

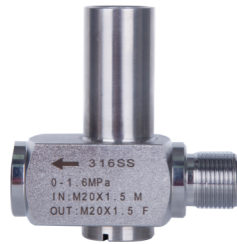


## Accessories / Instrument Valves



### AD Series - In-line Check Valve

- Instrument flow direction control
- Stainless steel wetted parts, optional brass
- Max. working pressure 125, 400 and 700 bar
- Conn. type Female x Male, Female x Female
- Conn. size G $\frac{1}{4}$ ",  $\frac{1}{4}$ "NPT, G $\frac{1}{2}$ " and  $\frac{1}{2}$ "NPT



### AO Series - Overrange Protector

- Adjustable pressure device at body
- Stainless steel body construction
- Selectable 6 working pressures, max. 600 bar
- Operating temperature maximum +80°C
- Conn. size G $\frac{1}{2}$ " or NPT, other size available



Brass



Stainless steel

### AN Series - Adjustable Snubber

- Gauge protector from pressure pulses & peaks effect
- Stainless steel 1-piece body with adjustable spindle
- Maximum working pressure 400 bar
- Connection size  $\frac{1}{2}$ " BSP or NPT, other sizes available
- Option Brass material, max. working press 250 bar



### AF Series - Knock-down Flange

- Easy installation in-field with pressure tool
- Special design for panel mount IP protection
- Design for 2 $\frac{1}{2}$ ", 4" and 6" pressure gauge
- Panel mount and surface mount flange
- Flat-Face (FF) and Raised-Face (RF) design



### AB Series - Connection Adapter

- Pressure gauge installation adaptor and fitting
- Material brass, SS304 and SS316(L)
- Conn. type Female x Male, F x F, M x M, etc
- Conn. size BSP or NPT :  $\frac{3}{8}$ ",  $\frac{1}{4}$ ",  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1", etc
- Compression fitting for thermometer application



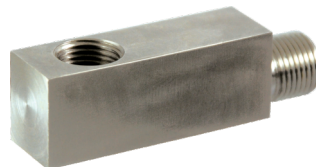
### AZ Series - Clamping Ring

- Compatible with clamping ISO and DIN standard
- Size DCS551 and DCS552 size 1 $\frac{1}{2}$ " and 2"
- Silicone rubber seal and below welded part
- Stainless steel clamping and welded part



### AP Series - Case Protector

- Contaminated area application
- Rubber material design, anti-slip side
- For pressure gauge dial 2 $\frac{1}{2}$ " and 4"



### AV Series - Angle Valve

- Special instrument angle tube device
- Stainless steel construction body
- Conn. size  $\frac{1}{2}$ " BSP or NPT, other size available



### AX Series - PG Memory Pointer

- Pressure gauge memory with resetable knob
- Plastic pointer with stop-handle install at window
- Design for gauge dial 4" and 6"



### FR Series - DCS Flushing Ring

- Diaphragm seal flushing solution
- Flush connection  $\frac{1}{4}$ " and  $\frac{1}{2}$ "BSP or NPT Female
- Design with 1 or 2 flushing ports
- Flanged to ASME B16.5, EN 1092-1 or JIS B2220
- Flange size from 1 $\frac{1}{2}$ "..4", rating Class 150..2500
- Material SS316L, Monel 400, Hastelloy C, Duplex, etc

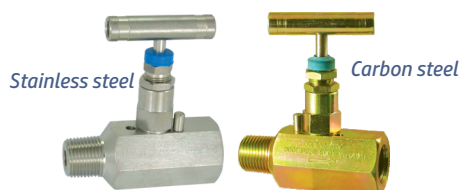
### EC Series - Portable Contact

- Portable contact gauge accessories
- Suitable for in-field use contact device
- Applicable for 4" / 100 mm gauge
- Design for SC500 and SX500 Series
- Contact characteristics :
  - Dry gauge execution
  - Contact set accuracy Class 4.0
  - 1 or 2 contacts function
  - Magnetic & Electric contact
  - Voltage 380/220 Vac
  - Maximum current 1A
  - Contact power 30VA





## Accessories / Instrument Valves



### AE100 Series - Needle Valve

- Instrument isolation needle valve
- Design wetted parts SS316 or Carbon steel
- DELRIN seat, TEFLON back-up ring, NBR dust cap
- Design working press. 6000 psi and 10000 psi
- Conn. type Female x Male, Female x Female
- Connection size 1/4" or 1/2" BSP or NPT



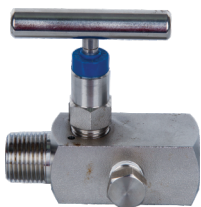
### AE120 Series - Needle Valve

- One-piece straight body with hard seat
- Design wetted parts SS316 or Carbon steel
- PTFE/Graphite gland packing, Nylon dust cap
- Design working press. 6000 psi and 10000 psi
- Conn. type Female x Male, Female x Female
- Connection size 1/4", 1/2", 3/8", 3/4", 1" BSP or NPT



### AE220 - Needle Valve with bleed

- Straight body needle valve with bleed
- Design wetted parts SS316 or Carbon steel
- PTFE/Graphite gland packing, Nylon dust cap
- Design working press. 6000 psi and 10000 psi
- Conn. type Female x Male, Female x Female
- Connection size 1/4", 1/2", 3/8", 3/4", 1" BSP or NPT



### AE401 - Needle Valve

- Square shape Needle valve with Drain plug
- Design wetted parts material SS316
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE packing, Nylon dust cap
- Connection type Female x Male
- Connection size 1/2" or 3/4" BSP or NPT



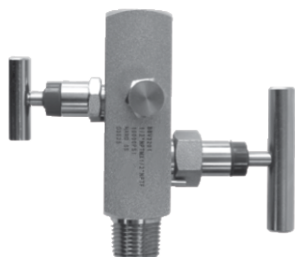
### AE402 - Multiport Gauge Valve

- Block shape Multi-port gauge valve
- Design wetted parts material SS316
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE packing, Nylon dust cap
- Connection type Female x Male
- Connection size 1/2" or 3/4" (Male) BSP or NPT



### AE500 Series - Ball Valve

- Standard construction material SS316
- Pressure rating 2000 and 6000 Psig
- Inlet/Outlet 1/2", 3/4" or 1" NPT F x F standard
- Inlet/Outlet Female x Male or Tube end
- Sealing PTFE, PEEK or Delrin depend on rating
- Available exotic material on Inconel, Duplex, etc



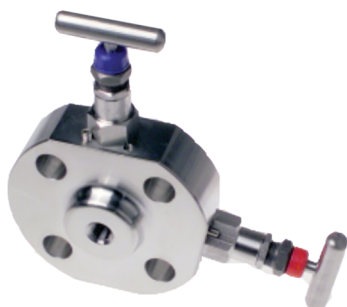
### BB201 - Block & Bleed Valve

- One-piece body construction (No welding)
- Strong construction and corrosive resistance
- Hex body shape, SS316 wetted parts or \*NACE
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, Nylon dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/4", 1/2", 3/4" BSP or NPT



### BB301 Series - Double Block and Bleed Manifold

- Process instrument isolates & bleeds system
- Hex body shape, SS316 design wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/2" BSP or NPT



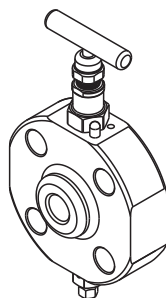
### MF101 Series - Monoflange Valves

- Reduced leak paths, bolting and gasket costs
- Minimize system vibration effects on instruments
- Hard seat (10,000psi) and Soft seat (6,000psi)
- Seal material FKM, PTFE or Graphite selection
- Flanged to standard ASME B16.5, DIN or others
- Flange sizes 1/2" to 2", 150lb to 3500lb, RF or RTJ
- Various material SS316, SS316L, Inconel, Duplex, Hastelloy C

## Monoflange Valves Series

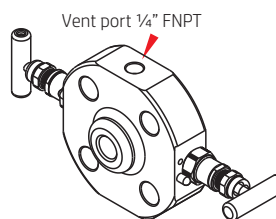
## MF10

### MF102 Series



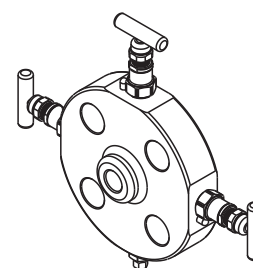
Isolation monoflange

### MF103 Series

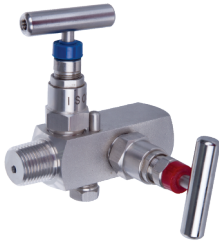


Block & Vent monoflange

### MF104 Series



DBB with screwed bonnets



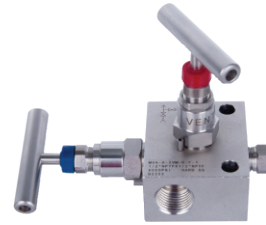
### VM22 Series - 2 Way Manifold

- Process instrument isolates & bleeds system
- Square bar body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/2" BSP or NPT



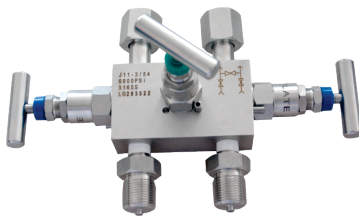
### VM24 Series - 2 Way Manifold

- Process instrument isolates & bleeds system
- Hex body shape, SS316 design wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/2" BSP or NPT



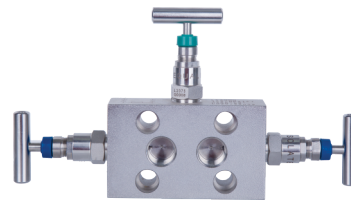
### VM25 Series - 2 Way Manifold

- Process instrument isolates & bleeds system
- Direct block body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Female
- Connection size 1/2" BSP or NPT



### VM32 Series - 3 Way Manifold

- Process instrument isolates & bleeds system
- Square bar body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/2" BSP or NPT



### VM35 Series - 3 Way Manifold

- Process instrument isolates & bleeds system
- Direct block body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Female
- Connection size 1/2" BSP or NPT



### VM52 Series - 5 Way Manifold

- Process instrument isolates & bleeds system
- Square bar body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/2" BSP or NPT



### VM54 Series - 5 Way Manifold

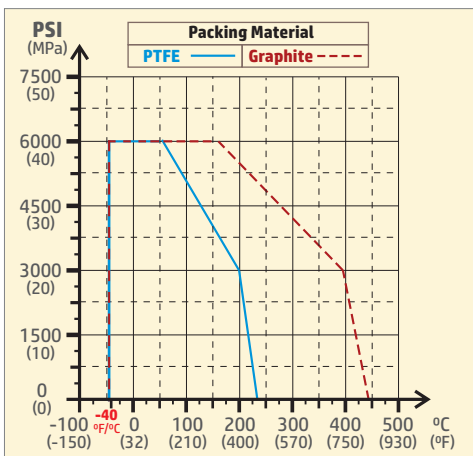
- Process instrument isolates & bleeds system
- Rectangular body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Male (F x M) or F x F
- Connection size 1/2" BSP or NPT



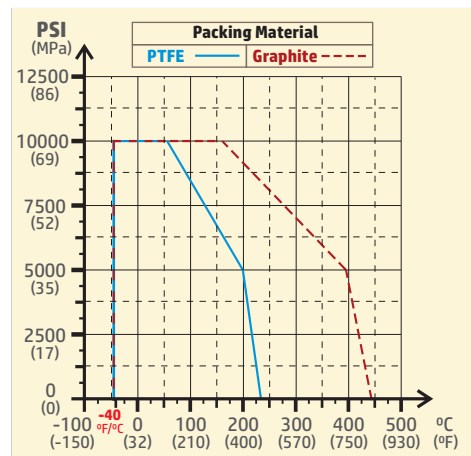
### VM55 Series - 5 Way Manifold

- Process instrument isolates & bleeds system
- Angle block body shape, SS316 wetted parts
- Hard seat (10,000psi) and Soft seat (6,000psi)
- FKM O-ring, PTFE/Graphite packing, PVC dust cap
- Connection type Female x Female
- Connection size 1/2" BSP or NPT

**Pressure vs Temperature (6000 Psi Series)  
Overpressure Safety Factor (4:1)**



**Pressure vs Temperature (10000 Psi Series)  
Overpressure Safety Factor (2.4:1)**





CS Series - Sanitary Clamping Cooling Tube



- Cooling tower for sanitary diaphragm seal
- Stainless steel 316 construction material
- Media temperature reducer up to 15%
- Max. process temperature 200°C (392°F)
- Max. operating pressure 1500 psi (100 bar)
- Diaphragm seal filling temperature reducer
- Fastening to ISO2852, DIN 32676

C1 Series - Cooling Tower, Wing Shape



- One-piece cooling tower compact design
- Stainless steel 316 construction material
- Media temperature reducer up to 15%
- Max. process temperature 300°C (932°F)
- Max. operating pressure 1500 psi (100 bar)
- Diaphragm seal filling temperature reducer
- Connection size ¼" or ½" BSP and NPT

C3 Series - Cooling Tower, Tube Shape



- Cooling tower syphon compact design
- Stainless steel 316 construction material
- Media temperature reducer up to 20%
- Max. process temperature 500°C (932°F)
- Max. operating pressure 1500 psi (100 bar)
- Diaphragm seal filling temperature reducer
- Connection size ¼" or ½" BSP and NPT

C2 Series - Cooling Tower, Spiral Shape



- One-piece cooling tower compact design
- Stainless steel 316 construction material
- Media temperature reducer up to 20%
- Max. process temperature 300°C (932°F)
- Max. operating pressure 1500 psi (100 bar)
- Diaphragm seal filling temperature reducer
- Connection size ¼" or ½" BSP and NPT

AS Series - Stainless steel Capillary



- All welded stainless steel construction
- Recommended line length up to 20 meters
- Swivel ring process and instrument connection
- Bare stainless steel 304, armoured protection
- Max. working press. 600 bar, depends on usage
- Working temperature -50°..+400°C (-58°..+752°F)
- Conn. Female x Male, size ¼" or ½" BSP or NPT
- Can be used for Cooling system or Vibration area

AS Series - Stainless steel Syphon



01 Shape



02 Shape

AS Series - Stainless steel Syphon Characteristic



DIN16282



SCH 80  
01 Shape



SCH 40



U1 Shape



U2 Shape

ASTM Specification (Grade) and Material

Compliance	Material	Max. Temp. (°C)	Max. Pressure
DIN 16282 Tube Ø20 mm	SS 304 or SS 316	120	160
		300	100
		400	80
Schedule 40 Tube Ø12 mm		120	100
		300	80
		400	63
Schedule 80 Tube Ø21 mm		120	160
		300	100
		400	80