schneider
Tailored to Your Business

Instrumentation Products

Soft Seated Needle Valves and Manifolds

Introduction

Introduction

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 Valves, Manifolds and the relevant Accessories required for instrumentation installations globally.

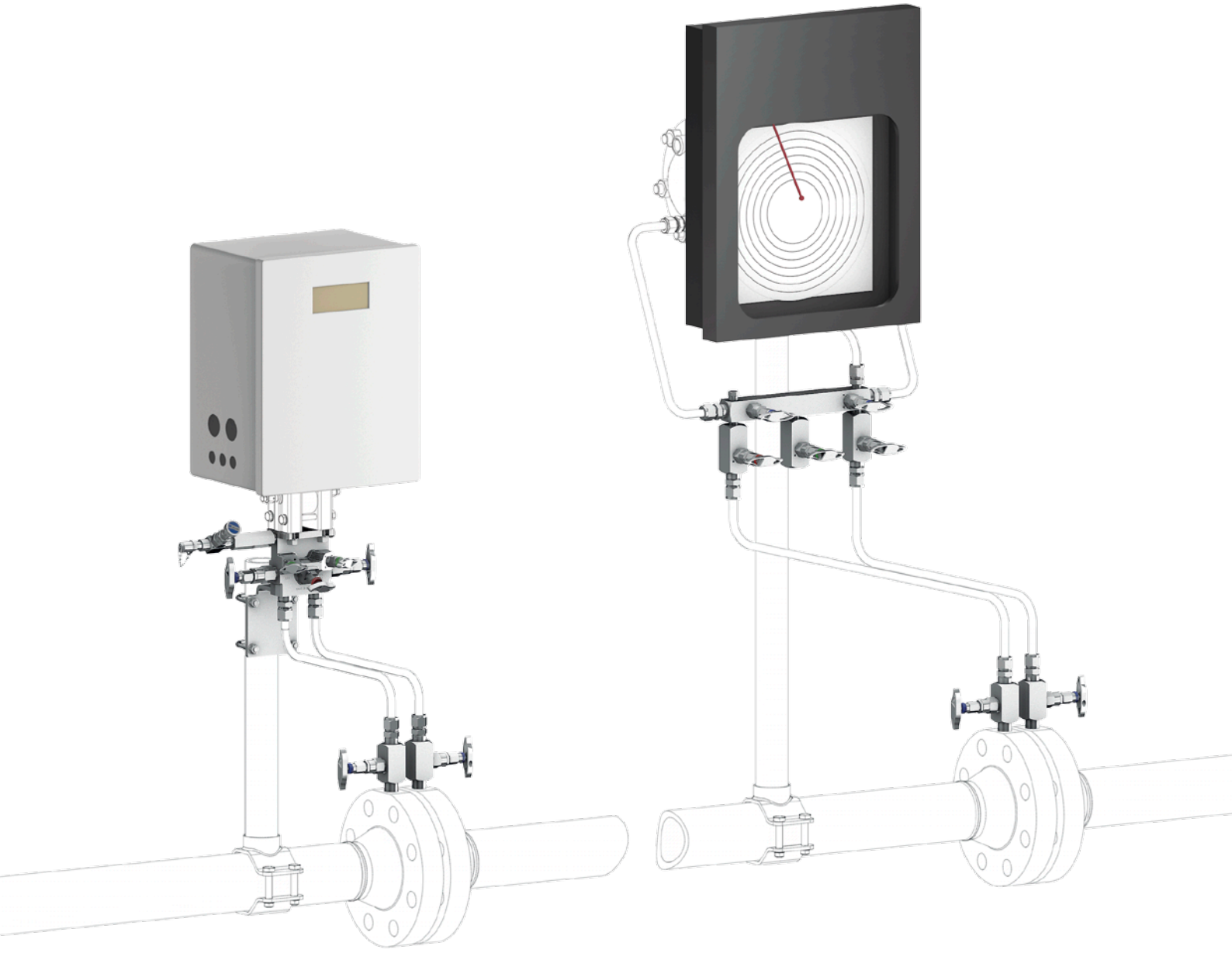
AS-Schneider Soft Seated Valves and Manifolds are designed for maximum system reliability. AS-Schneider utilizes a field replaceable soft seat that provides premium tightness at closure, even in dirty service.

Model Number Selection can be made from a comprehensive range of body designs with a variety of connections and material options, optimizing installation and access opportunities. Many of the valves shown in this catalogue are available from stock. The dimensions shown in this catalogue apply to standard designs. If you need the dimensions for your individual type please contact the factory.

Long-term Confidence and Commitment: You can rest assured in your decision to purchase AS-Schneider – we are a modern, international family-owned company since 1875. You can rely on our 140 years of manufacturing experience. AS-Schneider is your number one choice for Tough Applications, providing Superior Quality and Outstanding Service Levels at a very Competitive Price. Our USA office and warehouse located in Houston Texas is committed to providing excellent service to our customers in the Americas.

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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General Features

Body Material Options

Material Group	AS Material Designation	Material Grade acc. to ASTM	Equivalent UNS-No.	Material No.	Short Name	Valves and Manifolds made from Square resp. Flat Bar	T- and H-Style Manifolds made from forged material	Chart Recorder Manifolds
Carbon Steel	Carbon Steel	A105				Standard	Standard	Standard
Austenitic Stainless Steel	316 quadruple certified*	316	S31600	1.4401	X5CrNiMo17-12-2	Standard	Standard	Standard
		316L	S31603	1.4404	X2CrNiMo17-12-2			
Nickel Based Alloys	Alloy 400		N04400	2.4360	NiCu30Fe	Optional	Optional	
	Alloy C-276		N10276	2.4819	NiMo 16 Cr 15 W	Optional	Optional	

* Quadruple certified means acc. to ASTM and EN: 316 / 316L / 1.4401 / 1.4404

Standard Features

- Bore Size
  - Isolate Valves: 1/4" (6.35 mm)
    3/8" (9.5 mm)
  - Equalize and Vent Valves: 0.138" (3.5 mm)
- Soft Seat
  - Isolate Valves: Cone Design (roddable)
  - Equalize and Vent Valves:
    - Cup Design
    - Cone Design for Chart Recorder Manifolds only.
  - Soft Seats are field replaceable
- Double O-Ring Design as standard
- PTFE Packing is also available for all valve types
- 5 Valve Manifolds are supplied with a bug plug in the 1/4 NPT female vent port (fitted)

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).

Pressure Test:

A shell test at 1.5 times the max. allowable (working) pressure and a seat leakage test are performed acc. to EN 12266-1 – P10, P11 and P12 respectively MSS-SP61 (and complies also with ASME B31.1 and B31.3) at every standard AS-Schneider Needle Valve / Manifold. 100% Pressure Tested!

Certification:

Certified Mill Test Report (CMTR) as Inspection certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request.

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

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

Optional Features

Fugitive Emission Application:

For Fugitive Emission Applications please contact the factory.

Oxygen Service:

AS-Schneider offers an option with Reinforced PTFE Packing cleaned and lubricated for Oxygen Service:

Pressure-Temperature Rating:

Max. 6,092 psi (420 bar) @ 140°F (60°C)
Max. 392°F (200°C) @ 1,305 psi (90 bar)

Not every Valve Type is available for Oxygen Service!

If you don't find your options in this catalogue, please contact the factory.

Soft Seated Valves and Manifolds are manufacturered to the following Codes and Specifications:

• ASME B31.1	Power Piping
• ASME B31.3	Process Piping
• ASME B16.34	Valves – Flanged, Threaded and Welding End
• API 598	Valve Inspection and Testing
• MSS SP-25	Standard Marking Systems for Valves, Fittings and Flange Unions
• MSS SP-61	Pressure Testing of Valves
• MSS SP-99	Instrument Valves
• MSS SP-105	Instrument Valves for Code Applications
• NACE MR0175 / ISO 15156	Petroleum and Natural Gas Industries – Materials for use in H_2S – Containing environments in oil and gas production

Standard Soft Seat Valve Head Units / Bonnets – Cone Design

Cone Design Valve Head Unit

T Handle

Ergonomic Handle Design.

Valve Stem

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

Needle Seal

PTFE Packing or Double O-Ring

Needle

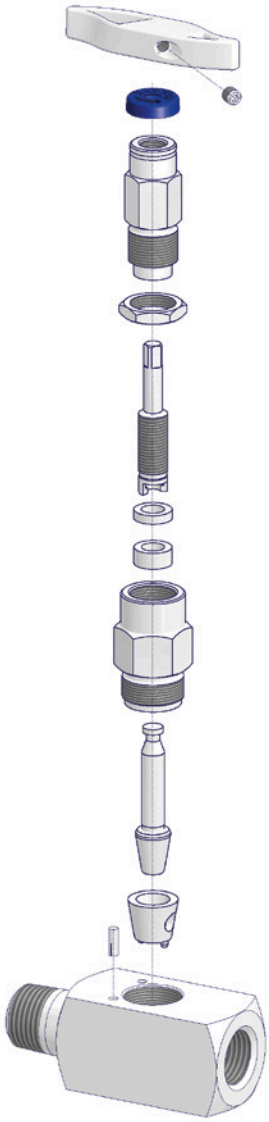
Non-rotating Needle for smooth operation and minimum wear of sealing elements.

Back Seat

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

Valve Seat

Material: ETFE, POM or PEEK
Valve Seats are field replaceable



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

TA-Luft Option

Lock Pin

Eliminates unauthorized removal of the bonnet assembly.

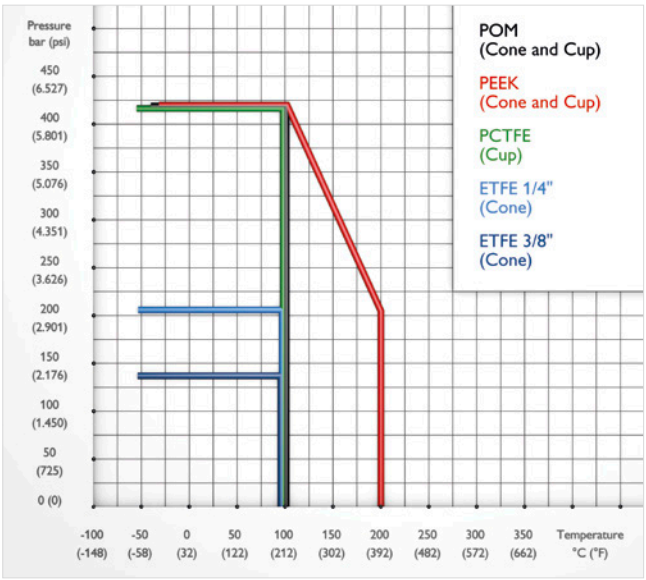
Bonnet

Bonnet-to-Body Metal Seal.

Traceability of Materials

All AS-Schneider Soft Seated Valves and Manifolds have material traceability.
A unique code is stamped on all valve bodies linking them with their material and chemical analysis certificates.

Pressure-Temperature Rating (Soft Seat)



Needle / Stem Seal Material

Material	Temperature	
	Min.	Max.
FKM	-13°F (-25°C)	392°F (200°C)
FKM (RGD resistant)	-40°F (-40°C)	450°F (232°C)
FEPM	-4°F (-20°C)	392°F (200°C)
PTFE	-67°F (-55°C)	450°F (232°C)

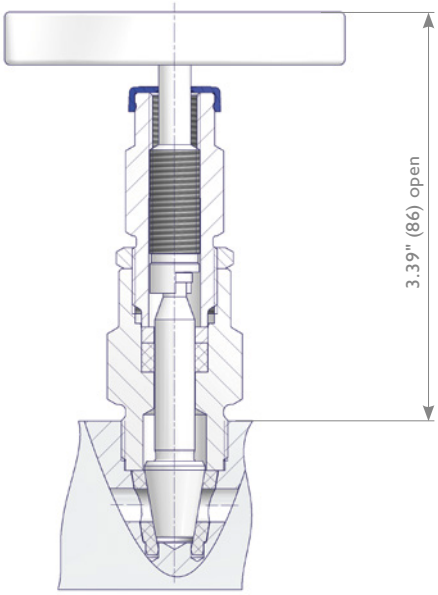
Low Temperature Service down to -55°C (-67°F) – As standard for Valves with PTFE Packing and Soft Seats in ETFE resp. PCTFE only.

Temperature Limit for Body Material:
- Carbon Steel A105: -20°F (-29°C)
All other materials are limited by soft goods.

Isolate Valves Bore Size 1/4" – Head Units

Isolate Valves (Block Valves)

Bore Size 1/4" (6.35 mm) – Needle Seal: Packing
Soft Seat: Cone Design

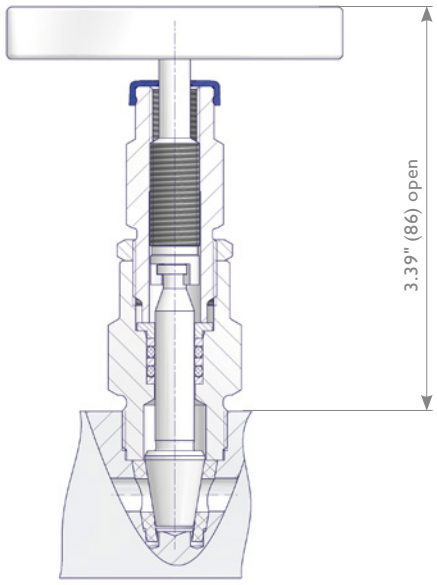


Features

- Rising Plug Valve Design
- Soft Seated – Roddable Design
- Replaceable Valve Seat – ETFE, POM and PEEK
- Needle Seal
  Standard Packing in PTFE
  or Carbon filled PTFE – TA-Luft Option
- Non-rotating Needle
- External Stem Thread – Packing below stem threads.
  Stem threads are protected from process media (non-wetted).
- Stem with Cold Rolled Threads
- Blow-out Proof Needle
- Back Seat – Metal to metal secondary stem seal
- Lock Pin – Eliminates unauthorized removal of the bonnet
- Color Coded Dust Cap for operating thread protection
- Valve Seat in ETFE 3,000 psi (207 bar) rated.
  Valve Seat in POM and PEEK mod 6,092 psi (420 bar) rated.
- Anti-Tamper Valve Head Options available
- All Non-wetted parts in 316 Stainless Steel

Isolate Valves (Block Valves)

Bore Size 1/4" (6.35 mm) – Needle Seal: Double O-Ring
Soft Seat: Cone Design



Features

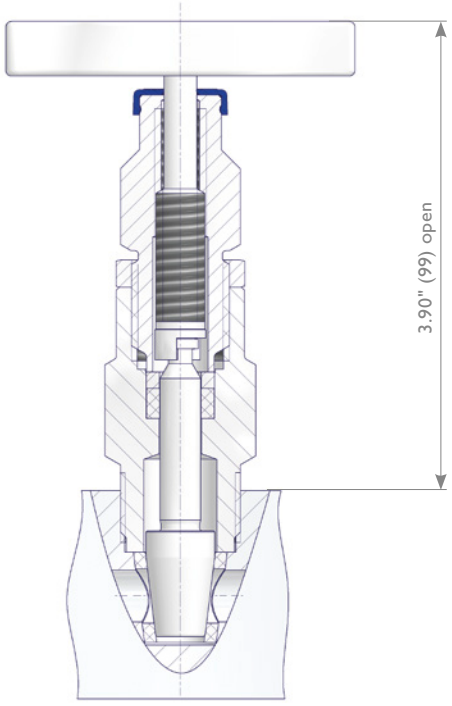
- Needle Seal
  Double O-Ring in FKM (optional RGD resistant) or FEPM
- All other features as above

Components	Carbon Steel	Stainless Steel	Exotic Alloys	
	Material / Material No.			
Body	A 105	316 / 316L	Alloy 400	Alloy C-276
Bonnet	316 / 316L		Alloy 400	Alloy C-276
Seat	ETFE, POM or PEEK			
Needle	316 / 316L		Alloy 400	Alloy C-276
O-Ring	FKM or FEPM			
Back-up Rings	Carbon filled PTFE			
Packing	PTFE or Carbon filled PTFE			
Valve Stem	316 / 316L			
Gland	316			
Stem Nut	316			
Lock Nut	316			
Set Screw	316			
T Handle	316			
Lock Pin	A4			

Wetted components listed in **bold**.

Isolate Valves (Block Valves)

Bore Size 3/8" (9.5 mm) – Needle Seal: Packing
Soft Seat: Cone Design

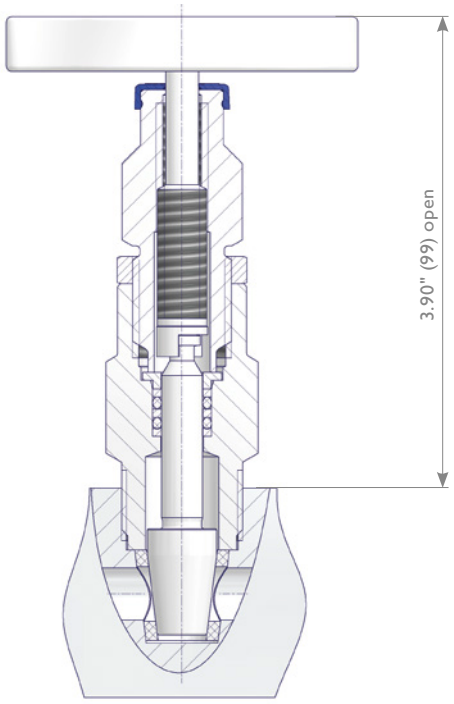


Features

- Rising Plug Valve Design
- Soft Seated – Roddable Design
- Replaceable Valve Seat – ETFE, POM and PEEK
- Needle Seal – PTFE Packing
- Non-rotating Needle
- External Stem Thread – Packing below stem threads.
  Stem threads are protected from process media (non-wetted).
- 6.5 turns to fully open or close the valve
- Heavy Duty Stem Threads
- Blow-out Proof Needle
- Back Seat – Metal to metal secondary stem seal
- Lock Pin – Eliminates unauthorized removal of the bonnet
- Color Coded Dust Cap for operating thread protection
- Valve Seat in ETFE 2.000 psi (138 bar) rated.
  Valve Seat in POM and PEEK mod 6,092 psi (420 bar) rated.
- Anti-Tamper Valve Head Options available
- All Non-wetted parts in 316 Stainless Steel

Isolate Valves (Block Valves)

Bore Size 3/8" (9.5 mm) – Needle Seal: Double O-Ring
Soft Seat: Cone Design



Features

- Needle Seal
  Double O-Ring in FKM (optional RGD resistant) or FEPM
- All other features as above

Components	Carbon Steel	Stainless Steel	Exotic Alloys	
	Material / Material No.			
Body	A 105	316 / 316L	Alloy 400	Alloy C-276
Bonnet	316 / 316L		Alloy 400	Alloy C-276
Seat	ETFE, POM or PEEK			
Needle	316 / 316L		Alloy 400	Alloy C-276
O-Ring	FKM or FEPM			
Back-up Rings	Carbon filled PTFE			
Packing	PTFE			
Valve Stem	316 / 316L			
Gland	316			
Stem Nut	316			
Lock Nut	316			
Set Screw	316			
T Handle	316			
Lock Pin	A4			

Wetted components listed in **bold**.

Standard Soft Seat Valve Head Units / Bonnets – Cup Design

Cup Design Valve Head Unit

T Handle

Ergonomic Handle Design.

Valve Stem

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

Needle Seal / Stem Seal

PTFE Packing or Double O-Ring

Needle

Non-rotating Needle for smooth operation and minimum wear of sealing elements – PTFE Packed Valve Head Unit only.

Back Seat

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

Valve Seat

Material: POM, PCTFE or PEEK
Valve Seats are field replaceable

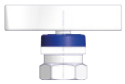
Color Coded Dust Cap

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 

Lock Pin

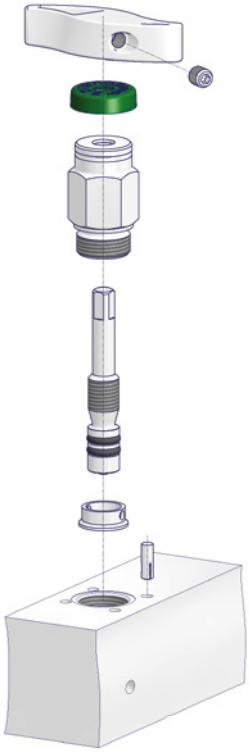
Eliminates unauthorized removal of the bonnet assembly.

Bonnet

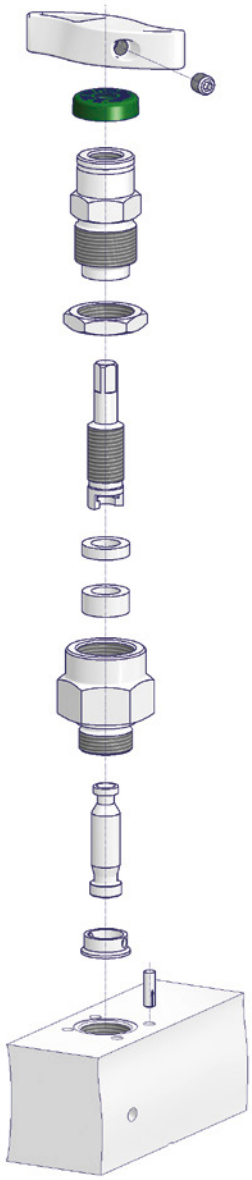
Bonnet-to-Body Metal Seal.

Traceability of Materials

All AS-Schneider Soft Seated Valves and Manifolds have material traceability.
A unique code is stamped on all valve bodies linking them with their material and chemical analysis certificates.



O-Ring Sealed Valve Head Unit



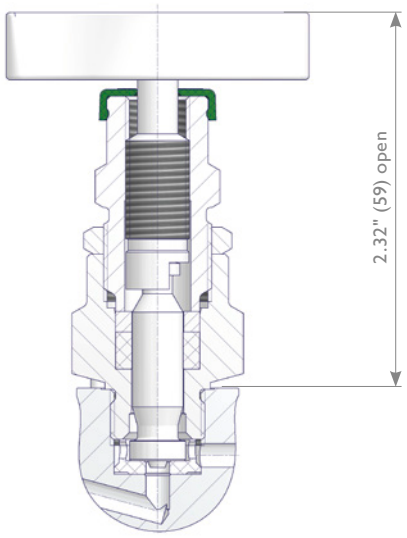
PTFE Packed Valve Head Unit

Equalize and Vent Valves

Bore Size 0.138" (3.5 mm) – Stem Seal: Packing
Soft Seat: Cup Design

Features

- Replaceable Valve Seat – POM, optional PCTFE and PEEK
- Stem Seal – PTFE Packing
- External Stem Thread – Packing below stem threads.
  Stem Threads are protected from process media (non-wetted).
- 2.5 turns to fully open or close the valve
- Stem with Cold Rolled Threads
- Blow-out Proof Needle
- Back Seat – Metal to metal secondary stem seal
- Lock Pin – Eliminates unauthorized removal of the bonnet
- Color Coded Dust Cap for operating thread protection
- Max. allowable (Working) Pressure (PS): 6,092 psi (420 bar)

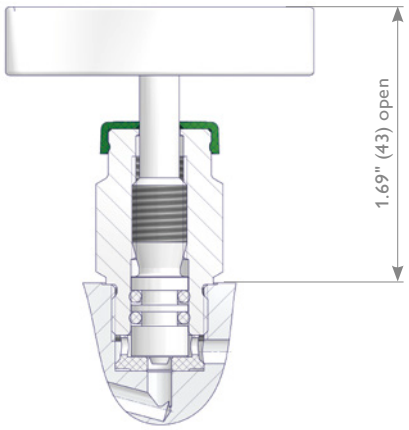


Equalize and Vent Valves

Bore Size 0.138" (3.5 mm) – Stem Seal: O-Ring
Soft Seat: Cup Design

Features

- Stem Seal
  O-Ring in FKM (optional RGD resistant) or FEPM
- All other features as above



Components	Carbon Steel	Stainless Steel	Exotic Alloys	
	Material / Material No.			
Body	A 105	316 / 316L	Alloy 400	Alloy C-276
Bonnet	316 / 316L		Alloy 400	Alloy C-276
Seat	POM, PCTFE or PEEK			
Valve Stem	316 / 316L		Alloy 400	Alloy C-276
O-Ring	FKM or FEPM			
Packing	PTFE			
Gland	316			
Stem Nut	316			
Lock Nut	316			
Set Screw	316			
T Handle	316			
Lock Pin	A4			

Wetted components listed in **bold**.

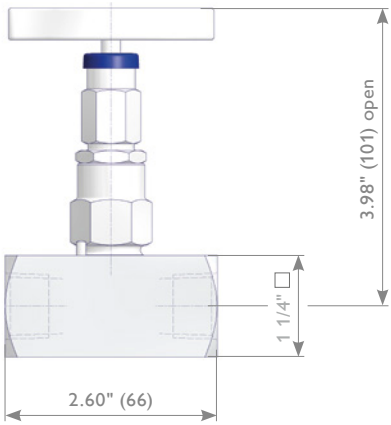
Hand Valves

AS-Schneider Hand Valves are available with a lot of options. HA Type Hand Valves are bi-directional. HX Type Hand Valves also, but the inlet is defined by the extension. We are showing on this page just the standard types. You find a lot more options on the next page – Ordering Information Hand Valves.

Bore Size: 1/4" (6.35 mm)

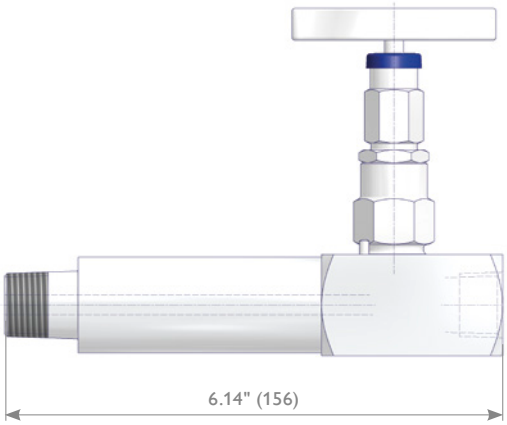
The dimensions shown apply only to the illustrated valves (1/2 NPT Threaded) – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.

Hand Valve Female x Female Threaded
HAFF Type



Hand Valve Male x Female Threaded
HAMF Type

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



Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
H	A	F	F	S	K	D	–	N	4	N	4	–	M		

H	**Hand Valves –** Soft Seated		
	Basic Design		
A	Standard – 1/4" Bore Size		
X	Extended Body		
	Inlet x Outlet → HA Type Valves are bi-directional		
FF	Female x Female		
MF	Male x Female		
	Material		
C	Carbon Steel A105		
S	1.4404 / 1.4401 / 316 / 316L		
M	Alloy 400 UNS N04400		
H	Alloy C-276 UNS N10276		
	Stem Seal / Packing		
A	PTFE	P	O-Ring FEPM
K	O-Ring FKM	W	Carbon filled PTFE
J	O-Ring FKM (RGD resistant)		
	Seat Material		
D	POM – 6,092 psi (420 bar) rated	P	PEEK – 6,092 psi (420 bar) rated
E	ETFE – 3,000 psi (207 bar) rated		
	Dash		
	Inlet		
	Thread Size		
N2	1/4 NPT	N6	3/4 NPT → Male Thread only
N4	1/2 NPT		
	Outlet		
	Thread Size		
N2	1/4 NPT		
N4	1/2 NPT		
	Dash		
	Options – Specify in alphabetical order (digits first, then letters)		
B	Cleaned for Oxygen Service		
M	Wetted Parts with 3.1 certificate		

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

Gauge Valves

Gauge Valves

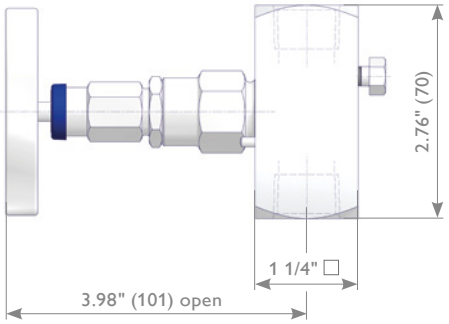
AS-Schneider Gauge Valves are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches. The standard types are equipped with a bleed screw. We are showing on this page just the standard types.

Bore Size: 1/4" (6.35 mm)

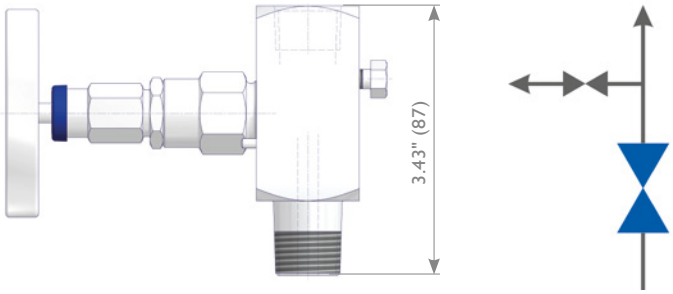
You find a lot more options on the next page – Ordering Information Gauge Valves. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 27-29.

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.

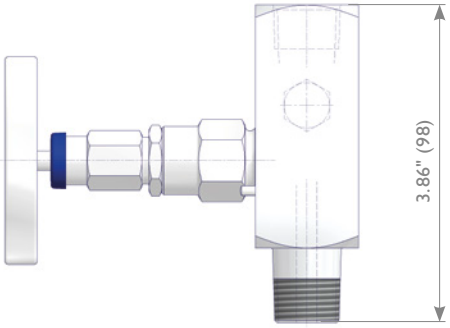
Gauge Valve Female x Female Threaded
GSFF Type



Gauge Valve Male x Female Threaded
GSMF Type



Gauge Valve Male x Female Threaded
GAMF Type



Female Threaded Vent Connection - Pipe Plug installed

Mounting Bracket
AKM-S Type
See also Page 27.

Ordering Information

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	G	S	M	F	S	A	D	–	N	4	N	4	–	8		

G	**Gauge Valves –** Soft Seated, 1/4" Bore Size		
	Vent Connection		
S	Bleed Screw		
A	1/4 NPT Female		
B	1/2 NPT Female		
	Inlet		
M	Male	F	Female
	Outlet		
M	Male	F	Female
	Material		
C	Carbon Steel A105		
S	1.4404 / 1.4401 / 316 / 316L		
M	Alloy 400 UNS N04400		
H	Alloy C-276 UNS N10276		
	Stem Seal / Packing		
A	PTFE	P	O-Ring FEPM
K	O-Ring FKM	W	Carbon filled PTFE
J	O-Ring FKM (RGD resistant)		
	Seat Material		
D	POM – 6,092 psi (420 bar) rated	P	PEEK – 6,092 psi (420 bar) rated
E	ETFE – 3,000 psi (207 bar) rated		
	Dash		
	Inlet		
	Thread Size		
N2	1/4 NPT	N6	3/4 NPT → Male Thread only
N4	1/2 NPT		
	Outlet		
	Thread Size		
N2	1/4 NPT		
N4	1/2 NPT		
	Dash		
	Options – Specify in alphabetical order (digits first, then letters)		
B	Cleaned for Oxygen Service		
M	Wetted Parts with 3.1 certificate		
	Accessory Kits		
8	SST Mounting Bracket AKM-S 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).
Note: Not every configuration which can be created in the ordering information is feasible / available.

Multiport Gauge Valves

Multiport Gauge Valves

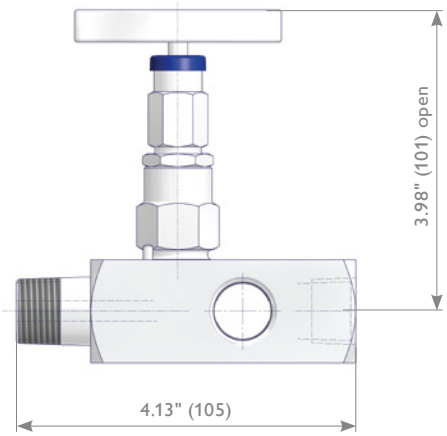
AS-Schneider Multiport Gauge Valves are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches. The standard types are provided with 3 female outlet ports and are therefore suitable for vertical or horizontal installations.

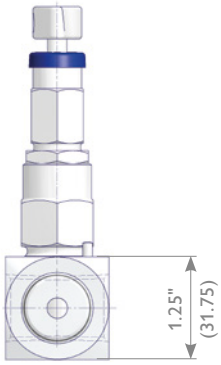
Bore Size: 1/4" (6.35 mm)

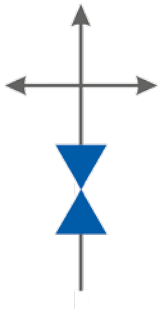
Accessories like Pipe Plugs and Vent Valves can be ordered separately or already factory installed – see also options next page – Ordering Information Multiport Gauge Valves. Accessories like Swivel Gauge Adaptors, Vent Valves etc. see Pages 27-29.

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.

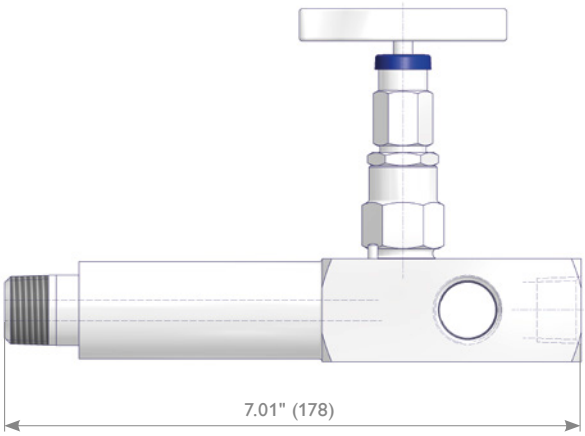
Multiport Gauge Valve – Screwed Bonnet
MAMA Type

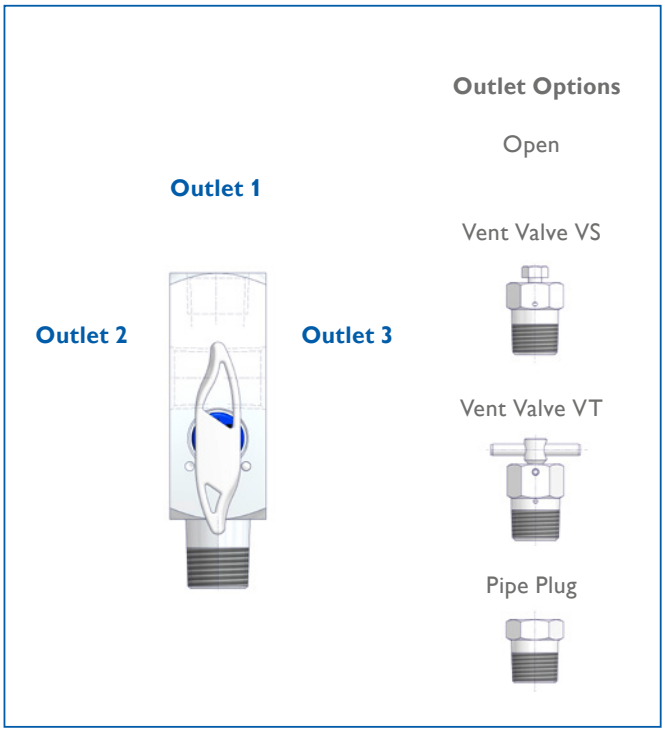






Multiport Gauge Valve with Extended Body
MXMA Type
Extended by approx. 3"





Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
M	A	M	A	S	K	D	–	N	4	N	4	–			

M	**Multiport Gauge Valves –** Soft Seated		
	Basic Design		
A	Standard – 1/4" Bore Size		
X	Extended Body		
	Inlet		
M	Male	F	Female
	Outlet		
A	3 x Female		
B	Outlet 1 – Female, Outlet 2 – Pipe Plug, Outlet 3 – Vent Valve VS		
C	Outlet 1 – Female, Outlet 2 – Pipe Plug, Outlet 3 – Vent Valve VT		
D	Outlet 1 – Female, Outlet 2 and 3 – Pipe Plug		
	Material		
C	Carbon Steel A105		
S	1.4404 / 1.4401 / 316 / 316L		
M	Alloy 400 UNS N04400		
H	Alloy C-276 UNS N10276		
	Stem Seal / Packing		
A	PTFE	P	O-Ring FEPM
K	O-Ring FKM	W	Carbon filled PTFE
J	O-Ring FKM (RGD resistant)		
	Seat Material		
D	POM – 6,092 psi (420 bar) rated	P	PEEK – 6,092 psi (420 bar) rated
E	ETFE – 3,000 psi (207 bar) rated		
	Dash		
	Inlet		
	Thread Size		
N2	1/4 NPT	N6	3/4 NPT → Male Thread only
N4	1/2 NPT		
	Outlet		
	Thread Size		
N2	1/4 NPT		
N4	1/2 NPT		
	Dash		
	Options – Specify in alphabetical order (digits first, then letters)		
B	Cleaned for Oxygen Service		
M	Wetted Parts with 3.1 certificate		

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

3 Valve and 5 Valve Manifolds

3 Valve and 5 Valve Manifolds

AS-Schneider Soft Seated Manifolds are designed for remote installation but also for direct mounting to Differential Pressure Transmitters. The standard vent connection is 1/4 NPT female. The vent connections of 3 Valve Manifolds are plugged as well as the test ports of the 5 Valve Manifolds. The vent port of the 5 Valve Manifolds is supplied with a fitted Bug Plug as standard.

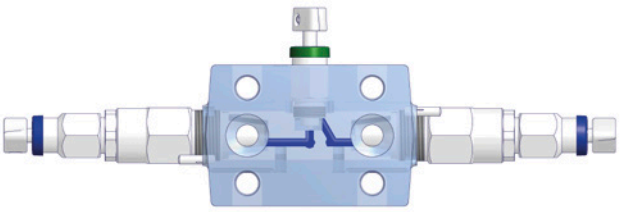
When mounting the Manifolds to ΔP Transmitters, Smart Multivariable or Flow Computer you must consider the mounting bolt lengths.

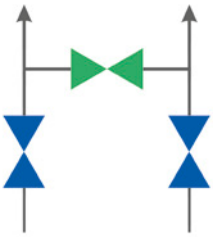
Bore Size:
Isolate Valves are roddable – Bore Size 1/4" (6.35 mm) or 3/8" (9.5 mm)
Equalize and Vent Valves – Bore Size 0.138" (3.5 mm)

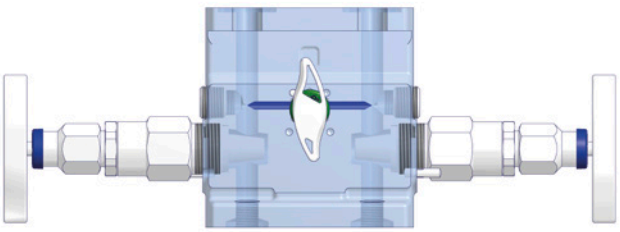
We are offering 3 different Manifold Styles (see also Ordering Information on Page 20):
R-Style – Remote Mounted Manifolds (Thread x Thread)
T-Style – Thread x Flange Style Manifolds
H-Style – Flange x Flange Style Manifolds

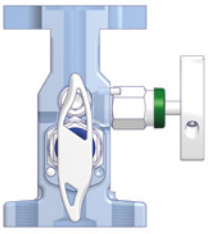
2 Valve Manifolds for Pressure Measurement see Manifolds for Ultrasonic Flow Meter Applications on Pages 24/25. Accessories like Pipe Plugs and Vent Valves respectively Mounting Bracket Kits see Pages 27-29. Should you not find your option please contact the factory.

Flow Pattern of 3 Valve Manifolds

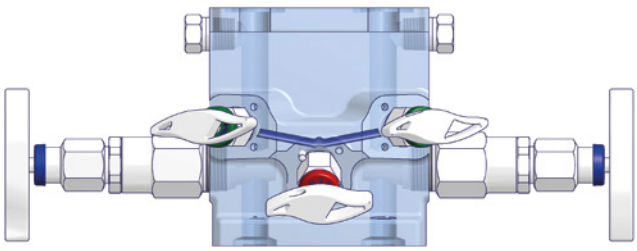


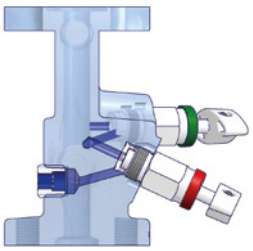


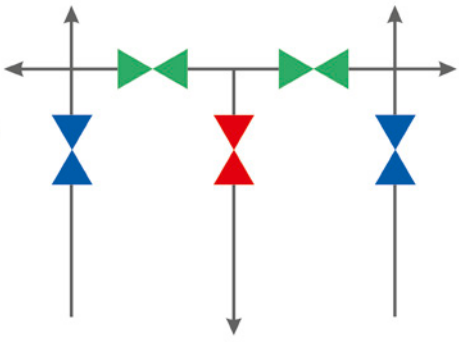




Flow Pattern of 5 Valve Manifolds

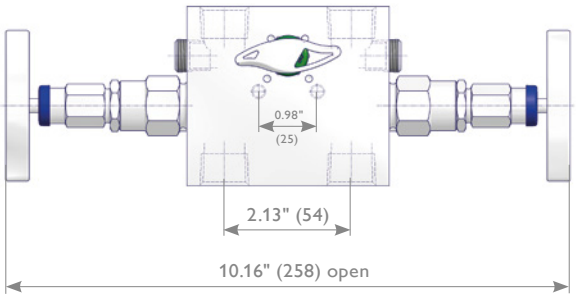


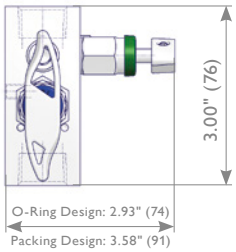




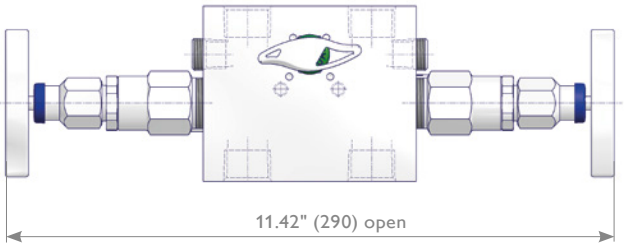
Remote Mounted Manifolds (3 and 5 Valve Manifolds)

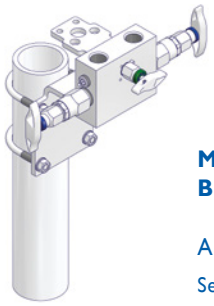
3 Valve Manifolds – Thread x Thread
R3A Type – 1/4" Soft Seat





3 Valve Manifolds – Thread x Thread
R3S Type – 3/8" Soft Seat



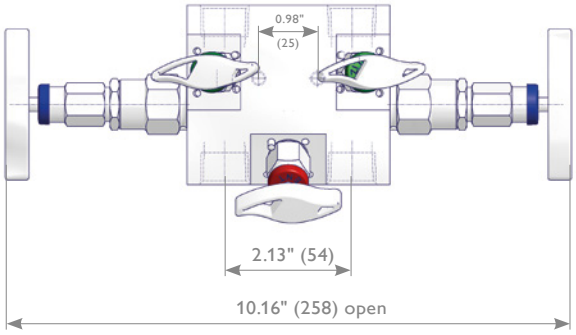


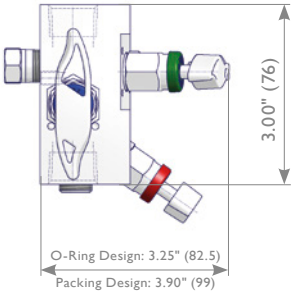
Mounting Bracket

AKM-U Type

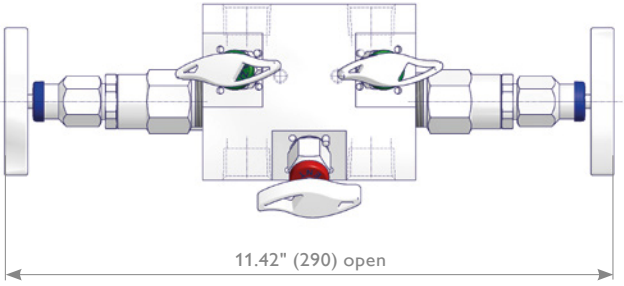
See also Page 27.

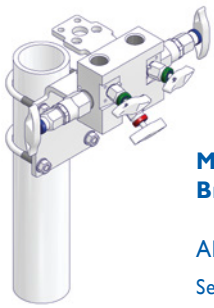
5 Valve Manifolds – Thread x Thread
R5A Type – 1/4" Soft Seat





5 Valve Manifolds – Thread x Thread
R5S Type – 3/8" Soft Seat





Mounting Bracket

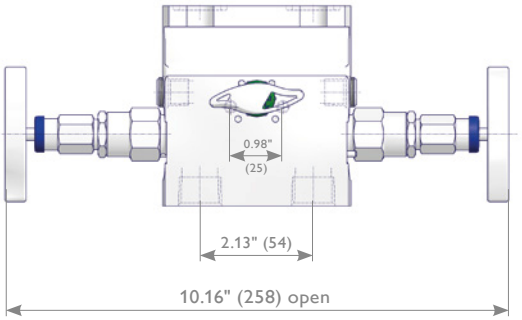
AKM-U Type

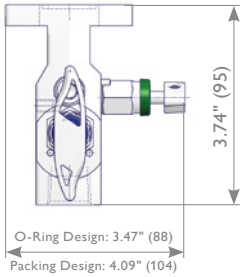
See also Page 27.

T-Style Manifolds

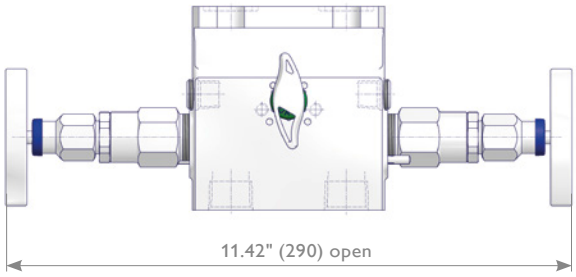
T-Style Manifolds (3 and 5 Valve Manifolds)

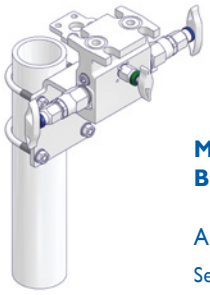
3 Valve Manifolds – Thread x Flange
T3A Type – 1/4" Soft Seat





3 Valve Manifolds – Thread x Flange
T3S Type – 3/8" Soft Seat



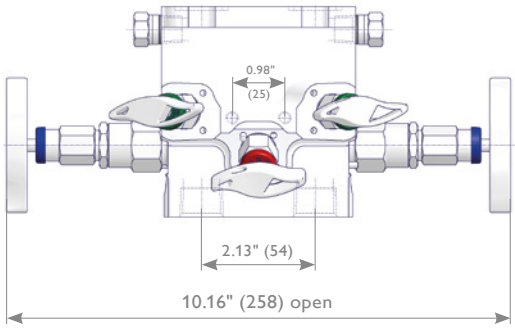


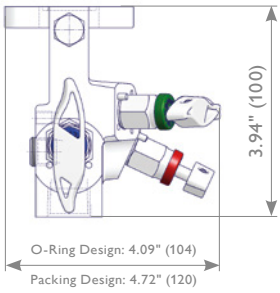
Mounting Bracket

AKM-U Type

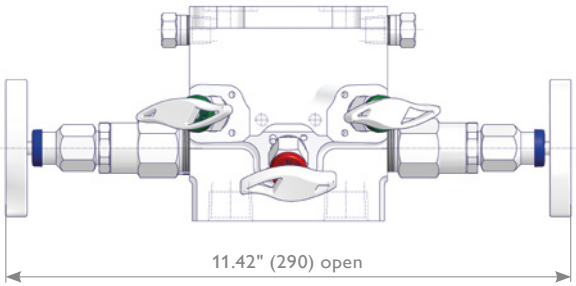
See also Page 27.

5 Valve Manifolds – Thread x Flange
T5A Type – 1/4" Soft Seat





5 Valve Manifolds – Thread x Flange
T5S Type – 3/8" Soft Seat



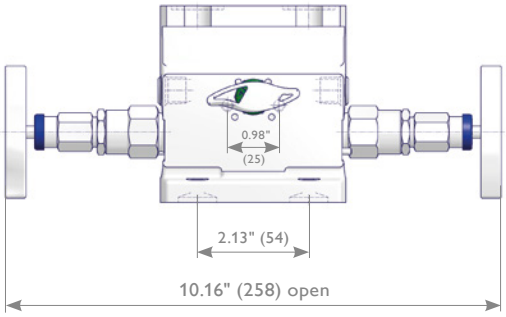
Mounting Bracket

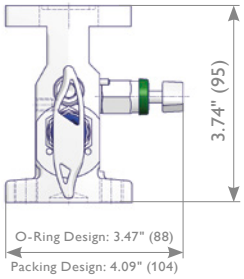
AKM-U Type

See also Page 27.

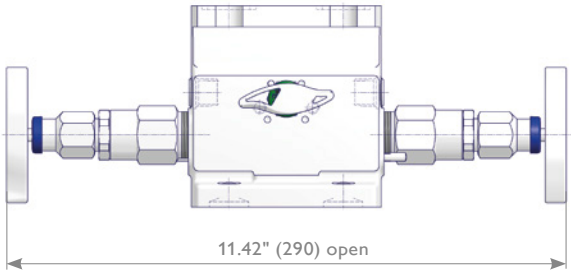
H-Style Manifolds (3 and 5 Valve Manifolds)

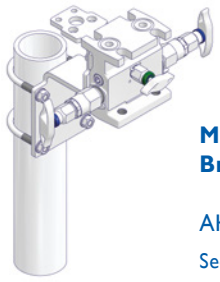
3 Valve Manifolds – Flange x Flange
H3A Type – 1/4" Soft Seat





3 Valve Manifolds – Flange x Flange
H3S Type – 3/8" Soft Seat



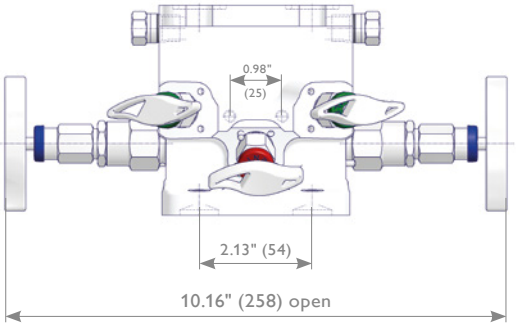


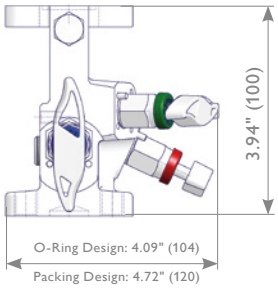
Mounting Bracket

AKM-U Type

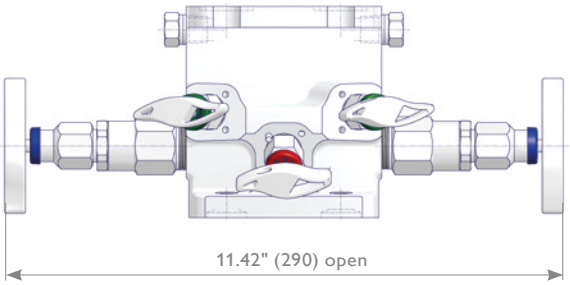
See also Page 27.

5 Valve Manifolds – Flange x Flange
H5A Type – 1/4" Soft Seat





5 Valve Manifolds – Flange x Flange
H5S Type – 3/8" Soft Seat



Mounting Bracket

AKM-U Type

See also Page 27.

3 Valve and 5 Valve Manifolds

Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
T	5	A	–	S	K	B	–	1	D						

R	**Remote Mounted Manifolds**
T	**T-Style Manifolds – Thread x Flange**
H	**H-Style Manifolds – Flange x Flange**

	Quantity Bonnets
3	3 Valve Manifold
5	5 Valve Manifold

	Manifold Design – Bore Size Isolate Valves
A	1/4" (6.35 mm) Bore Size on Isolate Valves
S	3/8" (9.5 mm) Bore Size on Isolate Valves

	Dash

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

	Stem Seal / Packing		
A	PTFE	P	O-Ring FEPM
K	O-Ring FKM	W	Carbon filled PTFE
J	O-Ring FKM (RGD resistant)		

	Seat Material – Isolate Valves x Equalize/Vent Valves		
A	ETFE x POM – 2,000 psi (138 bar) / 3,000 psi (207 bar) rated	D	POM x PCTFE – 6,092 psi (420 bar) rated
B	POM x POM – 6,092 psi (420 bar) rated	P	PEEK x PEEK – 6,092 psi (420 bar) rated
C	ETFE x PCTFE – 2,000 psi (138 bar) / 3,000 psi (207 bar) rated		

	Dash

	Options – Specify in alphabetical order (digits first, then letters)
B	Cleaned for Oxygen Service
D	Dielectric Isolation (for T&H-Style only) – Only to be ordered with Accessory Kit Option Code 1 to 4
M	Wetted Parts with 3.1 certificate

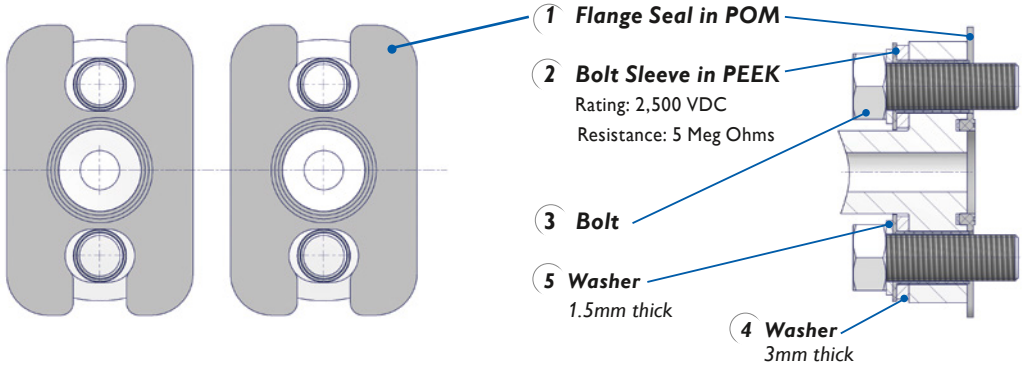
	Accessory Kits – For Manifold to Transmitter mounting
1	Hex Head Bolts 7/16-20 UNF x 1" lg. and Washers in SS, Seal Ring in PTFE – To mount Transmitters / Flow Computers with Traditional Flange.
2	Hex Head Bolts 7/16-20 UNF x 1" lg. and Washers in SS, Seal Ring in PTFE* – To mount Transmitters / Flow Computers with Traditional Flange.
3	Hex Head Bolts 7/16-20 UNF x 2 1/4" lg. and Washers in SS, Seal Ring in PTFE – To mount Transmitters / Flow Computers with Rosemount Coplanar™ Flange.
4	Hex Head Bolts 7/16-20 UNF x 2 1/4" lg. and Washers in SS, Seal Ring in PTFE* – To mount Transmitters / Flow Computers with Rosemount Coplanar™ Flange.
7	FKM O-Rings for Flange Seal – Only to be ordered with Accessory Kit Option Code 1 to 4. For Example Manifold with Bolts, Washers and Seal Rings acc. to Option Code 2, but instead of PTFE Seal Ring with FKM Seal Ring add Option Code 27.
	NOTE: Manifolds with Dielectric Isolation supplied with additional 1/4" to bolt length.

	Mountin Bracket Kits
8	SST Mounting Bracket AKM-U Type for 2" Pipe Mounting supplied separately – For R and T-Style Manifolds
9	SST Mounting Bracket AKM-U Type for 2" Pipe Mounting supplied separately – For H-Style Manifolds incl. Spacer

*Bolt Material S.S. = 316 Stainless Steel I ASTM F593 GP2 CW

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

Dielectric Isolation Kit



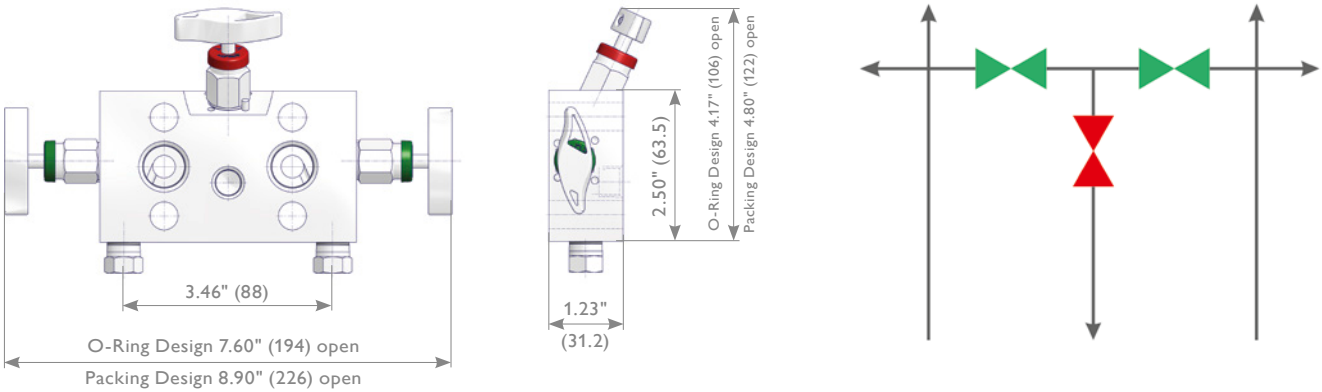
Equalizer Manifolds (3 Valve Manifolds)

AS-Schneider Equalizer Manifolds (Double Equalize and 1 x Vent) are designed for direct mounting to Differential Pressure Transmitters. The standard vent connection is 1/4 NPT female. The test/calibration ports 1/4 NPT female are plugged.

Bore Size:
Process to instrument connection – Bore Size 3/8" (9.5 mm)
Equalize and Vent Valves – Bore Size 0.138" (3.5 mm)

Accessories like Pipe Plugs and Vent Valves etc. see also Pages 27-29. Should you not find your option please contact the factory.

Equalizer Manifolds
EM3 Type



Ordering Information

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	E	M	3	–	S	K	D	N	2	–	2					

EM	**Equalizer Manifold**				
	Quantity Valves				
3	3 Valve Manifold				
	Dash				
	Body Material				
C	Carbon Steel A105	M	Alloy 400 UNS N04400		
S	1.4404 / 1.4401 / 316 / 316L	H	Alloy C-276 UNS N10276		
	Stem Seal / Packing				
A	PTFE	J	O-Ring FKM (RGD resistant)		
K	O-Ring FKM	P	O-Ring FEPM		
	Seat Material				
D	POM	K	PCTFE	P	PEEK
	Inlet				
	Thread Size				
N2	1/4 NPT				
N4	1/2 NPT				
	Dash				
	Options + Specify in alphabetical order (digits first, then letters)				
B	Cleaned for Oxygen Service				
M	Wetted Parts with 3.1 certificate				
	Accessory Kits – For Manifold to Transmitter mounting				
1	4 Hex Head Bolts 7/16-20 UNF x 1 3/4" lg. in CS, Seal Ring in PTFE – To mount Transmitters / Flow Computers with Traditional Flange.				
2	4 Hex Head Bolts 7/16-20 UNF x 1 3/4" lg. in SS, Seal Ring in PTFE* – To mount Transmitters / Flow Computers with Traditional Flange.				
3	4 Hex Head Bolts 7/16-20 UNF x 3" lg. in CS, Seal Ring in PTFE – To mount Transmitters / Flow Computers with Rosemount Coplanar™ Flange.				
4	4 Hex Head Bolts 7/16-20 UNF x 3" lg. in SS, Seal Ring in PTFE* – To mount Transmitters / Flow Computers with Rosemount Coplanar™ Flange.				
7	FKM O-Rings for Flange Seal – Only to be ordered with Accessory Kit Option Code 1 to 4. For Example Manifold with Bolts and Seal Rings acc. to Option Code 2, but instead of PTFE Seal Ring with FKM Seal Ring add Option Code 27.				

*Bolt Material S.S. = 316 Stainless Steel I ASTM F593 GP2 CW

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

Chart Recorder Manifolds

Chart Recorder Manifolds (3 and 5 Valve Manifolds)

AS-Schneider Chart Recorder Manifolds are designed for the calibration of chart recorders on natural gas pipelines.

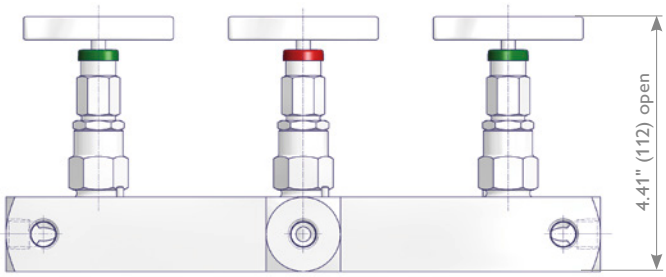
Two main types are available:
- 3 Valve Manifolds – Double Equalize and Vent and
- 5 Valve Manifolds – Double Isolate / Double Equalize / Vent

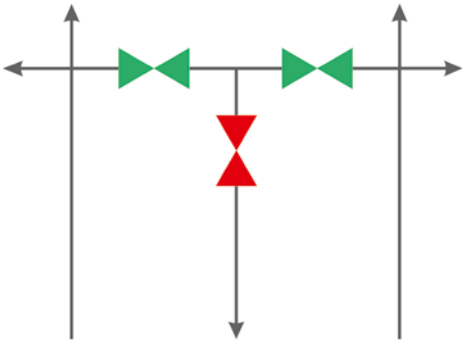
The standard vent connection is 1/4 NPT female. The test/calibration ports 1/4 NPT female are plugged.

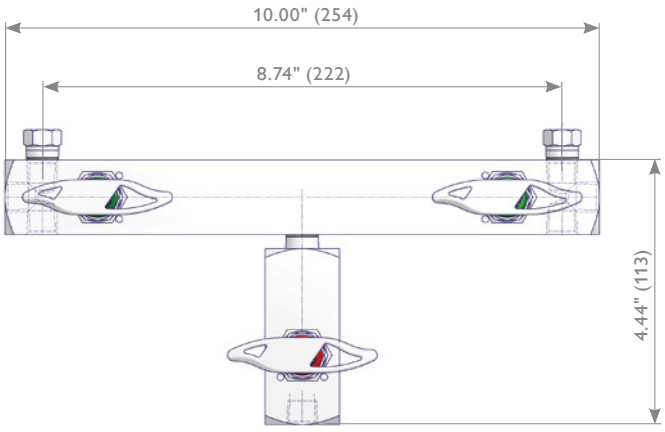
Bore Size: 1/4" (6.35 mm)

Accessories like Pipe Plugs and Vent Valves etc. see also Pages 27-29. Should you not find your option please contact the factory.

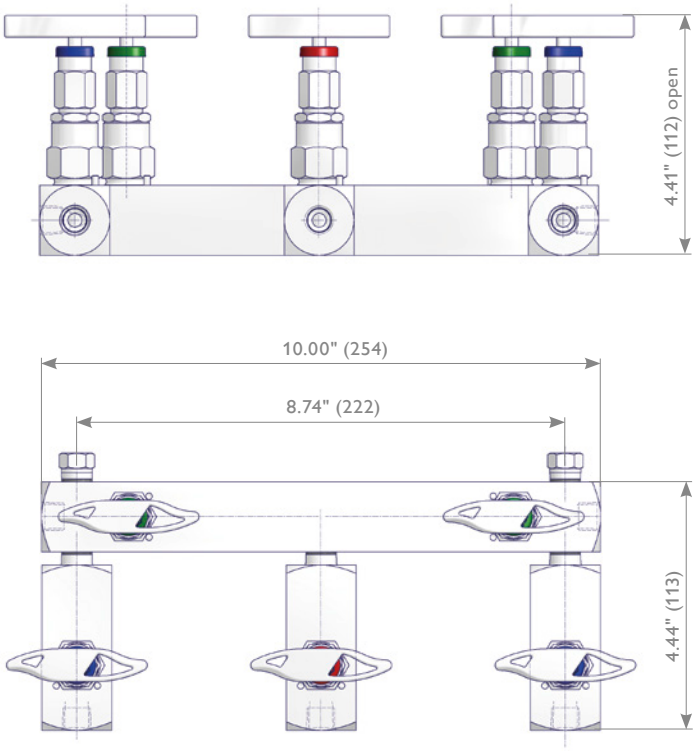
3 Valve Manifold
Available with PTFE Packing or Double O-Ring Needle Seal

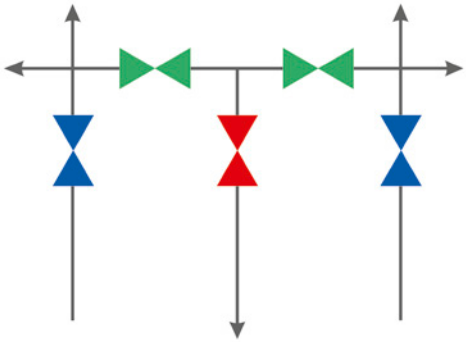






5 Valve Manifold
Available with PTFE Packing or Double O-Ring Needle Seal





Ordering Information

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	C	R	3	–	S	A	D	–								

CR	**Chart Recorder Manifold**				
	Quantity Valves				
3	3 Valve Manifold				
5	5 Valve Manifold				
	Dash				
	Body Material				
C	Carbon Steel A105				
S	1.4404 / 1.4401 / 316 / 316L				
	Stem Seal / Packing				
A	PTFE	J	O-Ring FKM (RGD resistant)		
K	O-Ring FKM	P	O-Ring FEPM		
	Seat Material				
D	POM – 6,092 psi (420 bar) rated	E	ETFE – 3,000 psi (207 bar) rated	P	PEEK – 6,092 psi (420 bar) rated
	Dash				
	Options – Specify in alphabetical order (digits first, then letters)				
B	Cleaned for Oxygen Service				
M	Wetted Parts with 3.1 certificate				

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

Manifolds for Ultrasonic Flow Meter Applications

Block & Bleed Manifolds – Flanged and Threaded Style

The following AS-Schneider Block & Bleed Manifolds are designed for a close coupled installation to Ultrasonic Flow Meters. The manifolds are supplied with stabilizer shoe as standard.

Two main types are available:

• Flanged Style – Multiport Type (3 outlet ports): ❶ Flange Connection ❷ 1/2 NPT Female Rod Out Port plugged and ❸ 1/4 NPT Female Vent/Calibrate Port ❹ Stabilizer Shoe

• Threaded Style – Multiport Type (3 outlet ports): 3 Outlet Ports 1/2 NPT Female. Pipe Plugs / Vent Valves to be ordered separately.

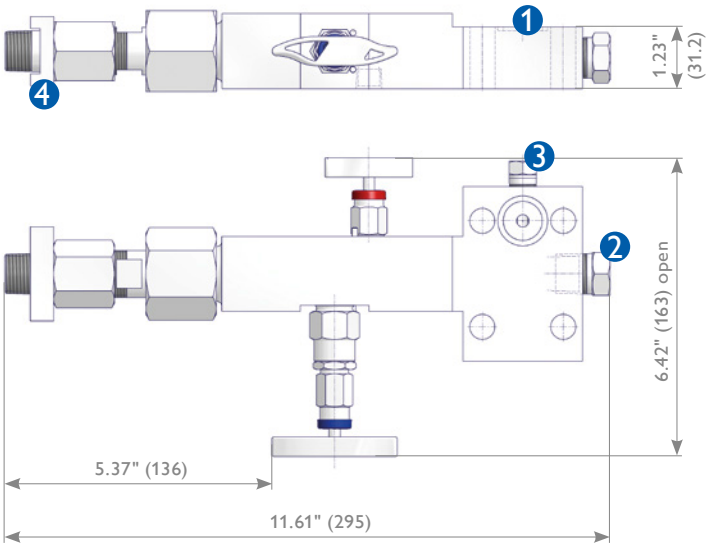
The standard bleed/vent connection is 1/4 NPT female. To plug the vent ports use Option Code A.

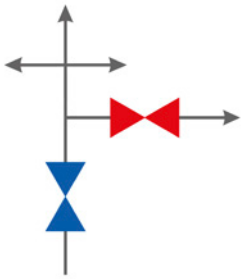
Bore Size: Isolate Valves are roddable: Bore Size 1/4" (6.35 mm) I Vent Valves: Bore Size 0.138" (3.5 mm)

Clearance of Process Connection to Transmitter = approx. 8"

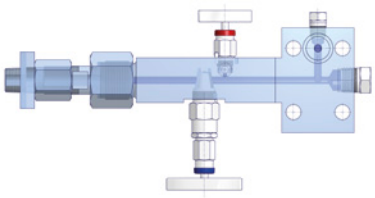
Both Manifold Styles are supplied with a stabilizer shoe. Accessories like Pipe Plugs, Vent Valves, Swivel Gauge Adaptors and Mini Valves see also Pages 27-29 or Catalogue AS-2601 respectively AS-4303. Should you not find your option please contact the factory.

Block & Bleed Manifold – Flanged Style
Available with PTFE Packing or Double O-Ring Needle Seal

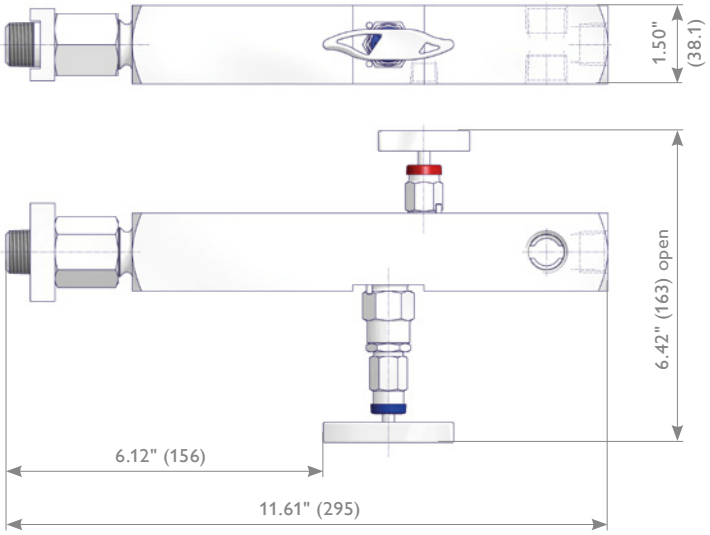




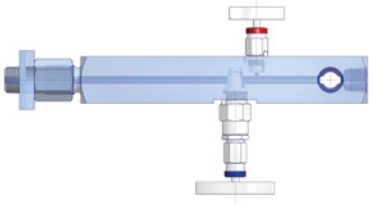
Flow Pattern of Flanged Type



Block & Bleed Manifold – Threaded Style
Available with PTFE Packing or Double O-Ring Needle Seal

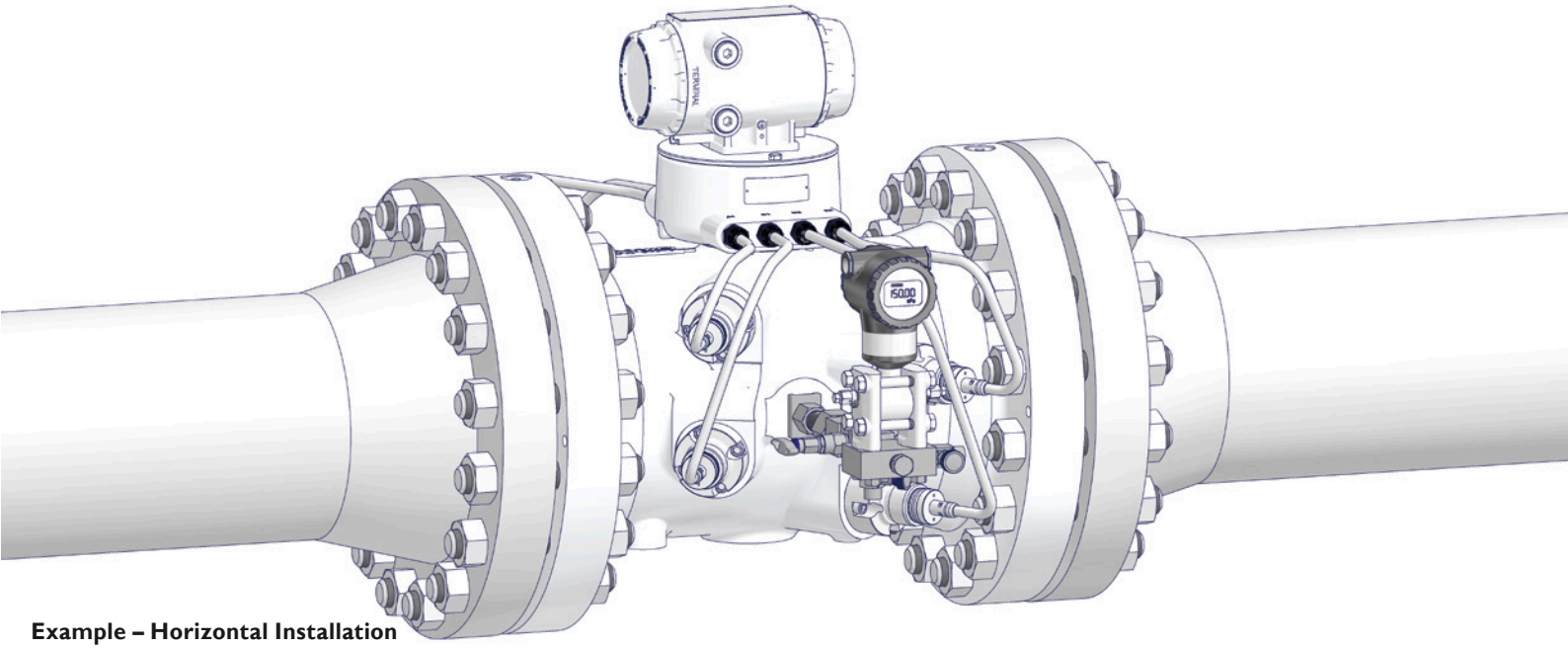


Flow Pattern of Threaded Type



Manifolds for Ultrasonic Flow Meter Applications

INSTALLATION OF FLANGED TYPE BLOCK & BLEED MANIFOLDS



Example – Horizontal Installation

2 Mini Valves assembled to bleed/vent and vent/calibrate connections.

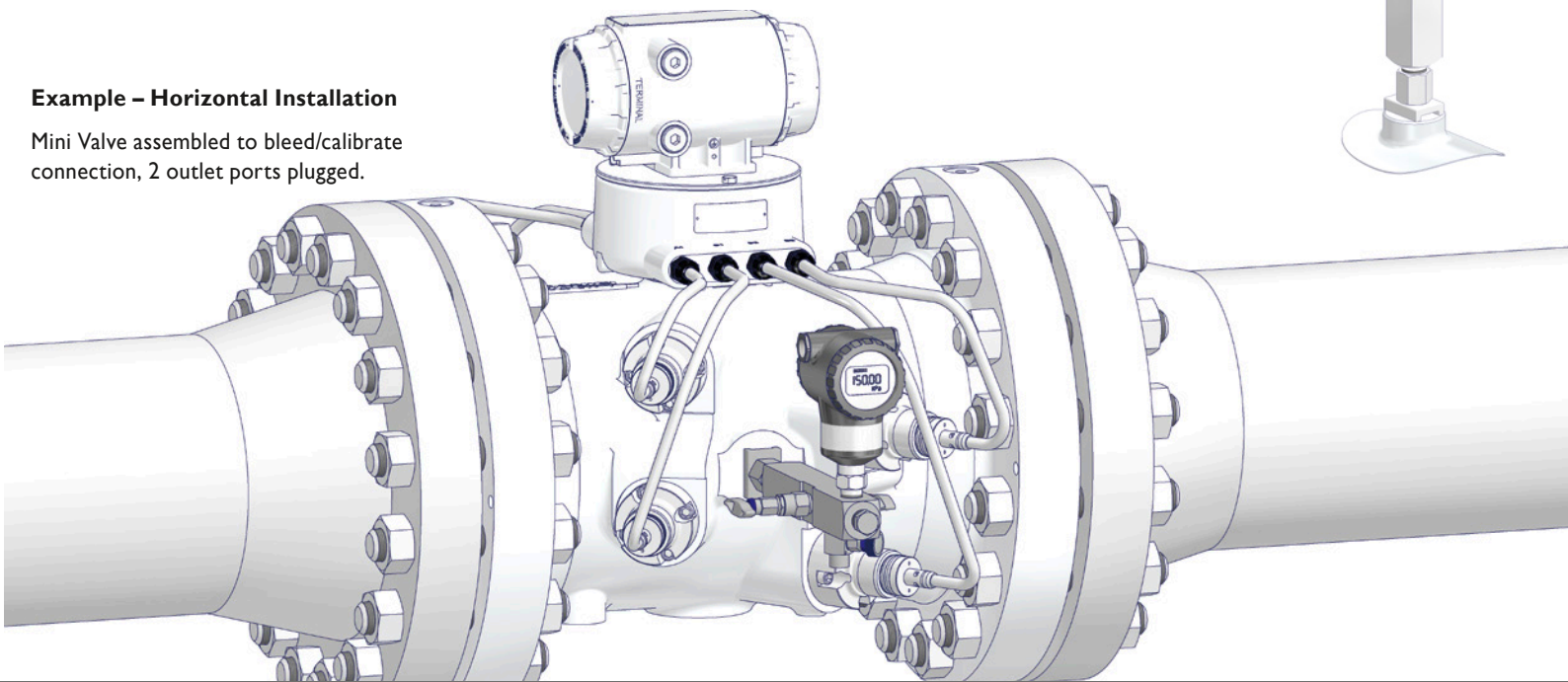
Example – Vertical Installation

Mini Valve assembled to bleed/calibrate connection, 2 outlet ports plugged.

INSTALLATION OF THREADED TYPE BLOCK & BLEED MANIFOLDS

Example – Horizontal Installation

Mini Valve assembled to bleed/calibrate connection, 2 outlet ports plugged.



Manifolds for Ultrasonic Flow Meter Applications

Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U	2	T	–	S	A	B	N	4	–						

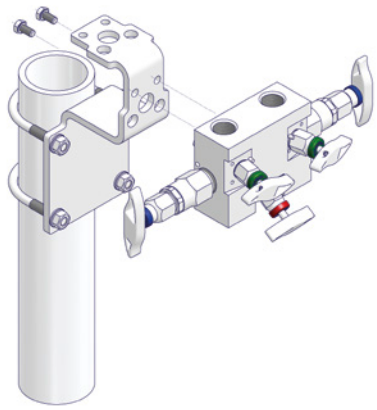
U	**Manifolds for Ultrasonic Flow Meter Applications**
	Quantity Bonnets
2	2 Valve Manifold
	Manifold Design
T	Threaded Style
F	Flanged Style
	Dash
	Body Material
S	1.4404 / 1.4401 / 316 / 316L
M	Alloy 400 UNS N04400
H	Alloy C-276 UNS N10276
	Stem Seal / Packing
A	PTFE
K	O-Ring FKM
J	O-Ring FKM (RGD resistant)
P	O-Ring FEPM
W	Carbon filled PTFE
	Seat Material
A	ETFE x POM – 3,000 psi (207 bar) rated
B	POM x POM – 6,092 psi (420 bar) rated
C	ETFE x PCTFE – 3,000 psi (207 bar) rated
D	POM x PCTFE– 6,092 psi (420 bar) rated
P	PEEK x PEEK– 6,092 psi (420 bar) rated
	Inlet
	Thread Size
N4	1/2 NPT Male
	Dash
	Options – Specify in alphabetical order (digits first, then letters)
A	Vent Port Plugged
B	Cleaned for Oxygen Service
D	Dielectric Isolation (for Flanged Style only) – Only to be ordered with Accessory Kit Option Code 1 to 4
M	Wetted Parts with 3.1 certificate
W	Without Stabilizer Shoe
	Accessory Kits for Flanged Style Manifolds – For Manifold to Transmitter mounting
1	Hex Head Bolts 7/16-20 UNF x 1 3/4" lg. and Washers in SS, Seal Ring in PTFE – To mount Transmitters / Flow Computers with Traditional Flange. Manifolds with Dielectric Isolation supplied with additional 1/4" to bolt length = 2" lg.
2	Hex Head Bolts 7/16-20 UNF x 1 3/4" lg. and Washers in SS, Seal Ring in PTFE* – To mount Transmitters / Flow Computers with Traditional Flange. Manifolds with Dielectric Isolation supplied with additional 1/4" to bolt length = 2" lg.
3	Hex Head Bolts 7/16-20 UNF x 3 1/4" lg. and Washers in SS, Seal Ring in PTFE – To mount Transmitters / Flow Computers with Rosemount Coplanar™ Flange. *For this Application the Bolt Length for Manifolds with or without Dielectric Isolation are identical (3 1/4" lg.).*
4	Hex Head Bolts 7/16-20 UNF x 3 1/4" lg. and Washers in SS, Seal Ring in PTFE* – To mount Transmitters / Flow Computers with Rosemount Coplanar™ Flange. *For this Application the Bolt Length for Manifolds with or without Dielectric Isolation are identical (3 1/4" lg.).*
7	FKM O-Rings for Flange Seal – Only to be ordered with Accessory Kit Option Code 1 to 4. For Example Manifold with Bolts, Washers and Seal Rings acc. to Option Code 2, but instead of PTFE Seal Ring with FKM Seal Ring add Option Code 27.

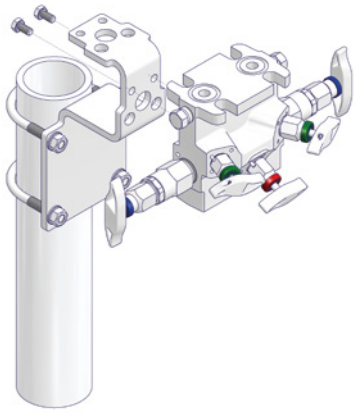
* Bolt Material S.S. = 316 Stainless Steel I ASTM F593 GP2 CW

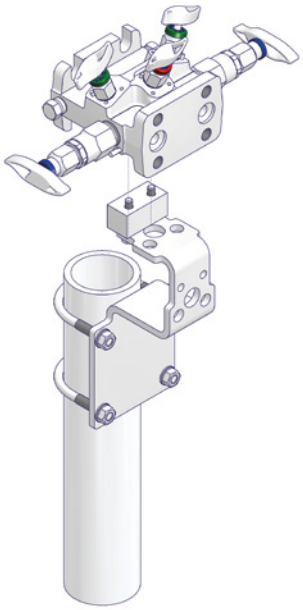
Wetted Parts according to above mentioned material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue).
Note: Not every configuration which can be created in the ordering information is feasible / available.

Mounting Bracket Kits

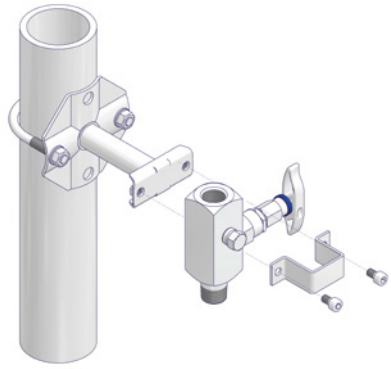
AKM-U Type – For Horizontal and Vertical Tube Run Installations
For Manifolds Type H, R and T







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



Mounting Bracket Kit
Mounting Bracket Kits are containing: • Mounting Bracket • 'U' Bolts* • Washers – 8.4* • Hexagon Nuts M8* • Screws and Cups for Mounting the Manifold to the Bracket – if applicable

* Amount depending on bracket type. See illustrations.

Ordering Information

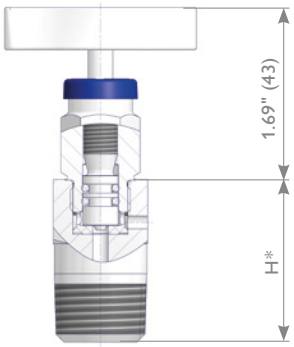
1	2	3	4	5	6	7	8	9
A	K	M	–	S	P	S	–	

AKM	**Mounting Bracket Kits**
	Dash
	Mounting Bracket incl. screws for mounting the bracket to the manifold (if applicable)
S	Valves and Manifolds with 1 1/4" Square Valve Body (Type H, G and M)
U	Manifolds Type H Manifolds Type R Manifolds Type T
	Mounting Method
P	2" Pipe Mounting – Incl. 'U' Bolt, Nuts and Washers
	Material
S	316 Stainless Steel
	Dash
H	Mandatory for Manifolds Type H and U-Type Bracket (incl. Spacer)

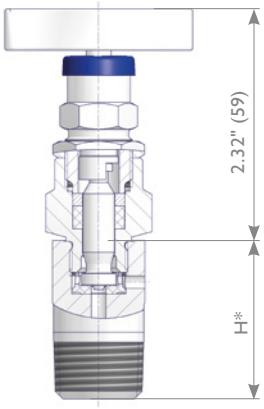
Accessories

Bleeder Valves

O-Ring Sealed Valve Head Unit



PTFE Packed Valve Head Unit



Soft Seated

Metal Seated

* Dimension	Bleeder Valve Connection	
	1/4 NPT	1/2 NPT
H	1.25" (32)	1.50" (38)

Ordering Information

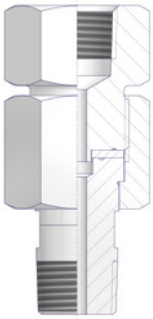
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	V	B	M	S	K	D	–	N	4	–	M					
VB	**Bleeder Valves**															
	Connection															
M	Male															
	Material															
S	1.4404 / 1.4401 / 316 / 316L															
M	Alloy 400 UNS N04400															
H	Alloy C-276 UNS N10276															
	Bonnet Seal / Packing															
A	PTFE Packing															
K	O-Ring FKM															
J	O-Ring FKM (RGD resistant)															
P	O-Ring FEPM															
	Seat Material															
D	POM															
K	PCTFE															
M	Metal to Metal (Integral)															
P	PEEK															
	Dash															
	Threaded Connection															
N2	1/4 NPT															
N4	1/2 NPT															
	Dash															
	Options – Specify in alphabetical order (digits first, then letters)															
B	Cleaned and Lubricated for Oxygen Service															
M	Wetted Parts with Certified Mill Test Report (CMRT) as 3.1 certificate acc. to EN 10204															
W	Round Handle in Stainless Steel															
Y	Round Handle in Aluminium															

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

Vent Valves, Pipe Plugs and Pipe Fittings

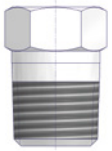
Please see Ordering Information in our Catalogue 'AS-2601 I E Series Valves and Manifolds'.

Swivel Gauge Adapters

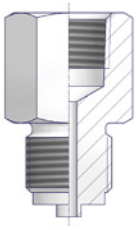


Vent Valves

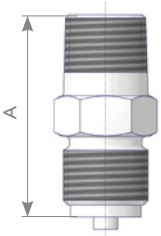
Pipe Plugs



Female to Male Adapters



Hex Nipples

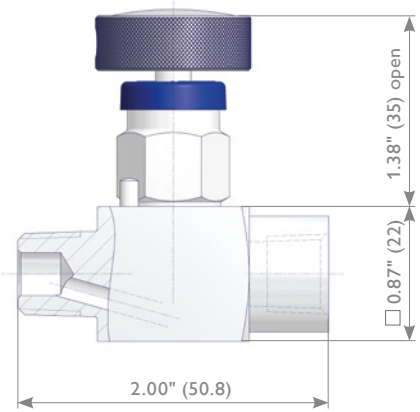


Thread Size	A (Available Lengths)				
	1.50" (38.1 mm)	1.75" (44.5 mm)	2.00" (50.4 mm)	3.00" (76.2 mm)	4.00" (101.6 mm)
N2, G2	Standard		... L2.0	... L3.0	... L4.0
N4, G4, M4			Standard		
Combination of #2 and #4		Standard	... L2.0		

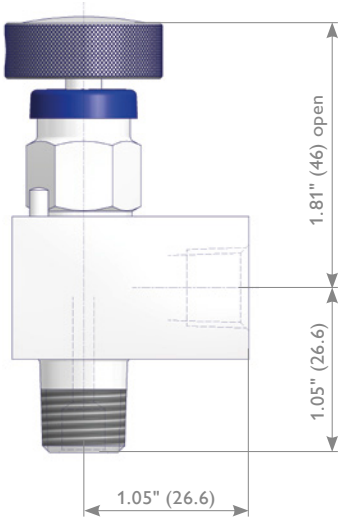
Test and Calibration Mini Valves

Please see Ordering Information in our Catalogue 'AS-4303 I Mini Valves and Rupture Disc Holders'.

Straight Pattern

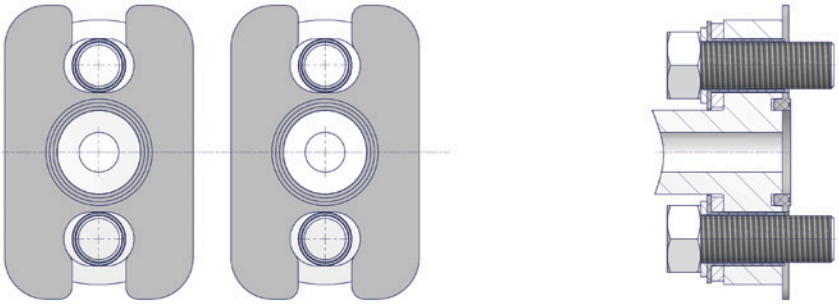


Angle Pattern



Spare Parts

Dielectric Isolation Kits



AS-Schneider is providing the following Dielectric Isolation Kits (always supplied as pair: 2 Dielectric Flange Seals, 4 Bolts, 4 Washers and 4 Bolt Sleeves):

To mount a Manifold Type H & T to a:	Part Number
Transmitter/Flow Computer with Traditional Flange	
Dielectric Kit w/CS Bolts (1 1/4" lg.) and 316 SS Washers	DEK-02C
Dielectric Kit w/316 SS Bolts (1 1/4" lg.) and 316 SS Washers	DEK-02F
Transmitter/Flow Computer with Rosemount Coplanar™ Flange	
Dielectric Kit w/CS Bolts (2 1/2" lg.) and 316 SS Washers	DEK-03C
Dielectric Kit w/316 SS Bolts (2 1/2" lg.) and 316 SS Washers	DEK-03F

To mount a Flanged Style Block & Bleed Manifold for Ultrasonic Flow Meter Applications to a:	Part Number
Transmitter/Flow Computer with Traditional Flange	
Dielectric Kit w/CS Bolts (2" lg.) and 316 SS Washers	DEK-04C
Dielectric Kit w/316 SS Bolts (2" lg.) and 316 SS Washers	DEK-04F
Transmitter/Flow Computer with Rosemount Coplanar™ Flange	
Dielectric Kit w/CS Bolts (3 1/4" lg.) and 316 SS Washers	DEK-05C
Dielectric Kit w/316 SS Bolts (3 1/4" lg.) and 316 SS Washers	DEK-05F

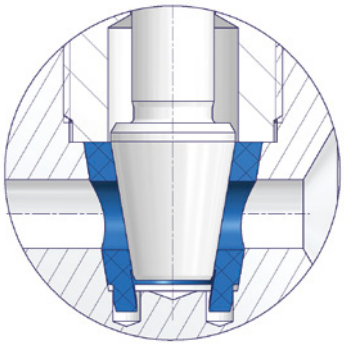
Flange Seal Rings and Valve Seats

Components	Material	Part Number
Flange Seal Ring for Stabilized Connectors and Manifolds	PTFE	S006.23.351.08
	FKM	531044
Valve Seats – Isolate Valves (Block Valves) – 3/8" (9.5 mm) Bore Size – Cone Design	ETFE	S007.01.350.1105
	POM	S007.01.350.1101
	PEEK	S007.01.350.1104
Valve Seats – Isolate Valves (Block Valves) – 1/4" (6.35 mm) Bore Size – Cone Design	ETFE	S007.01.350.0605
	POM	S007.01.350.0601
	PEEK	S007.01.350.0604
Valve Seats – Equalize and Vent Valves – 0.138" (3.5 mm) Bore Size – Cup Design	POM	S007.01.350.0801
	PCTFE	S007.01.350.0803
	PEEK	S007.01.350.0804

Comparison of AS-Schneider's Soft Seated Valve Options

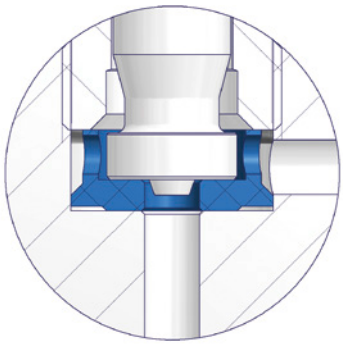
Comparison of AS-Schneider's Soft Seated Valve Options

Soft Seat – Cone Design



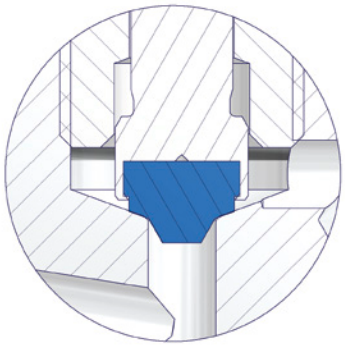
- Bore Size 1/4" (6.35 mm) and 3/8" (9.5 mm)
- Seat Material: ETFE, POM, PEEK
- Straight-Through Design → Fully Roddable for easy cleaning if used in dirty service
- Bi-directional Flow
- Field Replaceable

Soft Seat – Cup Design



- Bore Size 0.138" (3.5 mm)
- Seat Material: PCTFE, POM, PEEK
- Field Replaceable
- Small in size but big on pressure load

Soft Tip Design



- Bore Size 0.197" (5 mm)
- Tip Material: PCTFE, POM
- Same Valve Body as for all E Series Metal Seated Valves and Manifolds

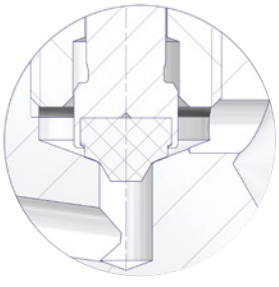
Needle Valves with Soft Tip

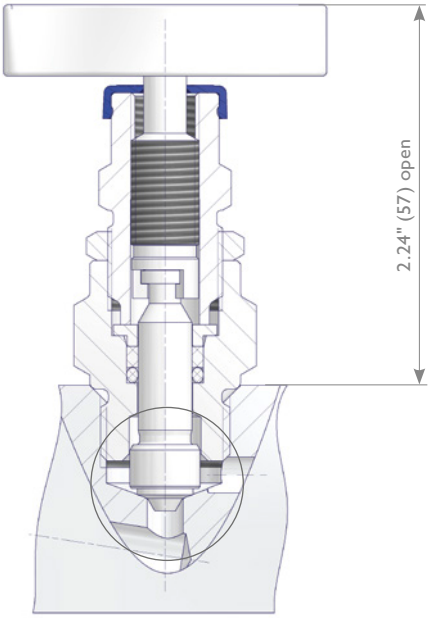
Bore Size 0.197" (5.0 mm) – Needle Seal: PTFE Packing or O-Ring

Features

- Integral Valve Seat
- Needle Seal
  – PTFE Packing or
  – O-Rings in FKM (optional RGD resistant) or EPDM
- Soft Tip PCTFE or POM
- Non-rotating Needle
- External Stem Thread – Packing below stem threads. Stem Threads are protected from process media (non-wetted).
- 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 6,092 psi (420 bar) rated
- Anti-Tamper Valve Head Options available
- All non-wetted parts in 316 stainless steel

Valve Head Units with Soft Tip are specified in Catalogue 'AS-2601 I E Series Valves and Manifolds'.





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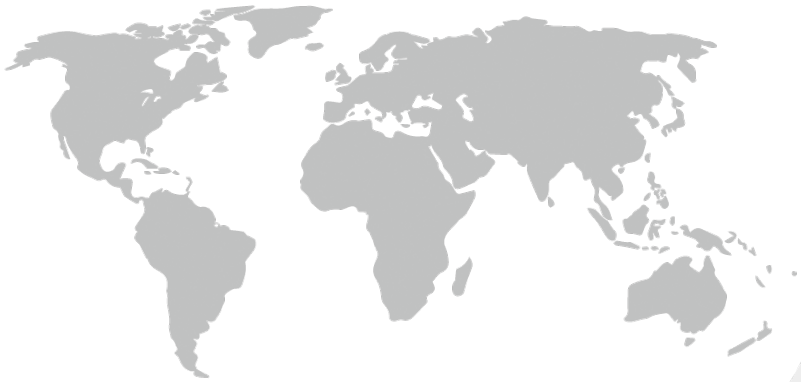

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