / 5D |      | BESTELLCODE<br>ORDER CODE |     |                   |      | 2 / 2D                              |      | 3 / 3D |      | 5 / 5D |       |
| [mm]                      | TYP | da               | s    | r                                   | [kg] | r      | [kg] | r      | [kg] | [mm]                      | TYP | da                | s    | r                                   | [kg] | r      | [kg] | r      | [kg]  |
| 15                        | RBD | 21,3<br>(1/2")   | 2,0  | 0,04                                | 0,06 | 0,06   | 0,06 | 0,06   | 0,06 | 80                        | RBD | 88,9              | 3,2  | 0,88                                | 1,22 | 2,22   | 2,22 | 2,22   | 2,22  |
|                           |     |                  | 2,6  | 17,5                                | 0,05 | 28     | 0,07 | 42,5   | 0,08 |                           |     |                   | 5,6  | 76                                  | 1,49 | 114    | 2,07 | 205    | 3,75  |
|                           |     |                  | 3,2  | ±2,5                                | 0,06 | ±2,5   | 0,09 | ±2,5   | 0,10 |                           |     |                   | 11,0 | ±3                                  | 2,36 | ±3     | 3,28 | ±3     | 207,5 |
|                           |     |                  | 3,6  | ±2,5                                | 0,06 | ±2,5   | 0,09 | ±2,5   | 0,10 |                           |     |                   | 14,2 | ±3                                  | 2,91 | ±3     | 4,04 | ±3     | 7,14  |
| -                         | RBD | 25,0             | 2,0  | 0,04                                | 0,05 | 0,09   | 0,09 | 0,09   | 0,09 | -                         | RBD | 101,6<br>(3 1/2") | 3,6  | 1,30                                | 1,82 | 3,3    | 3,3  | 3,3    | 3,3   |
|                           |     |                  | 2,3  | 21                                  | 0,04 | 27,5   | 0,06 | 52,5   | 0,11 |                           |     |                   | 8,0  | 95                                  | 2,76 | 133,5  | 3,87 | 237,5  | 6,89  |
|                           |     |                  | 3,2  | ±2,5                                | 0,06 | ±2,5   | 0,07 | ±2,5   | 0,14 |                           |     |                   | 8,8  | ±3                                  | 3,01 | ±3     | 4,22 | ±3     | 235   |
|                           |     |                  | 4,0  | ±2,5                                | 0,07 | ±2,5   | 0,09 | ±2,5   | 0,17 |                           |     |                   | 16,0 | ±3                                  | 5,04 | ±3     | 7,08 | ±3     | 12,4  |
| 20                        | RBD | 26,9<br>(3/4")   | 2,3  | 0,05                                | 0,08 | 0,13   | 0,13 | 0,13   | 0,13 | 100                       | RBD | 114,3<br>(4")     | 3,6  | 1,62                                | 2,35 | 4,71   | 4,71 | 4,71   | 4,71  |
|                           |     |                  | 2,6  | 25                                  | 0,06 | 29     | 0,09 | 57,5   | 0,14 |                           |     |                   | 6,3  | 102                                 | 2,77 | 152    | 4,02 | 270    | 7,12  |
|                           |     |                  | 3,2  | ±2,5                                | 0,07 | ±2,5   | 0,11 | ±2,5   | 0,17 |                           |     |                   | 14,2 | ±3                                  | 5,78 | ±3     | 8,40 | ±3     | 14,9  |
|                           |     |                  | 4,0  | ±2,5                                | 0,09 | ±2,5   | 0,14 | ±2,5   | 0,20 |                           |     |                   | 17,5 | ±3                                  | 6,92 | ±3     | 9,97 | ±3     | 17,7  |
| 25                        | RBD | 33,7<br>(1")     | 2,6  | 0,08                                | 0,12 | 0,23   | 0,23 | 0,23   | 0,23 | 125                       | RBD | 139,7<br>(5")     | 4,0  | 2,79                                | 4,01 | 6,94   | 6,94 | 6,94   | 6,94  |
|                           |     |                  | 3,2  | 25                                  | 0,10 | 38     | 0,14 | 72,5   | 0,27 |                           |     |                   | 6,3  | 127                                 | 4,31 | 190    | 6,20 | 330    | 10,7  |
|                           |     |                  | 4,0  | ±2,5                                | 0,12 | ±2,5   | 0,17 | ±2,5   | 0,33 |                           |     |                   | 17,5 | ±4                                  | 11,0 | ±4     | 15,8 | ±4     | 27,3  |
|                           |     |                  | 5,6  | ±2,5                                | 0,15 | ±2,5   | 0,23 | ±2,5   | 0,44 |                           |     |                   | 20,0 | ±4                                  | 12,3 | ±4     | 17,7 | ±4     | 30,6  |
| -                         | RBD | 38,0             | 2,6  | 0,12                                | 0,16 | 0,29   | 0,29 | 0,29   | 0,29 | -                         | RBD | 152,4             | 4,5  | 3,67                                | 5,54 | 9,22   | 9,22 | 9,22   | 9,22  |
|                           |     |                  | 3,2  | 32,5                                | 0,14 | 45     | 0,19 | 82,5   | 0,36 |                           |     |                   | 7,1  | 142,5                               | 5,69 | 215    | 8,59 | 357,5  | 14,3  |
|                           |     |                  | 4,5  | ±2,5                                | 0,19 | ±2,5   | 0,26 | ±2,5   | 0,48 |                           |     |                   | 12,5 | ±4                                  | 9,65 | ±4     | 14,6 | ±4     | 24,2  |
|                           |     |                  | 6,3  | ±2,5                                | 0,25 | ±2,5   | 0,35 | ±2,5   | 0,64 |                           |     |                   | 20,0 | ±4                                  | 14,6 | ±4     | 22,1 | ±4     | 36,7  |
| 32                        | RBD | 42,4<br>(1 1/4") | 2,6  | 0,13                                | 0,19 | 0,37   | 0,37 | 0,37   | 0,37 | 150                       | RBD | 168,3<br>(6")     | 4,5  | 4,43                                | 6,52 | 11,1   | 11,1 | 11,1   | 11,1  |
|                           |     |                  | 3,6  | 32                                  | 0,17 | 48     | 0,26 | 92,5   | 0,50 |                           |     |                   | 7,1  | 152                                 | 6,87 | 229    | 10,1 | 390    | 17,3  |
|                           |     |                  | 4,0  | ±2,5                                | 0,19 | ±2,5   | 0,28 | ±2,5   | 0,55 |                           |     |                   | 14,2 | ±4                                  | 13,1 | ±4     | 19,4 | ±4     | 33,1  |
|                           |     |                  | 6,3  | ±2,5                                | 0,28 | ±2,5   | 0,42 | ±2,5   | 0,81 |                           |     |                   | 22,2 | ±4                                  | 19,2 | ±4     | 28,8 | ±4     | 49,0  |
| 40                        | RBD | 48,3<br>(1 1/2") | 2,6  | 0,20                                | 0,26 | 0,50   | 0,50 | 0,50   | 0,50 | -                         | RBD | 177,8             | 5,0  | 5,69                                | 8,37 | 14,4   | 14,4 | 14,4   | 14,4  |
|                           |     |                  | 3,6  | 38                                  | 0,26 | 57     | 0,36 | 107,5  | 0,68 |                           |     |                   | 8,0  | 170                                 | 8,95 | 250    | 13,2 | 430    | 22,6  |
|                           |     |                  | 6,3  | ±3                                  | 0,44 | ±3     | 0,58 | ±3     | 1,10 |                           |     |                   | 14,2 | ±4                                  | 15,3 | ±4     | 22,5 | ±4     | 38,7  |
|                           |     |                  | 8,0  | ±3                                  | 0,53 | ±3     | 0,71 | ±3     | 1,34 |                           |     |                   | 20,0 | ±4                                  | 20,8 | ±4     | 30,6 | ±4     | 52,6  |
| 50                        | RBD | 60,3<br>(2")     | 2,9  | 0,35                                | 0,49 | 0,89   | 0,89 | 0,89   | 0,89 | 200                       | RBD | 219,1<br>(8")     | 6,3  | 10,9                                | 15,8 | 26,9   | 26,9 | 26,9   | 26,9  |
|                           |     |                  | 5,6  | 51                                  | 0,72 | 76     | 1,04 | 135    | 1,79 |                           |     |                   | 8,0  | 203                                 | 13,7 | 305    | 20,0 | 510    | 33,9  |
|                           |     |                  | 8,0  | ±3                                  | 0,89 | ±3     | 1,23 | ±3     | 2,19 |                           |     |                   | 16,0 | ±4                                  | 26,4 | ±4     | 38,4 | ±4     | 515   |
|                           |     |                  | 10,0 | ±3                                  | 1,07 | ±3     | 1,48 | ±3     | 2,63 |                           |     |                   | 22,2 | ±4                                  | 35,8 | ±4     | 51,8 | ±4     | 87,4  |
| 65                        | RBD | 76,1<br>(2 1/2") | 2,9  | 0,58                                | 0,78 | 1,44   | 1,44 | 1,44   | 1,44 | 250                       | RBD | 273,0<br>(10")    | 6,3  | 16,5                                | 24,8 | 42,4   | 42,4 | 42,4   | 42,4  |
|                           |     |                  | 10,0 | 63                                  | 1,79 | 95     | 2,43 | 175    | 4,48 |                           |     |                   | 10,0 | 254                                 | 25,9 | 381    | 38,8 | 650    | 66,2  |
|                           |     |                  | 12,5 | ±3                                  | 2,16 | ±3     | 2,93 | ±3     | 5,39 |                           |     |                   | 16,0 | ±5                                  | 40,5 | ±5     | 60,7 | ±5     | 104   |
|                           |     |                  | 14,2 | ±3                                  | 2,38 | ±3     | 3,23 | ±3     | 5,96 |                           |     |                   | 30,0 | ±5                                  | 71,9 | ±5     | 108  | ±5     | 184   |





T

TR



AVIT ≈ DIN EN 10253-2 (DIN 2615)

Tabelle enthält eine Auswahl von möglichen Rohr-  
messungen. Bitte fragen Sie bei Bedarf spezifiziert an.  
Der zulässige Betriebsdruck wird durch die verwen-  
dete Rohrabmessung bestimmt.

We supply suitable reducers acc. to your pipe dimen-  
sions. Please enquire in detail. The maximum working  
pressure depends on the pipe dimension.

LIEFERVERARIANTEN  
DELIVERY OPTIONS

| Werkstoff / Material                                    |
|---------------------------------------------------------|
| Stahl / Steel                                           |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti           |
| Stahl, Abgang II reduziert / Steel, branch tee reduced  |
| Stahl, Durchgang III reduziert / Steel, run tee reduced |

BESTELLBEISPIEL  
ORDER EXAMPLE

| TYP d1xs; TYP d1xs/d2xs/d3xs           |
|----------------------------------------|
| T 60,3x8,0                             |
| ET 60,3x8,0 - 1.4571                   |
| TR 60,3x8,0/38,0x6,0/60,3x8,0 - S355J2 |
| TR 60,3x8,0/60,3x8,0/38,0x6,0 - S355J2 |

Bitte ergänzen Sie den Bestellcode für die gewünschte Liefervariante. | Please, complete the order code for the requested delivery option.

5  
ZUBEHÖR  
ACCESSORIES

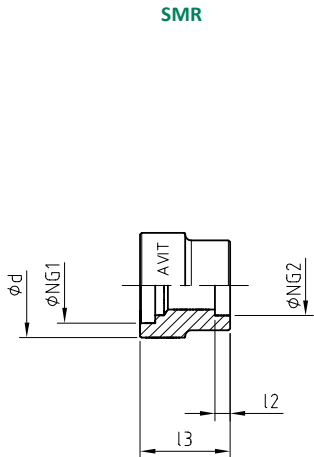
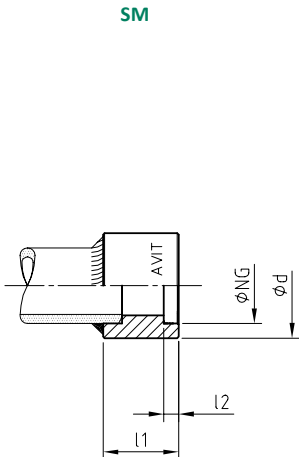
| NG   | DN   | NPS    | WANDDICKE / WALL THICKNESS s |                                        |       |       |       |        |        |        | ABMESSUNGEN [mm] |            |                        | BESTELLCODE |            |
|------|------|--------|------------------------------|----------------------------------------|-------|-------|-------|--------|--------|--------|------------------|------------|------------------------|-------------|------------|
|      |      |        |                              | Serien: (AVIT), DIN 3,4,5, ANSI B36.10 |       |       |       |        |        |        |                  | DIMENSIONS |                        |             | ORDER CODE |
| [mm] | [mm] | [inch] | d                            | 3                                      | STD40 | 4     | XS80  | 5      | 160    | XXS    | l1               | l2         | TYP d1xs / d2xs / d3xs |             |            |
| 12   | -    | -      | 12                           | 1,5                                    | -     | 2     | -     | 2,5    | -      | 3      | 25               | 50         | T d1xs / d2xs / d3xs   |             |            |
| 16   | -    | -      | 16                           | 1,5                                    | -     | 2     | -     | 2,5    | -      | 3      | 29               | 58         | T d1xs / d2xs / d3xs   |             |            |
| 20   | -    | -      | 20                           | 2                                      | -     | 2,5   | -     | 3      | -      | 4      | 33               | 66         | T d1xs / d2xs / d3xs   |             |            |
| -    | 12   | 1/2"   | 21,3                         | 2                                      | 2,7   | 3,2   | 3,7   | 4      | 4,8    | 7,5    | 33               | 66         | T d1xs / d2xs / d3xs   |             |            |
| 25   | -    | -      | 25                           | 2,5                                    | -     | 3     | -     | 4      | -      | 5      | 37               | 74         | T d1xs / d2xs / d3xs   |             |            |
| -    | 20   | 3/4"   | 26,9                         | 2,3                                    | 2,9   | 3,2   | 3,9   | 4      | 5,6    | 7,8    | 42               | 84         | T d1xs / d2xs / d3xs   |             |            |
| 30   | -    | -      | 30                           | 3                                      | -     | 4     | -     | 5      | -      | 6      | 42               | 84         | T d1xs / d2xs / d3xs   |             |            |
| -    | 25   | 1"     | 33,7                         | 2,6                                    | 3,4   | 3,2   | 4,5   | 5,6    | 6,4    | 9,1    | 48               | 98         | T d1xs / d2xs / d3xs   |             |            |
| 38   | -    | -      | 38                           | 4                                      | -     | 5     | -     | 6      | -      | 8      | 49               | 98         | T d1xs / d2xs / d3xs   |             |            |
| -    | 32   | 1 1/4" | 42,4                         | 2,6                                    | 3,6   | 3,6   | (5,6) | 4      | (7,1)  | 9,7    | 57               | 114        | T d1xs / d2xs / d3xs   |             |            |
| -    | 40   | 1 1/2" | 48,3                         | 2,6                                    | 3,6   | 4     | 4,5   | 5,1    | 7,1    | 10,2   | 57               | 114        | T d1xs / d2xs / d3xs   |             |            |
| 50   | -    | -      | 50                           | 5                                      | -     | 6     | -     | 8      | -      | 10     | 85               | 170        | T d1xs / d2xs / d3xs   |             |            |
| -    | 50   | 2"     | 60,3                         | 2,9                                    | 3,9   | 4,5   | 5,5   | (8)    | (10)   | (12,5) | 85               | 170        | T d1xs / d2xs / d3xs   |             |            |
| -    | 65   | 2 1/2" | 76,1                         | 2,9                                    | 4,5   | 5     | 6,3   | 7,1    | 10     | 12,5   | 76               | 152        | T d1xs / d2xs / d3xs   |             |            |
| -    | 80   | 3"     | 88,9                         | 3,2                                    | 5,5   | 5,6   | 7,6   | 8      | (14,2) | (17,5) | 86               | 172        | T d1xs / d2xs / d3xs   |             |            |
| -    | -    | 3 1/2" | 101,6                        | -                                      | 5,7   | (7,1) | (8,8) | (12,5) | (16)   | (20)   | 105              | 210        | T d1xs / d2xs / d3xs   |             |            |
| -    | 100  | 4"     | 114,3                        | 3,6                                    | -     | 6,3   | 8,8   | (14,2) | (17,5) | (20)   | 105              | 210        | T d1xs / d2xs / d3xs   |             |            |
| -    | 125  | 5"     | 139,7                        | 4                                      | -     | 6,3   | (8)   | 10     | (17,5) | (22,2) | 124              | 248        | T d1xs / d2xs / d3xs   |             |            |
| -    | 150  | 6"     | 168,3                        | 4,5                                    | -     | 7,1   | -     | 11     | (17,5) | (22,2) | 143              | 286        | T d1xs / d2xs / d3xs   |             |            |
| -    | 200  | 8"     | 219,1                        | 4,5                                    | 6,3   | 8     | 12,5  | 20     | -      | (36)   | 180              | 360        | T d1xs / d2xs / d3xs   |             |            |



**AVIT**

Die in dieser Tabelle aufgeführten Schweißmuffen sind zur Verbindung von nahtlosen Präzisionsstahlrohren vorgesehen und entsprechend toleriert.

*The welding sockets shown in this table are designed to be connected with seamless precision steel tubes and have the appropriate tolerances.*



**LIEFERVERARIANTEN**  
DELIVERY OPTIONS

| Werkstoff / Material                                      |
|-----------------------------------------------------------|
| Stahl / Steel; S355J2 (1.0579)                            |
| Stahl, Reduzierte Nenngröße / Steel, reduced nominal size |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti             |

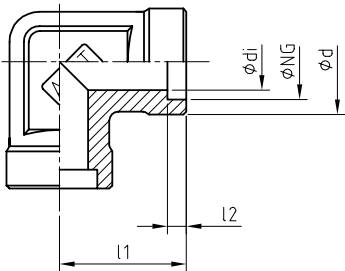
**BESTELLBEISPIEL**  
ORDER EXAMPLE

| TYP NG    |
|-----------|
| SM 25     |
| SMR 25>20 |
| ESM 25    |

Bitte ergänzen Sie den Bestellcode für die gewünschte Liefervariante. | Please, complete the order code for the requested delivery option.

| PN <sup>1</sup> NG |       | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |     | GEWICHT<br>WEIGHT | BESTELLCODE<br>ORDER CODE |               |
|--------------------|-------|--------------------------------|----|----|-----|-------------------|---------------------------|---------------|
| [bar]              | [mm]  | d                              | l1 | l2 | l3  | SR [kg]           | TYP NG                    | TYP NG1>NG2   |
| 160                | 6     | 12                             | 20 | 5  | 30  | 0,015             | SM 6                      | -             |
|                    | 8     | 13,5                           | 20 | 5  | 30  | 0,017             | SM 8                      | SMR 8>6       |
|                    | 10    | 16                             | 20 | 5  | 30  | 0,022             | SM 10                     | SMR 10>6      |
|                    | 12    | 20                             | 20 | 5  | 30  | 0,035             | SM 12                     | SMR 12>10     |
|                    | 16    | 25                             | 20 | 5  | 30  | 0,052             | SM 16                     | SMR 16>12     |
|                    | 20    | 30                             | 20 | 5  | 30  | 0,071             | SM 20                     | SMR 20>16     |
|                    | 25    | 35                             | 20 | 5  | 30  | 0,088             | SM 25                     | SMR 25>20     |
|                    | 30    | 43                             | 30 | 5  | 30  | 0,215             | SM 30                     | SMR 30>25     |
|                    | 38    | 54                             | 30 | 5  | 45  | 0,339             | SM 38                     | SMR 38>30     |
|                    | 50    | 64                             | 40 | 10 | 55  | 0,505             | SM 50                     | SMR 50>38     |
|                    | 60,3  | 80                             | 40 | 10 | 55  | 0,869             | SM 603                    | SMR 603>50    |
|                    | 63,5  | 80                             | 40 | 10 | 55  | 0,773             | SM 635                    | SMR 635>603   |
|                    | 70    | 82                             | 40 | 10 | 55  | 0,681             | SM 70                     | SMR 70>635    |
|                    | 76,1  | 88                             | 45 | 15 | 60  | 0,744             | SM 761                    | SMR 761>70    |
|                    | 82,5  | 101                            | 45 | 15 | 60  | 1,181             | SM 825                    | SMR 825>761   |
|                    | 88,9  | 108                            | 50 | 15 | 65  | 1,440             | SM 889                    | SMR 889>825   |
|                    | 101,6 | 114                            | 50 | 15 | 65  | 1,308             | SM 1016                   | SMR 1016>889  |
|                    | 108   | 127                            | 50 | 15 | 65  | 1,924             | SM 108                    | SMR 108>1016  |
|                    | 114,3 | 139                            | 60 | 20 | 80  | 2,927             | SM 1143                   | SMR 1143>108  |
|                    | 127   | 152                            | 60 | 20 | 80  | 3,456             | SM 127                    | SMR 127>1143  |
|                    | 133   | 159                            | 60 | 20 | 80  | 3,757             | SM 133                    | SMR 133>127   |
|                    | 139,7 | 168                            | 80 | 25 | 100 | 5,866             | SM 1397                   | SMR 1397>133  |
|                    | 152,4 | 177                            | 80 | 25 | 100 | 6,055             | SM 1524                   | SMR 1524>1397 |
|                    | 159   | 193                            | 80 | 25 | 100 | 8,133             | SM 159                    | SMR 159>1524  |
|                    | 168,3 | 193                            | 90 | 30 | 120 | 7,527             | SM 1683                   | SMR 1683>159  |

1 Druckeinschränkung wegen Kehlnaht! Bei geringen Druckspitzen sind höhere Drücke möglich. | Pressure restriction due to fillet weld! At low pressure pulsation are higher pressures possible.



AVIT

Die in dieser Tabelle aufgeführten Schweißmuffen sind zur Verbindung von nahtlosen Präzisionsstahlrohren vorgesehen und entsprechend toleriert.

The welding sockets shown in this table are designed to be connected with seamless precision steel tubes and have the appropriate tolerances.

LIEFERVERARIANTEN  
DELIVERY OPTIONS

| Werkstoff / Material                          |
|-----------------------------------------------|
| Stahl / Steel; S355J2 (1.0577)                |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti |

BESTELLBEISPIEL  
ORDER EXAMPLE

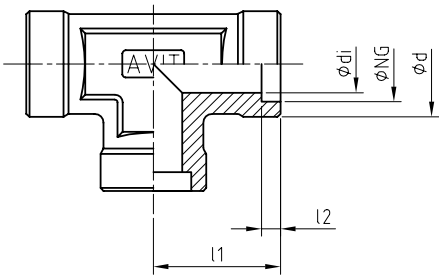
| TYP NG  |
|---------|
| SMW 25  |
| ESMW 25 |

Bitte ergänzen Sie den Bestellcode für die gewünschte Liefervariante. | Please, complete the order code for the requested delivery option.

ZUBEHÖR  
ACCESSORIES

| PN <sup>1</sup> | NG   | ABMESSUNGEN [mm] |      |                |                | GEWICHT | BESTELLCODE |
|-----------------|------|------------------|------|----------------|----------------|---------|-------------|
|                 |      | DIMENSIONS       |      |                |                | WEIGHT  | ORDER CODE  |
| [bar]           | [mm] | d <sub>i</sub>   | d    | l <sub>1</sub> | l <sub>2</sub> | [kg]    | TYP NG      |
| 160             | 6    | 4                | 11   | 24             | 5              | 0,080   | SMW 6       |
|                 | 8    | 5                | 13,5 | 24             | 5              | 0,090   | SMW 8       |
|                 | 10   | 7                | 16   | 24             | 5              | 0,100   | SMW 10      |
|                 | 12   | 8                | 20   | 29             | 5              | 0,110   | SMW 12      |
|                 | 16   | 12               | 25   | 33             | 5              | 0,160   | SMW 16      |
|                 | 20   | 16               | 30   | 37             | 5              | 0,260   | SMW 20      |
|                 | 25   | 20               | 35   | 42             | 5              | 0,410   | SMW 25      |
|                 | 30   | 24               | 43   | 49             | 5              | 0,580   | SMW 30      |
|                 | 38   | 30               | 54   | 57             | 5              | 1,18    | SMW 38      |
|                 | 50   | 40               | 64   | 85             | 10             | 3,23    | SMW 50      |

1 Druckeinschränkung wegen Kehlnaht! Bei geringen Druckspitzen sind höhere Drücke möglich. | Pressure restriction due to fillet weld! At low pressure pulsation are higher pressures possible.



AVIT

Die in dieser Tabelle aufgeführten Schweißmuffen sind zur Verbindung von nahtlosen Präzisionsstahlrohren vorgesehen und entsprechend toleriert.

The welding sockets shown in this table are designed to be connected with seamless precision steel tubes and have the appropriate tolerances.

LIEFERVERARIANTEN  
DELIVERY OPTIONS

| Werkstoff / Material                          |
|-----------------------------------------------|
| Stahl / Steel; S355J2 (1.0577)                |
| Edelstahl 1.4571 / Stainless steel AISI 316Ti |

BESTELLBEISPIEL  
ORDER EXAMPLE

| TYP NG  |
|---------|
| SMT 25  |
| ESMT 25 |

Bitte ergänzen Sie den Bestellcode für die gewünschte Liefervariante. | Please, complete the order code for the requested delivery option.

| PN <sup>1</sup> | NG   | ABMESSUNGEN [mm] |      |                |                | GEWICHT | BESTELLCODE |
|-----------------|------|------------------|------|----------------|----------------|---------|-------------|
|                 |      | DIMENSIONS       |      |                |                | WEIGHT  | ORDER CODE  |
| [bar]           | [mm] | d <sub>i</sub>   | d    | l <sub>1</sub> | l <sub>2</sub> | [kg]    | TYP NG      |
| 160             | 6    | 4                | 11   | 24             | 5              | 0,086   | SMT 6       |
|                 | 8    | 5                | 13,5 | 24             | 5              | 0,098   | SMT 8       |
|                 | 10   | 7                | 16   | 24             | 5              | 0,116   | SMT 10      |
|                 | 12   | 8                | 20   | 29             | 5              | 0,140   | SMT 12      |
|                 | 16   | 12               | 25   | 33             | 5              | 0,210   | SMT 16      |
|                 | 20   | 16               | 30   | 37             | 5              | 0,370   | SMT 20      |
|                 | 25   | 20               | 35   | 42             | 5              | 0,580   | SMT 25      |
|                 | 30   | 24               | 43   | 49             | 5              | 0,880   | SMT 30      |
|                 | 38   | 30               | 54   | 57             | 5              | 1,52    | SMT 38      |
|                 | 50   | 40               | 64   | 85             | 10             | 5,01    | SMT 50      |

1 Druckeinschränkung wegen Kehlnaht! Bei geringen Druckspitzen sind höhere Drücke möglich. | Pressure restriction due to fillet weld! At low pressure pulsation are higher pressures possible.

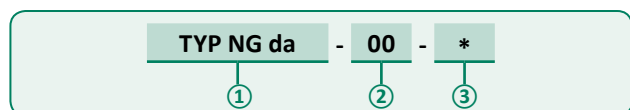
Passend zu unserem Rohrverbindungsprogramm liefern wir zur sicheren Befestigung von Rohrleitungen Rohrschellen der leichten (**RL**) und schweren Baureihe (**RS**) nach DIN 3015.

#### WERKSTOFFE ROHRSCHELLENKÖRPER

Polypropylen, Farbe: Grün ..... **PP**  
Polyamid, Farbe: Schwarz ..... **PA**  
Aluminium ..... **AL**

#### BESTELLBEZEICHNUNG

Unser alphanumerischer Bestellcode ① definiert den Rohrschellentyp, Baugröße und den gewünschten Rohraußendurchmesser.  
Die Werkstoff- und Oberflächenkombination wird durch die Kennziffer ② festgelegt. Optionen werden durch Ihre Angabe ③ gesteuert.



Bestellbezeichnung | Principle of the order designation

#### ① BESTELLCODE

Rohrschellentyp, Größe, Rohraußendurchmesser ..... **TYP NG da**

#### ② KENNZIFFER WERKSTOFF & OBERFLÄCHEN

PP, Schrauben, Metallteile Stahl unbehandelt. .... **TYP NG da - 01**  
PP, Schrauben und Deckplatte verzinkt ..... **- 02**  
PP, Schrauben A2, Metallteile Edelstahl (A4) ..... **- 03**  
PA, Schrauben, Metallteile Stahl unbehandelt ..... **- 04**  
PA, Schrauben und Deckplatte verzinkt ..... **- 05**  
PA, Schrauben A2, Metallteile Edelstahl (A4) ..... **- 06**  
AL, Schrauben, Metallteile Stahl unbehandelt ..... **- 07**  
AL, Schrauben und Deckplatte verzinkt ..... **- 08**  
AL, Schrauben A2, Metallteile Edelstahl (A4) ..... **- 09**

#### ③ OPTIONEN

Vormontiert. .... **- A**  
Ohne Grundplatte. .... **- B**  
Mit Sicherungsblech ..... **- SI**  
Satzweise verpackt ..... **- K**  
Weitere Varianten bitte bei Bestellung detailliert angeben.

#### MONTAGEVARIANTEN ASSEMBLY VARIANTS



Mit Anschweißplatte | On weld-on plate



Auf Tragschiene | On mounting rail

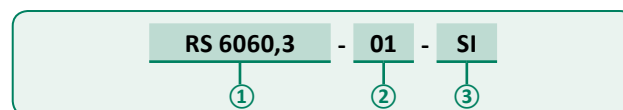
We provide pipe clamps of the light-duty series (**RL**) and heavy-duty series (**RS**) according to DIN 3015 for the fastening of pipelines that match our pipe connection assortment.

#### MATERIAL PIPE CLAMP BODIES

Polypropylene, colour: green ..... **PP**  
Polyamide, colour: black. .... **PA**  
Aluminium ..... **AL**

#### ORDER DESIGNATION

Our alphanumeric code ① defines the pipe clamp type, size and the outside pipe diameter.  
The material and surface combination is determined by the reference number ②. Possible options are controlled by your information ③.



Bestellbeispiel | Order example

#### ① ORDER CODE

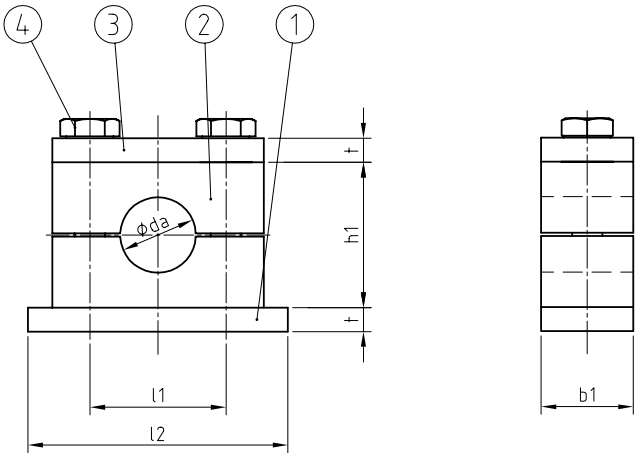
Clamp type, size, external pipe diameter ..... **TYPE NG da**

#### ② MATERIAL REFERENCE NUMBER

PP, bolts, steel metal parts untreated. .... **TYPE NG da - 01**  
PP, bolts and cover plate galvanised. .... **- 02**  
PP, bolts A2, metal parts stainless steel (A4) ..... **- 03**  
PA, bolts, steel metal parts untreated ..... **- 04**  
PA, bolts and cover plate galvanised. .... **- 05**  
PA, bolts A2, metal parts stainless steel (A4) ..... **- 06**  
AL, bolts, steel metal parts untreated. .... **- 07**  
AL, bolts and cover plate galvanised. .... **- 08**  
AL, bolts A2, metal parts stainless steel (A4) ..... **- 09**

#### ③ OPTIONS

Pre-assembled ..... **- A**  
Without base plate ..... **- B**  
With lock washer ..... **- SI**  
Packaged in sets ..... **- K**  
Please specify other versions accordingly when ordering.



DIN 3015-2

Zur sicheren Befestigung von Rohrleitungen.  
Innenfläche gerippt, der Spalt zwischen den Schellen-  
hälften sorgt für die notwendige Vorspannung.

For secure fastening from tubes and pipes.  
Clamp bodies with profiled inside surface. The gap  
between the clamps serves for the necessary preload.

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff / Material                                             | TYP NG da - ** |
|------------------------------------------------------------------|----------------|
| PP - Schrauben und Metallteile Stahl / Steel                     | RS 6***,* - 01 |
| PP - Schrauben und Deckplatte Stahl verzinkt / Steel, galvanised | RS 6***,* - 02 |
| PP - Schrauben (A2) Metallteile Edelstahl (A4) / Stainless steel | RS 6***,* - 03 |
| AL - Schrauben und Metallteile Stahl / Steel                     | RS 6***,* - 07 |
| AL - Schrauben und Deckplatte Stahl verzinkt / Steel, galvanised | RS 6***,* - 08 |
| AL - Schrauben (A2) Metallteile Edelstahl (A4) / Stainless steel | RS 6***,* - 09 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description               |
|------|-----------------------------------------|
| 1    | Schweißplatte / Welding plate           |
| 2    | Rohrschellenkörper / Pipe clamp body    |
| 3    | Deckplatte / Cover plate                |
| 4    | Sechskantschrauben / Hexagon head bolts |

| GRÖSSE<br>SIZE |    | ROHR [mm]<br>TUBE / PIPE | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |    | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|----------------|----|--------------------------|--------------------------------|-----|-----|-----|----|--------------------|---------------------------|
| DIN            | NG | da                       | l1                             | l2  | b1  | h1  | t  | Pos.4              | TYP NG da                 |
| 1              | 3  | 006,0 – 020,0            | 33                             | 74  | 30  | 32  | 8  | M10x45             | RS 3***,*                 |
| 2              | 4  | 019,0 – 030,0            | 45                             | 86  | 30  | 48  | 8  | M10x60             | RS 4***,*                 |
| 3              | 5  | 030,0 – 042,0            | 60                             | 100 | 30  | 60  | 8  | M10x70             | RS 5***,*                 |
| 4              | 6  | 038,0 – 070,0            | 90                             | 140 | 45  | 89  | 10 | M12x100            | RS 6***,*                 |
| 5              | 7  | 060,3 – 088,9            | 122                            | 180 | 60  | 120 | 10 | M16x130            | RS 7***,*                 |
| 6              | 8  | 088,9 – 133,0            | 168                            | 226 | 80  | 168 | 15 | M20x190            | RS 8***,*                 |
| 7              | 9  | 127,0 – 168,0            | 205                            | 270 | 90  | 200 | 15 | M24x220            | RS 9***,*                 |
| 8              | 10 | 168,0 – 219,0            | 265                            | 340 | 120 | 270 | 25 | M30x300            | RS 10***,*                |
| 9              | 11 | 219,0 – 324,0            | 395                            | 520 | 160 | 410 | 30 | M30x450            | RS 11***,*                |

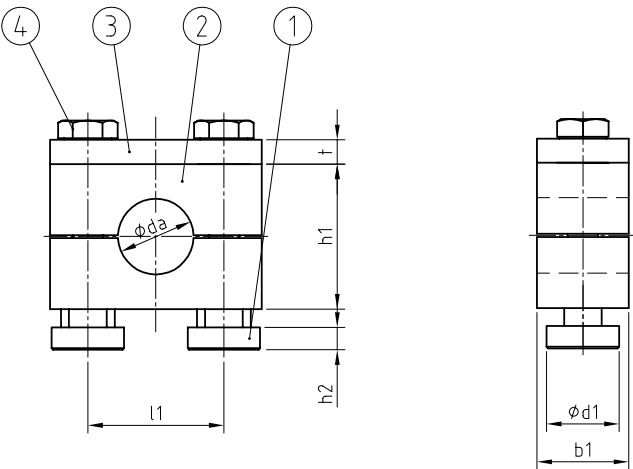
MONTAGEINFORMATION

Vorausgesetzt, die Grundkonstruktion entspricht den Anforderungen, wird die Anschweißplatte ① an der gewünschten Stelle positioniert und angeschweißt. Danach erfolgt die Verschraubung der Bauteile.

ASSEMBLY INFORMATION

If the base construction meets the requirements, the weld-on plate ① is positioned and welded in the desired location. Then the screw connection of the components can be done.





DIN 3015-2

Bis zur Rohrschellengröße 6 ist eine Montage auf Tragschienen mittels Tragschienenmutter möglich.

Up to the pipe clamp size 6, an assembly on mounting rails with mounting rail nuts is possible.

ZUBEHÖR • ROHRSCHELLEN  
ACCESSORIES • PIPE CLAMPS

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff / Material                                             | TYP NG da - **   |
|------------------------------------------------------------------|------------------|
| PP - Schrauben und Metallteile Stahl / Steel                     | TRS 6***, * - 01 |
| PP - Schrauben und Deckplatte Stahl verzinkt / Steel, galvanised | TRS 6***, * - 02 |
| PP - Schrauben (A2) Metallteile Edelstahl (A4) / Stainless steel | TRS 6***, * - 03 |
| AL - Schrauben und Metallteile Stahl / Steel                     | TRS 6***, * - 07 |
| AL - Schrauben und Deckplatte Stahl verzinkt / Steel, galvanised | TRS 6***, * - 08 |
| AL - Schrauben (A2) Metallteile Edelstahl (A4) / Stainless steel | TRS 6***, * - 09 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description               |
|------|-----------------------------------------|
| 1    | Tragschienenmutter / Mounting rail nut  |
| 2    | Rohrschellenkörper / Pipe clamp body    |
| 3    | Deckplatte / Cover plate                |
| 4    | Sechskantschrauben / Hexagon head bolts |

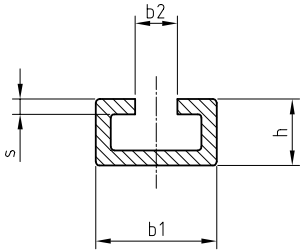
| GRÖSSE<br>SIZE |    | ROHR [mm]<br>TUBE / PIPE | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |    |     |    | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|----------------|----|--------------------------|--------------------------------|----|----|----|-----|----|--------------------|---------------------------|
| DIN            | NG | da                       | d1                             | l1 | b1 | h1 | h2  | t  | Pos. 4             | TYP NG da - **            |
| 1              | 3  | 006,0 – 020,0            | 24                             | 33 | 30 | 32 | 7,4 | 8  | M10x45             | TRS 3***, *               |
| 2              | 4  | 019,0 – 030,0            | 24                             | 45 | 30 | 48 | 7,4 | 8  | M10x60             | TRS 4***, *               |
| 3              | 5  | 030,0 – 042,0            | 24                             | 60 | 30 | 60 | 7,4 | 8  | M10x70             | TRS 5***, *               |
| 4              | 6  | 038,0 – 070,0            | 24                             | 90 | 45 | 89 | 7,4 | 10 | M12x100            | TRS 6***, *               |

MONTAGEINFORMATION

Durch die Verwendung von Tragschienenmütern (TYP GMV) anstelle der Grundplatte kann die Rohrschelle auf Tragschienen montiert werden. Diese Montagevariante hat den Vorteil, dass die genaue Position vor dem Verschrauben noch geändert werden kann.

ASSEMBLY INFORMATION

With the use of mounting rail nuts (TYPE GMV) instead of the base plate, the pipe clamps can be mounted on the mounting rail. This assembly variant offers the advantage that the exact position can still be changed just before the screw connection is done.



DIN 3015-2

Bis zur Rohrschellengröße 6 ist eine Montage auf Tragschienen mittels Tragschienenmutter möglich.  
Lieferlängen: 1m (STS 1) oder 2m (STS 2).

Up to the pipe clamp size 6, an assembly on mounting rails with mounting rail nuts is possible.  
Delivery lengths: 1m (STS 1) or 2m (STS 2).

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

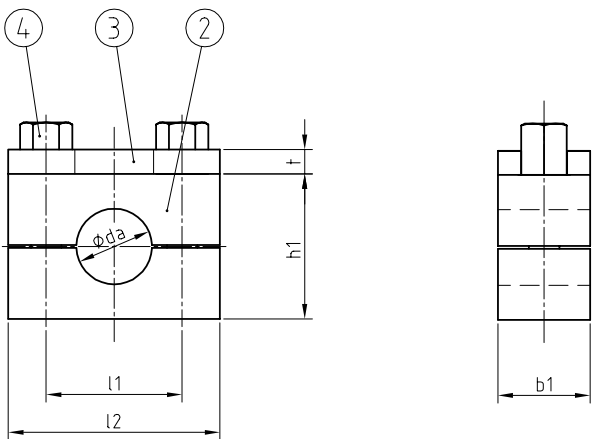
| Werkstoff / Material               | TYP - **   |
|------------------------------------|------------|
| Stahl / Steel                      | STS 1 - 01 |
| Stahl verzinkt / Steel, galvanised | STS 1 - 02 |
| Edelstahl / Stainless steel (A4)   | STS 1 - 03 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description   |
|------|-----------------------------|
| 1    | Tragschiene / Mounting rail |

| GRÖSSE<br>SIZE |    | ROHR [mm]<br>TUBE / PIPE | ABMESSUNGEN [mm]<br>DIMENSIONS |    |    |   | BESTELLCODE<br>ORDER CODE |         |
|----------------|----|--------------------------|--------------------------------|----|----|---|---------------------------|---------|
| DIN            | NG | da                       | b1                             | b2 | h  | s | TYP 1 m                   | TYP 2 m |
| 1              | 3  | 006,0 – 020,0            | 40                             | 13 | 22 | 5 | STS 1                     | STS 2   |
| 2              | 4  | 019,0 – 030,0            |                                |    |    |   |                           |         |
| 3              | 5  | 030,0 – 042,0            |                                |    |    |   |                           |         |
| 4              | 6  | 038,0 – 070,0            |                                |    |    |   |                           |         |



DIN 3015-2

Zur sicheren Aufstockung der Typen RS und TRS.  
Schellen gleicher Baugröße auch mit unterschiedlichen Rohrdurchmessern übereinander erweiterbar.

For a safe stacking of the clamp types RS and TRS.  
Clamps of the same nominal size, also with a different pipe dimension, stackable on top of each other.

ZUBEHÖR • ROHRSCHELLEN  
ACCESSORIES • PIPE CLAMPS

5

WERKSTOFF-KOMBINATION  
MATERIAL COMBINATION

| Werkstoff / Material                                             | TYP NG da - ** |
|------------------------------------------------------------------|----------------|
| PP - Schrauben und Metallteile Stahl / Steel                     | AS 6***,* - 01 |
| PP - Schrauben und Deckplatte Stahl verzinkt / Steel, galvanised | AS 6***,* - 02 |
| PP - Schrauben (A2) Metallteile Edelstahl (A4) / Stainless steel | AS 6***,* - 03 |
| AL - Schrauben und Metallteile Stahl / Steel                     | AS 6***,* - 07 |
| AL - Schrauben und Deckplatte Stahl verzinkt / Steel, galvanised | AS 6***,* - 08 |
| AL - Schrauben (A2) Metallteile Edelstahl (A4) / Stainless steel | AS 6***,* - 09 |

BESTELLBEISPIEL  
ORDER EXAMPLE

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description            |
|------|--------------------------------------|
| 2    | Rohrschellenkörper / Pipe clamp body |
| 3    | Sicherungsplatte / Locking plate     |
| 4    | Aufbauschraube / Build-up bolt       |

| GRÖSSE<br>SIZE |    | ROHR [mm]<br>TUBE / PIPE | ABMESSUNGEN [mm]<br>DIMENSIONS |     |     |     |    | SCHRAUBEN<br>BOLTS | BESTELLCODE<br>ORDER CODE |
|----------------|----|--------------------------|--------------------------------|-----|-----|-----|----|--------------------|---------------------------|
| DIN            | NG | da                       | l1                             | l2  | b1  | h1  | t  | Pos.4              | TYP NG da - **            |
| 1              | 3  | 006,0 – 020,0            | 33                             | 74  | 30  | 32  | 8  | M10                | AS 3***,*                 |
| 2              | 4  | 019,0 – 030,0            | 45                             | 86  | 30  | 48  | 8  | M10                | AS 4***,*                 |
| 3              | 5  | 030,0 – 042,0            | 60                             | 100 | 30  | 60  | 8  | M10                | AS 5***,*                 |
| 4              | 6  | 038,0 – 070,0            | 90                             | 140 | 45  | 89  | 10 | M12                | AS 6***,*                 |
| 5              | 7  | 060,3 – 088,9            | 122                            | 180 | 60  | 120 | 10 | M16                | AS 7***,*                 |
| 6              | 8  | 088,9 – 133,0            | 168                            | 226 | 80  | 168 | 15 | M20                | AS 8***,*                 |
| 7              | 9  | 127,0 – 168,0            | 205                            | 270 | 90  | 205 | 15 | M24                | AS 9***,*                 |
| 8              | 10 | 168,0 – 219,0            | 265                            | 340 | 120 | 265 | 25 | M30                | AS 10***,*                |
| 9              | 11 | 219,0 – 324,0            | 395                            | 520 | 160 | 395 | 30 | M30                | AS 11***,*                |

MONTAGEHINWEISE

Rohrleitungen sind entsprechend Ihrer Belastung zu befestigen.  
Hierbei sind folgende Grundsätze zu beachten:

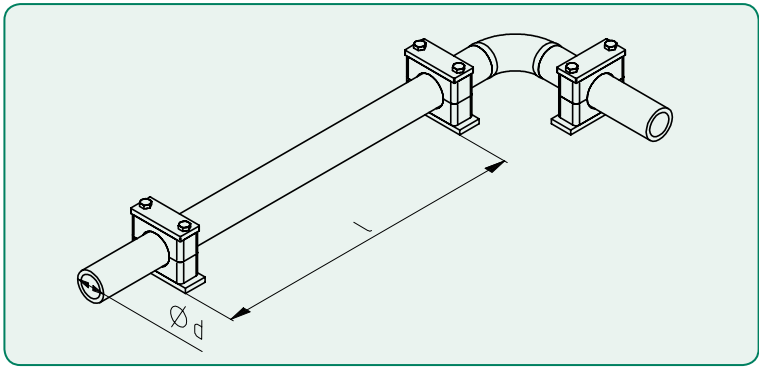
- Für die sichere Montage ist eine stabile, den Belastungen entsprechende, Unterkonstruktion notwendig
- Rohrleitungen müssen spannungsfrei befestigt werden
- Die erste Schelle sollte unmittelbar nach dem Anschluss platziert sein
- Rohrschellen sind unmittelbar vor und hinter einem Bogen zu setzen
- Die vorgegebenen Schraubenanzugsdrehmomente sind einzuhalten
- Die vorgegebenen Grenzen der unten genannten Materialeigenschaften sind zu beachten

INSTALLATION INFORMATION

Pipelines must be fastened appropriate to their load.  
The following principles must be observed:

- A sturdy supporting structure appropriate for the loads is required for safe installation
- Pipe lines must be fastened stress-free
- The first clamp should be positioned immediately after the connection
- Pipe clamps must be placed immediately before and after an elbow
- The assembly torques must be observed
- The specified limits of the material properties mentioned below must be observed

EMPFOHLENE ABSTÄNDE FÜR ROHRSCHELLEN  
RECOMMENDED DISTANCE FOR CLAMPS



| ROHR [mm]<br>TUBE / PIPE | ABSTAND [m]<br>DISTANCE |
|--------------------------|-------------------------|
| Ø d                      | l                       |
| < 10,0                   | 1,00                    |
| 10,0 - 25,0              | 1,50                    |
| 25,0 - 50,0              | 2,00                    |
| 50,0 - 76,1              | 3,00                    |
| 76,1 - 88,9              | 3,50                    |
| 88,9 - 102,0             | 4,00                    |
| 102,0 - 114,0            | 4,50                    |
| 114,0 - 168,0            | 5,00                    |
| 168,0 - 219,0            | 6,00                    |
| 219,0 - 324,0            | 6,70                    |

| REIHE<br>SERIES                    | GRÖSSE<br>SIZE |    | SCHRAUBE<br>BOLT | ANZUGSDREHMOMENT BEI WERKSTOFF [Nm]<br>ASSEMBLY TORQUE |     |     |
|------------------------------------|----------------|----|------------------|--------------------------------------------------------|-----|-----|
|                                    | DIN            | NG | [mm]             | PP                                                     | PA  | AL  |
| SCHWERE REIHE<br>HEAVY DUTY SERIES | 1              | 3  | M10              | 12                                                     | 20  | 30  |
|                                    | 2              | 4  | M10              | 12                                                     | 20  | 30  |
|                                    | 3              | 5  | M10              | 15                                                     | 25  | 35  |
|                                    | 4              | 6  | M12              | 30                                                     | 40  | 55  |
|                                    | 5              | 7  | M16              | 45                                                     | 55  | 120 |
|                                    | 6              | 8  | M20              | 80                                                     | 150 | 200 |
|                                    | 7              | 9  | M24              | 110                                                    | 200 | 250 |
|                                    | 8              | 10 | M30              | 180                                                    | 350 | 500 |
|                                    | 9              | 11 | M30              | 200                                                    | 370 | 500 |

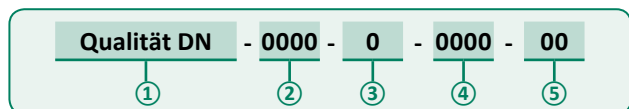
MATERIALEIGENSCHAFTEN DER SCHELLEN NACH DIN 3015  
MECHANICAL PROPERTIES ACC. DIN 3015

|                                                        | PP                  | PA                   | AL                |
|--------------------------------------------------------|---------------------|----------------------|-------------------|
| Farbe   Colour                                         | Grün   Green        | Schwarz   Black      | Silbergrau   Grey |
| Zug-E-Modul   Tensile modulus                          | 1.073 N/mm²         | > 1.400 N/mm²        | > 65.000 N/mm²    |
| Streckspannung   Yield stress                          | 25 N/mm²            | > 55 N/mm²           | > 150 N/mm²       |
| Kerbschlagzähigkeit   Notch impact strength            | 7,5 kJ/m² bei +23°C | > 15 kJ/m² bei +23°C | -                 |
| Kälte-Kerbschlagzähigkeit   Cold notch impact strength | 3,1 kJ/m² bei -30°C | > 3 kJ/m² bei -30°C  | -                 |
| Temperaturbeständigkeit   Temperature resistance       | -30 bis +90°C       | -40 bis +120°C       | bis +300°C        |
| Beständig gegen: Laugen, Säuren   Alkalies, acids      | +                   | +                    | +                 |
| Resistant to: Benzin   Gasoline                        | +                   | +++                  | +++               |
| Mineralöle   Mineral oils                              | +                   | +++                  | +++               |
| andere Öle   other oils                                | +++                 | +++                  | +++               |
| Seewasser   Seawater                                   | +++                 | +++                  | +++               |

+ Bedingt beständig | Limited resistance  
+++ Beständig | Resistant

## BESTELLBEZEICHNUNG

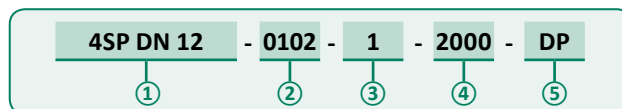
Unser alphanumerischer Bestellcode ① definiert die Schlauchqualität und die Nennweite [DN]. Die 1. Armatur und 2. Armatur werden durch die 2 Kennziffern ② gesteuert. Die Werkstoff- und Elastomerkombination der Armatur wird durch die Kennziffer ③ festgelegt. Die Schlauchlänge ④ und mögliche Optionen ⑤ werden durch Ihre Angabe gesteuert.



Bestellbezeichnung | Principle of the order designation

## ORDER EXAMPLE

Our alphanumeric code ① defines the hose quality and nominal diameter [DN]. The 1st and 2nd fitting are controlled by the fitting code ②. The materials and elastomer combination is determined by the reference number ③. The hose line length ④ and possible options ⑤ are controlled by your information.



Bestellbeispiel | Order example

### ① BESTELLCODE

Schlauchqualität (HQ) 2 SN nach DIN EN 853 ..... **2SN DN**  
Schlauchqualität (HQ) 4 SP nach DIN EN 856 ..... **4SP DN**  
Schlauchqualität (HQ) 4 SH nach DIN EN 856 ..... **4SH DN**

### ② KENNZIFFER ARMATURENTYP

24° Dichtkegel mit O-Ring ..... **AOS** ..... -01  
90° Bogen Dichtkegel mit O-Ring ..... **BS** ..... -02  
Gewindezapfen mit 24° Konus. .... **HS** ..... -03  
AVIT Quadratflanschanschluss ..... **FAS** ..... -10  
AVIT Quadrat Gegenflansch. .... **FGS** ..... -11  
90° Bogen AVIT Quadratflanschanschluss. .... **FBS** ..... -12  
SAE-Flanschanschluss. .... **SFS** ..... -20  
SAE-Gegenflansch. .... **SGS** ..... -21  
90° Bogen SAE-Flanschanschluss ..... **SBS** ..... -22

### ③ KENNZIFFER ARMATURENWERKSTOFF

Stahl, verzinkt, NBR. .... -1  
Stahl, verzinkt, FKM ..... -2  
Edelstahl (1.4571), NBR ..... -3  
Edelstahl (1.4571), FKM ..... -4

### ④⑤ SCHLAUCHLÄNGE / OPTIONEN

Die gewünschte Schlauchlänge [mm], die Verdrehwinkel <sup>1</sup> K und V, sowie sonstige Ausführungen bitte bei Bestellung angeben.

Druckprüfung (1,5 facher Betriebsdruck) ..... -DP  
Lieferung mit Schlauchfangsicherung ..... -SF  
Lieferung mit Edelstahl-Schutzgeflecht ..... -ES  
Lieferung mit Hitzeschutz ..... -HS

### ① ORDER CODE

Hose quality (HQ) 2 SN acc. DIN EN 853. .... **2SN DN**  
Hose quality (HQ) 4 SP acc. DIN EN 856 ..... **4SP DN**  
Hose quality (HQ) 4 SH acc. DIN EN 856 ..... **4SH DN**

### ② FITTING TYPE

24° seal cone end with O-ring ..... **AOS** ..... -01  
90° cone end with O-ring ..... **BS** ..... -02  
Screwed end with 24° conus. .... **HS** ..... -03  
AVIT square flange ..... **FAS** ..... -10  
AVIT square flange ..... **FGS** ..... -11  
90° elbow square flange. .... **FBS** ..... -12  
SAE-flange ..... **SFS** ..... -20  
SAE-counter flange ..... **SGS** ..... -21  
90° SAE-Elbow flange connection ..... **SBS** ..... -22

### ③ FITTING MATERIAL REFERENCE NUMBER

Steel, galvanised, NBR. .... -1  
Steel, galvanised, FKM ..... -2  
Stainless steel (1.4571), NBR ..... -3  
Stainless steel (1.4571), FKM ..... -4

### ④⑤ HOSE LENGTH / DELIVERY OPTIONS

Please specify the desired length of hose [mm], the angles of twist <sup>1</sup> K and V, and other features clearly when ordering.

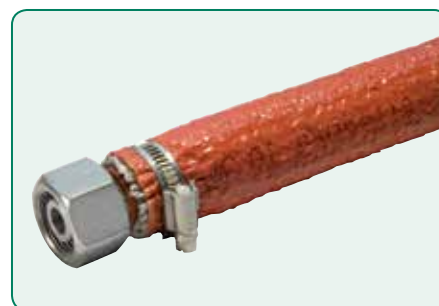
Pressure test (1.5 times operating pressure) ..... -DP  
Supplied with hose safety catch. .... -SF  
Supplied with stainless steel protection ..... -ES  
Supplied with heat protection ..... -HS



Schlauchfangsicherung ..... -SF  
Hose safety catch



Edelstahl-Schutzgeflecht. .... -ES  
Stainless steel protection



Hitzeschutz mit einseitiger Schlauchschelle. -HS  
Heat protection with single sided hose band clip

<sup>1</sup> Werden zwei Bogenarmaturen verpresst, müssen die Verdrehwinkel K und V angegeben werden. Seite 5.22 | If two elbow fittings are crimped, the angles of twist K and V have to be specified. Page 5.22

**SICHERHEITSHINWEISE**

Wir konfektionieren einbaufertige Schlauchleitungen nach DIN 20066 für Standard Hydrauliksysteme mit Hydrauliköl und anderen Ölen auf Mineralölbasis. Weitere Medien sind Glycol, Wasser (0°C bis +70°C) und Wasser-Öl-Emulsionen. Mechanische Beschädigungen und unzulässige Beanspruchung sind die häufigsten Ausfallursachen von Schlauchleitungen. Durch Verwendung geeigneter Armaturen bzw. Verbindungsstücke wird eine zusätzliche Beanspruchung des Schlauches vermieden. Schlauchleitungen sollen möglichst ihrer natürlichen Krümmung folgend eingebaut werden, wobei die zulässigen Biegeradien nicht unterschritten werden dürfen.



**SAFETY INSTRUCTIONS**

We customize ready-to-install hose connections acc. DIN 20066 for normal hydraulic systems with hydraulic oils and other mineral-based oils. Other media are glycol, water (0°C to +70°C) and water-oil emulsions. Mechanical damages and stress greater than tolerated levels are the most frequent causes for failure of hoses. Additional stresses on the hose can be avoided by the use of suitable fittings and connecting pieces. Hoses must be mounted following their natural bend, whereby the permissible bending radius must be respected.

Berücksichtigen Sie bereits bei der Planung die folgenden Faktoren:

- Druckverlust
- Die richtige Schlauchlänge
- Vermeidung von Torsion durch geeignete Armaturen
- Zweckmäßige Anordnung und Befestigung
- Zulässige Biegeradien
- Abstand / Abschirmung von wärmestrahrenden Bauteilen

Vermeiden Sie bei der Montage:

- Verdrehen (Torsion) der Schlauchleitung
- Zugbeanspruchung oder Stauchbelastung (bei kurzen Längen)
- Vermeiden von Abknicken (ggf. Knickschutz verwenden)
- Scheuerstellen

**VERWENDUNGSDAUER**

Auch bei zulässiger Beanspruchung unterliegen Schläuche und Schlauchleitungen einer natürlichen Alterung. Dadurch ist ihre Verwendungsdauer begrenzt. Gemäß der Empfehlung der DIN 20066 sollte die Lagerzeit für Schlauchware 4 Jahre und für Schlauchleitungen 2 Jahre nicht überschreiten.

Die Verwendungsdauer der Schlauchleitung einschließlich einer eventuellen Lagerdauer sollte 6 Jahre bei normalen Anforderungen nicht überschreiten. Bei erhöhten Anforderungen (erhöhte Einsatzzeit, stärkere äußere und innere Einflüsse, hydraulische handgeführte Werkzeuge) wird eine Betriebsdauer von 2 Jahren empfohlen.

You must consider right from the design the following parameter:

- Pressure loss
- The correct hose length
- Avoidance of torsion with suitable fittings
- Purpose-oriented arrangement and fastening
- Permissible bending radius
- Distance / shielding from heat-emitting components

Avoid the following during assembly:

- Torsion of the hose line
- Tensile stress or compression (with short lengths)
- Avoidance of bending (use of bend protection if applicable)
- Shear points

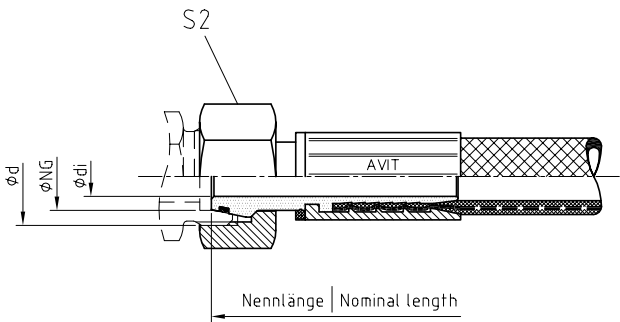
**SERVICE LIFE**

Even with permissible stress loads, hoses and hose lines are subject to natural ageing. Therefore their service life is limited. According to the recommendation of DIN 20066, the maximum storage time for hose materials is 4 years and for hose lines is 2 years.

The service life of the hose line and any possible storage time should not exceed 6 years with normal requirements. With increased requirements (extended usage time, heavy external and internal influences, hydraulically operated manual tools), a service life of 2 years is recommended.

| NENN-LÄNGE<br>NOMINAL LENGTH | ZULÄSSIGE LÄNGENTOLERANZEN NACH DIN 20066<br>PERMISSIBLE LENGTH TOLERANCE ACC. DIN 20066 |                |
|------------------------------|------------------------------------------------------------------------------------------|----------------|
|                              | ≤ DN 25                                                                                  | > DN 25        |
| [mm]                         |                                                                                          |                |
| < 630                        | -3 mm / +7 mm                                                                            | -4 mm / +12 mm |
| 630 - 1250                   | -4 mm / +12 mm                                                                           | -6 mm / +20 mm |
| 1250 - 2500                  | -6 mm / +20 mm                                                                           | -6 mm / +25 mm |
| 2500 - 8000                  | -0,5% / +1,5%                                                                            |                |
| 8000 >                       | -1,0% / +3,0%                                                                            |                |





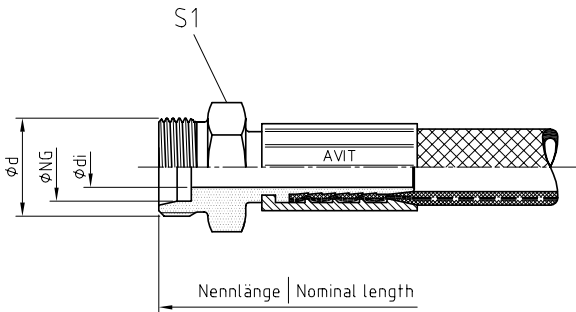
**DIN 20066 – P**  
**BAUREIHE / SERIES: S = HEAVY**  
24° Dichtkegel mit O-Ring und Überwurfmutter nach ISO 8434-1  
  
24° seal cone end with O-ring and union nut acc. ISO 8434-1

5

ZUBEHÖR • SCHLAUCHLEITUNGEN  
ACCESSORIES • HOSE CONNECTIONS

| SCHLAUCH / HOSE     |      |        |       |       |      | AVIT<br>NG | ABMESSUNGEN [mm]<br>DIMENSIONS |      |    | BESTELLCODE<br>ORDER CODE |
|---------------------|------|--------|-------|-------|------|------------|--------------------------------|------|----|---------------------------|
| QUALITÄT<br>QUALITY | DN   | SIZE   | WP    | BP    | BR   |            | d                              | di   | S2 |                           |
| 2SN                 | [mm] | [inch] | [bar] | [bar] | [mm] | [mm]       |                                |      |    | HQ DN TYP NG              |
|                     | 6    | ¼"     | 420   | 1600  | 100  | 10         | M18x1,5                        | 3,9  | 19 | 2SN 6 AOS 10              |
|                     | 8    | 5/16"  | 350   | 1400  | 115  | 12         | M20x1,5                        | 5,4  | 22 | 2SN 8 AOS 12              |
|                     | 12   | ½"     | 275   | 1100  | 180  | 16         | M24x1,5                        | 9,5  | 30 | 2SN 12 AOS 16             |
|                     | 16   | 5/8"   | 250   | 1020  | 200  | 20         | M30x2,0                        | 12,6 | 36 | 2SN 16 AOS 20             |
|                     | 19   | ¾"     | 215   | 860   | 240  | 25         | M36x2,0                        | 14,8 | 46 | 2SN 19 AOS 25             |
|                     | 25   | 1"     | 165   | 660   | 300  | 30         | M42x2,0                        | 20   | 50 | 2SN 25 AOS 30             |
|                     | 31   | 1 ¼"   | 125   | 500   | 420  | 38         | M52x2,0                        | 26   | 60 | 2SN 31 AOS 38             |
| 4SP                 | 38   | 1 ½"   | 90    | 360   | 500  | 50         | M68x2,0                        | 32   | 80 | 2SN 38 AOS 50             |
|                     | 12   | ½"     | 425   | 1900  | 175  | 16         | M24x1,5                        | 9,5  | 30 | 4SP 12 AOS 16             |
| 4SH                 | 16   | 5/8"   | 420   | 1600  | 200  | 20         | M30x2,0                        | 12,6 | 36 | 4SP 16 AOS 20             |
|                     | 19   | ¾"     | 420   | 1750  | 210  | 25         | M36x2,0                        | 14,8 | 46 | 4SH 19 AOS 25             |
|                     | 25   | 1"     | 385   | 1750  | 220  | 30         | M42x2,0                        | 19,5 | 50 | 4SH 25 AOS 30             |
|                     | 31   | 1 ¼"   | 350   | 1400  | 420  | 38         | M52x2,0                        | 25   | 60 | 4SH 31 AOS 38             |
|                     | 38   | 1 ½"   | 300   | 1250  | 560  | 50         | M68x2,0                        | 30   | 80 | 4SH 38 AOS 50             |

WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius



DIN 20066 – E  
BAUREIHE / SERIES: S = HEAVY  
24° Konusanschluss mit metrischem Gewinde nach ISO 8434-1  
24° cone end with metric thread acc. to ISO 8434-1

| SCHLAUCH / HOSE     |      |        |       |       |      | AVIT<br>NG | ABMESSUNGEN [mm]<br>DIMENSIONS |      |    | BESTELLCODE<br>ORDER CODE |
|---------------------|------|--------|-------|-------|------|------------|--------------------------------|------|----|---------------------------|
| QUALITÄT<br>QUALITY | DN   | SIZE   | WP    | BP    | BR   |            | d                              | di   | S1 |                           |
| HQ                  | [mm] | [inch] | [bar] | [bar] | [mm] | [mm]       |                                |      |    | HQ DN TYP NG              |
| 2SN                 | 6    | ¼"     | 420   | 1600  | 100  | 10         | M18x1,5                        | 3,9  | 19 | 2SN 6 HS 10               |
|                     | 8    | 5/16"  | 350   | 1400  | 115  | 12         | M20x1,5                        | 5,4  | 22 | 2SN 8 HS 12               |
|                     | 12   | ½"     | 275   | 1100  | 180  | 16         | M24x1,5                        | 9,5  | 27 | 2SN 12 HS 16              |
|                     | 16   | 5/8"   | 250   | 1020  | 200  | 20         | M30x2,0                        | 12,6 | 32 | 2SN 16 HS 20              |
|                     | 19   | ¾"     | 215   | 860   | 240  | 25         | M36x2,0                        | 14,8 | 41 | 2SN 19 HS 25              |
|                     | 25   | 1"     | 165   | 660   | 300  | 30         | M42x2,0                        | 20   | 46 | 2SN 25 HS 30              |
|                     | 31   | 1 ¼"   | 125   | 500   | 420  | 38         | M52x2,0                        | 26   | 55 | 2SN 31 HS 38              |
|                     | 38   | 1 ½"   | 90    | 360   | 500  | 50         | M68x2,0                        | 32   | 70 | 2SN 38 HS 50              |
| 4SP                 | 12   | ½"     | 425   | 1900  | 175  | 16         | M24x1,5                        | 9,5  | 27 | 4SP 12 HS 16              |
|                     | 16   | 5/8"   | 420   | 1600  | 200  | 20         | M30x2,0                        | 12,6 | 32 | 4SP 16 HS 20              |
| 4SH                 | 19   | ¾"     | 420   | 1750  | 210  | 25         | M36x2,0                        | 14,8 | 41 | 4SH 19 HS 25              |
|                     | 25   | 1"     | 385   | 1750  | 220  | 30         | M42x2,0                        | 19,5 | 46 | 4SH 25 HS 30              |
|                     | 31   | 1 ¼"   | 350   | 1400  | 420  | 38         | M52x2,0                        | 25   | 55 | 4SH 31 HS 38              |
|                     | 38   | 1 ½"   | 300   | 1250  | 560  | 50         | M68x2,0                        | 30   | 70 | 4SH 38 HS 50              |

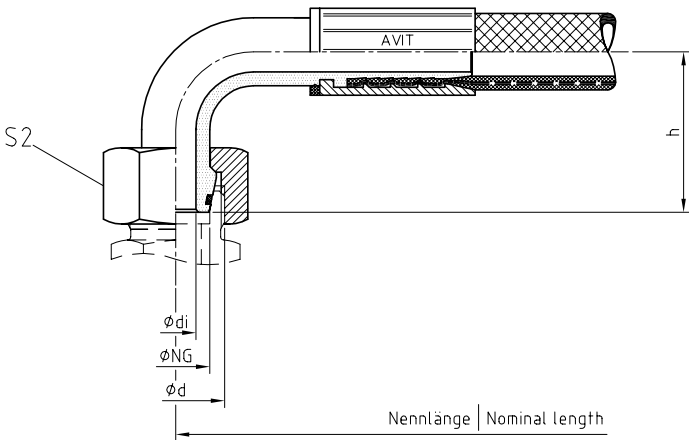
WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius



DIN 20066 – P90  
BAUREIHE / SERIES: S = HEAVY

24° Dichtkegel mit O-Ring und Überwurfmutter nach ISO 8434-1

24° seal cone end with O-ring and union nut acc. ISO 8434-1



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ZUBEHÖR • SCHLAUCHLEITUNGEN  
ACCESSORIES • HOSE CONNECTIONS

| QUALITÄT<br>QUALITY | SCHLAUCH / HOSE |       |     |      |     | AVIT<br>NG | ABMESSUNGEN [mm]<br>DIMENSIONS |      |      |    | BESTELLCODE<br>ORDER CODE |
|---------------------|-----------------|-------|-----|------|-----|------------|--------------------------------|------|------|----|---------------------------|
|                     | DN              | SIZE  | WP  | BP   | BR  |            | d                              | di   | h    | S2 |                           |
| 2SN                 | 6               | ¼"    | 420 | 1600 | 100 | 10         | M18x1,5                        | 3,9  | 33,0 | 22 | 2SN 6 BS 10               |
|                     | 8               | 5/16" | 350 | 1400 | 115 | 12         | M20x1,5                        | 5,4  | 38,5 | 24 | 2SN 8 BS 12               |
|                     | 12              | ½"    | 275 | 1100 | 180 | 16         | M24x1,5                        | 9,5  | 47,0 | 30 | 2SN 12 BS 16              |
|                     | 16              | 5/8"  | 250 | 1020 | 200 | 20         | M30x2,0                        | 12,6 | 52,5 | 36 | 2SN 16 BS 20              |
|                     | 19              | ¾"    | 215 | 860  | 240 | 25         | M36x2,0                        | 14,8 | 59,0 | 46 | 2SN 19 BS 25              |
|                     | 25              | 1"    | 165 | 660  | 300 | 30         | M42x2,0                        | 20   | 74,0 | 50 | 2SN 25 BS 30              |
|                     | 31              | 1 ¼"  | 125 | 500  | 420 | 38         | M52x2,0                        | 26   | 85,0 | 60 | 2SN 31 BS 38              |
| 4SP                 | 12              | ½"    | 425 | 1900 | 175 | 16         | M24x1,5                        | 9,5  | 47,0 | 30 | 4SP 12 BS 16              |
|                     | 16              | 5/8"  | 420 | 1600 | 200 | 20         | M30x2,0                        | 12,6 | 52,5 | 36 | 4SP 16 BS 20              |
| 4SH                 | 19              | ¾"    | 420 | 1750 | 210 | 25         | M36x2,0                        | 14,8 | 59,0 | 46 | 4SH 19 BS 25              |
|                     | 25              | 1"    | 385 | 1750 | 220 | 30         | M42x2,0                        | 19,5 | 74,0 | 50 | 4SH 25 BS 30              |
|                     | 31              | 1 ¼"  | 350 | 1400 | 420 | 38         | M52x2,0                        | 25   | 85,0 | 60 | 4SH 31 BS 38              |

WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius

#### AVIT-STANDARD

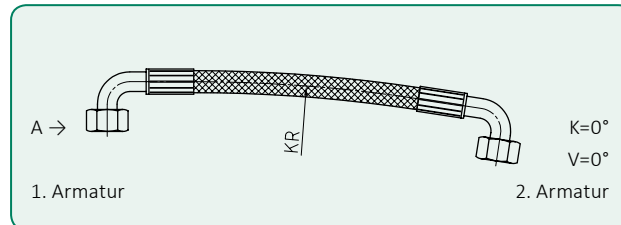
Wir verpresen bei zwei Bogenarmaturen an einer Schlauchleitung immer der natürlichen Schlauchkrümmung (KR) folgend.

A = Blickrichtung

#### AVIT-STANDARD

We are crimp two elbow connections to a hose line always in succession with the natural bend (KR).

A = Viewing direction



1. und 2. Bogenarmatur folgen der natürlichen Krümmung.  
*1st and 2nd elbow connections follow the natural bend.*

#### SCHLAUCHLEITUNGEN MIT VERDREHWINKEL

Wenn zwei Bogenarmaturen nicht der natürlichen Schlauchkrümmung folgen sollen, dann muss der Verdrehwinkel K angegeben werden.

Wenn zwei Bogenarmaturen verdreh zueinander verpresst werden sollen, dann muss der Verdrehwinkel V für die 2. Armatur angegeben werden. Die Angabe der Verdrehwinkel K und V erfolgt in Blickrichtung A immer von der 1. Armatur gesehen entgegen dem Uhrzeigersinn.

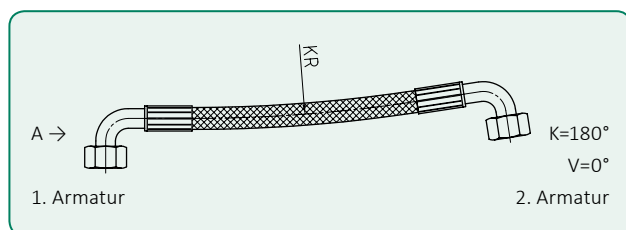
Die zulässige Einpresstoleranz der Verdrehwinkel K und V beträgt  $\pm 5^\circ$ .

#### HOSE ASSEMBLIES WITH ANGLE OF TWIST

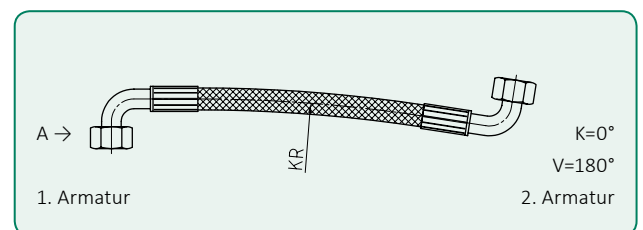
If the elbow fittings do not follow the natural bend of the hose, then the angle of twist K must be indicated.

If two elbow fittings are to be crimped toward each other in a twisted manner, then the angle of twist V must be indicated for the 2nd fitting. The angles of twist K and V are always determined when looking in direction A from the 1st fitting, counter-clockwise.

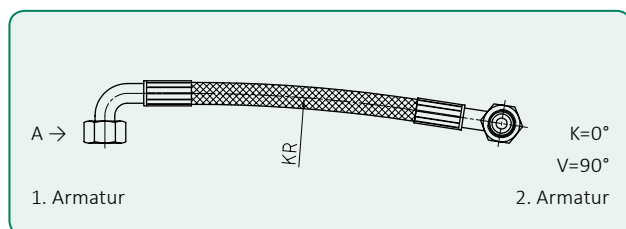
The permissible pressure tolerance of the angles of twist K and V is  $\pm 5^\circ$ .



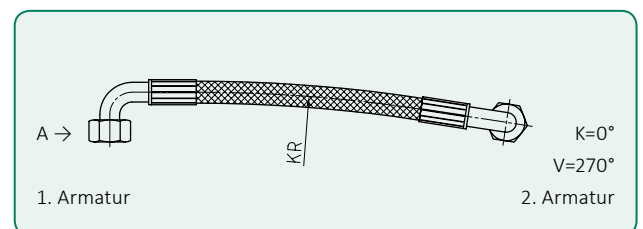
1. und 2. Bogenarmatur folgen nicht der natürlichen Krümmung.  
*1st and second elbow connections do not follow to the natural bend.*



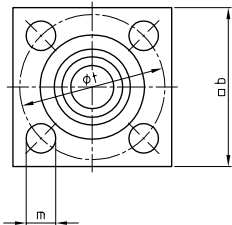
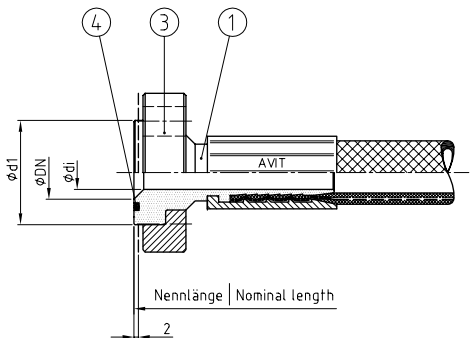
1. Bogenarmatur folgt der natürlichen Krümmung. 2. um 180° verdreht.  
*1st elbow connection follow to the natural bend. 2nd twisted by 180°.*



1. Bogenarmatur folgt der natürlichen Krümmung. 2. um 90° verdreht.  
*1st elbow connection follow to the natural bend. 2nd twisted by 90°.*



1. Bogenarmatur folgt der natürlichen Krümmung. 2. um 270° verdreht.  
*1st elbow connection follow to the natural bend. 2nd twisted by 270°.*



AVIT ≈ ISO 6164 <sup>1</sup>

- Für 2 mm Sicherheits-Flansch-Zentrierung
- Losflanshsystem Ausführung
- For 2 mm safety-flange-centring
- Two-piece design

STÜCKLISTE  
PARTS LIST

| Pos. | Bezeichnung / Description                                   |
|------|-------------------------------------------------------------|
| 1    | Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| 3    | Losflansch / Flange clamp                                   |
| 4    | O-Ring Dichtung / O-ring sealing                            |

ZUBEHÖR • SCHLAUCHLEITUNGEN  
ACCESSORIES • HOSE CONNECTIONS

| QUALITÄT<br>QUALITY | SCHLAUCH / HOSE |      |        |       |       | AVIT<br>DN | ABMESSUNGEN [mm]<br>DIMENSIONS |     |      |     |     | O-RING | BESTELLCODE<br>ORDER CODE  |
|---------------------|-----------------|------|--------|-------|-------|------------|--------------------------------|-----|------|-----|-----|--------|----------------------------|
|                     | DN              | SIZE | WP     | BP    | BR    |            | DN                             | d1  | d2   | b   | t   | m      |                            |
| 2SN                 | HQ              | [mm] | [inch] | [bar] | [bar] | [mm]       | [mm]                           |     |      |     |     |        |                            |
|                     | 6               | ¼"   | 420    | 1600  | 100   | 10         | 11                             | 28  | 5,5  | 50  | 44  | 11     | 16,3x2,40 2SN 6 FAS 10     |
|                     | 8               | ⅝"   | 350    | 1400  | 115   | 10         | 11                             | 28  | 5,5  | 50  | 44  | 11     | 16,3x2,40 2SN 8 FAS 10     |
|                     | 12              | ½"   | 275    | 1100  | 180   | 16         | 17,5                           | 38  | 9    | 60  | 54  | 11     | 22,4x2,62 2SN 12 FAS 16    |
|                     | 16              | ⅝"   | 250    | 1020  | 200   | 16         | 17,5                           | 38  | 12   | 60  | 54  | 11     | 22,4x2,62 2SN 16 FAS 16    |
|                     | 19              | ¾"   | 215    | 860   | 240   | 20         | 22,5                           | 46  | 14   | 70  | 64  | 13,5   | 28,0x2,62 2SN 19 FAS 20    |
|                     | 25              | 1"   | 165    | 660   | 300   | 25         | 28                             | 55  | 20   | 80  | 72  | 13,5   | 34,5x3,53 2SN 25 FAS 25    |
|                     | 31              | 1 ¼" | 125    | 500   | 420   | 32         | 32,5                           | 60  | 25   | 90  | 80  | 17     | 38,7x3,53 2SN 31 FAS 32    |
| 4SP                 | 38              | 1 ½" | 90     | 360   | 500   | 40         | 40,5                           | 76  | 32   | 100 | 98  | 17     | 53,0x5,33 2SN 38 FAS 40    |
|                     | 12              | ½"   | 420    | 1900  | 175   | 16         | 17,5                           | 38  | 9    | 60  | 54  | 11     | 22,4x2,62 4SP 12 FAS 16    |
| 4SH                 | 16              | ⅝"   | 420    | 1600  | 200   | 16         | 17,5                           | 38  | 12   | 60  | 54  | 11     | 22,4x2,62 4SP 16 FAS 16    |
|                     | 19              | ¾"   | 420    | 1750  | 200   | 20         | 22,5                           | 46  | 14   | 70  | 64  | 13,5   | 28,0x2,62 4SH 19 FAS 20    |
|                     | 25              | 1"   | 420    | 1750  | 210   | 25         | 28                             | 55  | 20   | 80  | 72  | 13,5   | 34,5x3,53 4SH 25 FAS 25    |
|                     | 31              | 1 ¼" | 385    | 1750  | 220   | 32         | 32,5                           | 60  | 25   | 90  | 80  | 17     | 38,7x3,53 4SH 31 FAS 32    |
| 6SP                 | 38              | 1 ½" | 350    | 1400  | 420   | 40         | 40,5                           | 76  | 32   | 100 | 98  | 17     | 53,0x5,33 4SH 38 FAS 40    |
|                     | 51              | 2"   | 420    | 1680  | 600   | 40-5       | 38,5                           | 92  | 38,5 | 120 | 118 | 22     | 50,17x5,33 6SP 51 FAS 40-5 |
|                     | 63              | 2 ½" | 350    | 1400  | 800   | 50-5       | 48                             | 110 | 48   | 150 | 145 | 26     | 56,52x5,33 6SP 63 FAS 50-5 |

WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius

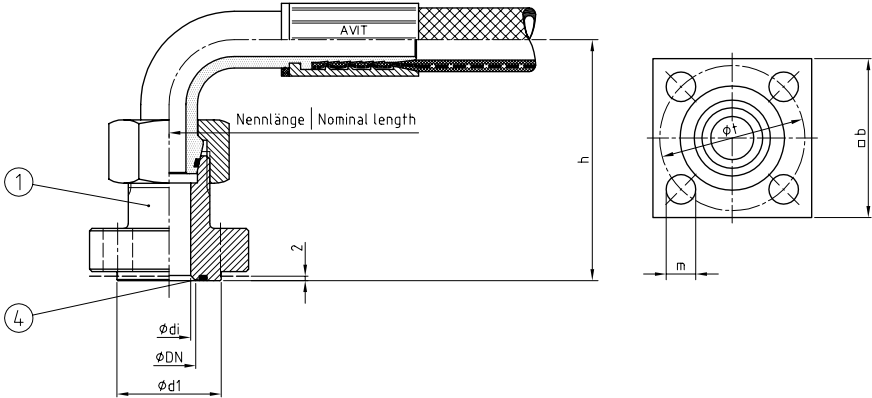
1 Lochbild gemäß Norm | Hole pattern according to ISO standard



- AVIT ≈ ISO 6164 <sup>1</sup>
- Für 2 mm Sicherheits-Flansch-Zentrierung

Zweitellige Ausführung
- For 2 mm safety-flange-centring

Two-piece design



| STÜCKLISTE<br>PARTS LIST |                                                    |
|--------------------------|----------------------------------------------------|
| Pos.                     | Bezeichnung / Description                          |
| 1                        | Flansch mit O-Ring Nut / Flange with O-ring groove |
| 4                        | O-Ring Dichtung / O-ring sealing                   |

| SCHLAUCH / HOSE     |    |                   |     |      |     | ABMESSUNGEN [mm]<br>DIMENSIONS |    |     |    |    |       |      | BESTELLCODE<br>ORDER CODE |               |
|---------------------|----|-------------------|-----|------|-----|--------------------------------|----|-----|----|----|-------|------|---------------------------|---------------|
| QUALITÄT<br>QUALITY | DN | SIZE              | WP  | BP   | BR  | AVIT<br>DN                     | d1 | di  | b  | t  | h     | m    | O-RING<br>Pos. 4          | HQ DN TYP DN  |
| 2SN                 | 6  | ¼"                | 420 | 1600 | 100 | 10                             | 28 | 5,5 | 50 | 44 | 76    | 11   | 16,3x2,40                 | 2SN 6 FBS 10  |
|                     | 8  | ⅝ <sub>16</sub> " | 350 | 1400 | 115 | 10                             | 28 | 5,5 | 50 | 44 | 81,5  | 11   | 16,3x2,40                 | 2SN 8 FBS 10  |
|                     | 12 | ½"                | 275 | 1100 | 180 | 12                             | 38 | 9,0 | 60 | 54 | 96    | 11   | 22,4x2,62                 | 2SN 12 FBS 12 |
|                     | 16 | ⅝ <sub>8</sub> "  | 250 | 1020 | 200 | 16                             | 38 | 12  | 60 | 54 | 104   | 11   | 22,4x2,62                 | 2SN 16 FBS 16 |
|                     | 19 | ¾"                | 215 | 860  | 240 | 20                             | 46 | 14  | 70 | 64 | 115,5 | 13,5 | 28,0x2,62                 | 2SN 19 FBS 20 |
|                     | 25 | 1"                | 165 | 660  | 300 | 25                             | 55 | 20  | 80 | 72 | 138   | 13,5 | 34,5x3,53                 | 2SN 25 FBS 25 |
| 4SP                 | 31 | 1 ¼"              | 125 | 500  | 420 | 32                             | 60 | 25  | 90 | 80 | 156   | 17   | 38,7x3,53                 | 2SN 31 FBS 32 |
|                     | 12 | ½"                | 100 | 500  | 500 | 12                             | 38 | 9,0 | 60 | 54 | 96    | 11   | 22,4x2,62                 | 4SP 12 FBS 12 |
| 4SH                 | 16 | ⅝ <sub>8</sub> "  | 420 | 1600 | 200 | 16                             | 38 | 12  | 60 | 54 | 104   | 11   | 22,4x2,62                 | 4SP 16 FBS 16 |
|                     | 19 | ¾"                | 420 | 1750 | 200 | 20                             | 46 | 14  | 70 | 64 | 115,5 | 13,5 | 28,0x2,62                 | 4SH 19 FBS 20 |
|                     | 25 | 1"                | 420 | 1750 | 210 | 25                             | 55 | 20  | 80 | 72 | 138   | 13,5 | 34,5x3,53                 | 4SH 25 FBS 25 |
|                     | 31 | 1 ¼"              | 385 | 1750 | 220 | 32                             | 60 | 25  | 90 | 80 | 156   | 17   | 38,7x3,53                 | 4SH 31 FBS 32 |

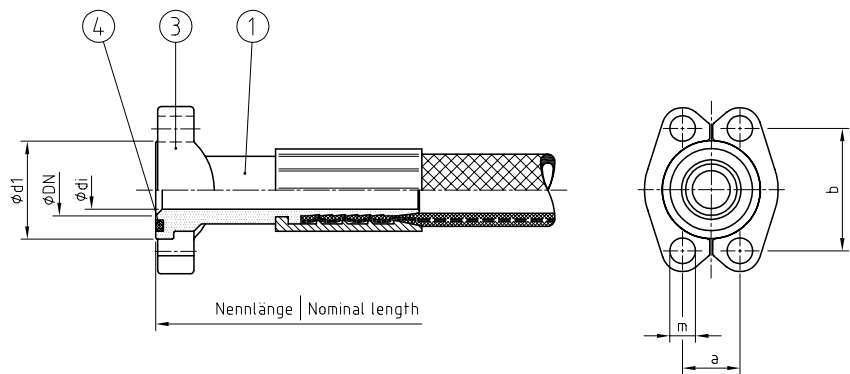
WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius

1 Lochbild gemäß Norm | Hole pattern according to ISO standard





DIN 20066 – S, ISO 6162-1/2 <sup>1</sup>



| STÜCKLISTE<br>PARTS LIST |                                                             |
|--------------------------|-------------------------------------------------------------|
| Pos.                     | Bezeichnung / Description                                   |
| 1                        | Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| (3)                      | Halbflansche / Split flange clamp pair                      |
| (4)                      | O-Ring Dichtung / O-ring sealing                            |

ZUBEHÖR • SCHLAUCHLEITUNGEN  
ACCESSORIES • HOSE CONNECTIONS

| SERIE<br>SERIES         | QUALITÄT<br>QUALITY | SCHLAUCH / HOSE |                |             |             |            | SAE<br>SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |      |      |      | O-RING | BESTELLCODE<br>ORDER CODE |                   |
|-------------------------|---------------------|-----------------|----------------|-------------|-------------|------------|-------------|--------------------------------|------|------|------|--------|---------------------------|-------------------|
|                         |                     | DN<br>[mm]      | SIZE<br>[inch] | WP<br>[bar] | BP<br>[bar] | BR<br>[mm] |             | d1                             | di   | a    | b    |        |                           | m                 |
| [psi]                   | HQ                  |                 |                |             |             |            | [inch]      |                                |      |      |      | Pos. 4 | HQ DN TYP Size Series     |                   |
| „3000“<br>ISO<br>6162-1 | 2SN                 | 12              | ½"             | 275         | 1100        | 180        | ¾"          | 30,2                           | 9,5  | 17,5 | 38,1 | 9      | 18,64x3,53                | 2SN 13 SFS ¾"-3   |
|                         |                     | 16              | 5⁄8"           | 250         | 1020        | 200        | ¾"          | 38,1                           | 12,6 | 22,2 | 47,6 | 11     | 24,99x3,53                | 2SN 16 SFS ¾"-3   |
|                         |                     | 19              | ¾"             | 215         | 860         | 240        | ¾"          | 38,1                           | 14,8 | 22,2 | 47,6 | 11     | 24,99x3,53                | 2SN 19 SFS ¾"-3   |
|                         |                     | 25              | 1"             | 165         | 660         | 300        | 1"          | 44,4                           | 20,0 | 26,2 | 52,4 | 11     | 32,92x3,53                | 2SN 25 SFS 1"-3   |
|                         |                     | 31              | 1 ¼"           | 125         | 500         | 420        | 1 ¼"        | 50,8                           | 26,0 | 30,2 | 58,7 | 11     | 37,69x3,53                | 2SN 31 SFS 1 ¼"-3 |
|                         |                     | 38              | 1 ½"           | 90          | 360         | 500        | 1 ½"        | 60,3                           | 31,0 | 35,7 | 69,9 | 13,5   | 47,22x3,53                | 2SN 38 SFS 1 ½"-3 |
| „6000“<br>ISO<br>6162-2 | 4SP                 | 12              | ½"             | 420         | 1900        | 175        | ¾"          | 31,7                           | 9,5  | 18,2 | 40,5 | 9      | 18,64x3,53                | 4SP 12 SFS ¾"-6   |
|                         |                     | 16              | 5⁄8"           | 420         | 1600        | 200        | ¾"          | 41,3                           | 12,6 | 23,8 | 50,8 | 11     | 24,99x3,53                | 4SP 16 SFS ¾"-6   |
|                         | 4SH                 | 19              | ¾"             | 420         | 1750        | 210        | ¾"          | 41,3                           | 14,8 | 23,8 | 50,8 | 11     | 24,99x3,53                | 4SH 19 SFS ¾"-6   |
|                         |                     | 25              | 1"             | 385         | 1750        | 220        | 1"          | 47,6                           | 20,0 | 27,8 | 57,2 | 13,5   | 32,92x3,53                | 4SH 25 SFS 1"-6   |
|                         |                     | 31              | 1 ¼"           | 350         | 1400        | 420        | 1 ¼"        | 54                             | 26,0 | 31,8 | 66,7 | 15     | 37,69x3,53                | 4SH 31 SFS 1 ¼"-6 |
|                         |                     | 38              | 1 ½"           | 300         | 1250        | 560        | 1 ½"        | 63,5                           | 31,0 | 36,5 | 79,3 | 17     | 47,22x3,53                | 4SH 38 SFS 1 ½"-6 |

WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius

STANDARD LIEFERUMFANG

Wir liefern Ihnen nur die mit dem Schlauch verpresste Armatur (Pos.1).  
Passendes Zubehör (Pos.3, 4) liefern wir auf Wunsch durch Ihre detail-  
lierte Angabe mit.

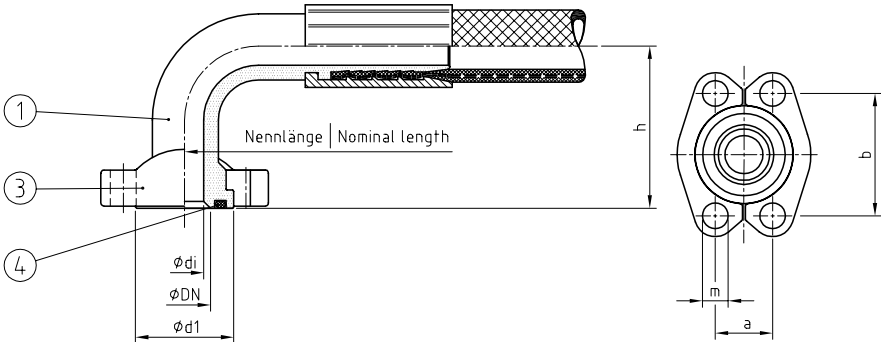
SCOPE OF DELIVERY

We deliver only the fitting (Pos.1) pressed with the hose.  
Suitable accessories (Pos.3, 4) can be supplied on request with your  
detailed information.

1 Lochbild gemäß Norm | Hole pattern according to ISO standard



DIN 20066 – S90, ISO 6162-1/2 <sup>1</sup>



| STÜCKLISTE<br>PARTS LIST |                                                             |
|--------------------------|-------------------------------------------------------------|
| Pos.                     | Bezeichnung / Description                                   |
| 1                        | Flanschbund mit O-Ring Nut / Flange head with O-ring groove |
| (3)                      | Halbflansche / Split flange clamp pair                      |
| (4)                      | O-Ring Dichtung / O-ring sealing                            |

| SERIE<br>SERIES         | QUALITÄT<br>QUALITY | SCHLAUCH / HOSE |      |      |        |       | SAE<br>SIZE | ABMESSUNGEN [mm]<br>DIMENSIONS |      |        |      |      |      | O-RING     | BESTELLCODE<br>ORDER CODE |
|-------------------------|---------------------|-----------------|------|------|--------|-------|-------------|--------------------------------|------|--------|------|------|------|------------|---------------------------|
|                         |                     | DN              | SIZE | WP   | BP     | BR    |             | d1                             | di   | h      | a    | b    | m    |            |                           |
|                         |                     | [psi]           | HQ   | [mm] | [inch] | [bar] |             | [bar]                          | [mm] | [inch] |      |      |      |            |                           |
| „3000“<br>ISO<br>6162-1 | 2SN                 | 12              | ½"   | 275  | 1100   | 180   | ½"          | 30,2                           | 9,5  | 44,5   | 17,5 | 38,1 | 9    | 18,64x3,53 | 2SN 13 SBS ½"-3           |
|                         |                     | 16              | ⅝"   | 250  | 1020   | 200   | ¾"          | 38,1                           | 12,6 | 55,5   | 22,2 | 47,6 | 11   | 24,99x3,53 | 2SN 16 SBS ¾"-3           |
|                         |                     | 19              | ¾"   | 215  | 860    | 240   | ¾"          | 38,1                           | 14,8 | 61,5   | 22,2 | 47,6 | 11   | 24,99x3,53 | 2SN 19 SBS ¾"-3           |
|                         |                     | 25              | 1"   | 165  | 660    | 300   | 1"          | 44,4                           | 20,0 | 70,5   | 26,2 | 52,4 | 11   | 32,92x3,53 | 2SN 25 SBS 1"-3           |
|                         |                     | 31              | 1 ¼" | 125  | 500    | 420   | 1 ¼"        | 50,8                           | 26,0 | 76,5   | 30,2 | 58,7 | 11   | 37,69x3,53 | 2SN 31 SBS 1 ¼"-3         |
|                         |                     | 38              | 1 ½" | 90   | 360    | 500   | 1 ½"        | 60,3                           | 31,0 | 110    | 35,7 | 69,9 | 13,5 | 47,22x3,53 | 2SN 38 SBS 1 ½"-3         |
| „6000“<br>ISO<br>6162-2 | 4SP                 | 12              | ½"   | 420  | 1900   | 175   | ½"          | 31,7                           | 9,5  | 45,0   | 18,2 | 40,5 | 9    | 18,64x3,53 | 4SP 12 SBS ½"-6           |
|                         |                     | 16              | ⅝"   | 420  | 1600   | 200   | ¾"          | 41,3                           | 12,6 | 55,5   | 23,8 | 50,8 | 11   | 24,99x3,53 | 4SP 16 SBS ¾"-6           |
|                         | 4SH                 | 19              | ¾"   | 420  | 1750   | 210   | ¾"          | 41,3                           | 14,8 | 59,0   | 23,8 | 50,8 | 11   | 24,99x3,53 | 4SH 19 SBS ¾"-6           |
|                         |                     | 25              | 1"   | 385  | 1750   | 220   | 1"          | 47,6                           | 20,0 | 73,0   | 27,8 | 57,2 | 13,5 | 32,92x3,53 | 4SH 25 SBS 1"-6           |
|                         |                     | 31              | 1 ¼" | 350  | 1400   | 420   | 1 ¼"        | 54                             | 26,0 | 85,0   | 31,8 | 66,7 | 15   | 37,69x3,53 | 4SH 31 SBS 1 ¼"-6         |
|                         |                     | 38              | 1 ½" | 300  | 1250   | 560   | 1 ½"        | 63,5                           | 31,0 | 112,0  | 36,5 | 79,3 | 17   | 47,22x3,53 | 4SH 38 SBS 1 ½"-6         |

WP Betriebsdruck | Working pressure  
BP Berstdruck | Burst pressure  
BR Biegeradius | Bend radius

STANDARD LIEFERUMFANG

Wir liefern Ihnen nur die mit dem Schlauch verpresste Armatur (Pos.1).  
Passendes Zubehör (Pos.3, 4) liefern wir auf Wunsch durch Ihre detail-  
lierte Angabe mit.

SCOPE OF DELIVERY

We deliver only the fitting (Pos.1) pressed with the hose.  
Suitable accessories (Pos.3, 4) can be supplied on request with your  
detailed information.

1 Lochbild gemäß Norm | Hole pattern according to ISO standard

## 1. Allgemeines

- 1.1. Für unsere Angebote, Lieferungen und Leistungen gelten ausschließlich nachstehende Bedingungen. Entgegenstehende oder von unseren Bedingungen abweichende Bedingungen des Käufers erkennen wir nicht an, es sei denn, wir hätten ausdrücklich schriftlich ihrer Geltung zugestimmt. Abweichende Vereinbarungen gelten jeweils nur für einen bestimmten Vertrag und nicht für nachfolgende Verträge, soweit nicht ausdrücklich etwas anderes vereinbart ist.
- 1.2. Alle Vereinbarungen, Nebenabreden und Vertragsänderungen bedürfen der Schriftform. Dies gilt auch für eine Aufhebung dieser Schriftformklausel. Mündliche oder schriftliche Zusagen, die von unseren Vertragsbedingungen und/oder der Auftragsbestätigung abweichen, bedürfen zu ihrer Wirksamkeit der Zustimmung unserer Geschäftsführung. Unsere Innen- oder Außendienstmitarbeiter haben keine Befugnis, abweichende Vereinbarungen zu treffen oder Sonderkonditionen zu gewähren.

## 2. Angebot, Vertragsabschluss

- 2.1. Unsere Angebote sind freibleibend. Ein Liefer- oder sonstiger Vertrag kommt erst zustande, wenn wir die Kundenbestellung oder den sonstigen Auftrag schriftlich bestätigen oder die Ware ausgeliefert haben.
- 2.2. Unsere Auftragsbestätigung wird maschinell erstellt und bedarf zu ihrer Wirksamkeit keiner Unterschrift.
- 2.3. An Abbildungen, Zeichnungen, Kalkulationen und sonstigen Unterlagen, behalten wir uns Eigentums- und Urheberrechte vor. Dies gilt auch für solche schriftlichen Unterlagen, die als „vertraulich“ bezeichnet sind. Vor ihrer Weitergabe an Dritte bedarf der Besteller unserer ausdrücklichen, schriftlichen Zustimmung.

## 3. Preise – Zahlungen

- 3.1. Für die Berechnung sind die am Tage der Lieferung geltenden Preise nach unserer verbindlichen Preisliste maßgebend, soweit nicht ausdrücklich schriftlich ein Festpreis vereinbart worden ist.
- 3.2. Sämtliche Preise sind Nettopreise ohne Umsatzsteuer, die der Käufer in der jeweiligen gesetzlichen Höhe zusätzlich zu entrichten hat.
- 3.3. Für Bestellungen mit einem Nettowarenwert von unter € 50,00 wird ein Mindermengenzuschlag von € 15,00 berechnet.
- 3.4. Erhöhen sich zwischen dem Tag der Auftragsbestätigung und dem Tag der Lieferung unsere sonstigen Materialbeschaffungskosten, Energiekosten oder Lohn-/Lohnnebenkosten, so sind wir berechtigt, einen vereinbarten Festpreis entsprechend anzupassen. Im Falle einer Preiserhöhung in Höhe von mehr als 5 % ist der Käufer berechtigt, von dem Vertrag unverzüglich, spätestens jedoch innerhalb von 10 Arbeitstagen nach Kenntnis von der Preiserhöhung, zurückzutreten.
- 3.5. Soweit nicht ausdrücklich etwas anderes vereinbart worden ist, haben Zahlungen innerhalb von 10 Tagen nach Rechnungsdatum mit 2 % Skonto und innerhalb von 30 Tagen nach Rechnungsdatum ohne Abzug zu erfolgen. Anspruch auf Skonto besteht nicht, wenn ältere, fällige Rechnungen unbezahlt sind.
- 3.6. Bei Überschreitung von Zahlungsfristen sind wir berechtigt, Zinsen in Höhe von 8 Prozentpunkten über dem Basiszinssatz (247 BGB) p.a. zu verlangen. Des weiteren werden alle unsere Forderungen sofort fällig.
- 3.7. Die Aufrechnung mit Gegenansprüchen durch den Käufer ist nur zulässig, wenn diese Gegenansprüche unbestritten oder rechtskräftig festgestellt sind. Wegen Mängel kann der Käufer allenfalls den 3-fachen Betrag des Nacherfüllungsaufwandes zurückhalten. Bei Ausübung des Zurückbehaltungsrechtes ist der Käufer verpflichtet, uns nach unserer Wahl Sicherheit für den nicht gezahlten Teilbetrag durch Bankbürgschaft oder Hinterlegung bei einem Notar seiner Wahl zu leisten.

## 4. Lieferung

- 4.1. Lieferfristen (Termine) beginnen mit dem Datum unserer Auftragsbestätigung, jedoch nicht vor Eingang etwa vereinbarter Anzahlungen und nicht vor eindeutiger Klärung aller Einzelheiten des Auftrages unter Beibringung der erforderlichen Bescheinigungen und/oder Bereitstellung aller notwendigen Unterlagen. Die Lieferfrist ist eingehalten, wenn der Gegenstand bis zu ihrem Ablauf unser Werk bzw. unser Lager verlassen hat oder die Versandbereitschaft mitgeteilt ist, wenn die Ware ohne unser Verschulden nicht rechtzeitig abgesendet werden kann. Termine gelten mangels besonderer Vereinbarung als annähernd.
- 4.2. Bei Überschreitung von Terminen, die in der Auftragsbestätigung nicht ausdrücklich als „fix“ bezeichnet sind, kann der Käufer eine angemessene Nachfrist zur Lieferung/Leistung setzen. Erst mit Ablauf dieser Nachfrist können wir in Verzug geraten.
- 4.3. Termine verlängern sich unbeschadet unserer Rechte aus Zahlungsverzögerungen des Käufers um den Zeitraum, um den der Käufer seinen Verpflichtungen uns gegenüber nicht nachkommt.
- 4.4. Richtige und rechtzeitige Selbstbelieferung bleibt vorbehalten, soweit die nicht ordnungsgemäße Selbstbelieferung von uns nicht zu vertreten ist.
- 4.5. Unvorhersehbare, außergewöhnliche, von uns nicht zu vertretende Ereignisse, wie Arbeitskämpfe, Betriebsstörungen, behördliche Maßnahmen, Transportstörungen oder sonstige Fälle höherer Gewalt, gleich ob diese Ereignisse bei uns oder unserem Vorlieferanten auftreten, befreien uns von der Verpflichtung aus dem jeweiligen Vertrag; Hindernisse vorübergehender Natur allerdings nur für die Dauer der Behinderung zzgl. einer angemessenen Anlauffrist. Vorbezeichnete Umstände sind auch dann nicht von uns zu vertreten, wenn sie bereits während eines eingetretenen Verzuges entstehen. Wird hierdurch die Lieferung nachträglich unmöglich oder für eine Partei unzumutbar, sind beide Parteien berechtigt, vom Vertrag zurückzutreten.
- 4.6. Unsere Haftung für Verzögerungsschäden, die auf einer leicht fahrlässigen Pflichtverletzung beruhen, ist ausgeschlossen, es sei denn, die Pflichtverletzung führt zu einer Verletzung des Lebens, des Körpers oder der Gesundheit. Eine Änderung der Beweislast zum Nachteil des Käufers ist mit dieser Regelung nicht verbunden.
- 4.7. Beruht die Haftung für Verzögerungsschäden nicht nur auf einer leicht fahrlässigen Pflichtverletzung, so ist der Käufer unter Ausschluss weiterer Ansprüche berechtigt nur eine Entschädigung zu fordern, die für jede volle Woche der Verspätung 0,5 %, im Ganzen aber höchstens 5 % vom Wert desjenigen Teiles der Gesamtlieferung, der infolge der Verspätung nicht rechtzeitig oder nicht vertragsgemäß benutzt werden kann, beträgt.
- 4.8. Wir sind zu Teillieferungen berechtigt, soweit diese für den Käufer zumutbar sind. Teillieferungen können gesondert in Rechnung gestellt werden.

## 5. Versand, Gefahrübergang

- 5.1. Sofern nichts anderes vereinbart worden ist, erfolgt die Lieferung ab Werk (Essen). Falls als Lieferbedingungen Incoterms vereinbart worden sind, findet die zum Zeitpunkt des Abschlusses des Vertrages geltende Fassung Anwendung.
- 5.2. Wird die Ware auf Wunsch des Käufers an einen anderen Ort als den Erfüllungsort versandt, trägt der Käufer alle dadurch entstehenden Kosten. Uns steht die Wahl des Transportweges und des Transportunternehmens frei. Transportschäden hat der Käufer uns und dem Transportunternehmen sofort bei Empfang der Ware schriftlich nach Art und Umfang zu melden. Eine Versicherung der Ware gegen Transportschäden, Transportverluste oder Bruch erfolgt nur auf ausdrücklichen Wunsch des Käufers zu seinen Lasten.
- 5.3. Bei Lieferungen ab Werk erfolgen Versand und Transport stets auf Gefahr des Käufers. Dies gilt auch, wenn von uns an einen Dritten geliefert wird (Streckenlieferungen) und für die Rücksendung von Waren. Die Gefahr geht, auch bei Teillieferung, auf den Käufer über, sobald die Sendung an die den Transport ausführende Person übergeben worden ist oder zwecks Versendung eines unserer Lager oder bei Lieferung ab Werk unser Werk verlassen hat.

## 6. Eigentumsvorbehalt

- 6.1. Alle gelieferten Waren bleiben unser Eigentum (Vorbehaltsware) bis zur Erfüllung sämtlicher Forderungen, gleich aus welchem Rechtsgrund, einschließlich der künftig entstehenden und bedingten Forderungen aus gleichzeitig oder später abgeschlossenen Verträgen. Das gilt auch, wenn Zahlungen auf besonders bezeichnete Forderungen geleistet werden. Bestehen Anhaltspunkte, die die Annahme der Zahlungsunfähigkeit des Käufers oder das Drohen einer solchen rechtfertigen, sind wir berechtigt, ohne Fristsetzung vom Vertrag zurückzutreten und Herausgabe der Ware zu verlangen.
- 6.2. Be- und Verarbeitungen der Vorbehaltsware erfolgen für uns als Hersteller im Sinne des § 950 BGB, ohne uns zu verpflichten. Die verarbeitete Ware gilt als Vorbehaltsware im Sinne der Ziff. 6.1. Bei Verarbeitung, Verbindung, Vermischung und Vermengung der Vorbehaltsware mit anderen Waren durch den Käufer steht uns das Miteigentum an der neuen Sache im Verhältnis des Rechnungswertes der Vorbehaltsware zum Rechnungswert der anderen verwendeten Waren zu. Erlischt unser Eigentum durch Verbindung oder Vermischung, so überträgt der Käufer bereits jetzt die ihm zustehenden Eigentumsrechte an dem neuen Bestand oder der Sache im Umfang des Rechnungswertes der Vorbehaltsware und verwahrt sie unentgeltlich für uns. Die hiernach entstehenden Miteigentumsrechte gelten als Vorbehaltsware im Sinne der Ziff. 6.1.
- 6.3. Der Käufer ist nur im Rahmen eines ordnungsgemäßen Geschäftsbetriebes und solange er nicht im Verzuge ist, berechtigt, die Vorbehaltsware weiter zu veräußern, zu verarbeiten oder mit anderen Sachen zu verbinden oder sonst einzubauen (Weiterveräußerung). Jede anderweitige Verfügung über die Vorbehaltsware ist unzulässig. Von dritter Seite vorgenommene Pfändungen oder sonstige Zugriffe auf die Vorbehaltsware sind uns unverzüglich anzuzeigen.

- 6.4. Die Forderungen des Käufers aus der Weiterveräußerung der Vorbehaltsware werden bereits jetzt an uns abgetreten. Sie dienen in demselben Umfange zur Sicherung wie die Vorbehaltsware. Der Käufer ist zu einer Weiterveräußerung nur berechtigt und ermächtigt, wenn sichergestellt ist, dass die ihm daraus zustehenden Forderungen auf uns übergehen.
- 6.5. Wird die Vorbehaltsware vom Käufer zusammen mit anderen, nicht von uns gelieferten Waren zu einem Gesamtpreis veräußert, so erfolgt die Abtretung der Forderung aus der Veräußerung in Höhe des Rechnungswertes unserer jeweils veräußerten Vorbehaltsware.
- 6.6. Wird die abgetretene Forderung in eine laufende Rechnung aufgenommen, so tritt der Käufer bereits hiermit einen der Höhe nach dieser Forderung entsprechenden Teil des Saldos einschließlich des Schlussaldos aus dem Kontokorrent an uns ab.
- 6.7. Der Käufer ist bis zu unserem Widerruf zur Einziehung der an uns abgetretenen Forderung ermächtigt. Wir sind zum Widerruf berechtigt, wenn der Käufer seinen Zahlungsverpflichtungen aus der Geschäftsverbindung mit uns nicht ordnungsgemäß nachkommt oder uns Umstände bekannt werden, die geeignet sind, die Kreditwürdigkeit des Käufers erheblich zu mindern. Liegen die Voraussetzungen für die Ausübung des Widerrufsrechtes vor, hat der Käufer auf unser Verlangen hin uns unverzüglich die abgetretenen Forderungen und deren Schuldner bekanntzugeben, alle zum Einzug der Forderung erforderlichen Angaben zu machen, uns die dazugehörigen Unterlagen auszuhändigen und dem Schuldner die Abtretung anzuzeigen. Zur Abtretung der Forderungen im Übrigen ist der Käufer nicht befugt, auch nicht aufgrund unserer Einziehungsermächtigung.
- 6.8. Übersteigt der realisierbare Wert (Rechnungsbetrag der Ware oder Nennbetrag der Forderungsrechte) der für uns bestehenden Sicherheiten die gesicherten Forderungen insgesamt um mehr als 50 %, sind wir auf Verlangen des Käufers insoweit zur Freigabe von Sicherheiten nach unserer Wahl verpflichtet.
- 6.9. Wenn wir den Eigentumsvorbehalt geltend machen, so gilt dies nur dann als Rücktritt vom Vertrag, wenn wir dies ausdrücklich schriftlich erklären. Das Recht des Käufers, die Vorbehaltsware zu besitzen, erlischt, wenn er seine Verpflichtung aus diesem oder einem anderen Vertrag nicht erfüllt.

## **7. Haftung für Mängel**

- 7.1. Wir haften nicht für unsachgemäße oder ungeeignete Verwendung, insbesondere übermäßige Beanspruchung, fehlerhafte Montage bzw. fehlerhaften Einsatz durch den Käufer oder Dritte, natürliche Abnutzung (Verschleiß), fehlerhafte und nachlässige Behandlung und Handhabung, insbesondere durch nicht geschultes Personal
- 7.2. Der Käufer ist verpflichtet, die gelieferten Waren – auch wenn zuvor Muster oder Proben übersandt worden waren – unverzüglich nach Eintreffen bei ihm auf Vollständigkeit und Ordnungsmäßigkeit sorgfältig zu untersuchen. Die Lieferung gilt als genehmigt, wenn eine Mängelrüge nicht binnen 10 Arbeitstagen nach Eingang der Ware am Bestimmungsort oder wenn der Mangel bei einer ordnungsgemäßen Untersuchung nicht erkennbar war, binnen 10 Arbeitstagen nach seiner Entdeckung schriftlich, per Telefax oder E-Mail eingegangen ist. Das gilt auch für Mehrlieferungen. Wird eine Mehrlieferung nicht innerhalb von 10 Tagen ab Eingang der Ware am Bestimmungsort gerügt, gilt diese als genehmigt. Unsere Außendienstmitarbeiter sind zur Entgegennahme von Mängel- und Mengenrügen nicht berechtigt.
- 7.3. Nimmt der Käufer eine mangelhafte Ware an, obwohl er den Mangel erkennt, so stehen ihm die Ansprüche und Rechte bei Mängeln nur zu, wenn er diese wegen des Mangels bei Annahme vorbehält.
- 7.4. Für Ansprüche des Käufers wegen Mängel der Ware, haften wir zwei Jahre jeweils beginnend ab Ablieferung. Die Haftung für Rechtsmängel nach den gesetzlichen Vorschriften bleibt unberührt. Die Haftung für mangelbedingte Schäden richtet sich nach Ziff. 10.
- 7.5. Bei berechtigter Mängelrüge hat der Käufer zunächst nur einen Anspruch auf Nacherfüllung, den wir nach unserer, billigen Ermessen unterliegender Wahl entweder durch Ausbesserung oder durch Lieferung einer mangelfreien Sache erbringen können. Ist die Nacherfüllung fehlgeschlagen, dem Käufer unzumutbar (§ 440 BGB) oder entbehrlich, weil:
  - 7.5.1. wir die Nacherfüllung abschließend ablehnen,
  - 7.5.2. wir die Nacherfüllung zu einem vertraglich bestimmten Termin oder innerhalb einer bestimmten Frist nicht bewirken und der Käufer im Vertrag den Fortbestand seines Leistungsinteresses an der Rechtzeitigkeit der Leistung gebunden hat oder
  - 7.5.3. besondere Umstände vorliegen, die unter Abwägung der beiderseitigen Interessen den sofortigen Rücktritt rechtfertigen (§ 323 Abs. 2 BGB), so steht dem Käufer sofort das Recht zu, den Kaufpreis zu mindern oder nach seiner Wahl vom Vertrag zurückzutreten oder Schadensersatz statt Leistung oder Ersatz vergeblicher Aufwendungen nach Maßgabe der Ziff. 10 zu verlangen.
- 7.6. Zur Vornahme aller uns nach billigen Ermessen notwendig erscheinenden Nachbesserungen und Nachlieferungen hat uns der Käufer die erforderliche Zeit und Gelegenheit zu geben, sonst sind wir von der Mängelhaftung befreit. Nur in dringenden Fällen der Gefährdung der Betriebssicherheit und zur Abwehr unverhältnismäßig großer Schäden, wobei wir sofort zu verständigen sind, oder wenn wir mit der Beseitigung des Mangels in Verzug sind, hat der Käufer das Recht, den Mangel selbst oder durch Dritte beseitigen zu lassen und von uns den Ersatz der notwendigen Kosten zu verlangen.

## **8. Haftung auf Schadensersatz**

- 8.1. Wir haften für Schäden aus der Verletzung des Lebens, des Körpers oder der Gesundheit nach den gesetzlichen Bestimmungen.
- 8.2. Im Übrigen ist unsere Haftung wegen Pflichtverletzungen und unsere außervertragliche Haftung auf Vorsatz und grobe Fahrlässigkeit beschränkt. Die Haftung für grobes Verschulden unserer Arbeitnehmer, Mitarbeiter und einfachen Erfüllungsgehilfen ist hierbei ausgeschlossen.
- 8.3. Ausgenommen von Ziff. 10.2 ist die Verletzung von vertragswesentlichen Pflichten (Kardinalpflichten). In diesem Falle haften wir auch bei leichter Fahrlässigkeit für eigenes Verschulden sowie für das Verschulden eines unserer Arbeitnehmer, Mitarbeiter oder einfachen Erfüllungsgehilfen.
- 8.4. Die Haftung ist auf den vertragstypischen Schaden begrenzt, mit dessen Entstehung wir bei Vertragsschluss aufgrund der uns zu diesem Zeitpunkt bekannten Umstände rechnen mussten.
- 8.5. Eine weitergehende Haftung ist unabhängig von ihrem Rechtsgrund ausgeschlossen. Wir haften insbesondere nicht für mangelnden wirtschaftlichen Erfolg, entgangenen Gewinn, mittelbaren Schäden, Mangelfolgeschäden und Schäden aus Ansprüchen Dritter.
- 8.6. Die vorstehenden Haftungseinschränkungen gelten gleichermaßen für Ansprüche auf Ersatz vergeblicher Aufwendungen (§ 284 BGB).
- 8.7. Gegen uns gerichtete Schadensersatzansprüche, gleich aus welchem Rechtsgrund, verjähren innerhalb von zwei Jahren ab dem gesetzlich geregelten Beginn der Verjährungsfrist, spätestens jedoch ab Ablieferung der Sache.
- 8.8. Mit den vorstehenden Regelungen ist eine Beweislastumkehr zum Nachteil des Käufers nicht verbunden.
- 8.9. Schadensersatzansprüche nach dem Produkthaftungsgesetz bleiben unberührt.

## **9. Rücksendungen**

Die Rücksendung gekaufter Ware oder eine Rückabwicklung des Vertrages ist außerhalb der Fälle von Ziff. 4.4, Ziff. 9 und Ziff. 10 nur in Ausnahmefällen und nur nach unserer vorherigen ausdrücklichen Zustimmung zulässig. Ohne unsere Zustimmung zurückgesandte Waren werden wir zurückweisen bzw. unfrei an den Käufer zurücksenden. Rückwaren im vorgenannten Sinne reisen stets auf Gefahr und auf Kosten des Käufers. Soweit wir uns ausnahmsweise mit einer Warenrücknahme einverstanden erklären, berechnen wir mindestens 25% des Nettorechnungswertes wenigstens jedoch 50 EUR zur Deckung unserer Kosten. Sonderanfertigungen nehmen wir grundsätzlich nicht zurück.

## **10. Erfüllungsort, Gerichtsstand, anwendbares Recht**

- 10.1. Erfüllungsort für alle beiderseitigen Verpflichtungen ist Essen.
- 10.2. Ausschließlicher Gerichtsstand für alle Streitigkeiten ist bei Kaufleuten das Gericht, das für unseren Sitz zuständig ist. Wir sind jedoch berechtigt, den Käufer auch an einem sonstigen gesetzlichen Gerichtsstand zu verklagen.
- 10.3. Die Beziehung zwischen uns und dem Käufer unterliegen deutschem Recht mit Ausnahme des Abkommens der Vereinten Nationen über den Internationalen Warenkauf (CISG) und der Regeln des Internationalen Privatrechts.
- 10.4. Sollten Einzelbestimmungen unwirksam sein oder die Wirksamkeit durch einen später eintretenden Umstand verlieren, so bleibt die Wirksamkeit der übrigen Bestimmungen hiervon unberührt.

## 1. General

- 1.1. Our offers, deliveries and services are subject exclusively to these terms and conditions. We do not accept terms and conditions of the customer that deviate from our terms and conditions, unless we have expressly agreed in writing to their validity. Deviating agreements apply only for a particular contract and not for subsequent contracts, unless expressly agreed otherwise.
- 1.2. All agreements, subsidiary agreements and amendments to the contract must be in writing. This also applies to cancellation of this written form requirement. Verbal or written promises that deviate from our contract terms and conditions and/or from the order confirmation must be approved by our management in order to be valid. Our office staff and sales representatives are not authorised to make deviating agreements or to grant special conditions.

## 2. Offers and contracts

- 2.1. Our offers are subject to alteration without notice. A delivery contract or other contract is formed only if we have confirmed the customer order or other order in writing or if we have delivered the goods.
- 2.2. Our order confirmation is created automatically and requires no signature for its validity.
- 2.3. We reserve the ownership and copyrights to illustrations, drawings, calculations and other documents. This also applies to such written documents that are marked "confidential". Before passing them on to third parties the customer requires our express written permission.

## 3. Prices and payments

- 3.1. Prices are calculated based on the prices in our binding price list applicable on the date of delivery, unless a fixed price has been expressly agreed to in writing.
- 3.2. All prices are net prices without statutory value added tax, which the customer is obligated to pay in full, in addition to the purchase price.
- 3.3. For orders with a net merchandise value of less than € 50.00 there will be a surcharge of € 15.00 for below-minimum order quantity.
- 3.4. If our other material procurement costs, energy costs or wage costs/wage-related costs increase between the date of the order confirmation and the date of delivery, then we are entitled to adapt an agreed-upon fixed price accordingly. In the event of a price increase totalling more than 5% the customer is entitled to withdraw from the contract immediately, however not later than 10 work days after learning of the price increase.
- 3.5. Unless expressly stipulated otherwise, payments must be made within 10 days of the invoice date with a 2% discount and within 30 days of the invoice date without discount. Entitlement to a discount does not exist if older, due and payable invoices are unpaid.
- 3.6. In the event that payment deadlines are not met we are entitled to charge interest totalling 8 percentage points above the base interest rate (247 German Civil Code) p.a. Furthermore, all of our claims will become immediately due and payable.
- 3.7. The customer is only permitted to offset counter-claims if these counter-claims are undisputed or non-appealable. Due to defects the customer can retain at most 3 times the amount of the cost of the alternative performance. When exercising the right of retention the customer is obligated to provide security for the unpaid partial amount by bank guarantee or deposit with a notary, at our option.

## 4. Delivery

- 4.1. Delivery periods (deadlines) begin with the date of our order confirmation, however not before the receipt of any stipulated advance payments and not before definitive clarification of all details of the order and furnishing the required certificates and/or provision of all necessary documents. The delivery deadline is deemed to have been met if by the time of its expiration the object has left our factory or our warehouse or notification has been sent that it is ready for dispatch if the goods cannot be dispatched on schedule through no fault of ours. Unless specially agreed otherwise, deadlines are deemed approximate.
- 4.2. If deadlines not expressly designated as "fixed" in the order confirmation are not met, the customer can set an appropriate grace period for delivery/performance. We cannot be in default until the time of expiration of this grace period.
- 4.3. Deadlines are extended regardless of our rights from delayed payments on the part of the customer by the period by which the customer does not fulfil his obligations toward us.
- 4.4. We reserve the right of correct and on-schedule delivery by our suppliers, insofar as the incorrect delivery by our suppliers is beyond our control.
- 4.5. Unforeseeable, extraordinary events beyond our control, such as labour disputes, disruptions in operations, governmental measures, disruptions in transport or other cases of force majeure, regardless of whether these events occur at our facilities or those of our suppliers, release us from the obligations of the respective contract; hindrances of a temporary nature however only for the duration of the hindrance, plus an appropriate lead time. The afore-mentioned circumstances are also beyond our control if they already arise during a delay that has occurred. If the delivery subsequently becomes impossible or unreasonable for one party, both parties are entitled to withdraw from the contract.
- 4.6. Our liability for damages from delay due to a slight negligent infringement is excluded, unless the infringement results in injury to life, limb or health. This stipulation does not involve a shift in the burden of proof to the disadvantage of the customer.
- 4.7. If the liability for damages from delay is based not only on a slight negligent breach of duty, the customer is entitled, to the exclusion of further claims, to demand indemnification only that for each full week of delay totals 0.5%, however no more than 5% of the value of that part of the overall delivery that cannot be used in due time or in accordance with the contract as a result of the delay.
- 4.8. We are entitled to make partial deliveries, insofar as they are reasonable for the customer. Partial deliveries can be invoiced separately.

## 5. Shipment and transfer of risk

- 5.1. Unless agreed otherwise, the delivery is ex works (Essen). If Incoterms have been agreed to as terms of delivery, the version that is valid at the time the contract is concluded applies.
- 5.2. If the goods are sent at the request of the customer to a different location than the place of fulfilment, the customer will bear all costs incurred as a result. We are free to choose the transport route and the carrier. The customer must report damages from transport to us and the carrier immediately upon receipt of the goods, stating the type and extent of damage. Insurance of the goods against damage from transport, loss during transport or breakage will be provided only at the express request of the customer, who will be charged accordingly.
- 5.3. For deliveries ex works, dispatch and transport always take place at the risk of the customer. This also applies in the case of third-party deliveries and the return of goods. The risk, also in the case of a partial delivery, is transferred to the customer as soon as the shipment has been handed over to the person executing the transport or for the purpose of dispatch has left one of our warehouses or in the case of delivery ex works, our factory.

## 6. Retention of title

- 6.1. All delivered goods remain our property (reserved goods) until fulfilment of all claims, regardless of the legal basis, including claims arising in the future based on contracts concluded at the same time or later. This also applies if payments are made for specially designated claims. If there are indications that justify the assumption of the customer's inability to pay or the threat of such, we are entitled to withdraw from the contract without notice and to request surrender of the goods.
- 6.2. Processing and conversion of the reserved goods is performed on our behalf as the manufacturer, in accordance with § 950 of the German Civil Code, without any obligation on our part. The processed goods are deemed reserved goods in accordance with section 6.1. In case of processing, combination, mixing or blending of the reserved goods with other goods by the customer, we are entitled to co-ownership of the new object in proportion of the invoice value of the reserved goods to the invoice value of the other goods used. If our ownership expires due to combination or mixing, the customer hereby transfers the ownership of the new assets or object to the extent of the invoice value of the reserved goods and will keep the goods in safe custody at no cost to us. The resulting co-ownership rights are deemed reserved goods in accordance with section 6.1.

- 6.3. The customer is entitled only within the scope of regular business operations and as long as he is not in default to resell or process the reserved goods or to combine them or otherwise integrate them with other objects (resale). Any other disposition of the reserved goods is not permitted. Third-party attachments or other access to the reserved goods must be reported to us immediately.
- 6.4. The customer hereby assigns to us his claims arising from the resale of the reserved goods. These claims serve as security to the same extent as the reserved goods. The customer is entitled and authorised to resell the goods only if it is guaranteed that his resulting entitlements are assigned to us.
- 6.5. If the reserved goods are sold by the customer at a total price together with other goods not delivered by us, the claim from the resale is assigned for the amount of the invoice value of our respectively sold reserved goods.
- 6.6. If the assigned claim is included in a current account, then the customer hereby assigns to us a part of the balance corresponding to the amount of this claim, including the final balance of the current account.
- 6.7. The customer is authorised to collect the claim assigned to us, until we revoke this authorisation. We are entitled to revoke this authorisation if the customer fails to properly fulfil his payment obligations from the business relations with us or if we become aware of circumstances that are suited to significantly diminish the customer's credit standing. If the requirements for exercising the right of revocation are given, the customer shall at our request inform us immediately of the assigned claims and their debtors, provide all information necessary for collecting the claim, surrender to us the corresponding documents and notify the debtor of this assignment. The customer is not entitled to assign the claims otherwise, also not on the basis of our direct debit authorization.
- 6.8. If the realisable value (invoice amount of the goods or nominal value of the legal claims) of the securities existing for us exceed the secured claims altogether by more than 50%, we are obligated at the request of the customer to release securities of our choosing.
- 6.9. If we claim the retention of title, then this is deemed withdrawal from the contract only if we state this expressly in writing. The right of the customer to be in possession of the reserved goods expires if he does not fulfil his obligation from this contract or another contract.

## **7. Liability for defects**

- 7.1. We are not liable for improper or unsuitable use, especially excessive strain, incorrect installation or incorrect use by the customer or third parties, wear and tear, incorrect and negligent treatment and handling, especially by untrained personnel.
- 7.2. The customer is obligated to carefully inspect the delivered goods – also if samples or specimens had been sent previously – immediately upon receipt at his premises to ensure that the delivery is complete and in order. The delivery is deemed approved if a notice of defect is not received in writing, by E-Mail or telefax within 10 work days of receipt of the goods at the destination or if the defect was not obvious during a regular inspection, within 10 work days of discovery of the defect. This also applies to additional deliveries. In the case of an additional delivery, if a notice of defect is received within 10 days of receipt of the goods at the destination, it is deemed approved. Our sales representatives are not authorised to accept notices of defects and incorrect quantities.
- 7.3. If the customer accepts defective goods, although he recognises the defect, then he is entitled to the claims and rights with respect to notice of defects only if he reserves this right due to the defect at the time of acceptance.
- 7.4. We are liable for customer claims due to defective goods for a period of two years starting from the time of delivery. The liability for defects of title in accordance with the statutory provisions is not affected by this clause. The liability for damages due to defects is stipulated in section 10.
- 7.5. Bei In case of justified notice of defects the customer initially has only a claim for alternative performance, which we can render at our option and our discretion by remedy or delivery of goods that are free of defects. If the alternative performance has failed, is unreasonable for the customer (§ 440 German Civil Code) or dispensable, because:..
  - 7.5.1. We definitively reject the alternative performance,.,
  - 7.5.2. We fail to effect the alternative performance by a contractually defined deadline or within a stipulated period and the customer has contractually bound the continuation of his performance interest to the punctuality of the performance or
- 7.5.3. Special circumstances exist that in consideration of mutual interests justify immediate withdrawal (§ 323, par. 2 German Civil Code), then the customer is immediately entitled to reduce the purchase price or at his option to withdraw from the contract or request compensation for damages in lieu of performance or compensation for futile expenses in accordance with section 10.
- 7.6. For the performance of all remedy of defects and subsequent deliveries deemed necessary by us at our discretion, the customer shall grant us the necessary time and opportunity; otherwise we are released from the liability for defects. Only in urgent cases in which operational safety is jeopardised or to prevent inordinate damage, in which case we are to be notified immediately, or if we are in delay with the remedy of the defect, does the customer have the right to remedy the defect himself or through third parties and to request that we reimburse him for the necessary costs.

## **8. Liability for damages**

- 8.1. We are liable for damages arising from the injury to life, limb or health in accordance with the statutory provisions.
- 8.2. Otherwise, our liability due to infringements of duties and our non-contractual liability is limited to deliberate action and gross negligence. The liability for gross negligence on the part of our employees, staff and individual vicarious agents is excluded in this connection.
- 8.3. Excepted from section 10.2 is the infringement of essential contractual duties (cardinal duties). In this case we are also liable in the case of slight negligence due to our own fault and the fault of one of our employees, staff or individual vicarious agents.
- 8.4. The liability is limited to the typical damage reasonably expected by us upon conclusion of the contract based on the circumstances known to us at the time.
- 8.5. Any further liability is excluded, regardless of its legal basis. In particular, we are not liable for the lack of business success, lost profit, indirect damages, consequential damages caused by a defect and damages from third-party claims.
- 8.6. The above limitations of liability apply likewise for claims for compensation of futile expenses (§ 284 German Civil Code).
- 8.7. Claims for damages directed against us, regardless of the legal grounds, are subject to a limitation period of two years from the statutory start of the limitation period, at the latest however from the delivery of the goods.
- 8.8. The above stipulations do not involve a reversal of the burden of proof to the disadvantage of the customer.
- 8.9. Claims for damages in accordance with the Product Liability Act are not affected by this clause.

## **9. Returns**

The return of purchased goods or unravelling of the contract is beyond the cases in sections 4.4, 9 and 10 permissible only in exceptional cases and after obtaining our express approval. Goods returned without our approval will be rejected or returned to the customer carriage forward. The transport of returned goods in accordance with the above is always at the risk and expense of the customer. If we decide to comply with an exceptional return of goods, we will charge 25% of the net invoice value, but at least 50 euro to cover our costs. Special designs are generally excluded from return.

## **10. Place of performance, place of jurisdiction, applicable law**

- 10.1. Place of performance for the obligations of both parties is Essen.
- 10.2. The sole place of jurisdiction for all disputes in the case of merchants is the competent court for our registered office. We are entitled, however, to bring action against the customer at another legal place of jurisdiction.
- 10.3. The relationship between us and the customer is subject to German law with the exception of the United Nations Convention on Contracts for the International Sale of Goods (CISG) and the rules of International Private Law.
- 10.4. If single provisions should be invalid or become invalid due to a circumstance arising at a later time, this will not affect the validity of the remaining provisions.



Mit der Überarbeitung der Kataloge seit 2007 wurde vieles technisch überprüft, mit Normen abgeglichen und neu berechnet. Die daraus resultierenden Optimierungen und Berichtigungen ergaben folgende erforderliche Änderungen.

*With the revision of the catalogues since 2007, much has been technically checked, compared with standards and recalculated. The improvements and corrections deriving from this process lead to the following necessary changes.*

**ÄNDERUNGEN / CHANGES: KATALOG 2007 ► KATALOG 08/2016**

| TYP               | Unterschiede / Differences                               | Alter Wert / Former value | Neuer Wert / New value | Seite / Page |
|-------------------|----------------------------------------------------------|---------------------------|------------------------|--------------|
| <b>DN</b>         | Abmessung L1 korrigiert / Dimension L1 revised           | -                         | -                      | 2.5 / 2.33   |
| <b>DU</b>         | Abmessung L1 korrigiert / Dimension L1 revised           | -                         | -                      | 2.5 / 2.34   |
| <b>DO</b>         | Abmessung L1 korrigiert / Dimension L1 revised           | -                         | -                      | 2.5 / 2.35   |
| <b>RI</b>         | Bauteillänge überarbeitet / Part length revised          | -                         | -                      | 2.19 / 2.42  |
| <b>FA 32-0</b>    | Schraube verlängert / Screw length extended              | M12x40                    | M12x45 (+5 mm)         | 5.6 / 3.09   |
| <b>FA 40-0</b>    | Schraube verlängert / Screw length extended              | M16x40                    | M16x55 (+5 mm)         | 5.6 / 3.09   |
| <b>FA 65-0</b>    | Schraube verlängert / Screw length extended              | M20x70                    | M20x75 (+5 mm)         | 5.6 / 3.09   |
| <b>FA 80-0</b>    | Schraube verlängert / Screw length extended              | M24x75                    | M24x80 (+5 mm)         | 5.6 / 3.09   |
| <b>FA 90-0</b>    | Schraube verlängert / Screw length extended              | M30x90                    | M30x100 (+10 mm)       | 5.6 / 3.09   |
| <b>FA 100-0</b>   | Schraube verlängert / Screw length extended              | M30x90                    | M30x100 (+10 mm)       | 5.6 / 3.09   |
| <b>FA 150-0</b>   | Schraube verlängert / Screw length extended              | M30x110                   | M30x120 (+10 mm)       | 5.6 / 3.09   |
| <b>FA 32-2</b>    | O-Ring geändert / O-ring changed                         | 34,5x2,65                 | 34,5x3,53              | 5.7 / 3.09   |
| <b>FA 32-2</b>    | Schraube verlängert / Screw length extended              | M12x40                    | M12x45 (+5 mm)         | 5.7 / 3.09   |
| <b>FA 40-2</b>    | Schraube verlängert / Screw length extended              | M16x50                    | M16x55 (+5 mm)         | 5.7 / 3.09   |
| <b>FA 80-2</b>    | Schraube verlängert / Screw length extended              | M30x90                    | M30x100 (+10 mm)       | 5.7 / 3.09   |
| <b>FA 100-2</b>   | Schraube verlängert / Screw length extended              | M30x90                    | M30x100 (+10 mm)       | 5.7 / 3.09   |
| <b>FA 150-2</b>   | Schraube verlängert / Screw length extended              | M30x110                   | M30x120 (+10 mm)       | 5.7 / 3.09   |
| <b>FA 32-3/4</b>  | Schraube verlängert / Screw length extended              | M16x50                    | M16x55 (+5 mm)         | 5.8,9 / 3.10 |
| <b>FA 50-3/4</b>  | Schraube verlängert / Screw length extended              | M20x70                    | M20x75 (+5 mm)         | 5.8,9 / 3.10 |
| <b>FA 65-3/4</b>  | Schraube verlängert / Screw length extended              | M24x75                    | M24x80 (+5 mm)         | 5.8,9 / 3.10 |
| <b>FA 65-3/4</b>  | O-Ring geändert / O-ring changed                         | 75,0x5,33                 | 75,57x5,33             | 5.8,9 / 3.10 |
| <b>FA 80-3/4</b>  | Schraube verlängert / Screw length extended              | M30x90                    | M30x100 (+10 mm)       | 5.8,9 / 3.10 |
| <b>FA 125-3/4</b> | Schraube verlängert / Screw length extended              | M30x110                   | M30x120 (+10 mm)       | 5.8,9 / 3.10 |
| <b>FA 150-3/4</b> | Schraube verlängert / Screw length extended              | M36x130                   | M36x140 (+10 mm)       | 5.8,9 / 3.10 |
| <b>FA 40-5</b>    | Schraube verlängert / Screw length extended              | M20x70                    | M20x75 (+5 mm)         | 5.10 / 3.10  |
| <b>FA 50-5</b>    | Schraube verlängert / Screw length extended              | M24x75                    | M24x80 (+5 mm)         | 5.10 / 3.10  |
| <b>FA 65-5</b>    | Schraube verlängert / Screw length extended              | M30x90                    | M30x100 (+10 mm)       | 5.10 / 3.10  |
| <b>FA 65-5</b>    | O-Ring geändert / O-ring changed                         | 73,0x5,33                 | 75,57x5,33             | 5.10 / 3.10  |
| <b>FA 100-5</b>   | Bezeichnung geändert / Designation changed               | FA 100-5                  | FA 90-5                | 5.10 / 3.10  |
| <b>FA 32-6</b>    | Schraube verlängert / Screw length extended              | M24x85                    | M24x90 (+5 mm)         | 5.11 / 3.10  |
| <b>FA 40-6</b>    | Schraube verlängert / Screw length extended              | M24x90                    | M24x95 (+5 mm)         | 5.11 / 3.10  |
| <b>FA 125-6</b>   | Teilkreis (t) verändert / Pitch circle (t) changed       | 327                       | 330 (+ 3 mm)           | 5.11 / 3.10  |
| <b>FA 150-6</b>   | Teilkreis (t) verändert / Pitch circle (t) changed       | 392                       | 395 (+ 3 mm)           | 5.11 / 3.10  |
| <b>WFA 16-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 65                        | 50 (-15 mm)            | 5.15 / 3.21  |
| <b>WFA 20-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 75                        | 55 (-20 mm)            | 5.15 / 3.21  |
| <b>WFA 25-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 90                        | 65 (-25 mm)            | 5.15 / 3.21  |
| <b>WFA 32-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 95                        | 75 (-20 mm)            | 5.15 / 3.21  |
| <b>WFA 40-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 105                       | 85 (-20 mm)            | 5.15 / 3.21  |
| <b>WFA 50-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 115                       | 95 (-20 mm)            | 5.15 / 3.21  |
| <b>WFA 65-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 155                       | 115 (-40 mm)           | 5.15 / 3.21  |
| <b>WFA 65-3/4</b> | O-Ring geändert / O-ring changed                         | 75,0x5,33                 | 75,57x5,33             | 5.15 / 3.21  |
| <b>WFA 80-3/4</b> | Bauteillänge (L3 / l1) verkürzt / Part length shortened  | 180                       | 135 (-45 mm)           | 5.15 / 3.21  |
| <b>FV 25-3/4</b>  | Bauteillänge (L2 / l1) verlängert / Part length extended | 123                       | 126 (+3 mm)            | 5.14 / 3.26  |
| <b>FV 32-3/4</b>  | Bauteillänge (L2 / l1) verlängert / Part length extended | 140                       | 150 (+10 mm)           | 5.14 / 3.26  |
| <b>FV 50-3/4</b>  | Bauteillänge (L2 / l1) verlängert / Part length extended | 180                       | 200 (+20 mm)           | 5.14 / 3.26  |
| <b>FV 65-3/4</b>  | Bauteillänge (L2 / l1) verlängert / Part length extended | 200                       | 240 (+40 mm)           | 5.14 / 3.26  |
| <b>FV 80-3/4</b>  | Bauteillänge (L2 / l1) verlängert / Part length extended | 260                       | 280 (+20 mm)           | 5.14 / 3.26  |
| <b>FV 100-3/4</b> | Bauteillänge (L2 / l1) verkürzt / Part length shortened  | 360                       | 320 (-40 mm)           | 5.14 / 3.26  |
| <b>FV 125-3/4</b> | Bauteillänge (L2 / l1) verkürzt / Part length shortened  | 410                       | 390 (-20 mm)           | 5.14 / 3.26  |
| <b>FV 150-3/4</b> | Bauteillänge (L2 / l1) verkürzt / Part length shortened  | 490                       | 470 (-20 mm)           | 5.14 / 3.26  |
|                   |                                                          |                           |                        |              |
|                   |                                                          |                           |                        |              |

| TYP | Unterschiede / Differences | Alter Wert / Former value | Neuer Wert / New value | Seite / Page |
|-----|----------------------------|---------------------------|------------------------|--------------|
|-----|----------------------------|---------------------------|------------------------|--------------|

ÄNDERUNGEN / CHANGES: KATALOG 08/2016 ► KATALOG 04/2019

| TYP        | Änderung / Change                           | Alter Wert / Former value | Neuer Wert / New value | Seite / Page |
|------------|---------------------------------------------|---------------------------|------------------------|--------------|
| FFA 25     | Abmessung h geändert / Dimension h changed  | 23                        | 25                     | 3.23 / 3.25  |
| FFA 32     | Abmessung h geändert / Dimension h changed  | 28                        | 30                     | 3.23 / 3.25  |
| FFA 32     | Schraube verlängert / Screw length extended | M12x45                    | M12x50 (+5 mm)         | 3.23 / 3.25  |
| FFA 38     | Abmessung h geändert / Dimension h changed  | 29                        | 36                     | 3.23 / 3.25  |
| FFA 38     | Schrauben geändert / Bolts changed          | M14x50                    | M16x60 (+10 mm)        | 3.23 / 3.25  |
| FFA 51     | Abmessung h geändert / Dimension h changed  | 37                        | 40                     | 3.23 / 3.25  |
| FFA 51     | Schraube verlängert / Screw length extended | M16x60                    | M16x65 (+5 mm)         | 3.23 / 3.25  |
| FFA 56     | Abmessung h geändert / Dimension h changed  | 44                        | 50                     | 3.23 / 3.25  |
| FFA 56     | Schraube verlängert / Screw length extended | M20x70                    | M20x80 (+10 mm)        | 3.23 / 3.25  |
| FFA 63     | Abmessung h geändert / Dimension h changed  | 48                        | 52                     | 3.23 / 3.25  |
| FFA 63     | Schraube verlängert / Screw length extended | M24x75                    | M24x90 (+15 mm)        | 3.23 / 3.25  |
| FFA 70     | Abmessung h geändert / Dimension h changed  | 48                        | 60                     | 3.23 / 3.25  |
| FFA 70     | Schraube verlängert / Screw length extended | M24x90                    | M24x100 (+10 mm)       | 3.23 / 3.25  |
| FFA 80     | Abmessung h geändert / Dimension h changed  | 59                        | 70                     | 3.23 / 3.25  |
| FFA 80     | Schraube verlängert / Screw length extended | M30x90                    | M30x120 (+30 mm)       | 3.23 / 3.25  |
| FA 90-5    | Schraube verlängert / Screw length extended | M30x110                   | M30x120 (+10 mm)       | 3.10 / 3.12  |
| FA 100-5   | Schraube verlängert / Screw length extended | M30x110                   | M30x120 (+10 mm)       | 3.10 / 3.12  |
| FA 125-5   | Schraube verlängert / Screw length extended | M36x130                   | M36x140 (+10 mm)       | 3.10 / 3.12  |
| WFA 40-3/4 | Schraube verlängert / Screw length extended | M16x90                    | M16x100 (+10 mm)       | 3.21 / 3.23  |
| AFSA 32-6  | Schraube verlängert / Screw length extended | M14x45                    | M14x50 (+5 mm)         | 3.41 / 3.49  |
| AFW 32-6   | Schraube verlängert / Screw length extended | M14x45                    | M14x50 (+5 mm)         | 3.46 / 3.52  |
| AFE 32-6   | Schraube verlängert / Screw length extended | M14x45                    | M14x50 (+5 mm)         | 3.45 / 3.53  |
| AFB 32-6   | Schraube verlängert / Screw length extended | M14x45                    | M14x50 (+5 mm)         | 3.44 / 3.56  |
| AFM 32-6   | Schraube verlängert / Screw length extended | M14x45                    | M14x50 (+5 mm)         | 3.47 / 3.57  |

ÄNDERUNGEN / CHANGES: KATALOG 04/2019 ► KATALOG 01/2024

| TYP             | Änderung / Change                                   | Alter Wert / Former value | Neuer Wert / New value | Seite / Page |
|-----------------|-----------------------------------------------------|---------------------------|------------------------|--------------|
| AFA / AFK 51-3  | Bauteillänge l verkürzt / Part length l shortened   | 60 / 120                  | 57 / 114               | 3.39 / 3.40  |
| AFA / AFK 64-3  | Bauteillänge l verkürzt / Part length l shortened   | 70 / 140                  | 58 / 116               | 3.39 / 3.40  |
| AFA / AFK 76-3  | Bauteillänge l verkürzt / Part length l shortened   | 80 / 160                  | 60 / 120               | 3.39 / 3.40  |
| AFA / AFK 89-3  | Bauteillänge l verkürzt / Part length l shortened   | 80 / 160                  | 60 / 120               | 3.39 / 3.40  |
| AFA / AFK 102-3 | Bauteillänge l verkürzt / Part length l shortened   | 80 / 160                  | 60 / 120               | 3.39 / 3.40  |
| AFA / AFK 127-3 | Bauteillänge l verkürzt / Part length l shortened   | 80 / 160                  | 60 / 120               | 3.39 / 3.40  |
| AFA / AFK 13-6  | Bauteillänge l verkürzt / Part length l shortened   | 40 / 80                   | 34 / 68                | 3.39 / 3.40  |
| AFA / AFK 19-6  | Bauteillänge l verkürzt / Part length l shortened   | 45 / 90                   | 38 / 76                | 3.39 / 3.40  |
| AFA / AFK 25-6  | Bauteillänge l verkürzt / Part length l shortened   | 50 / 100                  | 40 / 80                | 3.39 / 3.40  |
| AFA / AFK 32-6  | Bauteillänge l verkürzt / Part length l shortened   | 55 / 110                  | 45 / 90                | 3.39 / 3.40  |
| AFA / AFK 38-6  | Bauteillänge l verkürzt / Part length l shortened   | 60 / 120                  | 50 / 100               | 3.39 / 3.40  |
| AFA / AFK 51-6  | Bauteillänge l verkürzt / Part length l shortened   | 70 / 140                  | 58 / 116               | 3.39 / 3.40  |
| FV 25-3/4       | Bauteillänge l1 verkürzt / Part length l1 shortened | 126                       | 123 (-3 mm)            | 3.28         |
| FV 32-3/4       | Bauteillänge l1 verkürzt / Part length l1 shortened | 150                       | 140 (-10 mm)           | 3.28         |
| FV 50-3/4       | Bauteillänge l1 verkürzt / Part length l1 shortened | 200                       | 180 (-20 mm)           | 3.28         |
| FV 65-3/4       | Bauteillänge l1 verkürzt / Part length l1 shortened | 240                       | 210 (-30 mm)           | 3.28         |
| FV 80-3/4       | Bauteillänge l1 verkürzt / Part length l1 shortened | 280                       | 260 (-20 mm)           | 3.28         |
| SFV / SFVH      | Äußere Abmaße verkürzt / Outer dimensions shortened | siehe Katalog 04/2019     | siehe Katalog 01/2024  | 3.59 / 3.60  |

| TYP          | Beschreibung                                    | Description                                   | Seite / Page |
|--------------|-------------------------------------------------|-----------------------------------------------|--------------|
| <b>AFA</b>   | SAE-Flanschanschluss                            | SAE-flange connection                         | 3.39         |
| <b>AFAB</b>  | SAE-Blindflansch                                | SAE-blind flange                              | 3.42         |
| <b>AFAG</b>  | SAE-Flansch Gewinde Adapter (SGA)               | SAE-flange thread adapter (SGA)               | 3.46         |
| <b>AFAL</b>  | SAE-Einschweiß-Flanschanschluss                 | SAE-socket weld flange connection             | 3.45         |
| <b>AFAM</b>  | SAE-Flanschanschluss mit 24° Konus              | SAE-flange with 24° conus                     | 3.47         |
| <b>AFB</b>   | SAE-Blindflansch                                | SAE-blind flange, one pice                    | 3.56         |
| <b>AFE</b>   | SAE-Flansch mit Whitworth Rohrgewinde           | SAE-flange with BSP thread, one pice          | 3.53         |
| <b>AFG</b>   | SAE-Gegenflansch                                | SAE-counter flange                            | 3.41         |
| <b>AFGB</b>  | SAE-Gegen-Blindflansch                          | SAE-counter blind flange                      | 3.44         |
| <b>AFK</b>   | SAE-Flanschkupplung                             | SAE-flange coupling                           | 3.40         |
| <b>AFKB</b>  | SAE-Blind-Flanschkupplung                       | SAE-blind flange coupling                     | 3.43         |
| <b>AFLA</b>  | SAE-Einschweiß-Flanschanschluss                 | SAE-socket weld flange connection, one pice   | 3.54         |
| <b>AFLAF</b> | SAE-Einschweiß-Flanschanschluss flach           | SAE-socket weld flat flange                   | 3.55         |
| <b>AFM</b>   | SAE-Flansch mit 24° Konus, einteilig            | SAE-flange with 24° conus, one pice           | 3.57         |
| <b>AFMW</b>  | SAE-Winkelflansch mit 24° Konus                 | SAE-elbow flange with 24° conus, one pice     | 3.58         |
| <b>AFP</b>   | SAE-Flansch Blindplatte                         | SAE-flange locking plate                      | 3.64         |
| <b>AFR</b>   | SAE-Reduzierflansch                             | SAE-adapter flange                            | 3.61         |
| <b>AFSA</b>  | SAE-Flanschanschluss, einteilig                 | SAE-butt weld flange connection, one pice     | 3.49         |
| <b>AFSG</b>  | SAE-Gegenflansch                                | SAE-butt weld counter flange                  | 3.51         |
| <b>AFSK</b>  | SAE-Flanschkupplung                             | SAE-butt weld flange coupling                 | 3.50         |
| <b>AFW</b>   | SAE-Winkelflanschanschluss                      | SAE-elbow butt weld flange connection         | 3.52         |
| <b>AFWA</b>  | SAE-Winkelflansch mit 24° Konus                 | SAE-elbow flange with 24° conus               | 3.48         |
| <b>AFZ</b>   | SAE-Zwischenflansch mit Messanschluss           | SAE-intermediate flange with test point       | 3.63         |
| <b>AK</b>    | 24° Schweißkegel                                | 24° Welding cone                              | 2.11         |
| <b>AKS</b>   | 24° Schweißkegel mit Drahtstiftmutter           | 24° Welding cone with wire nail nut           | 2.16         |
| <b>AOS</b>   | Schlauchleitung mit 24° Dichtkegel              | Hose line with 24° seal cone                  | 5.19         |
| <b>ARK</b>   | 24° Schweißreduzierkegel                        | 24° reduced welding cone                      | 2.13         |
| <b>AS</b>    | Aufbauschelle                                   | Build-up clamp                                | 5.15         |
| <b>ASKB</b>  | 24° Schweißkegel Rohrbogen                      | 24° elbow welding cone                        | 2.15         |
| <b>AV</b>    | Gerade Aufschweißverschraubung                  | Weld-on straight connector                    | 2.59         |
| <b>BKF</b>   | Blockkugelhahn mit Flanschanschluss             | Ball valve with flange connection             | 3.30         |
| <b>BKH</b>   | Blockkugelhahn mit 24° Konus                    | Ball valve with 24° conus                     | 2.79         |
| <b>BKS</b>   | Blockkugelhahn mit SAE-anschluss                | Ball valve with SAE-flange connection         | 3.62         |
| <b>BS</b>    | Schlauchleitung mit 90° Bogen                   | Hose line with 90° elbow                      | 5.21         |
| <b>DEV</b>   | Druckprüf- und Entlüftungsverschr.              | Pressure test and ventilation connector       | 2.70         |
| <b>DFA</b>   | Vorschweißflansch                               | Welding neck flange                           | 3.33         |
| <b>DFK</b>   | Vorschweiß-Flanschkupplung                      | Welding neck flange coupling                  | 3.34         |
| <b>DG/DS</b> | Mehrkanaldrehdurchführungen                     | Multi-channel rotary units                    | 4.12         |
| <b>DGA</b>   | Rohrdrehgelenk mit Schweissenden                | Swivel joint with weld-on ends                | 4.10         |
| <b>DGN-F</b> | Rohrdrehgelenk mit Flanschanschluss             | Swivel joint with flange connection           | 4.16         |
| <b>DGN-S</b> | Rohrdrehgelenk mit Schweissenden                | Swivel joint with weld-on ends                | 4.14         |
| <b>DGN-T</b> | Rohrdrehgelenk mit Innengewinde                 | Swivel joint with inside thread               | 4.15         |
| <b>DKG</b>   | Kugelrohrdrehgelenk                             | Ball-type rotary pipe joint                   | 4.11         |
| <b>DKS</b>   | 24° Doppelkegel                                 | 24° Double cone                               | 2.47         |
| <b>DN</b>    | Doppelnippel mit Dichtkante                     | Double-ended stud with metal-to-metal sealing | 2.35         |
| <b>DO</b>    | Doppelnippel mit O-Ring Dichtung                | Double-ended stud with O-ring sealing         | 2.37         |
| <b>DU</b>    | Doppelnippel mit U-Ring Dichtung                | Double-ended stud with U-ring sealing         | 2.36         |
| <b>DVG</b>   | Gerades Drehgelenk mit 24° Konus                | Straight swivel joint with 24° conus          | 4.07         |
| <b>DVL</b>   | Rohrdrehgelenk mit Innengewinde                 | Swivel joint with inside thread               | 4.09         |
| <b>DVW</b>   | Winkeldrehgelenk mit 24° Konus                  | Elbow swivel joint with 24° conus             | 4.08         |
| <b>ERV</b>   | Rückschlagventil                                | Non-return valve                              | 2.77         |
| <b>FA</b>    | Flanschanschluss                                | Flange connection                             | 3.11         |
| <b>FAB</b>   | Blindflansch                                    | Blind flange                                  | 3.17         |
| <b>FAM</b>   | Flansch mit 24° Konus                           | Flange with 24° conus                         | 3.29         |
| <b>FAR</b>   | Rücklauf Flanschanschluss                       | Return flange connection                      | 3.33         |
| <b>FAS</b>   | Schlauchleitung mit Quadratflanschanschluss     | Hose line with square flange connection       | 5.23         |
| <b>FBS</b>   | Schlauchleitung mit 90° Quadratflanschanschluss | Hose line with 90° square flange connection   | 5.24         |
| <b>FFA</b>   | ISO-Flanschanschluss                            | ISO-flange connection                         | 3.25         |
| <b>FFK</b>   | ISO-Flanschkupplung                             | ISO-flange coupling                           | 3.26         |
| <b>FG</b>    | Gegenflansch                                    | Counter flange                                | 3.15         |
| <b>FGB</b>   | Gegen-Blindflansch                              | Counter blind flange                          | 3.21         |
| <b>FK</b>    | Flanschkupplung                                 | Flange coupling                               | 3.13         |
| <b>FKB</b>   | Blind-Flanschkupplung                           | Blind flange coupling                         | 3.19         |
| <b>FKR</b>   | Rücklauf Flanschkupplung                        | Return flange coupling                        | 3.34         |
| <b>FV</b>    | Flanschverteiler                                | Flange distributor                            | 3.28         |
| <b>FVH</b>   | Winkel-Flanschverteiler                         | Elbow flange distributor                      | 3.27         |

| TYP         | Beschreibung                                                 | Description                                                   | Seite / Page |
|-------------|--------------------------------------------------------------|---------------------------------------------------------------|--------------|
| <b>GAV</b>  | Gerade Schweißverschraubung                                  | Straight welding connector                                    | 2.61         |
| <b>GDA</b>  | Gerader Distanz- / Reduzieradapter                           | Straight distance or reducing adaptor                         | 2.49         |
| <b>GDV</b>  | Druckprüf- und Entlüftungsadapter                            | Pressure test and ventilation adapter                         | 2.71         |
| <b>GE.</b>  | Gerade Verschraubung mit Dichtkante, Whitworth Gewinde       | Male stud coupling with metal-to-metal sealing, BSP thread    | 2.23         |
| <b>GE.A</b> | Gerade Verschraubung mit O-Ring Dichtung (ISO)               | Male stud coupling with O-ring Sealing (ISO)                  | 2.33         |
| <b>GE.M</b> | Gerade Verschraubung mit Dichtkante, Metrisches Gewinde      | Male stud coupling with metal-to-metal sealing, metric thread | 2.25         |
| <b>GE.N</b> | Gerade Verschraubung mit NPTF Gewinde                        | Male stud coupling with NPTF thread                           | 2.34         |
| <b>GEI</b>  | Gerader Aufschraubstutzen                                    | Straight female tube connector                                | 2.45         |
| <b>GEL.</b> | Einstellbarer Stutzen mit O-Ring (ISO)                       | Adjustable stud with O-ring sealing (ISO)                     | 2.53         |
| <b>GESV</b> | Gerade Einschweiß Schottverschraubung                        | Weld-in bulkhead straight connector                           | 2.66         |
| <b>GO.</b>  | Gerade Verschraubung mit O-Ring Dichtung                     | Male stud coupling with O-ring sealing                        | 2.31         |
| <b>GSV</b>  | Gerade Schottverschraubung                                   | Bulkhead straight connector                                   | 2.67         |
| <b>GU.</b>  | Gerade Verschraubung mit U-Ring Dichtung, Whitworth Gewinde  | Male stud coupling with U-ring sealing, BSP Thread            | 2.27         |
| <b>GU.M</b> | Gerade Verschraubung mit U-Ring Dichtung, Metrisches Gewinde | Male stud coupling with U-ring sealing, metric thread         | 2.29         |
| <b>GUL.</b> | Einstellbarer Stutzen mit U-Ring Dichtung                    | Adjustable stud with U-ring sealing                           | 2.51         |
| <b>GV</b>   | Gerade Verschraubung                                         | Straight union connector                                      | 2.57         |
| <b>GVR</b>  | Gerade Verschraubung Reduziert                               | Reduced straight union connector                              | 2.58         |
| <b>HK</b>   | Schnellverschluss-Kupplung mit 24° Konus                     | Quick connect coupling with 24° conus                         | 2.81         |
| <b>HKE</b>  | Schnellverschluss-Kupplung                                   | Quick connect coupling with BSP thread                        | 2.82         |
| <b>HS</b>   | Schlauchleitung mit 24° Konus                                | Hose line with 24° conus                                      | 5.20         |
| <b>HVAB</b> | Hochdruck Absperrventil                                      | High pressure shut-off valve                                  | 2.80         |
| <b>HVAL</b> | Absperrventil                                                | Shut-off valve                                                | 3.32         |
| <b>HVAP</b> | Hochdruck Absperrventil                                      | High pressure globe valve                                     | 3.31         |
| <b>KOM</b>  | Kontermutter                                                 | Locknut                                                       | 2.20         |
| <b>KOR</b>  | Konzentrisches Reduzierstück                                 | Concentric reducer                                            | 5.05         |
| <b>KV</b>   | Kreuz-Verschraubung                                          | Cross union connector                                         | 2.65         |
| <b>LS</b>   | T-Verschraubung, Durchgang einst.                            | Adjustable run tee                                            | 2.56         |
| <b>M</b>    | Überwurfmutter                                               | Union nut                                                     | 2.19         |
| <b>MAK</b>  | Dichtkegelanschluss für Messkupplung                         | Seal cone for test coupling                                   | 2.72         |
| <b>MAV</b>  | Manometer-Verschraubung                                      | Gauge coupling                                                | 2.74         |
| <b>MIS</b>  | Messkupplungs Schweißstutzen                                 | Welding stud for test coupling                                | 2.73         |
| <b>MK</b>   | Messkupplung                                                 | Test coupling                                                 | 2.69         |
| <b>OR</b>   | O-Ring                                                       | O-ring                                                        | 2.22         |
| <b>RB</b>   | Nahtloser Rohrbogen                                          | Seamless precision tube elbow                                 | 5.04         |
| <b>RBD</b>  | Rohrbogen                                                    | Elbow                                                         | 5.06         |
| <b>RI</b>   | Reduzierstutzen mit U-Ring Dichtung                          | Reducing piece with U-ring sealing                            | 2.43         |
| <b>RO</b>   | Nahtloses Präzisions-Stahlrohr                               | Seamless precision steel tube                                 | 5.03         |
| <b>RRV</b>  | Rückschlagventil                                             | Non-return valve                                              | 2.76         |
| <b>RS</b>   | Rohrschelle                                                  | Pipe clamp                                                    | 5.12         |
| <b>RV</b>   | Rückschlagventil                                             | Non-return valve                                              | 2.75         |
| <b>RVS</b>  | Rückschlagventil                                             | Non-return valve                                              | 2.78         |
| <b>SBS</b>  | Schlauchleitung mit 90° SAE-Flanschanschluss                 | Hose line with 90° SAE-flange connection                      | 5.26         |
| <b>SFS</b>  | Schlauchleitung mit SAE-Flanschanschluss                     | Hose line with SAE-flange connection                          | 5.25         |
| <b>SFV</b>  | SAE-Flanschverteiler                                         | SAE-flange distributor                                        | 3.60         |
| <b>SFVH</b> | SAE-Winkel-Flanschverteiler                                  | SAE-elbow flange distributor                                  | 3.59         |
| <b>SKV</b>  | Einstellbare Schwenkverschraubung                            | Adjustable banjo elbow                                        | 2.41         |
| <b>SM</b>   | Schweißmuffe                                                 | Welding socket                                                | 5.08         |
| <b>SMT</b>  | T-Schweißmuffe                                               | Welding t-socket                                              | 5.10         |
| <b>SMW</b>  | Winkel Schweißmuffe                                          | Welding elbow socket                                          | 5.09         |
| <b>SR</b>   | Schneidring                                                  | Cutting ring                                                  | 2.21         |
| <b>STS</b>  | Tragschiene                                                  | Mounting rail                                                 | 5.14         |
| <b>SV</b>   | einstellbare Winkel-verschraubung                            | Adjustable elbow male stud connection                         | 2.39         |
| <b>T</b>    | T-Stück                                                      | Tee fitting                                                   | 5.07         |
| <b>TRS</b>  | Tragschienen Rohrschelle                                     | Pipe clamp for mounting rail                                  | 5.13         |
| <b>TS</b>   | T-Verschraubung, Abgang einstellbar                          | Adjustable branch tee                                         | 2.55         |
| <b>TSKV</b> | Einstellbare T-Schwenkverschraubung                          | Adjustable banjo tee                                          | 2.42         |
| <b>TV</b>   | T-Verschraubung                                              | Tee union connector                                           | 2.64         |
| <b>VK</b>   | 24° Verschlusskegel                                          | 24° plug cone                                                 | 2.17         |
| <b>VSK</b>  | 24° Dichtkegelverschluss                                     | 24° Seal conus plug                                           | 2.18         |
| <b>VSU</b>  | Verschlussschraube mit U-Ring Dichtung                       | Pipe and coupling plug with U-ring sealing                    | 2.38         |
| <b>WAV</b>  | Winkel Aufschweißverschraubung                               | Weld-on elbow connector                                       | 2.60         |
| <b>WFA</b>  | Winkelflansch                                                | Elbow flange                                                  | 3.23         |
| <b>WKS</b>  | 24° Winkel-Doppelkegel                                       | 24° Elbow double cone                                         | 2.48         |
| <b>WS</b>   | Einstellbare Winkelsverschraubung                            | Adjustable swivel elbow                                       | 2.54         |
| <b>WSV</b>  | Winkel Schottverschraubung                                   | Bulkhead elbow coupling                                       | 2.68         |
| <b>WV</b>   | Winkel Verschraubung                                         | Elbow union connector                                         | 2.63         |



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