Instrumentation Products
E Series Valves and Manifolds
The AS-Schneider Group with its headquarters in Germany is one of the World’s Leading Manufacturers of Instrumentation Valves and Manifolds. AS-Schneider offers a large variety of E Series Valves and Manifolds as well as numerous accessories needed for the instrumentation installations globally.

Selection can be made from a comprehensive range of bodies with a variety of connections and material options, optimising installation and access opportunities. Many of the valves shown in this catalogue are available from stock or within a short period of time. The dimensions shown in this catalogue apply to standard types – very often 1/2 NPT treads. If you need the dimensions for your individual type please contact the factory.

Note: Not every configuration which can be created in the ordering information is feasible / available.

Continuous product development may from time to time necessitate changes in the details contained in this catalogue. AS-Schneider reserves the right to make such changes at their discretion and without prior notice.

All dimensions shown in this catalogue are approximate and subject to change.
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Body Material Options

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</table>

* Quadruple Certified means 316 / 316L / 1.4401 / 1.4404

Standard Features

- Bore Size 5 mm
- Manifolds are not supplied with plugs unless specified.
- Anti-Tamper Head Unit Options see Page 11.

Needle Seal:
PTFE and Graphite Packings are available for all valve types. Alternatively O-Ring stem seal and Bellows Sealed Head Units – see Page 6–10.

Sour Gas Service:
Wetted Parts according to a.m. material list are supplied as standard according to NACE MR0175/MR0103 and ISO 15156 (latest issue) – Standard Material only (see last column), except Titanium Grade 2.

Pressure Test:
A shell test and a seat leakage test are performed at 1.5 times the max. allowable (working) pressure acc. to EN 12266-1 – P10, P11 and P12 respectively MSS-SP61 at every standard AS-Schneider E Series Needle Valve / Manifold $\rightarrow$ 100% Pressure Tested!

Certification:
Inspection Certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request.
The manifolds can be provided by default with a
- CRN Certificate
- EAC Certificate – Manifolds are marked with EAC

Valves with Graphite Packings are Fire Safe Tested and Certified according to ISO 10497 and API 607.

Optional Features

- Soft Seated Needle Valves: Bore Size 6.35 mm (1/4")
- Bore Size 10 mm

Fugitive Emission Application:
For Fugitive Emission Applications AS-Schneider is providing bellows sealed valves with safety packing. Choice of Pressure class PN 100 or PN 250. The bellows are submitted to a 100% Helium leak test. The leak rate is $10^{-8}$ mbar l/s. Optional available are TA-Luft and ISO 15848 solutions. For more details see Pages 9 and 10.

Oxygen Service:
AS-Schneider offers an option with Reinforced PTFE Packing cleaned and lubricated for Oxygen Service:
Pressure-Temperature Rating:
Max. 420 bar (6,092 psi) @ 60°C (140°F)
Max. 200°C (392°F) @ 90 bar (1,305 psi)

Not every Valve Type is available for Oxygen Service!

If you don’t find your options in this catalogue, please contact the factory.
Standard Bonnet Design

T Handle
Ergonomic Handle Design. Operating options are Anti-Tamper features or a Stainless Steel Handwheel.

Valve Stem
Stem with cold rolled threads for high strength and smooth operation.

Needle Seal
Standard: PTFE or Graphite Packing
Options: O-Ring or Bellows Sealed

Needle
Non-rotating Needle for smooth operation and minimum wear of sealing elements.

Back Seat
Metal to Metal secondary needle seal and therefore the needle is anti-blowout / non-removable – For your safety.

Needle Tip
Choices of Needle Tip Materials such as Stellite, and Soft Tips like PCTFE and POM.

Valve Seat
Metal seated (integral type) and Soft seated → See Page 7 and Catalogue AS-4302.

Color Coded Dust Cap
For operating thread protection:
- Isolate: Blue
- Vent/Test: Red
- Equalize: Green

Color Coded Options
Following options are also color coded below dust cap:
- Oxygen Service: White
- Graphite Packing: Black
- FKM O-ring Stem Seal with PCTFE Soft Tip: Orange
- TA-Luft Option: Magenta

Lock Pin
Eliminates unauthorized removal of the bonnet assembly.

Bonnet
Metal to Metal Seal to Valve Body.

Traceability of Materials
All AS-Schneider E Series Valves and Manifolds have material traceability. A unique code is stamped on all valve bodies linking them with their material and chemical analysis certificates.

Flow Data

Needle Valves Standard Head Unit – Bore Size 5 mm

![Flow Data Graph](flow_data_graph.png)
### Standard Needle Valves

**Screwed Bonnet** – Stem Seal: Packing

**Features**
- Integral Valve Seat – Metal to Metal Seated
- Soft Tip PCTFE or POM optional
- Non-rotating Needle
- External Stem Thread – Packing below stem threads. Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.
- Stem with cold rolled threads
- Blow-out proof Needle
- Back Seat – Metal to metal secondary needle seal
- Lock Pin – Eliminates unauthorized removal of the bonnet
- Color Coded Dust Cap for operating thread protection
- Standard Packing in PTFE and Graphite available
- Carbon filled PTFE Packing - TA-Luft option
- Max. allowable (Working) Pressure (P5):
  - 420 bar (6,092 psi)
  - 689 bar (10,000 psi) optional
- Panel Mount Option available
- Anti-Tamper Valve Head Options available
- All non-wetted parts in 316 stainless steel

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### Standard Design

**420 bar (6,092 psi)**

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### High Pressure Design

**689 bar (10,000 psi) and 500 bar (7,252 psi)**

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### Color Coded Options

- Graphite Packing
- Oxygen Service
- TA-Luft Option

### Panel Mount Option

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### Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Stainless Steel</th>
<th>Exotic Alloys</th>
</tr>
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<tr>
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<td></td>
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<tr>
<td>Body</td>
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<tr>
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<td>316 / 316L</td>
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<tr>
<td>Needle</td>
<td></td>
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<td>Pipe Plug</td>
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<td>Valve Stem</td>
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<td>Gland</td>
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<td>Packing</td>
<td>PTFE or Graphite</td>
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<td>Stem Nut</td>
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<td>Lock Nut</td>
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<td>Set Screw</td>
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<tr>
<td>T Handle</td>
<td>316</td>
<td></td>
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<tr>
<td>Lock Pin</td>
<td>A4 (316)</td>
<td></td>
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Wetted components listed in bold.
Screwed Bonnet – Stem Seal: Graphite Packing
Meet the requirements of ASME B31.1 (Power Piping).
A Locking Plate eliminates an unauthorized removal of the bonnet.

Features
• Integral Valve Seat – Metal to Metal Seated
• Non-rotating Needle
• External Stem Thread – Packing below stem threads.
  Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.
• Stem with cold rolled threads
• Blow-out proof Needle
• Back Seat – Metal to metal secondary needle seal
• Locking Plate – Eliminates unauthorized removal of the bonnet
• Color Coded Dust Cap for operating thread protection
• Max. allowable (Working) Pressure (PS): 414 bar (6,000 psi)
• Anti-Tamper Valve Head Options available
• All non-wetted parts in 316 stainless steel

Needle Valves with O-Ring Stem Seal

Screwed Bonnet – O-Ring Stem Seal

Features
• Integral Valve Seat
• Non-rotating Needle
• External Stem Thread – Packing below stem threads.
  Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.
• Stem with cold rolled threads
• Blow-out proof Needle
• Back Seat – Metal to metal secondary needle seal
• Lock Pin – Eliminates unauthorized removal of the bonnet
• Color Coded Dust Cap for operating thread protection
• O-Ring FKM, optional EPDM
• Soft Tip PCTFE or POM
• Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
• Panel Mount Option not available
• Anti-Tamper Valve Head Options available
• All non-wetted parts in 316 stainless steel

Color Coded Option
FKM O-Ring Stem Seal with PCTFE Soft Tip
Standard Valve Head Units

Needle Valves with OS&Y Bolted Bonnet

OS&Y Bolted Bonnet – Standard Packing

Features

• Integral Valve Seat – Metal to Metal Seated
• Non-rotating Needle
• External Stem Thread – Packing below stem threads.
  Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.
• Stem with cold rolled threads
• Blow-out proof Needle
• Spring Washers for compensation of thermal expansion
• Back Seat – Metal to metal secondary needle seal
• Color Coded Dust Cap for operating thread protection
• Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
• Anti-Tamper Valve Head Options available
• PTFE or Graphite Packing
• Bonnet Seal Ring: Graphite
• All non-wetted parts in 316 stainless steel

Pressure-Temperature Rating for Standard Valve Head Units
acc. to Page 6 – 8

Low-temperature Limits:
- Standard Valves with PTFE and Graphite Packing; 
  -40°C (-40°F)
- Valves with PTFE Packing and Arctic Operations Option, Code K: -55°C (-67°F)
- Valves with FKM O-Ring Needle Seal: -20°C (-4°F)
- Carbon Steel ASTM A105: -29°C (20.2°F)

Packing adjustment may be required during the service life of the valves.

Valves that have not been cycled for a period of time may have a higher initial actuation torque.
**Needle Valves acc. to ISO 15848**

**Screwed Bonnet** — Type 1 O-Ring Stem Seal + Graphite Packing
Type 3 PTFE Packing

**Features**
- Integral Valve Seat – Metal to Metal Seated
- Non-rotating Needle
- External Stem Thread – Packing below stem threads. Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.
- Stem with cold rolled threads
- Back Seat – Metal to metal secondary needle seal
- Color Coded Dust Cap for operating thread protection
- Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
- Anti-Tamper Valve Head Options available
- FKM O-Ring Needle Seal – RGD (Rapid Gas Decompression) resistant
- PTFE or Graphite Packing
- Bonnet Seal Ring: Graphite
- All non-wetted parts in 316 stainless steel
- Types also comply with the requirements of TA-Luft 2002

**ISO FE Performance Data**
ISO FE Type 1:
Class A 1,500 cycles / –29°C to 40°C
(–20°F to 104°F)
Class A 500 cycles / –29°C to 200°C
(–20°F to 392°F)
Class B 1,500 cycles / –29°C to 200°C
(–20°F to 392°F)

ISO FE Type 3:
Class B 1,500 cycles / –29°C to 200°C
(–20°F to 392°F)

**OS&Y Needle Valves acc. to ISO 15848**

**OS&Y Bolted Bonnet** — Type 1 O-Ring Stem Seal + Graphite Packing
Type 3 PTFE Packing

**Features**
- Integral Valve Seat – Metal to Metal Seated
- Non-rotating Needle
- External Stem Thread – Packing below stem threads. Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.
- Stem with cold rolled threads
- Blow-out proof Needle
- Spring Washers for compensation of thermal expansion
- Back Seat – Metal to metal secondary stem seal
- Color Coded Dust Cap for operating thread protection
- Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
- Anti-Tamper Valve Head Options available
- FKM O-Ring Stem Seal – RGD (Rapid Gas Decompression) resistant
- PTFE or Graphite Packing
- Bonnet Seal Ring: Graphite
- All non-wetted parts in 316 stainless steel
- Types also comply with the requirements of TA-Luft 2002

**ISO FE Performance Data**
ISO FE Type 1:
Class A 2,500 cycles / –29°C to 40°C
(–20°F to 104°F)
Class A 500 cycles / –29°C to 200°C
(–20°F to 392°F)
Class B 2,500 cycles / –29°C to 200°C
(–20°F to 392°F)

ISO FE Type 3:
Class B 2,500 cycles / –29°C to 200°C
(–20°F to 392°F)
Valve Head Units for Fugitive Emission Applications

Bellows Sealed Head Units

**Screwed Bonnet**
- PN 100 and Graphite Safety Packing
- PN 250 and Graphite Safety Packing

**Features**
- Integral Valve Seat – Metal to Metal Seated
- Non-rotating Stem
- Bellows sealed – PN 100 and PN 250 incl. Graphite Safety Packing
- Stem with cold rolled threads
- Stellite Needle Tip as standard
- Bellows are submitted to a 100% Helium leak test
- Leak rate: 10^{-8} mbar l/s
- Valves for Oxygen Service on request

Bellows Sealed Head Units are mainly used for applications requiring the highest tightness class – such as toxic or vacuum service.

⚠️ Packing adjustment may be required during the service life of the valves.

⚠️ Valves that have not been cycled for a period of time may have a higher initial actuation torque.

⚠️ When delivered ex factory, the safety packing of the bellows sealed valve is not fully tightened. In the event of a bellows failure the safety packing must be tightened in order to avoid fluid leakage.

**Pressure-Temperature Rating**

<table>
<thead>
<tr>
<th>ISO FE Type</th>
<th>Packing</th>
<th>Pressure-Temperature Rating</th>
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<tbody>
<tr>
<td>1</td>
<td>FKM O-Ring and Graphite Packing</td>
<td>PN 100: 108 (4.25”) open</td>
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<tr>
<td>3</td>
<td>PTFE Packing</td>
<td>PN 250: 137 (5.39”) open</td>
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</table>

Above-mentioned Pressure-Temperature Rating is based on the standard material 316 stainless steel. Other materials as shown on page 4 and 6 might have different Pressure-Temperature Ratings.
Anti-Tamper Valve Head Unit Options

AS-Schneider is providing 2 Anti-Tamper Valve Head Units, both types are lockable with a padlock.

Standard Anti-Tamper Head Unit

The valves are operated with a special Anti-Tamper Key (AT-Key), which fits exactly in the key guide. The valve can therefore only be operated with the AT-Key. In addition to this safety function, installing a padlock prevents the AT-Key being inserted into the key guide. Operating the valve is therefore no longer possible which protects your equipment against unauthorized opening and closing of the valve head units. The valve can be locked reliably in every position required.

'AT-Key Lock' Anti-Tamper Head Unit (Option Code Q)

'AT-Key Lock' valves are operated by an AT-Key which is a part of the valve. This Key can be extracted a little from the valve head unit which loosens the connection between the valve stem and the Key. In this extended position a padlock can now be hooked diagonally in the valve head unit which prevents the Key being inserted again. Operating the valve is therefore no longer possible which protects your equipment against unauthorized opening and closing of the valve. The valve is lockable reliably in every position required. This design offers you optimal security against unintentional and unauthorized operation of the valve. A color coded dust cap protects stem threads against ingress of dirt unauthorized opening and closing of the valve head units. The valve can be locked reliably in every position required.

Stainless Steel Handwheel and 'Locking Plate' Design

The valves can be ordered optional with Stainless Steel Handwheel (Option Code W) and also with an additional fitted locking plate (Option Code J). For ordering the 'Locking Plate' Design incl. padlock you need to state J and U. This design allows minimum handle movements and is ideal as protection against unauthorized closing of the valve.
Connections

AS-Schneider is manufacturing a lot of different connections and connection combinations. In this catalogue we are showing the most popular types. On the next 2 pages you will find the standard connections in detail. If you don't find your option please contact us.

**Designations used in the tables:** Inlet = Process Connection | Outlet = Instrument / Transmitter Connection

**Tube Fittings**

- Single Ferrule Tube Fittings  
  acc. to EN ISO 8434-1 Size S

- Twin Ferrule Tube Fittings

**Tapered Pipe Threads**

- NPT Male Threads  
  acc. to ASME B 1.20.1

- BSP Tapered Thread  
  acc. to ISO 7/1 (e.g. R 1/2)

- NPT Female Threads  
  acc. to ASME B 1.20.1

- BSP Tapered Thread  
  acc. to ISO 7/1 (e.g. Rc 1/2)

**Parallel Pipe Threads**

- BSP Parallel Male Thread  
  acc. to ISO 228 (e.g. G1/2)  
  acc. to DIN 3852  
  acc. to EN 837-1

- BSP Parallel Female Threads  
  acc. to ISO 228 (e.g. G 1/2)  
  acc. to DIN 3852-2 Form Z  
  acc. to ISO 7/1 (e.g.) R 1/2  
  acc. to EN 837-1

**Weld Ends**

- Butt Weld Ends for  
  Pipes and Tubes acc. to  
  EN12627 / ASME B16.9

- Socket Weld Ends for  
  Pipes and Tubes acc. to  
  EN12760 / ASME B16.11

**Pressure Gauge Connections - For Parallel Pipe Threads only**

- Swivel Male Connection

- Adjusting Nut  
  acc. to DIN 16283

- Swivel Nut (Wire Design)

- Swivel Nut  
  (Welded Nipple Design)  
  acc. to DIN 16284
Flange Connections

According to DIN EN 61518 the manifold-transmitter interface is applicable for a max. allowable (Working) Pressure (PS) of 413 bar (6,000 psi) and a max. allowable Temperature (TS) of 120 °C (248°F) for liquids, gas or vapors. The max. allowable Temperature (TS) of 120 °C (248°F) is considering the requirement that manifolds and transmitters need to be protected against heating by hot media. This can be achieved by using adequate hook-ups or by instrument impulse lines with sufficient length. However the AS-Schneider E Series Manifolds can be used for temperatures up to 550 °C (1,022°F), PTFE up to 232 °C (450°F), Graphite up to 550 °C (1,022°F).

Flange Connections – Inlet Manifold respectively Transmitter Connection DIN EN 61518 / IEC 61518

<table>
<thead>
<tr>
<th>Type</th>
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<tbody>
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<td>Graphite</td>
<td>Flange Ring</td>
<td>-10 to +80 (14 to 176)</td>
<td>413 (6,000)²</td>
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<td></td>
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<td>-15 to +120 (5 to 248)</td>
<td>413 (6,000)²</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>-40 to +120 (-40 to 248)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Graphite</td>
<td>Flange Ring</td>
<td>-10 to +80 (14 to 176)</td>
<td>413 (6,000)²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-40 to +120 (-40 to 248)</td>
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Connection at the manifold acc. to DIN EN 61518 / IEC 61518

<table>
<thead>
<tr>
<th>Type A with spigot</th>
<th>Type B without spigot</th>
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<tbody>
<tr>
<td>Max. allowable (Working) Pressure (PS) in bar (psi)</td>
<td>413 (6,000)²</td>
</tr>
<tr>
<td>Temperature Range in °C (°F)</td>
<td>-10 to +80 (14 to 176)</td>
</tr>
<tr>
<td>Seal Ring²</td>
<td>Flat Ring 24 x 17.7 x 2.7 Material: PTFE</td>
</tr>
<tr>
<td>Min. Thread Engagement in mm</td>
<td>9</td>
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</table>

Notes:
1. Threaded option for transmitters – plug / vent valve
2. Materials and temperature limits for the flat rings and the O-Rings are for reference only. It is the responsibility of the user to ensure compatibility between the selected gasket ring material and the process requirements, such as pressure, temperature, and chemical compatibility.
3. IEC 61518 is stating 413 bar (6,000 psi), AS-Schneider however confirms 420 bar (6,092 psi).
Hand Valves are available with a lot of options. We are showing on this page just the standard types. You find a lot more options on the next page – Ordering Information Hand Valves.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

**Hand Valve Female x Female Threaded**
HAFF Type

[Diagram of Hand Valve Female x Female Threaded]

**Hand Valve Male x Female Threaded**
HAMF Type

[Diagram of Hand Valve Male x Female Threaded]

**Hand Valve with Integral Tube Fittings**
HATT Type

[Diagram of Hand Valve with Integral Tube Fittings]

**Hand Valve with Extended Body**
HXMF Type
Extended by approx. 3"

[Diagram of Hand Valve with Extended Body]

**Hand Valve with OS&Y Bolted Bonnet**
HFFF Type

[Diagram of Hand Valve with OS&Y Bolted Bonnet]

**Angle Hand Valve**
HLMF Type

[Diagram of Angle Hand Valve]

**Bore Size 10 mm:**
Depending on connection size
Width = 1 1/4"
### Hand Valves

#### Basic Design

**A** Screwed Bonnet  
**L** Angle Hand Valve (Screwed Bonnet)

**F** OS&Y Bonnet  
**X** Extended Body (Screwed Bonnet)

#### Inlet

**M** Male  
**B** Butt-Weld End

**F** Female  
**S** Socket-Weld End

**T** Integral Tube Fitting  
**A** 1/2 NPT with Tube Fitting

#### Outlet

**M** Male  
**B** Butt-Weld End

**F** Female  
**S** Socket-Weld End

**T** Integral Tube Fitting  
**A** 1/2 NPT with Tube Fitting

#### Material

**S** 1.4401 / 1.4404 / 316 / 316L  
**B** Duplex UNS S31803

**M** Alloy 400 UNS N04400  
**D** Super Duplex UNS S32750

**H** Alloy C-276 UNS N10276  
**Y** Alloy 625 UNS N06625

#### Bonnet

**A** PTFE  
**K** O-Ring FKX (FFM by ISO)

**B** Graphite  
**W** Carbon filled PTFE – TA-Luft

**D** ISO FE Series Type 1  
**ISO FE Series Type 3**

**S** Stellite Valve Tip

10,000 psi (689 bar) for PTFE Packing  
I 7,252 psi (500 bar) for Graphite Packing

**P** Power Piping ASME B31.1 – For Graphite Packing only

**K** Arctic Operations (-55°C (-67°F))  
**M** Wetted Parts with 3.1 certificate

#### Operation Options

**J** Stainless Steel Handwheel with Locking Plate Design

**T** Anti-Tamper Bonnet (Key to be ordered separately)

**R** Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)

**Q** AT-Key Lock Bonnet Design

**U** Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design

### Ordering Information

<table>
<thead>
<tr>
<th>Hand Valves</th>
<th>1</th>
<th>2</th>
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<td><strong>M</strong></td>
<td><strong>S</strong></td>
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</table>

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**AS-Schneider Gauge Valves**

AS-Schneider Gauge Valves are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches. The standard types are equipped with a bleed screw. We are showing on this page just the standard types.

You find a lot more options on the next page – Ordering Information Gauge Valves. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT / G 1/2 Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

**Gauge Valves**

- **Gauge Valve Female x Female Threaded**
  - GSFF Type
  - Dimensions: 74 (2.91") open

- **Gauge Valve Male x Female Threaded**
  - GSMF Type
  - Dimensions: 86 (3.34")

- **Gauge Valve Male x Male Threaded**
  - GSMM Type
  - Dimensions: 100 (3.94")

- **Gauge Valve Male x Adjusting Nut**
  - GSMG Type
  - Dimensions: 146 (5.75")

- **Gauge Valve Male x Female Threaded**
  - GAMF Type
  - Female Threaded Vent Connection - Pipe Plug installed

- **Mounting Bracket**
  - AKM-S Type
  - See also Page 48.
### Gauge Valves

#### Vent Connection
- **A**: 1/4 NPT Female
- **B**: 1/2 NPT Female
- **C**: G 1/4 Female
- **D**: G 1/2 Female
- **E**: G 1/4 (1/4 BSP P)
- **F**: G 1/2 (1/2 BSP P)

#### Inlet
- **M**: Male
- **T**: Integral Tube Fitting
- **W**: Series similar to EN 837-1
- **X**: 1/2” Pipe

#### Outlet
- **M**: Male
- **F**: Female
- **G**: Adjusting Nut (For Connection Code G2, G4 and M4 only)
- **D**: Swivel Nut (Wire Design) (For Connection Code G2, G4 and M4 only)

#### Material
- **A**: 1.4401 / 1.4404 / 316 / 316L
- **B**: 6Mo UNS S31254
- **C**: Super Duplex UNS S32750
- **D**: Titanium Grade 2

#### Bonnet
- **A**: PTFE
- **B**: Graphite
- **C**: Carbon filled PTFE – TA-Luft
- **D**: ISO FE Series Type 1
- **E**: ISO FE Series Type 3

#### Thread Type
- **N**: NPT
- **G**: BSP Parallel (G) – EN 837-1
- **H**: BSP Parallel (G) – DIN 3822
- **R**: BSP Taper (R/Rc) – ISO 7/1
- **M**: Metric similar to EN 837-1

#### Fitting Type
- **C**: Single Ferrule Tube Fitting
- **K**: Twin Ferrule Tube Fitting
- **D**: Butt Weld End
- **E**: Socket Weld End

#### Wall Thickness Butt Weld
- **A**: Schedule 80
- **B**: Schedule 160
- **C**: 2.0 mm
- **Q**: 2.6 mm
- **W**: 3.2 mm

#### Outlet
- **M**: Male
- **N**: Female Thread only
- **Q**: R/Rc 1/2 – ISO 7/1 (1/2 BSPF)
- **R**: Female Thread only
- **S**: M20 x 1.5

#### Options - Specify in alphabetical order (digits first, then letters)
- **B**: Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- **F**: PCTFE Soft Tip
- **G**: Stellite Valve Tip
- **H**: 10,000 psi (689 bar) for PTFE Packing 17,252 psi (500 bar) for Graphite Packing
- **P**: Power Piping ASME B31.1 – For Graphite Packing only
- **K**: Arctic Operations (-55°C (-67°F)) – For PTFE Packing only
- **M**: Wetted Parts with 3.1 certificate
- **C**: Panel Mounting

#### Operation Options
- **J**: Stainless Steel Handwheel with Locking Plate Design
- **T**: Anti-Tamper Bonnet (Key to be ordered separately)
- **R**: Anti-Tamper Bonnet (Key supplied per Valve/Manifold)
- **Q**: AT-Key Lock Bonnet Design
- **U**: Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
- **W**: Stainless Steel Handwheel

#### Accessory Kits
- **B**: SST Mounting Bracket AKM-S Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations

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*Wetted Parts according to above mentioned material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.
Note: Not every configuration which can be created in the ordering information is feasible / available.*

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**Multiport Gauge Valves**

AS-Schneider Multiport Gauge Valves are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches. The standard types are provided with 3 female outlet ports and are therefore suitable for vertical or horizontal installations.

Accessories like Pipe Plugs and Vent Valves can be ordered separately or already factory installed – see also options next page – Ordering Information Multiport Gauge Valves. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

**Multiport Gauge Valve – Screwed Bonnet**
MAMA Type

**Multiport Gauge Valve with Extended Body**
MXBA Type
Extended by approx. 3”
## Multiport Gauge Valves

### Ordering Information

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
| Multiport Gauge Valves | Screwsce Bonnet | OSGY Bonnet | Extended Body (Screwed Bonnet) | Total | 3 x Female | Outlet 1 – Female, Outlet 2 – Pipe Plug, Outlet 3 – Vent Valve VS | Outlet 1 – Female, Outlet 2 – Pipe Plug, Outlet 3 – Vent Valve VT | Outlet 1 – Female, Outlet 2 and 3 – Pipe Plug | Material | S 1.4401 / 1.4404 / 316 / 316L | F Duplex UNS S31803 | B 6Mo UNS S31254 |  |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Male |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Female |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inlet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| F |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Outlet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| S 1.4401 / 1.4404 / 316 / 316L | F Duplex UNS S31803 | B 6Mo UNS S31254 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| M |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Material |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**Note:** Not every configuration which can be created in the ordering information is feasible / available.

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*Wetted Parts according to above mentioned material list are supplied according to NACE MR0175/ MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.*
Block & Bleed and Double Block & Bleed Manifolds

AS-Schneider Block & Bleed and Double Block & Bleed Manifolds are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard. For plugged vent ports (factory installed) – see also options next page – Ordering Information Block & Bleed Manifolds. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

Block & Bleed Manifolds – Female Threaded Instrument Connection
SAFF Type

SAMF Type

Double Block & Bleed Manifolds – Female Threaded Instrument Connection
CAFF Type

CAMF Type

Mounting Bracket
AKM-G Type
See also Page 48.

Mounting Bracket
AKM-S Type
See also Page 48.
## Block & Bleed and Double Block & Bleed Manifolds

### Ordering Information

<table>
<thead>
<tr>
<th>Block &amp; Bleed Manifolds</th>
<th>Double Block &amp; Bleed Manifolds</th>
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<tbody>
<tr>
<td><strong>Vent Connection</strong></td>
<td></td>
</tr>
<tr>
<td>A 1/4 NPT Female</td>
<td>C 1/4 Female</td>
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<tr>
<td>B 1/2 NPT Female</td>
<td>D 1/2 Female</td>
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<tr>
<td><strong>Inlet</strong></td>
<td></td>
</tr>
<tr>
<td>M Male</td>
<td>B Butt Weld End</td>
</tr>
<tr>
<td>F Female</td>
<td>S Socket Weld End</td>
</tr>
<tr>
<td>T Integral Tube Fitting</td>
<td>A 1/2 NPT with Tube Fitting</td>
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<tr>
<td><strong>Outlet</strong></td>
<td></td>
</tr>
<tr>
<td>M Male</td>
<td>G Adjusting Nut (For Connection Code G2, G4 and M4 only)</td>
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<tr>
<td>F Female</td>
<td>D Swivel Nut [Wire Design] (For Connection Code G2, G4 and M4 only)</td>
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<tr>
<td><strong>Material</strong></td>
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<td>M Alloy 400 UNS N04400</td>
<td>D Super Duplex UNS S32750</td>
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<td>H Alloy C-276 UNS N02276</td>
<td>V Alloy 625 UNS N06625</td>
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<td>A PTFE</td>
<td>K O-Ring FM (FPM by ISO)</td>
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<tr>
<td>B Graphite</td>
<td>W Carbon filled PTFE – TA-Luft</td>
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<td>Fitting Type</td>
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<tr>
<td>G BSP Parallel (G) – EN 837-1</td>
<td>Twin Ferrule Tube Fitting</td>
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<tr>
<td>H BSP Parallel (G) – DIN 3852</td>
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<tr>
<td>R BSP Taper (R/t) – ISO 711</td>
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<td>M Metric similar to EN 837-1</td>
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<td><strong>Fitting Sizes</strong></td>
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<td>4 1/2</td>
<td>14 resp. 14S</td>
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<td>6 3/4</td>
<td>1/2”</td>
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<tr>
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<td><strong>Socket Weld End</strong></td>
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<td>P Schedule 80</td>
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<tr>
<td>B Cleaned and Lubricated for Oxygen Service – For PTFE Packing only</td>
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<tr>
<td>F PCTFE Soft Tip</td>
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</tr>
<tr>
<td>G POM Soft Tip</td>
<td></td>
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<tr>
<td>S Stellite Valve Tip</td>
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<tr>
<td>A Vent Ports Plugged</td>
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<tr>
<td>H 10,000 psi (689 bar) for PTFE Packing</td>
<td>17,252 psi (500 bar) for Graphite Packing</td>
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<td>M Wetted Parts with 3.1 certificate</td>
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<td><strong>Operation Options</strong></td>
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<tr>
<td>J Stainless Steel Handwheel with Locking Plate Design</td>
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<tr>
<td>T Anti-Tamper Bonnet (Key to be ordered separately)</td>
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<tr>
<td>R Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)</td>
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<tr>
<td>Q AT-Key Lock Bonnet Design</td>
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<tr>
<td>U Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design</td>
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<tr>
<td>W Stainless Steel Handwheel</td>
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<tr>
<td><strong>Accessory Kits</strong></td>
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<tr>
<td>8 SST Mounting Bracket AKM-S Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations of Block &amp; Bleed Manifolds Type S</td>
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<td>9 SST Mounting Bracket AKM-G Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations of Double Block &amp; Bleed Manifolds Type C</td>
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</table>

Wetted Parts according to above mentioned material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.

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Block & Bleed and Double Block & Bleed Manifolds
L, Y & W-Shaped Manifolds

AS-Schneider L, Y & W-Shaped Manifolds are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard. For plugged vent ports (factory installed) – see also options Page 24 – Ordering Information L, Y & W-Shaped Manifolds. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

L-Shaped Manifolds

Y-Shaped Manifolds

Mounting Bracket
AKM-R Type
See also Page 48.
W-Shaped Manifolds
PWAA Type

Mounting Bracket
AKM-R Type
See also Page 48.
## L, Y & W-Shaped Manifolds

### Ordering Information

<table>
<thead>
<tr>
<th>P</th>
<th>L, Y &amp; W-Shaped Manifolds</th>
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</thead>
<tbody>
<tr>
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</table>

#### Manifold Type
- L: L-Shaped Bonnet Orientation
- Y: Y-Shaped Bonnet Orientation
- W: W-Shaped Bonnet Orientation – Double Block & Bleed Type

#### Vent Connection

<table>
<thead>
<tr>
<th>A</th>
<th>1/4 NPT Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1/2 NPT Female – Only Type PL</td>
</tr>
<tr>
<td>C</td>
<td>G 1/4 Female</td>
</tr>
<tr>
<td>D</td>
<td>G 1/2 Female – Only Type PL</td>
</tr>
</tbody>
</table>

**Vent Connection Options**
- F: 1/4 NPT with Tube Fitting 6 mm
- G: 1/4 NPT with Tube Fitting 12 mm
- H: G 1/4 with Tube Fitting 6 mm
- J: G 1/4 with Tube Fitting 12 mm
- Tube Fitting Brand see inlet/outlet

#### Inlet x Outlet Configuration

<table>
<thead>
<tr>
<th>A</th>
<th>Female x Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Female x Swivel Nut</td>
</tr>
<tr>
<td>C</td>
<td>1/2 NPT with Tube Fitting x Female</td>
</tr>
<tr>
<td>D</td>
<td>1/2 NPT with Tube Fitting x Swivel Nut</td>
</tr>
</tbody>
</table>

**Inlet x Outlet Configuration Options**
- E: G 1/2 with Tube Fitting x Female
- F: G 1/2 with Tube Fitting x Swivel Nut

#### Material

<table>
<thead>
<tr>
<th>S</th>
<th>1.4401 / 1.4404 / 316 / 316L</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Alloy 400 UNS N04400</td>
</tr>
<tr>
<td>H</td>
<td>Alloy C-276 UNS N10276</td>
</tr>
</tbody>
</table>

**Material Options**
- F: Duplex UNS S31803
- G: Super Duplex UNS S32750
- Y: Alloy 625 UNS N06625

#### Bonnet

<table>
<thead>
<tr>
<th>A</th>
<th>PTFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Graphite</td>
</tr>
<tr>
<td>D</td>
<td>ISO FE Series Type 1</td>
</tr>
<tr>
<td>E</td>
<td>ISO FE Series Type 3</td>
</tr>
</tbody>
</table>

**Bonnet Options**
- K: O-Ring FKM (FPM by ISO)
- W: Carbon filled PTFE – TA-Luft
- D: ISO FE Series Type 3 4 Bellows sealed PN 100
- E: ISO FE Series Type 3 4 Bellows sealed PN 250

#### Inlet

<table>
<thead>
<tr>
<th>N</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>BSP Parallel (G) – DIN 3852</td>
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</table>

**Inlet Options**
- C: Single Ferrule Tube Fitting
- K: Twin Ferrule Tube Fitting

#### Outlet

<table>
<thead>
<tr>
<th>N4</th>
<th>1/2 NPT Female</th>
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<tbody>
<tr>
<td>G4</td>
<td>G 1/2 Swivel Nut</td>
</tr>
<tr>
<td>M4</td>
<td>M 20 x 1.5 Swivel Nut</td>
</tr>
</tbody>
</table>

**Outlet Options**
- G: Single Ferrule Tube Fitting
- K: Twin Ferrule Tube Fitting

#### Options - Specify in alphabetical order (digits first, then letters)

- B: Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- F: PCTFE Soft Tip
- G: POM Soft Tip
- S: Stellite Valve Tip
- A: Vent Ports Plugged
- H: 10,000 psi (689 bar) for PTFE Packing 17,252 psi (500 bar) for Graphite Packing
- P: Power Piping ASME B31.1 – For Graphite Packing only
- K: Arctic Operations (-55°C (-67°F)) – For PTFE Packing only
- M: Wetted Parts with 3.1 certificate

#### Operation Options

- J: Stainless Steel Handwheel with Locking Plate Design
- T: Anti-Tamper Bonnet (Key to be ordered separately)
- R: Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
- Q: AT-Key Lock Bonnet Design
- U: Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
- W: Stainless Steel Handwheel

#### Accessory Kits

- B: SST Mounting Bracket AKM-4 Type for 2" Pipe Mounting supplied separately – For Vertical Impulse Piping Installations

---

*Wetted Parts according to above mentioned material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.*

*Note: Not every configuration which can be created in the ordering information is feasible / available.*
AS-Schneider Remote Mounted Manifolds are designed for remote installation from Pressure Instruments and Differential Pressure Transmitters. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard to 2 and 5 Valve Manifolds. For plugged vent ports (factory installed) - see also options Page 27 – Ordering Information Remote Mounted Manifolds. The standard type of 3 Valve Manifolds is the one without vent connection. The 3 Valve Manifolds with vent connection are supplied with installed pipe plugs as standard. Accessories like Mounting Brackets, Swivel Gauge Adaptors, Pipe Plugs etc. see also Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

2 Valve Manifolds, Remote Mounted
R2AA Type

3 Valve Manifolds, Remote Mounted without Vent Connection
R3AA Type

Mounting Bracket
AKM-R Type
See also Page 48.
Remote Mounted Manifolds

3 Valve Manifolds, Remote Mounted with Vent Connection 1/4 NPT Female
R3BA Type

Vent Ports on Process Side
R3GA Type

5 Valve Manifolds, Remote Mounted
RSAA Type

Mounting Bracket
AKM-R Type
See also Page 48.
## Remote Mounted Manifolds

**Ordering Information**

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<tr>
<th>Quantity Bonnets – 2, 3 or 5</th>
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<tr>
<td><strong>Vent Connection</strong></td>
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<tr>
<td>A Standard – 2 Valve / 5 Valve Manifold with Vent Ports 1/4 NPT Female; 3 Valve Manifold without Vent Port</td>
</tr>
<tr>
<td>B Vent Ports 1/4 NPT Female – For 3 Valve Manifolds only</td>
</tr>
<tr>
<td>G Vent Ports 1/4 NPT on Process Side of the 5 Valve Manifold</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Inlet and Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Female Connections</td>
</tr>
<tr>
<td>B 1/4 NPT with Tube Fittings</td>
</tr>
<tr>
<td>C 1/2 NPT with Tube Fittings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
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<tr>
<td>S 1.4401 / 1.4404 / 316L</td>
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<tr>
<td>M Alloy 400 UNS N04400</td>
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<tr>
<td>H Alloy C-276 UNS N10276</td>
</tr>
<tr>
<td>F Duplex UNS S31803</td>
</tr>
<tr>
<td>D Super Duplex UNS S32750</td>
</tr>
<tr>
<td>Y Alloy 625 UNS N06625</td>
</tr>
<tr>
<td>B 6Mo UNS S31254</td>
</tr>
<tr>
<td>T Titanium Grade 2</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Bonnet</th>
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</thead>
<tbody>
<tr>
<td>A PTFE</td>
</tr>
<tr>
<td>B Graphite</td>
</tr>
<tr>
<td>D ISO FE Series Type 1</td>
</tr>
<tr>
<td>E ISO FE Series Type 3</td>
</tr>
<tr>
<td>K O-Ring FM (FPM by ISO)</td>
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<tr>
<td>W Carbon filled PTFE – TA-Luft</td>
</tr>
<tr>
<td>2 Bellows sealed PN 100</td>
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<tr>
<td>4 Bellows sealed PN 250</td>
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<table>
<thead>
<tr>
<th>Inlet</th>
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</thead>
<tbody>
<tr>
<td>NPT</td>
</tr>
<tr>
<td>C Single Ferrule Tube Fitting</td>
</tr>
<tr>
<td>K Twin Ferrule Tube Fitting</td>
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</table>

<table>
<thead>
<tr>
<th>Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT</td>
</tr>
<tr>
<td>C Single Ferrule Tube Fitting</td>
</tr>
<tr>
<td>K Twin Ferrule Tube Fitting</td>
</tr>
</tbody>
</table>

**Options - Specify in alphabetical order (digits first, then letters)**

- B Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- F PCTFE Soft Tip
- G POM Soft Tip
- S Stainless Valve Tip
- A Vent Ports Plugged
- H 10,000 psi (689 bar) for PTFE Packing 17,252 psi (100 bar) for Graphite Packing
- P Power Piping ASME B31.1 – For Graphite Packing only
- K Arctic Operations (-35°C (-31°F)) – For PTFE Packing only
- M Wetted Parts with 3.1 certificate

**Operation Options**

- J Stainless Steel Handwheel with Locking Plate Design
- T Anti-Tamper Bonnet (Key to be ordered separately)
- R Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
- Q AT-Key Lock Bonnet Design
- U Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
- W Stainless Steel Handwheel

**Accessory Kits**

- B SST Mounting Bracket AKM-R Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.
Direct Mount Manifolds - Wafer Style

Direct Mount Manifolds (2, 3 and 5 Valve Manifolds)

AS-Schneider Direct Mount Manifolds are designed for direct mounting to Pressure and Differential Pressure Transmitters – either Transmitters with standard flange connection in accordance with DIN EN 61518 / IEC 61518 or alternatively to Rosemount 2051/3051 Coplanar™ Pressure Transmitters. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard to 2 and 5 Valve Manifolds. For plugged vent ports (factory installed) and other options see Page 33, 37 and 40 – Ordering Information Direct Mount Manifolds.

The standard type of 3 Valve Manifolds is the one without vent connection. 3 Valve Manifolds with vent connection are supplied with installed pipe plugs as standard. Integral Style 3 Valve Manifolds with Coplanar™ flange connection are provided with vent connections 1/4 NPT female as standard – plugged with vent valves type VS.

We differentiate between Wafer Style Manifolds (see Page 28-33) and Traditional Style Manifolds (see Page 34-37), the Wafer Type for the Rosemount 2051/3051 Coplanar™ Pressure Transmitter is just called Coplanar™ Style Manifold. You will find the Integral Manifolds for 2051/3051 Coplanar™ Pressure Transmitters on Page 38-40. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded / Flange Interface DIN EN 61518) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

Wafer Style Manifolds

2 Valve Manifolds – Standard
W2AA Type

2 Valve Manifolds – L-Shaped Bonnet Orientation
W2LA Type

Mounting Bracket
AKM-U Type
See also Page 49.

Mounting Bracket
AKM-U Type
See also Page 49.

Mounting Bracket
AKM-D Type
See also Page 48.
3 Valve Manifolds – Standard (Female x Flanged)
Without Vent Connection W3AA Type
With Vent Connection W3BA Type

3 Valve Manifolds – Standard (Flanged x Flanged)
Without Vent Connection W3AB Type
With Vent Connection W3BB Type

Mounting Bracket
AKM-U Type
See also Page 49.

Mounting Bracket
AKM-D Type
See also Page 48.
Direct Mount Manifolds - Wafer Style

3 Valve Manifolds – Compact Design (Female x Flanged)
Without Vent Connection W3CA Type
With Vent Connection 1/4 NPT Female W3DA Type

Mounting Bracket
AKM-U Type
See also Page 49.

3 Valve Manifolds – Bottom Inlet Design (Female x Flanged)
W3EA Type

Mounting Bracket
AKM-B Type
See also Page 48.

Mounting Bracket
AKM-U Type
See also Page 49.

Mounting Bracket
AKM-D Type
See also Page 48.
Direct Mount Manifolds - Wafer Style

5 Valve Manifolds – Standard (Female x Flanged IEC 61518-A)
WSAA Type

5 Valve Manifolds – Female x Flanged IEC 61518-B
WSAA Type

5 Valve Manifolds – Female x Flanged
Vent Ports on Bottom Face
WSGA Type

Illustrated type with IEC 61518-A connection*

* Other dimensions same as WSAA Type

Mounting Bracket
AKM-U Type
See also Page 49.

Mounting Bracket
AKM-D Type
See also Page 48.

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Direct Mount Manifolds - Wafer Style

5 Valve Manifolds – Compact Design (Female x Flanged)
WSCA Type

5 Valve Manifolds – Bottom Inlet Design (Female x Flanged)
WSEA Type

For Bottom Inlet Design only
Mounting Bracket
AKM-B Type
See also Page 48.

For Compact Design
Mounting Bracket
AKM-D Type
See also Page 48.
### Ordering Information

**Direct Mount Manifolds - Wafer Style**

<table>
<thead>
<tr>
<th>Quantity Bonnets – 2-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
</tbody>
</table>

#### Manifold Specifics

- **A**: Standard – 2 Valve / 5 Valve Manifold with Vent Ports 1/4 NPT Female, 3 Valve Manifold without Vent Port
- **B**: Vent Ports 1/4 NPT Female Plugged – For 3 Valve Manifolds only
- **C**: Compact Design – 5 Valve Manifold with Vent Ports 1/4 NPT Female, 3 Valve Manifold without Vent Port
- **D**: Bottom Inlet Design
- **G**: Vent Ports on Bottom Face of the 3 Valve Manifold
- **L**: L-Shaped Bonnet Orientation

#### Inlet

- **A**: Female
- **B**: Flanged
- **C**: 1/2 NPT with Tube Fittings
- **D**: G 5/2 with Tube Fittings

#### Material

- **S**: 1.4401 / 1.4404 / 316 / 316L F Duplex UNS S31803
- **D**: Super Duplex UNS S32750
- **B**: 6Mo UNS S31254
- **L**: Titanium Grade 2

#### Bonnet

- **A**: PTFE
- **B**: Graphite
- **D**: ISO FE Series Type 1
- **E**: ISO FE Series Type 3

#### Inlet

- **N**: NPT
- **H**: BSP Parallel (G) – DIN 3852

#### Thread Type

- **C**: Single Ferrule Tube Fitting
- **K**: Twin Ferrule Tube Fitting

#### Thread Size

<table>
<thead>
<tr>
<th>Size</th>
<th>Tube Fitting Sizes</th>
<th>Flange Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/14</td>
<td>4</td>
<td>EN 61518 without 1/4 NPT</td>
</tr>
<tr>
<td>4</td>
<td>12 resp. 125</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>14 resp. 145</td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

#### Outlet

- **TD**: DIN EN 61518-A
- **TE**: DIN EN 61518-B

#### Options - Specify in alphabetical order (digits first, then letters)

- **B**: Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- **F**: PCTFE Soft Tip
- **G**: POM Soft Tip
- **S**: SS Ferrule Tip
- **A**: Vent Ports Plugged
- **P**: Power Piping ASME B31.1 – For Graphite Packing only
- **K**: Arctic Operations (-55°C (-67°F)) – For PTFE Packing only
- **M**: Wetted Parts with 3.1 certificate

#### Operation Options

- **J**: Stainless Steel Handwheel with Locking Plate Design
- **T**: Anti-Tamper Bonnet (Key to be ordered separately)
- **R**: Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
- **Q**: AT-Key Lock Bonnet Design
- **U**: Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
- **W**: Stainless Steel Handwheel

#### Standard Accessory Kits for Manifold to Transmitter mounting according to DIN EN 61518 / IEC 61518

1. Hex Cap Screw 7/16-20 UNF, Bolt Length 1 3/4", C.S., PTFE Seal Rings
3. Hex Cap Screw 7/16-20 UNF, Bolt Length 1 3/4", C.S., Graphite Seal Rings

#### Mounting Bracket Kits

1. CST Mounting Brackets AKM-D Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations
2. SST Mounting Bracket AKM-J Type, or -D Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations
3. SST Mounting Bracket AKM-U Type for 2” Pipe Mounting supplied separately – For Horizontal and Vertical Impulse Piping Installations

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**Note:** Not applicable for W3GJ type with IEC 61518-B connection

**Relevant Bracket Type see Pages 28-32.

**For W3B Types Option A is not relevant because it is already included.

**Mentioned bolt length 1 3/4" not applicable for manifold type W3AB/W3BB - the bolt length depends here on the flange thickness of the flange on the process side.
Direct Mount Manifolds - Traditional Style

Traditional Style Manifolds

2 Valve Manifolds – Female x Flanged
T2A Type

2 Valve Manifolds – Flanged x Flanged
H2A Type

Mounting Bracket
AKM-U Type
See also Page 49.
3 Valve Manifolds – Without Vent Connection
T3A Type – Female x Flanged

H3A Type – Flanged x Flanged

3 Valve Manifolds – With Vent Connection
T3B Type – Female x Flanged

H3B Type – Flanged x Flanged

Mounting Bracket
AKM-U Type
See also Page 49.
Direct Mount Manifolds - Traditional Style

5 Valve Manifolds – Female x Flanged
TSA Type

5 Valve Manifolds – Flanged x Flanged
HSA Type

5 Valve Manifolds with Natural Gas Metering Pattern
T5N Type

Mounting Bracket
AKM-U Type
See also Page 49.
Direct Mount Manifolds - Traditional Style

Ordering Information

Manifold Specifics

A Standard – 2 Valve / 3 Valve Manifold with Vent Ports 1/4 NPT Female, 3 Valve Manifold without Vent Port
B Vent Ports 1/4 NPT Female Plugged – For 3 Valve Manifolds only
N Natural Gas Metering Pattern – For 5 Valve Manifolds only

Inlet

A Female – For T-Style Manifolds only
B Flanged – For H-Style Manifolds only
C 1/2 NPT with Tube Fittings – For T-Style Manifolds only

Material

S 1.4401 / 1.4404 / 316 / 316L F Duplex UNS S31803
M Alloy 400 UNS N04400
H Alloy C-276 UNS N10276

Bonnet

A PTFE
B Graphite
D ISO FE Series Type 1
E ISO FE Series Type 3

Transmitter Interface

TD DIN EN 61518-A
TE DIN EN 61518-B

Options - Specify in alphabetical order (digits first, then letters)

B Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
F PCTFE Soft Tip
G POM Soft Tip
S Stellite Valve Tip
A Vent Ports Plugged
P Power Piping ASME B31.1 – For Graphite Packing only
K Arctic Operations (-55°C (-67°F)) – For PTFE Packing only
M Wetted Parts with 3.1 certificate

Operation Options

J Stainless Steel Handwheel with Locking Plate Design
T Anti-Tamper Bonnet (Key to be ordered separately)
R Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
Q AT-Key Lock Bonnet Design
U Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
W Stainless Steel Handwheel

Standard Accessory Kits for Manifold to Transmitter mounting according to DIN EN 61518 / IEC 61518

Mounting Bracket Kits

9 SST Mounting Bracket ARM-U Type for 2” Pipe Mounting supplied separately – For Horizontal and Vertical Impulse Piping Installations

97 Relevant Bracket Type see Pages 34-36.
98 For K38T3B Type Option A is not relevant because it's already included.
99 Bolt Material S.S. = 316 Stainless Steel / ASTM A193 BBM Class 2

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/0103 and ISO 15156 (latest issue) – except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.
Direct Mount Manifolds - Integral Style

Integral Manifolds for Rosemount 2051/3051 Coplanar™ Pressure Transmitters

Coplanar™ Style Manifolds

2 Valve Integral Manifolds
W2RA Type

3 Valve Integral Manifolds
W3RA Type
Supplied as standard with vent valves – fitted

5 Valve Integral Manifolds
WSRA Type

Mounting Bracket
AKM-C Type
See also Page 48.
Direct Mount Manifolds - Integral Style

**Traditional Style Integral Manifolds**
Inlet with Flange Interface DIN EN 61518 / IEC 61518 and 1/4 NPT female only.

**2 Valve Integral Manifolds**
H2TB Type

![Diagram of 2 Valve Integral Manifolds]

**3 Valve Integral Manifolds**
H3TB Type
Supplied as standard with vent valves – fitted

![Diagram of 3 Valve Integral Manifolds]

**5 Valve Integral Manifolds**
H5TB Type

![Diagram of 5 Valve Integral Manifolds]

**Mounting Bracket**
AKM-T Type
See also Page 49.
**Direct Mount Manifolds - Integral Style**

### Ordering Information

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<thead>
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<tbody>
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<td>R</td>
<td>A</td>
<td>S</td>
<td>A</td>
<td>-</td>
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<td>4</td>
<td>T</td>
<td>F</td>
<td>-</td>
<td>M</td>
<td>S</td>
<td>T</td>
<td></td>
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</tr>
</tbody>
</table>

**W Coplanar™ Style Manifolds**

**H Traditional Style Integral Manifolds**

### Quantity Bonnets - 2-5

**Manifold Specifications**

- **R** Integral Manifold – Coplanar™ Style
- **T** Integral Manifold – Traditional Style

### Inlet

- **A** Female
- **B** Flanged – For Traditional Style Integral Manifolds only
- **C** 1/2 NPT with Tube Fitting

### Material

- **S** 1.4401 / 1.4404 / 316 / 316L
- **F Duplex UNS S31803**
- **D Super Duplex UNS S32750**
- **Aloy 625 UNS N06625**
- **B** 6Mo UNS S31254

### Bonnet

- **A** PTFE
- **B** Graphite
- **C** Carbon filled PTFE - TA-Luft
- **D ISO FE Series Type 1**
- **E ISO FE Series Type 2**

### Inlet

- **Thread Type**
- **Fitting Type**
- **Flange Interface**
- **NPT**
- **C Single Ferrule Tube Fitting**
- **T Flange Interface**
  - **1/2”**

### Outlet

- **Transmitter Interface**
  - **TF** Rosemount 2051/3051 Coplanar™ Pressure Transmitter

### Options - Specify in alphabetical order (digits first, then letters)

- **B** Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- **F** PCTFE Soft Tip
- **G** POM Soft Tip
- **S** Stellite Valve Tip
- **A** Vent Ports Plugged
- **P** Power Piping ASME B31.1 – For Graphite Packing only
- **K** Arctic Operations (-55°C (-67°F)) – For PTFE Packing only
- **M** Wetted Parts with 3.1 certificate

### Operation Options

- **J** Stainless Steel Handwheel with Locking Plate Design
- **T** Anti-Tamper Bonnet (Key to be ordered separately)
- **R** Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
- **Q** Anti-Key Lock Bonnet Design
- **U** Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
- **W** Stainless Steel Handwheel

### Mounting Bracket Kits

- **7 CST Mounting Bracket AKM-C Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations**
- **8 SST Mounting Bracket AKM-T Type for 2” Pipe Mounting supplied separately – For Horizontal Impulse Piping Installations**
  - **W** Relevant Bracket Type see Pages 38-39.

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) – except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.
AS-Schneider is manufacturing various 5 Valve Manifold Designs with Natural Gas Metering Pattern for direct mounting to Differential Pressure Transmitters – either Transmitters with standard flange connection in accordance with IEC 61518 or alternatively to Rosemount 2051/3051 Coplanar™ Pressure Transmitters. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard. For plugged vent ports (factory installed) and other options see Page 42 – Ordering Information 5 Valve Manifolds with Natural Gas Metering Pattern. The standard test connection is 1/4 NPT female plugged. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.
## 5 Valve Manifolds with Natural Gas Metering Pattern

### Ordering Information

<table>
<thead>
<tr>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>A</td>
<td>A</td>
<td>T</td>
<td>S</td>
<td>K</td>
<td>-</td>
<td>C</td>
<td>4</td>
<td>A</td>
<td>D</td>
<td>-</td>
<td>A</td>
<td>F</td>
<td>M</td>
<td></td>
</tr>
</tbody>
</table>

### Manifold Type

- **A**: Outlet DIN EN 61518-A – Test Connection 1/4 NPT – Vent Port 1/4 NPT – Inlet 1/2 NPT
- **D**: Outlet for Rosemount 2051/3051 Coplanar Pressure Transmitter – Test Connection 1/4 NPT – Vent Port 1/4 NPT – Inlet 1/2 NPT

### Vent Connection

- **A**: 1/4 NPT Female
- **C**: 1/4 NPT with Twin Ferrule Tube Fitting 12 mm
- **E**: 1/4 NPT with Single Ferrule Tube Fitting 12S

### Inlet

- **F**: Female
- **T**: Tube Fitting

### Material

- **S**: 1.4401 / 1.4404 / 316 / 316L
- **F**: Duplex UNS S31803
- **D**: Super Duplex UNS S32750
- **B**: 6Mo UNS S31254
- **V**: Alloys UNS N04400
- **T**: Titanium Grade 2

### Bonnet

- **A**: PTFE
- **B**: Graphite
- **D**: ISO FE Series Type 1
- **E**: ISO FE Series Type 3
- **K**: O-Ring PTFE (PM by ISO)
- **W**: Carbon filled PTFE - TA-Luft
- **2**: Bellows sealed PN 100
- **4**: Bellows sealed PN 250

### Inlet

- **N**: NPT
- **T**: Single Ferrule Tube Fitting
- **K**: Twin Ferrule Tube Fitting

### Test Connection

- **A**: 1/4 NPT Female plugged

### Transmitter Interface

- **D**: DIN EN 61518-A
- **F**: Rosemount 2051/3051 Coplanar Pressure Transmitter

### Options - Specify in alphabetical order (digits first, then letters)

- **B**: Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- **F**: PCTFE Soft Tip
- **G**: POM Soft Tip
- **S**: Stellite Valve Tip
- **A**: Vent Ports Plugged
- **P**: Power Piping ASME B31.1 – For Graphite Packing only
- **K**: Arctic Operations (-55°C (-67°F)) – For PTFE Packing only
- **M**: Wetted Parts with 3.1 certificate

### Operation Options

- **J**: Stainless Steel Handwheel with Locking Plate Design
- **T**: Anti-Tamper Bonnet (Key to be ordered separately)
- **R**: Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
- **Q**: AT-Key Lock Bonnet Design
- **U**: Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design

### Accessory Kits for Manifold to Transmitter mounting according to DIN EN 61518 - For SA Type only (not for SD Type)

1. **Hex Cap Screw 7/16-20 UNF Bolt Length 2”**, C.S., PTFE Seal Rings
2. **Hex Cap Screw 7/16-20 UNF Bolt Length 2”**, S.S., PTFE Seal Rings
3. **Hex Cap Screw 7/16-20 UNF Bolt Length 2”**, C.S., Graphite Seal Rings
4. **Hex Cap Screw 7/16-20 UNF Bolt Length 2”**, S.S., Graphite Seal Rings

### Mounting Bracket Kits

1. CST Mounting Bracket AKM-C or –D Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations
2. SST Mounting Bracket AKM –C or –D Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations

* Bolt Material S.S. = 316 Stainless Steel I ASTM A193 B8M Class 2

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) – except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.
Enclosure Manifolds EDM Series

Enclosure Manifolds EDM Series (2, 3 and 5 Valve Manifolds)

AS-Schneider Enclosure Manifolds EDM Series are manufactured for applications that require the transmitter to be mounted in an enclosure for environmental protection. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard. For plugged vent ports (factory installed) and other options see page 45—Ordering Information Enclosure Manifolds.

The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

2 Valve Manifolds

Transmitter Connection

<table>
<thead>
<tr>
<th>Acc. to DIN EN 61518</th>
<th>1/2 NPT Female</th>
<th>Swivel Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2AA Type</td>
<td>E2AC Type</td>
<td>E2AE Type</td>
</tr>
</tbody>
</table>

![2 Valve Manifolds Diagram]

3 Valve Manifolds – Female x Flanged

E3AA Type

![3 Valve Manifolds Diagram]
5 Valve Manifolds – Female x Flanged

- Standard Flow Schematic → ESAA Type
- Upstream Vent Schematic → ESUA Type

Enclosure Systems

AS-Schneider Enclosure Systems have been developed to provide a weatherproof barrier for every type of installation. Modern process measurement instrumentation needs protection not only from the effects of sun, rain, frost, aggressive atmosphere or dirt but also from accidental damage or unauthorized access.

The Enclosure Manifolds allow direct mounting to a baseplate or a back plate of the enclosures. A lot of accessories such as electrical heating systems, thermostats, junction boxes, grommets and pipe stands are available. Designed and fitted out to customer’s specifications AS-Schneider is supplying the complete solution - enclosure, manifolds and all accessories needed – for an easy on-site installation. For more details please contact the factory.
### Ordering Information

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>11</th>
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<th>13</th>
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<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>S</td>
<td>A</td>
<td>A</td>
<td>S</td>
<td>A</td>
<td>-</td>
<td>N</td>
<td>4</td>
<td>T</td>
<td>D</td>
<td>-</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Enclosure Manifolds EDM Series**

**Quantity Bonnets – 2-5**

**Manifold Specifics**

- **A**: Standard - 2 Valve / 5 Valve Manifold with Vent Ports 1/4 NPT Female, 3 Valve Manifold without Vent Port
- **C**: Vent 1/4 NPT with Tube Fitting x 12 mm
- **U**: Upstream Vent Type (2 Valve Manifold only)

**Inlet x Outlet Configuration**

- **A**: Female x Flanged
- **B**: 1/2 NPT with Tube Fitting x Flanged
- **C**: Female x Female

**Material**

- **S**: 1.4401 / 1.4404 / 316 / 316L
- **M**: Alloy 400 UNS N04400
- **H**: C-276 UNS N10276

**Bonnet**

- **A**: PTFE K O-Ring
- **B**: Graphite W Carbon filled PTFE – TA-Luft
- **D**: ISO FE Series Type 1 2 Bellows sealed PN 100
- **E**: ISO FE Series Type 3 4 Bellows sealed PN 250

**Inlet**

- **N**: NPT
- **K**: Single Ferrule Tube Fitting
- **T**: Twin Ferrule Tube Fitting

**Outlet**

- **N4**: 1/2 NPT Female
- **G4**: G 1/2 Swivel Nut
- **M4**: M20 x 1.5 Swivel Nut

**Options - Specify in alphabetical order (digits first, then letters)**

- **B**: Cleaned and Lubricated for Oxygen Service – For PTFE Packing only
- **F**: PCTFE Soft Tip
- **G**: POM Soft Tip
- **S**: Stellite Valve Tip
- **P**: Vent Ports Plugged
- **K**: Arctic Operations (–55°C / –67°F) – For PTFE Packing only
- **M**: Wetted Parts with 3.1 certificate

**Operation Options**

- **J**: Stainless Steel Handwheel with Locking Plate Design
- **T**: Anti-Tamper Bonnet (Key to be ordered separately)
- **R**: Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold)
- **Q**: AT-Key Lock Bonnet Design
- **U**: Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design
- **W**: Stainless Steel Handwheel

**Standard Accessory Kits for Manifold to Transmitter mounting according to DIN EN 61518 / IEC 61518**

1. Hex Cap Screw 7/16-20 UNE Bolts Length 2", C.S., PTFE Seal Rings
2. Hex Cap Screw 7/16-20 UNE Bolts Length 2", S.S., PTFE Seal Rings
3. Hex Cap Screw 7/16-20 UNE Bolts Length 2", C.S., Graphite Seal Rings
4. Hex Cap Screw 7/16-20 UNE Bolts Length 2", S.S., Graphite Seal Rings

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.
3 and 5 Valve Manifolds for Differential Pressure Gauges

Differential Pressure Gauge Manifolds

AS-Schneider Manifolds for Differential Pressure Gauges are available with a center to center distance of 37 mm or 54 mm as standard. The instrument connections are supplied with a Swivel Nut or a Swivel Male Connection. The standard vent connection is 1/4 NPT female. Pipe plugs are not installed as standard. For plugged vent ports (factory installed) and other options see Page 47 – Ordering Information Differential Pressure Gauge Manifolds. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 48-53.

The dimensions shown apply only to the illustrated valves (G 3/8 Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

3 Valve Manifolds for Differential Pressure Gauges

D3 Type

Inlet Configurations

<table>
<thead>
<tr>
<th>Female Thread</th>
<th>Male Connector</th>
<th>Tube Fitting</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/8</td>
<td>1/2 NPT</td>
<td>G1/2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 NPT</td>
</tr>
</tbody>
</table>

Mounting Bracket

AKM-D Type
See also Page 48.
**Differential Pressure Gauge Manifolds**

**Quantity Bonnets – 3 or 5**

### Manifold Specifics

**Thread Size Inlet x Distance from Center to Center for Differential Pressure Gauge**

<table>
<thead>
<tr>
<th>A</th>
<th>G 3/8 x 37 mm</th>
<th>C</th>
<th>1/2 NPT x 37 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>G 3/8 x 54 mm</td>
<td>D</td>
<td>1/2 NPT x 54 mm</td>
</tr>
</tbody>
</table>

### Inlet x Outlet Configuration

<table>
<thead>
<tr>
<th>A</th>
<th>Female x Swivel Nut</th>
<th>D</th>
<th>Tube Fitting x Swivel Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Female x Swivel Male</td>
<td>E</td>
<td>Male Connector x Swivel Nut</td>
</tr>
<tr>
<td>C</td>
<td>Tube Fitting x Swivel Nut</td>
<td>F</td>
<td>Male Connector x Swivel Male</td>
</tr>
</tbody>
</table>

### Material

<table>
<thead>
<tr>
<th>S</th>
<th>1.4401 / 1.4404 / 316 / 316L</th>
<th>F</th>
<th>Duplex UNS S31803</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Alloy 400 UNS N04400</td>
<td>D</td>
<td>Super Duplex UNS S32750</td>
</tr>
<tr>
<td>H</td>
<td>Alloy C-276 UNS N10276</td>
<td>E</td>
<td>Titanium Grade 2</td>
</tr>
</tbody>
</table>

### Bonnet

<table>
<thead>
<tr>
<th>A</th>
<th>PTFE</th>
<th>K</th>
<th>O-Ring FKM (PM by ISO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Graphite</td>
<td>W</td>
<td>Carbon filled PTFE - TA-Luft</td>
</tr>
<tr>
<td>D</td>
<td>ISO FE Series Type 1</td>
<td>2</td>
<td>Bellows sealed PN 100</td>
</tr>
<tr>
<td>E</td>
<td>ISO FE Series Type 3</td>
<td>4</td>
<td>Bellows sealed PN 250</td>
</tr>
</tbody>
</table>

### Inlet

**Thread Type**

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<thead>
<tr>
<th>N4</th>
<th>1/2 NPT</th>
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<tr>
<td>H3</td>
<td>G 3/8 – DIN 3822 (Female only)</td>
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<tr>
<td>G4</td>
<td>G 1/2 – EN 837-1 (Male only)</td>
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</table>

**Fitting Type**

<table>
<thead>
<tr>
<th>C</th>
<th>Single Ferrule Tube Fitting</th>
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</thead>
<tbody>
<tr>
<td>K</td>
<td>Twin Ferrule Tube Fitting</td>
</tr>
</tbody>
</table>

**Tube Fitting Sizes**

| 4 | 12 resp. 125 |
| 5 | 14 resp. 145 |
| 9 | 1/2” |

### Outlet

**Thread Type**

<table>
<thead>
<tr>
<th>G2</th>
<th>G 1/4 Swivel Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4</td>
<td>G 1/2 Swivel Nut or Swivel Male</td>
</tr>
<tr>
<td>M4</td>
<td>M 20 x 1.5 Swivel Nut</td>
</tr>
</tbody>
</table>

**Options - Specify in alphabetical order (digits first, then letters)**

| B | Cleaned and Lubricated for Oxygen Service – For PTFE Packing only |
| F | PCTFE Soft Tip |
| G | POM Soft Tip |
| S | Stellite Valve Tip |
| A | Vent Ports Plugged |
| H | 10,000 psi (689 bar) for PTFE Packing | 7,252 psi (500 bar) for Graphite Packing |
| P | Power Piping ASME B31.1 – For Graphite Packing only |
| K | Arctic Operations (–65°C (–85°F)) – For PTFE Packing only |
| M | Wetted Parts with 3.1 certificate |

### Operation Options

| J | Stainless Steel Handwheel with Locking Plate Design |
| T | Anti-Tamper Bonnet (Key to be ordered separately) |
| R | Anti-Tamper Bonnet (1 Key supplied per Valve/Manifold) |
| Q | AT-Key Lock Bonnet Design |
| U | Padlock for Anti-Tamper Bonnet / AT-Key Lock Bonnet Design |
| W | Stainless Steel Handwheel |

### Accessory Kits

<table>
<thead>
<tr>
<th>7</th>
<th>CST Mounting Bracket AKM-O Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>SST Mounting Bracket AKM-O Type for 2” Pipe Mounting supplied separately – For Vertical Impulse Piping Installations</td>
</tr>
</tbody>
</table>

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.

Note: Not every configuration which can be created in the ordering information is feasible / available.
Accessories – Mounting Bracket Kits

Mounting Bracket Kits for
Vertical Impulse Piping Installations

**AKM-S Type**
For Valves and Manifolds with
1 1/4” Square Valve Body
(Type H, G, M and S)

**AKM-R Type**
For Manifolds with 1 1/4” Flat Body
(Type P and R)

**AKM-G Type**
For Double Block & Bleed Manifolds
(Type C)

**AKM-D Type and AKM-C Type**
For Manifolds Type D, W and S

**AKM-B Type**
For Wafer Style Manifolds with
Bottom Inlet Design
Mounting Bracket Kits for Horizontal Impulse Piping Installations

**AKM-T Type**
For Integral Manifolds – Traditional Style

Mounting Bracket Kits for Horizontal and Vertical Impulse Piping Installations

**AKM-U Type**
For Manifolds Type H, W and T

Ordering Information

<table>
<thead>
<tr>
<th>AKM</th>
<th>Mounting Bracket Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mounting Bracket incl. screws for mounting the bracket to the manifold (if applicable)</td>
</tr>
<tr>
<td>S</td>
<td>Valves and Manifolds with 1 1/4&quot; Square Valve Body (Type H, G, M and S)</td>
</tr>
<tr>
<td>R</td>
<td>Manifolds with 1 1/4&quot; Flat Body (Type P and R)</td>
</tr>
<tr>
<td>G</td>
<td>Manifolds Type C</td>
</tr>
<tr>
<td>D</td>
<td>Manifolds Type D, W and S</td>
</tr>
<tr>
<td>B</td>
<td>Wafer Style Manifolds with Bottom Inlet Design</td>
</tr>
<tr>
<td>U</td>
<td>Manifolds Type H (not for Integral Manifolds for Rosemount 2051/3051 Coplanar™ Pressure Transmitters) Manifolds Type W (except Bottom Inlet Design) Manifolds Type T</td>
</tr>
<tr>
<td>C</td>
<td>Integral Manifolds - Coplanar™ Style</td>
</tr>
<tr>
<td>T</td>
<td>Integral Manifolds - Traditional Style</td>
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<table>
<thead>
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<th>Mounting Method</th>
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<table>
<thead>
<tr>
<th>Material</th>
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<tbody>
<tr>
<td>C</td>
</tr>
<tr>
<td>S</td>
</tr>
<tr>
<td>H</td>
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</tbody>
</table>

Mounting Bracket Kit

Mounting Bracket Kits on Page 48 and 49 are containing:

- Mounting Bracket
- 'U' Bolts *
- Washers – 8.4 *
- Hexagon Nuts M8 *
- Screws and Washers for Mounting the Manifold to the Bracket – if applicable

* Amount depending on bracket type. See illustrations.
### Accessory Kits for Manifold to Transmitter Mounting

**according to DIN EN 61518 / IEC 61518**

b = Depending on manifold thickness

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<tbody>
<tr>
<td>A</td>
<td>K</td>
<td>S</td>
<td>-</td>
<td>H</td>
<td>U</td>
<td>4</td>
<td>C</td>
<td>-</td>
<td>P</td>
<td>A</td>
<td>F</td>
<td>4</td>
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</table>

#### Ordering Information

**AKS Transmitter Mounting Kit**

<table>
<thead>
<tr>
<th>Type of Screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>H Hex Cap Screw</td>
</tr>
<tr>
<td>S Socket Head Cap Screw</td>
</tr>
</tbody>
</table>

**Thread Size**

| U | 7/16-20 UNF – For Traditional Style Manifolds (see page 34-37) please use Option Code W – Incl. washer |
| M | M10 – Max. allowable (Working) Pressure (PS): 160 bar (2,320 psi) – Screws supplied with Washers |
| W | 7/16-20 UNF – Screws supplied with Washers |

<table>
<thead>
<tr>
<th>Number of Screws and Seal Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Screws and 1 Seal Ring</td>
</tr>
<tr>
<td>4 Screws and 2 Seal rings</td>
</tr>
<tr>
<td>5 Screws and 1 Seal Ring</td>
</tr>
<tr>
<td>8 Screws and 4 Seal Rings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material*</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Carbon Steel UNF Thread: Hex Cap Screw ASTM A449 - Type 1</td>
</tr>
<tr>
<td>S 316 Stainless Steel UNF Thread: ASTM A193 B8M Class 2</td>
</tr>
<tr>
<td>F 316 Stainless Steel UNF Thread: ASTM F593 GP2 CW</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Seal Ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN EN 61518 Type A</td>
</tr>
<tr>
<td>PA PTFE</td>
</tr>
<tr>
<td>GA Graphite</td>
</tr>
<tr>
<td>FA O-Ring FPM (FKM by ASTM)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Screw Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNF Thread</td>
</tr>
<tr>
<td>F25 1&quot;</td>
</tr>
<tr>
<td>F38 1 1/2&quot;</td>
</tr>
<tr>
<td>F44 1 3/4&quot;</td>
</tr>
<tr>
<td>F51 2&quot;</td>
</tr>
<tr>
<td>F70 2 3/4&quot; (For Wide Style Manifold w/ Oval Flange)</td>
</tr>
<tr>
<td>F76 3&quot; (For Rosemount 2051/3051 Coplanar™ Pressure Transmitter)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metric Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>M25 25 mm</td>
</tr>
<tr>
<td>M40 40 mm</td>
</tr>
<tr>
<td>M45 45 mm</td>
</tr>
<tr>
<td>M50 50 mm</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Cleaned for Oxygen Service (only for PTFE Seal Ring – Carbon filled PTFE)</td>
</tr>
</tbody>
</table>

---

*IEC 61518 calls for the mentioned mechanical properties (for example B8 Class 2) because the flange connection is designed for high pressure service (up to 6,000 psi) and high temperature service. The usage of screws without the defined mechanical properties is critical and may lead to a sudden component failure which could cause a fatal accident!
Accessories – Pipe Plugs, Vent Valves, Adaptors

Vent Valves, Pipe Plugs and Pipe Fittings

<table>
<thead>
<tr>
<th>Vent Valve Type</th>
<th>Vent Valve Type</th>
<th>Pipe Plug Type</th>
<th>Female to Male Adaptor Type</th>
<th>Hex Nipple Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS</td>
<td>VT</td>
<td>PP</td>
<td>FM</td>
<td>HN</td>
</tr>
</tbody>
</table>

### Vent Valves
- **VS Type**
  - **Connection**: M Male
  - **Material**: 
    - S 1.4401 / 1.4404 / 316 (F)
    - M Alloy 400 UNS N04400 (D)
    - H Alloy C-276 UNS N10276 (V)

### Pipe Plugs
- **PP Type**
  - **Connection**: M Male
  - **Material**: 
    - S 1.4401 / 1.4404 / 316 (F)
    - M Alloy 400 UNS N04400 (D)
    - H Alloy C-276 UNS N10276 (V)

### Female to Male Adaptors
- **FM Type**
  - **Nipple Type**: 
    - S 1.4401 / 1.4404 / 316 (F)
    - M Alloy 400 UNS N04400 (D)
    - H Alloy C-276 UNS N10276 (V)

### Hex Nipples
- **HN Type**
  - **Thread Size**: 
    - 3B.1 mm (1.50")
    - 44.5 mm (1.75")
    - 50.4 mm (2.00")
    - 76.2 mm (3.00")
    - 101.6 mm (4.00")

### Ordering Information - Pipe Plugs and Vent Valves

- **Pipe Plug Type**: PP
- **Vent Valve Type**: VS, VT
- **Options**:
  - B Cleaned for Oxygen Service
  - M Wetted Parts with 3.1 certificate – Not applicable for Pipe Plug Type PP

### Ordering Information - Pipe Fittings

- **Female to Male Adaptor Type**: FM
- **Hex Nipple Type**: HN
- **Options**:
  - B Cleaned for Oxygen Service
  - L# Available Lengths see table above – For Hex Nipples only

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Part according to a.m. material list is supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.
## Accessories – Swivel Gauge Adaptors

### Swivel Gauge Adaptors

The Swivel Gauge Adaptors enable the easy positioning of the pressure instrument in any direction through 360°. The dimensions shown apply only to the illustrated components – if you need the dimensions for your individual type please contact the factory.

#### GS Type

<table>
<thead>
<tr>
<th>Inlet Type</th>
<th>Thread Type</th>
<th>Thread Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Male</td>
<td>NPT</td>
<td>1/4</td>
</tr>
<tr>
<td>F Female</td>
<td>G</td>
<td>1/2</td>
</tr>
</tbody>
</table>

#### GD Type

<table>
<thead>
<tr>
<th>Outlet Type</th>
<th>Thread Type</th>
<th>Thread Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Male</td>
<td>NPT</td>
<td>1/4</td>
</tr>
<tr>
<td>F Female</td>
<td>G</td>
<td>1/2</td>
</tr>
</tbody>
</table>

### Ordering Information - Swivel Gauge Adaptors

<table>
<thead>
<tr>
<th>Specification</th>
<th>GS Type</th>
<th>GD Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet</td>
<td>Screwed Design (10,000 psi / 689 bar)</td>
<td>Wired Design (6,092 psi / 420 bar)</td>
</tr>
<tr>
<td>Material</td>
<td>1.4401 / 1.4404 / 316 / 316L</td>
<td>Duplex UNS S31803</td>
</tr>
<tr>
<td></td>
<td>Alloy 600 UNS N04400</td>
<td>Super Duplex UNS S32750</td>
</tr>
<tr>
<td></td>
<td>Alloy C-276 UNS N10276</td>
<td>Alloy 635 UNS N06625</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B 6Mo UNS S31254</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Titanium Grade 2</td>
</tr>
<tr>
<td>Seal Ring</td>
<td>P PTFE (GS Type only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S Same Material as threaded components (GS Type only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A No Seal Ring required (GD Type only)</td>
<td></td>
</tr>
</tbody>
</table>

### Options - Specify in alphabetical order (digits first, then letters)

- B Cleaned for Oxygen Service
- M Wetted Parts with 3.1 certificate

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* GS Type only: NPT Threaded Options as standard.
* Wetted Parts according to a.m. material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.
Oval Flanges KF Type

Transmitter Interface EN 61518-A
Code TD

Transmitter Interface EN 61518
Code T4

Ordering Information - Oval Flange (Kidney Flange, Futbol)

<table>
<thead>
<tr>
<th>KF Oval Flange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet</td>
</tr>
<tr>
<td>F Female</td>
</tr>
<tr>
<td>Material</td>
</tr>
<tr>
<td>S 1.4401 / 1.4404 / 316 / 316L</td>
</tr>
<tr>
<td>M Alloy 400 UNS N04400</td>
</tr>
<tr>
<td>H Alloy C-276 UNS N10276</td>
</tr>
</tbody>
</table>

Material Option S as forging, all other materials made from flat bar

<table>
<thead>
<tr>
<th>Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thread Type</td>
</tr>
<tr>
<td>N NPT</td>
</tr>
<tr>
<td>H BSP Parallel (G) – DIN 3852</td>
</tr>
</tbody>
</table>

Outlet (Flange Connection)

| TD Transmitter Interface DIN EN 61518-A |
| T4 Transmitter Interface DIN EN 61518 |

Options - Specify in alphabetical order (digits first, then letters)

B Cleaned for Oxygen Service (if ordered with Transmitter Mounting Kit – Only with PTFE Seal Ring available)

Accessory Kits for Oval Flange to Manifold/Transmitter mounting according to DIN EN 61518 – only applicable for Outlet Option TD and TE

1 2 Hex Cap Screws 7/16-20 UNF, Stainless Steel ASTM A193 BBM Cl.2.1, 1 PTFE Seal Ring
2 2 Hex Cap Screws 7/16-20 UNF, Stainless Steel ASTM A193 BBM Cl.2.1, 1 Graphite Seal Ring
3 2 Hex Cap Screws 7/16-20 UNF, Stainless Steel ASTM A193 BBM Cl.2.1, 1 PTFE Seal Ring
4 2 Hex Cap Screws 7/16-20 UNF, Stainless Steel ASTM A193 BBM Cl.2.1, 1 Graphite Seal Ring

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/09 and ISO 15156 (latest issue) – except Titanium Grade 2.

Anti-Tamper Key ATK Type

ATK-ES Type
Check Valves

Check Valves CV Type

AS-Schneider Check Valves (Non-Return Valves) are designed for a cold (Working) Pressure rating of 10,000 psi (689 bar). The Check Valve allows flow in one direction only, closing when flow reverses. Should you still not find your option please contact the factory.

Features

- Soft Seated – O-Rings used are RGD (Rapid Gas Decompression) resistant
- Cracking Pressure: < 11 psi (0.75 bar)
- Re-Seal Pressure: < 20 psi (1.38 bar)
- Temperature Rating: -50°C up to +200°C (-58°F up to +392°F), depending on seal materials used
- 100% Pressure Tested – hydrostatically at 1.5 times the max. allowable (Working) Pressure (PS)
- Cv-Value: 0.3

Ordering Information - Check Valves

<table>
<thead>
<tr>
<th>CV</th>
<th>Check Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet</td>
<td>Material</td>
</tr>
<tr>
<td>M Male</td>
<td>F Female</td>
</tr>
<tr>
<td>Outlet</td>
<td>Material</td>
</tr>
<tr>
<td>F Female</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Seal Ring</td>
</tr>
<tr>
<td>S 1.4404 / 1.4401 / 1.4404 / 316L</td>
<td>F Duplex UNS S31803</td>
</tr>
<tr>
<td>P Alloy 400 UNS N04400</td>
<td>D Super Duplex UNS S32750</td>
</tr>
<tr>
<td>H Alloy C-276 UNS N10276</td>
<td>V Alloy 625 UNS N06625</td>
</tr>
<tr>
<td>B 6Mo UNS S31254</td>
<td>T Titanium Grade 2</td>
</tr>
</tbody>
</table>

Options - Specify in alphabetical order (digits first, then letters)

- M Wetted Parts with 3.1 certificate

Wetted Parts according to a.m. material list are supplied according to NACE MR0175/ MR0103 and ISO 15156 (latest issue) - except Titanium Grade 2.

Note: Check Valves which are not actuated for a period of time may initially crack at a higher pressure than above stated.
Complementary Products

In this catalogue the following products are not described in detail because they are covered in catalogue AS-0201:

- **Gauge Protectors**
- **Gauge Snubbers**
- **Compact Syphons**
- **Coil Type Syphons / Pigtail Syphons**
- **Elbows**
Technical Service Portal - Digital Product Pass

Digital Product Pass for Valves and Manifolds

The E Series Valves and Manifolds manufactured by the AS-Schneider Group are now marked with an unique QR-code. That QR-code provides easy access to static product information like material properties, certificates and physical dimensions via CAD drawings. It also includes operating and installation instructions or spare parts or replacement information.

Product Details Operating Instructions Individual Drawings Spare Part Service Technical Support

How it works

If you have an AS-Schneider valve or manifold with QR-code in your hand or installed in your plant, you can now access the product information very easy. The access is straightforward:

MAINTENANCE BENEFITS

All technically relevant information on the product can always be retrieved directly.

Clear planning
More straightforward planning and installation via the mechanical properties of the product.

Error-free assembly
Automated error free equipment identification at the incoming good inspection and during the field installation.

Easy and fast maintenance
Easier and faster maintenance and repair cycles. This is possible due to direct access to spare parts or replacement units.

Link to asset management tool
Operators link this information into their respective asset and operation management system.

Environmental friendly
The environmentally responsible disassembly and disposal.

Check the DPP of your valves and manifolds:
www.qr4v.de