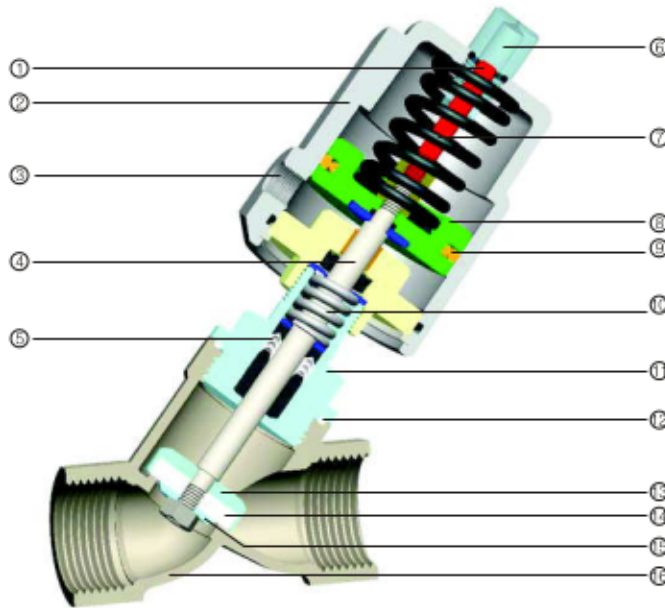


Pneumatic Angle Seat Valve



- ① Indication Rod (nylon)
- ② Actuator (CF8)
- ③ Pilot Part (1/8")
- ④ Stem (AISI316/304)
- ⑤ Stem Seal (PTFE)
- ⑥ Cap (PC)
- ⑦ Spring (Steel 65Mn)
- ⑧ Piston (Alu.alloy)
- ⑨ Piston Seal (Viton)
- ⑩ Seal Spring (AISI304)
- ⑪ Connecting Piece (CF8M/CF8)
- ⑫ Body Seal (PTFE)
- ⑬ Valve core (CF8M/CF8)
- ⑭ Seat Seal (PTFE)
- ⑮ Gasket (AISI316/304)
- ⑯ Body (CF8M/CF8)

Function Principle

Valve stays closed(open) by spring force in its normal state. When piston is actuated by compressed air, valve becomes opened(closed). For double acting type, valve is opened and closed by compressed air.

Applications

- Beer & Drinks Bottling Machinery
- Textile Printing & Dyeing
- Gas Industry
- Pharmacy & Medical Equipment
- Chemical Industry
- High-temperature disinfection
- Frothing Equipment
- Water/Sewage treatment

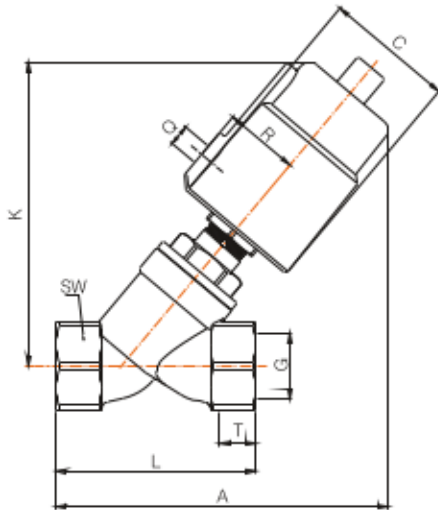
Advantages

- Large flux, low resistance, no water-hammer
- Y-type shape with enlarged flowing section raises flux by 30% and smoothers the flow.
- Superb service life.
- The stem adjusts and lubricates itself automatically, minimizing needs for maintaince.
- The cylinder can rotate 360° unconstrained, and uses stainless steel material, which enables superior performance.

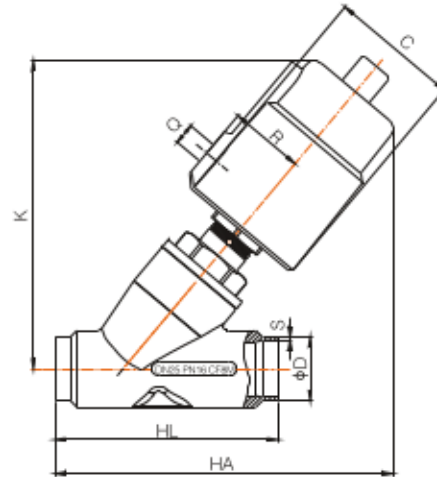
Technical Specification

| | |
|---------------------|--|
| Fluid Pressure | Max 1.6MPa(232psi) |
| Control Pressure | 0.3 — 0.8MPa (43.5 — 116psi) |
| Control Fluid | Neutral gas, Air |
| Body Material | CF8M/CF8 |
| Seals Material | PTFE |
| Actuator Material | CF8 |
| Actuator Size | 40mm, 50mm, 63mm, 90mm, 125mm |
| Applicable Fluid | Water, Alcohol, Oil, Fuel, Steam, Neutral gas or liquid, Organic solvent, Acid and lye |
| Fluid Viscosity | Max 600mm ² /s |
| Fluid Temperature | -10°C — +180°C, +25°C — +220°C |
| Ambient Temperature | -10°C — +80°C |
| Control Type | Normally closed, Normally open, Double acting |
| Connection | Threaded(BSP, BSPT, NPT), Welded, Flanged, Tri-clamp |

Pneumatic Angle Seat Valve



Threaded Connection

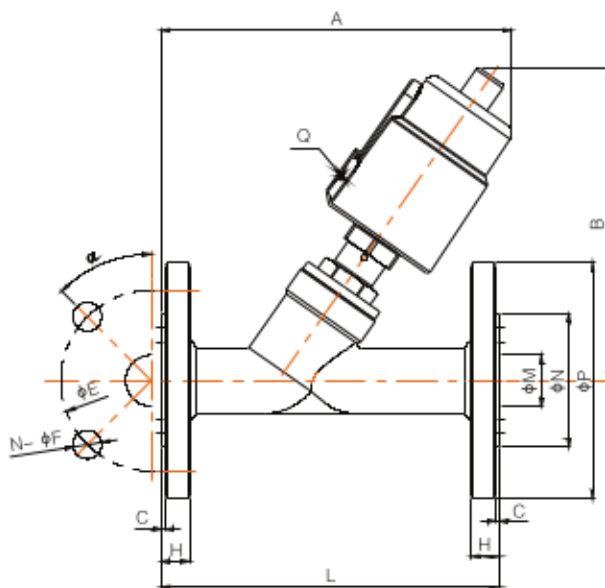


Welded Connection

Main Dimension

| Size | Actuator (mm) | Q | C | R | K | Threaded connection | | | | | Welded connection | | | | | |
|------------------------|------------------------|-------|------|-----|-----|---------------------|----|-----|-----|----|-------------------|-----|------------|-----|------------|-----|
| | | | | | | G | T | A | L | SW | HA | HL | DIN11850-2 | | DIN11850-3 | |
| | | | | | | | | | | | | | D | S | D | S |
| DN10 | 40 | 1/8" | 50.5 | 27 | 112 | 3/8" | 12 | 124 | 68 | 27 | - | - | - | - | - | - |
| | 50 | 1/8" | 60 | 33 | 125 | | | 135 | | | - | - | - | - | - | |
| DN15 | 40 | 1/8" | 50.5 | 27 | 112 | 1/2" | 15 | 124 | 68 | 27 | 118 | 70 | 19 | 1.5 | 20 | 2 |
| | 50 | 1/8" | 60 | 33 | 125 | | | 135 | | | 128 | | | | | |
| DN20 | 50 | 1/8" | 60 | 33 | 132 | 3/4" | 16 | 140 | 75 | 32 | 135 | 82 | 23 | 1.5 | 24 | 2 |
| DN25 | 50 | 1/8" | 60 | 33 | 136 | 1" | 17 | 150 | 90 | 40 | 150 | 100 | 29 | 1.5 | 30 | 2 |
| | 63 | 1/8" | 75 | 41 | 162 | | | 175 | | | | | | | | |
| | 90AL | 1/8" | 112 | 57 | 210 | | | 216 | | | | | | | | |
| | 90 | 1/8" | 106 | 55 | 211 | | | 218 | | | | | | | | |
| DN32 | 63 | 1/8" | 75 | 41 | 174 | 1 1/4" | 21 | 190 | 116 | 50 | 186 | 125 | 35 | 1.5 | 36 | 2 |
| | 90AL | 1/8" | 112 | 57 | 220 | | | 230 | | | | | | | | |
| | 90 | 1/8" | 106 | 55 | 223 | | | 235 | | | | | | | | |
| DN40 | 63 | 1/8" | 75 | 41 | 175 | 1 1/2" | 21 | 190 | 116 | 56 | 190 | 130 | 41 | 1.5 | 42 | 2 |
| | 90AL | 1/8" | 112 | 57 | 220 | | | 230 | | | | | | | | |
| | 90 | 1/8" | 106 | 55 | 223 | | | 235 | | | | | | | | |
| DN50 | 63 | 1/8" | 75 | 41 | 183 | 2" | 22 | 205 | 138 | 69 | 206 | 155 | 53 | 1.5 | 54 | 2 |
| | 90AL | 1/8" | 112 | 57 | 232 | | | 245 | | | | | | | | |
| | 90 | 1/8" | 106 | 55 | 232 | | | 250 | | | | | | | | |
| | 125AL | 1/4" | 170 | 85 | 300 | | | 305 | | | | | | | | |
| DN65 | 90AL | 1/8" | 112 | 57 | 262 | 2 1/2" | 26 | 282 | 178 | 85 | - | - | - | - | - | - |
| | 90 | 1/8" | 106 | 55 | 265 | | | 285 | | | | | | | | |
| | 125AL | 1/4" | 170 | 85 | 315 | | | 327 | | | | | | | | |
| DN65 Square opening | 90AL | 1/8" | 112 | 57 | 280 | 2 1/2" | 26 | 270 | 178 | 85 | 315 | 270 | 70 | 2 | - | - |
| | 90 | 1/8" | 106 | 55 | 280 | | | 275 | | | 320 | | | | - | - |
| | 125AL | 1/4" | 170 | 85 | 330 | | | 320 | | | 360 | | | | - | - |
| | DN80 Square opening | 125AL | 1/4" | 170 | 85 | | | 355 | | | 3" | | | | 27 | 340 |
| DN80 | 125AL | 1/4" | 170 | 85 | 327 | 380 | - | - | - | - | | - | - | | | |

Flange Ends Angle Seat Valve

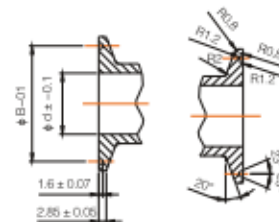
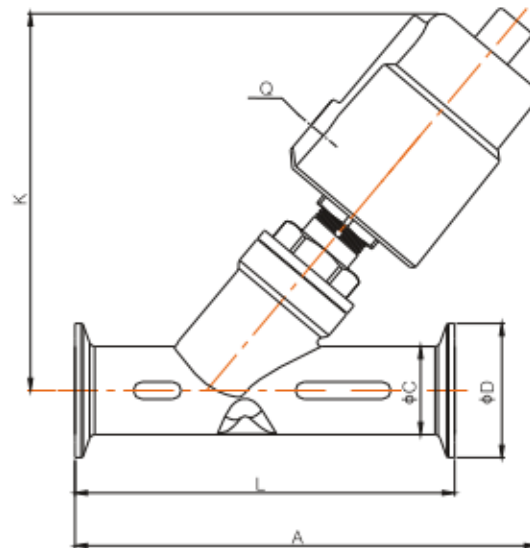


Flange specification:
DIN2576(JB/T82.1); customization available, ISO/DIN/JIS is also available

Main Dimension

| Size | Actuator (mm) | Q | A | B | L | C | H | φE | N-φF | φM | φN | φP | α |
|------------------------|---------------|------|-----|-----|-----|---|----|-----|------|----|-----|-----|-------|
| DN15 | 40 | G1/8 | 135 | 125 | 130 | 2 | 14 | 65 | 4-14 | 16 | 45 | 95 | 45° |
| | 50 | | 145 | 140 | | | | | | | | | |
| DN20 | 50 | G1/8 | 165 | 140 | 150 | 2 | 14 | 75 | 4-14 | 19 | 56 | 105 | 45° |
| DN25 | 50 | G1/8 | 170 | 145 | 160 | 2 | 14 | 85 | 4-14 | 26 | 65 | 115 | 45° |
| | 63 | | 190 | 175 | | | | | | | | | |
| DN32 | 63 | G1/8 | 190 | 188 | 180 | 2 | 16 | 100 | 4-18 | 31 | 78 | 140 | 45° |
| | 90 | | 230 | 235 | | | | | | | | | |
| | 90AL | | 225 | 234 | | | | | | | | | |
| DN40 | 63 | G1/8 | 206 | 190 | 200 | 3 | 16 | 110 | 4-18 | 38 | 84 | 150 | 45° |
| | 90 | | 250 | 240 | | | | | | | | | |
| | 90AL | | 244 | 235 | | | | | | | | | |
| DN50 | 63 | G1/8 | 235 | 195 | 230 | 3 | 16 | 125 | 4-18 | 49 | 100 | 165 | 45° |
| | 90 | | 277 | 245 | | | | | | | | | |
| | 90AL | | 275 | 245 | | | | | | | | | |
| | 125AL | G1/4 | 330 | 310 | | | | | | | | | |
| DN65 Square opening | 90 | G1/8 | 330 | 280 | 290 | 3 | 18 | 145 | 4-18 | 66 | 120 | 185 | 45° |
| | 90AL | | 325 | 280 | | | | | | | | | |
| | 125AL | G1/4 | 375 | 330 | | | | | | | | | |
| DN80 Square opening | 125AL | G1/4 | 380 | 355 | 310 | 3 | 20 | 160 | 8-18 | 78 | 135 | 200 | 22.5° |
| DN100 | 125AL | G1/4 | 420 | 395 | 350 | 3 | 20 | 180 | 8-18 | 96 | 155 | 215 | 22.5° |

Tri-clamp Ends Angle Seat Valve



Clamp Specification:
ISO2852-1993, customization available.

Main Dimension

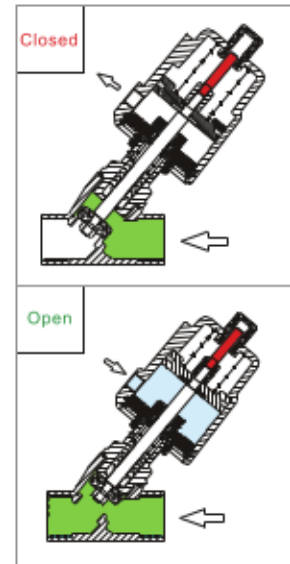
| Size | Actuator (mm) | Q | A | K | L | C | B | φ d | φ D |
|------------------------|---------------|------|-----|-----|-----|----|------|-----|------|
| DN15 | 40 | 1/8" | 130 | 115 | 80 | 19 | 27.5 | 15 | 34 |
| | 50 | 1/8" | 140 | 126 | | | | | |
| DN20 | 50 | 1/8" | 158 | 148 | 130 | 25 | 43.5 | 19 | 50.5 |
| | 63 | 1/8" | 175 | 163 | | | | | |
| DN25 | 50 | 1/8" | 165 | 140 | 130 | 32 | 43.5 | 27 | 50.5 |
| | 63 | 1/8" | 188 | 166 | | | | | |
| DN32 | 63 | 1/8" | 200 | 174 | 146 | 37 | 43.5 | 31 | 50.5 |
| | 90 | 1/8" | 245 | 223 | | | | | |
| | 90AL | 1/8" | 242 | 222 | | | | | |
| DN40 | 63 | 1/8" | 210 | 175 | 160 | 40 | 56.5 | 33 | 64 |
| | 90 | 1/8" | 255 | 223 | | | | | |
| | 90AL | 1/8" | 254 | 222 | | | | | |
| DN50 | 63 | 1/8" | 221 | 185 | 175 | 53 | 56.5 | 45 | 64 |
| | 90 | 1/8" | 265 | 235 | | | | | |
| | 90AL | 1/8" | 265 | 232 | | | | | |
| | 125AL | 1/4" | 325 | 296 | | | | | |
| DN65 Square opening | 90 | 1/8" | 325 | 280 | 278 | 75 | 83.5 | 66 | 91 |
| | 90AL | 1/8" | 320 | 280 | | | | | |
| | 125AL | 1/4" | 360 | 330 | | | | | |
| DN80 Square opening | 125AL | 1/4" | 360 | 352 | 290 | 89 | 97 | 78 | 106 |

Pressure Data Sheet

Single Acting, Normally Closed (NC) – Enter Above Seat

Suitable for condensable media, such as air, steam, and low pressure liquid media.

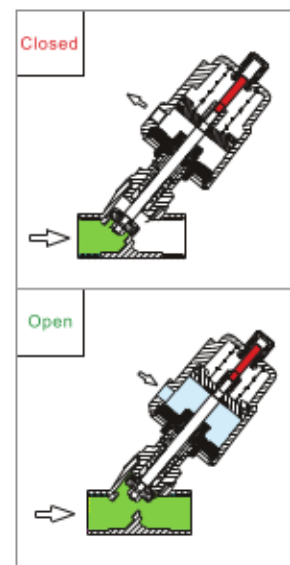
| Size | Thread end | Orifice (mm) | Kv (m ³ /h) | Actuator (mm) | ΔP (MPa) | Control pressure (MPa) |
|------|------------|--------------|------------------------|---------------|------------------|------------------------|
| DN10 | G3/8" | 13 | 3.8 | 40 | 0–1.6 | 0.3–0.45 |
| | | | | 50 | 0–1.6 | 0.3–0.35 |
| DN15 | G1/2" | 13 | 4.7 | 40 | 0–1.6 | 0.3–0.45 |
| | | | | 50 | 0–1.6 | 0.3–0.35 |
| DN20 | G3/4" | 18 | 9.5 | 50 | 0–1.6 | 0.3–0.4 |
| DN25 | G1" | 24 | 18.1 | 50 | 0–1.6 | 0.3–0.45 |
| | | | | 63 | 0–1.6 | 0.3–0.35 |
| | | | | 90 | 0–1.6 | 0.2–0.25 |
| DN32 | G1–1/4" | 31 | 23.1 | 63 | 0–1.6 | 0.3–0.55 |
| | | | | 90 | 0–1.6 | 0.2–0.35 |
| DN40 | G1–1/2" | 35 | 32.9 | 63 | 0–1.6 | 0.3–0.65 |
| | | | | 90 | 0–1.6 | 0.2–0.4 |
| DN50 | G2" | 45 | 52.8 | 63 | 0–0.9 | 0.3–0.7 |
| | | | | 90 | 0–1.6 | 0.2–0.45 |
| | | | | 125 | 0–1.6 | 0.2–0.3 |
| DN65 | G2–1/2" | 61 | 82.6 | 90 | 0–1.0 | 0.2–0.6 |
| | | | | 125 | 0–1.6 | 0.2–0.4 |
| DN80 | G3" | 80 | 127 | 125 | 0–1.2 | 0.2–0.7 |



Single Acting, Normally Closed (NC) – Enter Below Seat (NO Water-hammer)

Flow enters below seat, avoid water hammer

| Size | Thread end | Orifice (mm) | Kv (m ³ /h) | Actuator (mm) | ΔP (MPa) | Control pressure (MPa) |
|-------|------------|--------------|------------------------|---------------|------------------|------------------------|
| DN10 | G3/8" | 13 | 3.8 | 40 | 0–1.3 | 0.4 |
| | | | | 50 | 0–1.4 | 0.45 |
| DN15 | G1/2" | 13 | 4.7 | 40 | 0–1.3 | 0.4 |
| | | | | 50 | 0–1.4 | 0.45 |
| DN20 | G3/4" | 18 | 9.5 | 50 | 0–1.4 | 0.45 |
| DN25 | G1" | 24 | 18.1 | 50 | 0–0.8 | 0.45 |
| | | | | 63 | 0–1.3 | 0.5 |
| | | | | 90 | 0–1.4 | 0.35 |
| DN32 | G1–1/4" | 31 | 23.1 | 63 | 0–0.6 | 0.5 |
| | | | | 90 | 0–1.6 | 0.6 |
| DN40 | G1–1/2" | 35 | 32.9 | 63 | 0–0.5 | 0.5 |
| | | | | 90 | 0–1.6 | 0.6 |
| DN50 | G2" | 45 | 52.8 | 63 | 0–0.3 | 0.5 |
| | | | | 90 | 0–1.0 | 0.6 |
| | | | | 125 | 0–1.6 | 0.55 |
| DN65 | G2–1/2" | 61 | 82.6 | 90 | 0–0.6 | 0.6 |
| | | | | 125 | 0–0.9 | 0.55 |
| DN80 | G3" | 80 | 127 | 125 | 0–0.5 | 0.55 |
| DN100 | G4" | 90 | 143 | 125 | 0–0.25 | 0.55 |

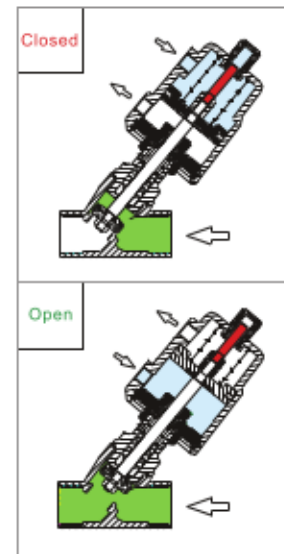


Pressure Data Sheet

Double Acting, Normally Closed (NC) – Enter Above Seat

Suitable for higher ΔP ; valve can close automatically in case of emergency.

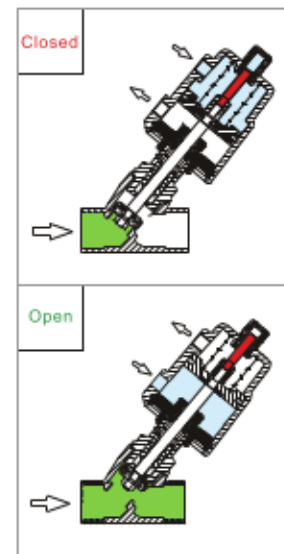
| Size | Thread end | Orifice (mm) | Kv (m ³ /h) | Actuator (mm) | ΔP (MPa) | Control pressure (MPa) |
|------|------------|--------------|------------------------|---------------|------------------|------------------------|
| DN10 | G3/8" | 13 | 3.8 | 40 | 0–1.6 | 0.3–0.45 |
| | | | | 50 | 0–1.6 | 0.3–0.35 |
| DN15 | G1/2" | 13 | 4.7 | 40 | 0–1.6 | 0.3–0.45 |
| | | | | 50 | 0–1.6 | 0.3–0.35 |
| DN20 | G3/4" | 18 | 9.5 | 50 | 0–1.6 | 0.3–0.4 |
| DN25 | G1" | 24 | 18.1 | 50 | 0–1.6 | 0.3–0.45 |
| | | | | 63 | 0–1.6 | 0.3–0.35 |
| | | | | 90 | 0–1.6 | 0.2–0.25 |
| DN32 | G1–1/4" | 31 | 23.1 | 63 | 0–1.6 | 0.3–0.55 |
| | | | | 90 | 0–1.6 | 0.2–0.35 |
| DN40 | G1–1/2" | 35 | 32.9 | 63 | 0–1.6 | 0.3–0.65 |
| | | | | 90 | 0–1.6 | 0.2–0.4 |
| DN50 | G2" | 45 | 52.8 | 63 | 0–0.9 | 0.3–0.7 |
| | | | | 90 | 0–1.6 | 0.2–0.45 |
| | | | | 125 | 0–1.6 | 0.2–0.3 |
| DN65 | G2–1/2" | 61 | 82.6 | 90 | 0–1.0 | 0.2–0.6 |
| | | | | 125 | 0–1.6 | 0.2–0.4 |
| DN80 | G3" | 80 | 127 | 125 | 0–1.2 | 0.2–0.7 |



Double Acting, Normally Closed (NC) – Enter Below Seat(No Water-hammer)

Flow enters below seat, avoid water hammer, suitable for higher ΔP .

| Size | Thread end | Orifice (mm) | Kv (m ³ /h) | Actuator (mm) | ΔP (MPa) | Control pressure (MPa) |
|-------|------------|--------------|------------------------|---------------|------------------|------------------------|
| DN10 | G3/8" | 13 | 3.8 | 40 | 0–1.6 | ≥ 0.3 |
| | | | | 50 | 0–1.6 | ≥ 0.3 |
| DN15 | G1/2" | 13 | 4.7 | 40 | 0–1.6 | ≥ 0.3 |
| | | | | 50 | 0–1.6 | ≥ 0.3 |
| DN20 | G3/4" | 18 | 9.5 | 50 | 0–1.6 | ≥ 0.3 |
| DN25 | G1" | 24 | 18.1 | 50 | 0–1.3 | 0.3–0.6 |
| | | | | 63 | 0–1.6 | 0.3–0.4 |
| | | | | 90 | 0–1.6 | 0.2–0.3 |
| DN32 | G1–1/4" | 31 | 23.1 | 63 | 0–1.6 | 0.3–0.6 |
| | | | | 90 | 0–1.6 | 0.2–0.4 |
| DN40 | G1–1/2" | 35 | 32.9 | 63 | 0–1.6 | 0.3–0.7 |
| | | | | 90 | 0–1.6 | 0.2–0.5 |
| DN50 | G2" | 45 | 52.8 | 63 | 0–0.8 | 0.3–0.75 |
| | | | | 90 | 0–1.6 | 0.2–0.6 |
| | | | | 125 | 0–1.6 | 0.2–0.4 |
| DN65 | G2–1/2" | 61 | 82.6 | 90 | 0–1.1 | 0.2–0.7 |
| | | | | 125 | 0–1.6 | 0.2–0.55 |
| DN80 | G3" | 80 | 127 | 125 | 0–1.6 | 0.2–0.65 |
| DN100 | G4" | 90 | 143 | 125 | 0–1.2 | 0.4–0.5 |

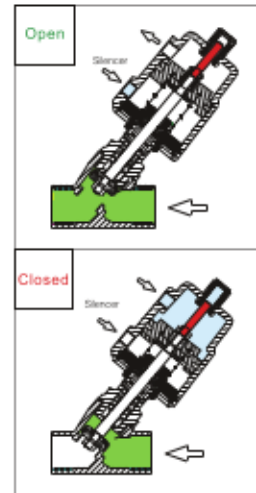


Pressure Data Sheet

Normally Open(NO)-Enter Above Seat

Suitable for long time open-valve application. With the silencer taken off, valve can be changed to double acting-NO type.

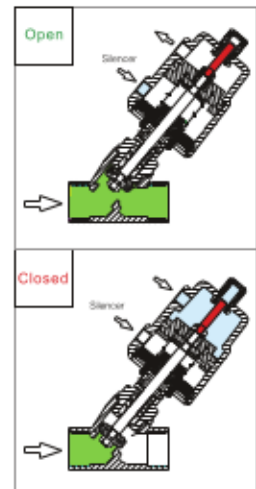
| Size | Thread end | Orifice(mm) | Kv(m ³ /h) | Actuator(mm) | ΔP(MPa) | Control pressure (MPa) |
|------|------------|-------------|-----------------------|--------------|---------|------------------------|
| DN10 | G3/8" | 13 | 3.8 | 40 | 0-1.6 | ≥ 0.3 |
| | | | | 50 | 0-1.6 | ≥ 0.3 |
| DN15 | G1/2" | 13 | 4.7 | 40 | 0-1.6 | ≥ 0.3 |
| | | | | 50 | 0-1.6 | ≥ 0.3 |
| DN20 | G3/4" | 18 | 9.5 | 50 | 0-1.2 | ≥ 0.3 |
| DN25 | G1" | 24 | 18.1 | 50 | 0-0.3 | ≥ 0.3 |
| | | | | 63 | 0-1.6 | ≥ 0.45 |
| DN32 | G1-1/4" | 31 | 23.1 | 63 | 0-1.4 | ≥ 0.45 |
| DN40 | G1-1/2" | 35 | 32.9 | 63 | 0-1.4 | ≥ 0.45 |
| DN50 | G2" | 45 | 52.8 | 63 | 0-0.6 | ≥ 0.45 |



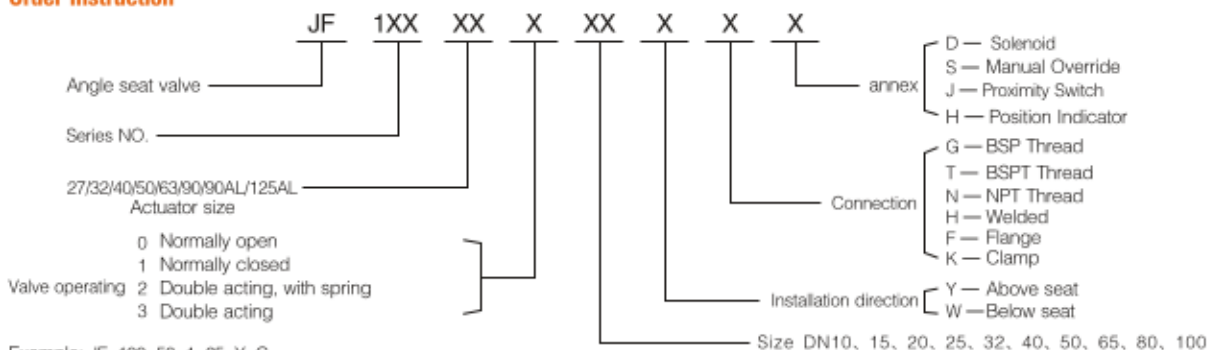
Normally Open(NO)-Enter Below Seat (NO water-hammer)

Suitable for long time open-valve application, avoid water hammer. With the silencer taken off, valve can be changed to double acting-NO type.

| Size | Thread end | Orifice (mm) | Kv (m ³ /h) | Actuator (mm) | ΔP(MPa) | Control pressure (MPa) |
|------|------------|--------------|------------------------|---------------|---------|------------------------|
| DN10 | G3/8" | 13 | 3.8 | 40 | 0-1.6 | 0.2-0.5 |
| | | | | 50 | 0-1.6 | 0.2-0.4 |
| DN15 | G1/2" | 13 | 4.7 | 40 | 0-1.6 | 0.2-0.5 |
| | | | | 50 | 0-1.6 | 0.2-0.4 |
| DN20 | G3/4" | 18 | 9.5 | 50 | 0-1.6 | 0.2-0.6 |
| DN25 | G1" | 24 | 18.1 | 50 | 0-1.3 | 0.2-0.6 |
| | | | | 63 | 0-1.6 | 0.25-0.5 |
| DN32 | G1-1/4" | 31 | 23.1 | 63 | 0-1.3 | 0.25-0.6 |
| DN40 | G1-1/2" | 35 | 32.9 | 63 | 0-0.7 | 0.25-0.6 |
| | | | | 90 | 0-1.6 | 0.3-0.35 |
| | | | | 63 | 0-0.5 | 0.25-0.6 |
| DN50 | G2" | 45 | 52.8 | 90 | 0-1.2 | 0.25-0.6 |
| | | | | 125 | 0-1.4 | 0.25-0.7 |
| | | | | 63 | 0-0.5 | 0.25-0.6 |
| DN65 | G2-1/2" | 61 | 82.6 | 125 | 0-1.4 | 0.25-0.7 |
| DN80 | G3" | 80 | 127 | 125 | 0-1.2 | 0.25-0.7 |



Order Instruction



Example: JF 100 50 1 25 Y G
 Means: Angle seat valve, Series 100, Actuator Φ50, Normally close single acting, DN25 enter above seat, BSP thread.

Angle Seat Valve Accessory

Solenoid Valve

Apply to angle seat valve with any aperture size. Connect to 2/5 or 2/3 way solenoid valve.

Technical Specification

Connection: G1/8"
 Power: 24V DC or 220V AC
 Air pressure: 0.15–0.8 MPa
 Temperature range: –5°C — +50°C
 Protection class: IP65

Manual Override for Stroke Actuator

Can adjust piston position, restrict travel, and regulate flow. Applicable to all types of angle seat valves. Can be used for emergency control, in case of lack of control fluids or electrical/mechanical failure.

Proximity Switch

Switch can be installed on any actuator to signal open/close state of the valve.

Technical Specification

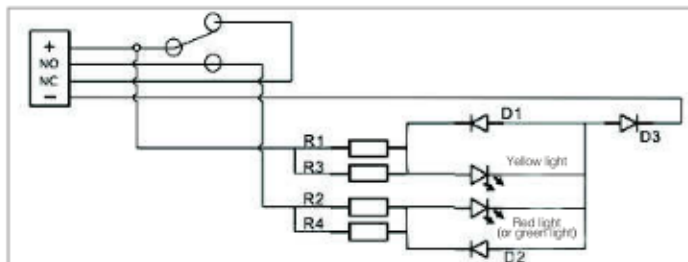
Voltage: 10–30V DC
 Protection level: IP67
 Detection distance: 3mm ± 10%
 Temperature range: –25°C — +70°C
 Shell material: shell: brass nickel plating
 Probe material: ABS

Position Indicator

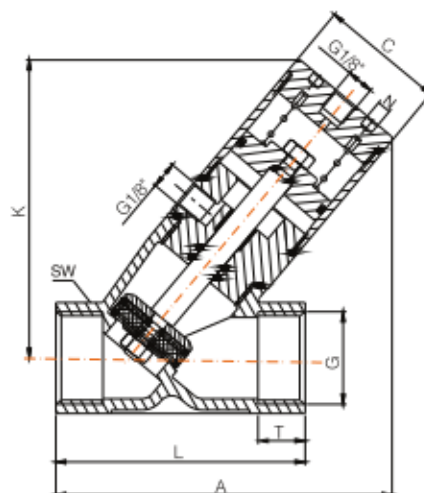
Switch can be installed on any actuator to signal open/close state of the valve.

Technical Specification

Voltage: 12–48V DC
 Power: DC12V–0.11W, DC24V–0.45W, DC48V–1.8W
 Indicator: visually signal valve open/close state
 Protection level: IP65
 Temperature range: –20°C~60°C
 Shell material: PA6 + PC
 Wiring instruction: open clear lid, thread the cord through opening and connect to desired ports.



Economy Type Angle Seat Valve



Function Principle

Actuator has lightweight design, fine aesthetics, tight structure and excellent performance. Available as double acting type (normally closed by spring)

Application

Widely used in food, packaging, petrochemical, metallurgical, spraying, auto mobile, printing and dyeing machinery equipment.

Technical Specification

| | |
|----------------------------|--|
| Fluid Pressure | Max 1.0MPa |
| Control Pressure | 0.3 — 0.8MPa (43.5–116psi) |
| Control Medium | Neutral gas, Air |
| Body Material | CF8M/CF8 |
| Seal Material | PTFE |
| Applicable Medium | Water, Oil, Gas, Pulp and other Neutral liquid |
| Medium Temperature | –10°C — +80°C |
| Ambient Temperature | –10°C — +80°C |
| Control Type | Double acting with spring |
| Connection Type | Threaded(BSP, BSPT, NPT), Welded |

Main Dimension

| Size | Actuator | G | N | K | C | T | A | L | SW | Weight(Kg) |
|------|----------|--------|---|-----|----|------|-----|-----|----|------------|
| DN10 | 32 | 3/8" | 5 | 99 | 38 | 12 | 112 | 68 | 27 | 0.42 |
| DN15 | 32 | 1/2" | 5 | 99 | 38 | 13.5 | 112 | 68 | 27 | 0.41 |
| DN20 | 32 | 3/4" | 5 | 105 | 38 | 15.5 | 118 | 75 | 32 | 0.48 |
| DN25 | 40 | 1" | 5 | 110 | 45 | 16.5 | 125 | 90 | 40 | 0.76 |
| DN32 | 50 | 1 1/4" | 5 | 135 | 55 | 20.5 | 156 | 116 | 50 | 1.33 |
| DN40 | 50 | 1 1/2" | 5 | 138 | 55 | 19 | 158 | 116 | 56 | 1.46 |
| DN50 | 63 | 2" | 5 | 160 | 69 | 21.5 | 190 | 138 | 69 | 2.43 |

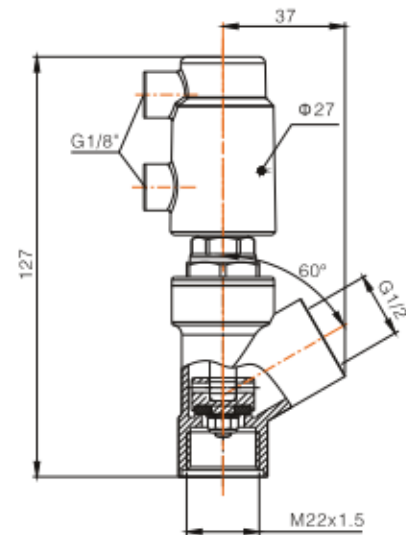
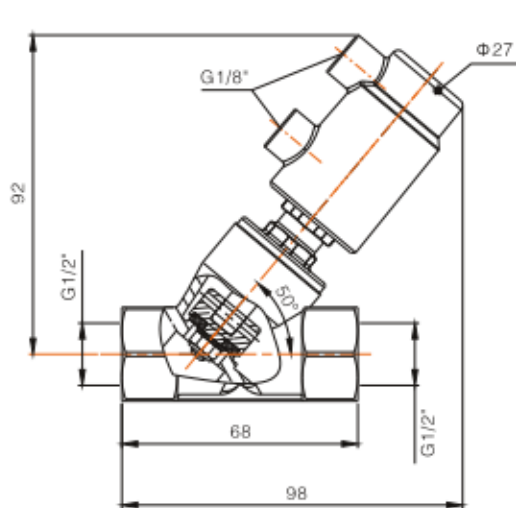
Filling Valve



101-A, DN15



101-B, DN15



Advantages

Compact design, allowing this valve to work in tight space.
Movable seat with excellent sealing.

Technical Specification

Control type: double acting(no spring)
Fluid pressure: 0–0.7MPa
Control medium: Air
Control pressure: 0.3–0.35MPa
Body material: CF8 or CF8M
Seal material: PTFE
Medium temperature: –10°C — +120°C
Connection type: Thread(BSP, BSPT, NPT)

Filling Valve



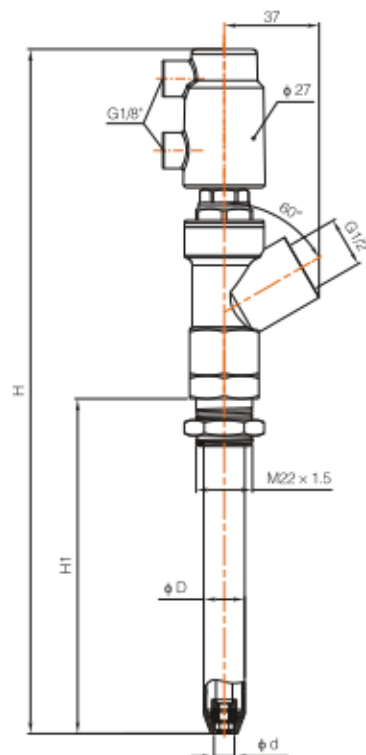
101-C, DN15

Advantages

1. It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
2. Fast, accurate and stable filling.
3. Delicate and compact, easy to arrange pipeline layout.
4. Special nozzle structure and sealing design ensure no dripping leakage.
5. Bottom chamfer structure of the filling nozzle self-locates and enables submerged filling.

Technical Specification

Control type: double acting(no spring)
 Fluid pressure: 0–0.7MPa
 Control pressure: 0.3–0.45 MPa
 Body material: CF8M
 Seal material: PTFE
 Medium temperature: -10°C — $+120^{\circ}\text{C}$



Filling valve with internal sealing

Main Dimension

| Size | H | H1 | d | D |
|----------------|-----|-----|----|----|
| 101-C | 267 | 130 | 10 | 20 |
| 101-C(M)18-130 | 267 | 130 | 9 | 18 |
| 101-C(M)16-130 | 267 | 130 | 8 | 16 |

Filling Valve

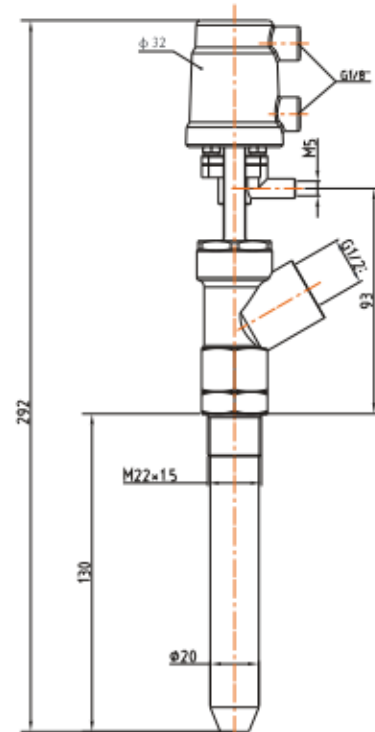


Advantages

1. It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
2. Fast, accurate and stable filling.
3. Delicate and compact, easy to arrange pipeline layout.
4. Special nozzle structure and sealing design ensure no dripping leakage.
5. Bottom chamfer structure of the filling nozzle self-locates and enables submerged filling.
6. Internal suction structure recovers dripping liquid along the pipe wall.

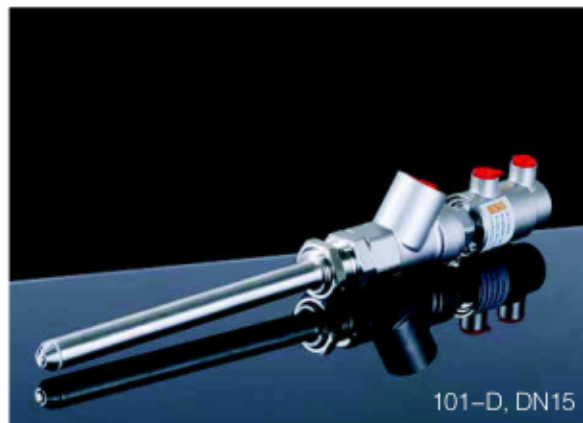
Technical Specification

Control type: double acting(no spring)
 Fluid pressure: 0-0.7MPa
 Control pressure: 0.35-0.45 MPa
 Body material: CF8M
 Seal material: PTFE
 Medium temperature: -10°C — +120 °C



Filling valve with internal suction structure

Filling Valve

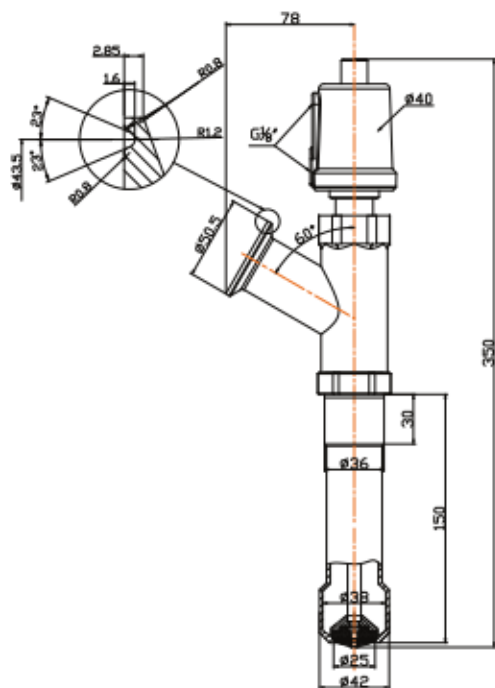


Advantages

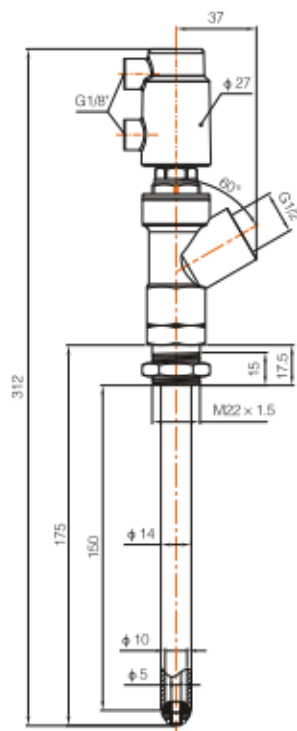
1. It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
2. Fast, accurate and stable filling.
3. Delicate and compact, easy to arrange pipeline layout.
4. Special nozzle structure and sealing design ensure no dripping leakage.
5. Bottom chamfer structure of the filling nozzle self-locates and enables submerged filling.
6. The head gourd shape design of the filling tube reduces weight and cost without sacrificing flow rate.

Technical Specification

Control type: double acting(no spring)
 Fluid pressure: 0-0.7MPa
 Control pressure: 0.35-0.45MPa
 Body material: CF8M
 Seal material: PTFE
 Medium temperature: -10°C — +120°C

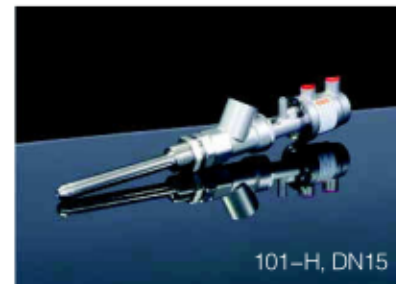
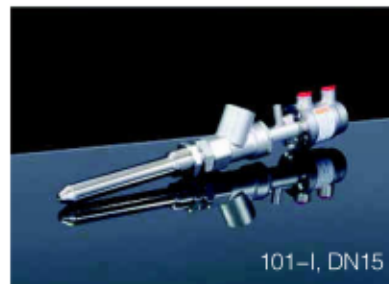
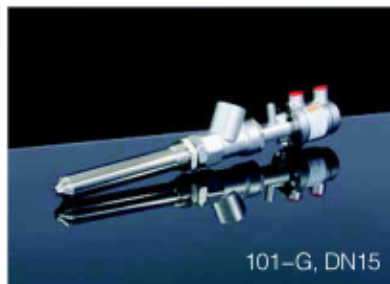
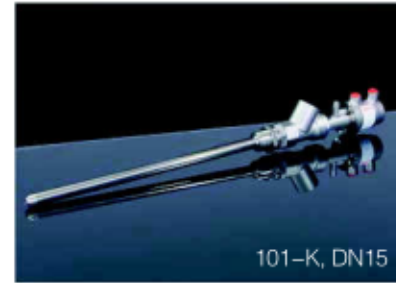
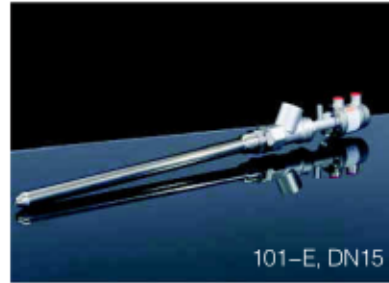


Filling valve with large head



Lengthened filling valve with external seal

Filling Valve

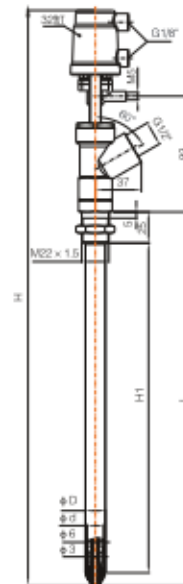


Advantages

1. It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
2. Fast, accurate and stable filling.
3. Delicate and compact, easy to arrange pipeline layout.
4. Special nozzle structure and sealing design ensure no dripping leakage.
5. Bottom chamfer structure of the filling nozzle self-locates and enables submerged filling.
6. Internal suction structure recovers dripping liquid along the pipe wall.

Technical Specification

Control type: double acting(no spring)/Double acting normally closed
 Fluid pressure: 0-0.7MPa
 Control pressure: 0.3-0.35MPa
 Body material: CFBM
 Seal material: PTFE
 Medium temperature: -10°C — +120°C



Main Dimension

| Size | φ D | φ d | L | H | H1 |
|-------|-----|-----|-----|-----|-----|
| 101-J | 20 | 17 | 300 | 462 | 265 |
| 101-G | 20 | 17 | 130 | 292 | 95 |
| 101-E | 16 | 13 | 300 | 462 | 265 |
| 101-I | 16 | 13 | 130 | 292 | 95 |
| 101-K | 12 | 10 | 300 | 462 | 265 |
| 101-H | 12 | 10 | 130 | 292 | 95 |

Three Way Angle Seat Valve

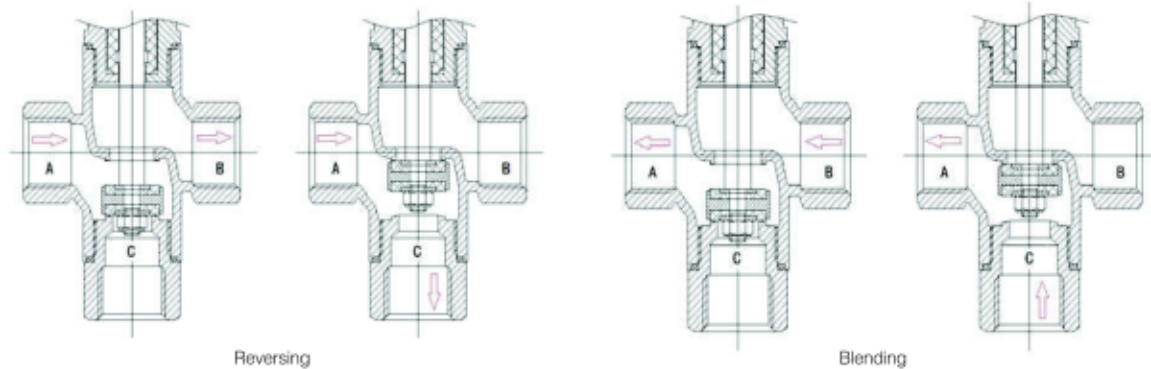


Function Principle

The valve has three ports that enable "reversing" and "blending" features. When the valve is in idle state, C port is closed due to force spring. When the actuator piston is compressed, C port is opened and B port is closed. When double acting, the valve opens and closes by compressed air.

Technical Specification

Fluid pressure: Max1.6MPa
 Control pressure: 0.3–0.8MPa
 Control medium: Neutral gas or air
 Body material: CF8M
 Actuator material: CF8
 Seal material: PTFE
 Medium temperature: -10°C — $+180^{\circ}\text{C}$
 Ambient temperature: -10°C — $+80^{\circ}\text{C}$
 Control type: Normally closed, Double acting with spring, Double acting with compressed air.
 Connection: Thread, Tri-clamp
 Applicable medium: Water, steam, oil, neutral gas or liquid, organic solvent, acid base solution, etc



Three Way Angle Seat Valve

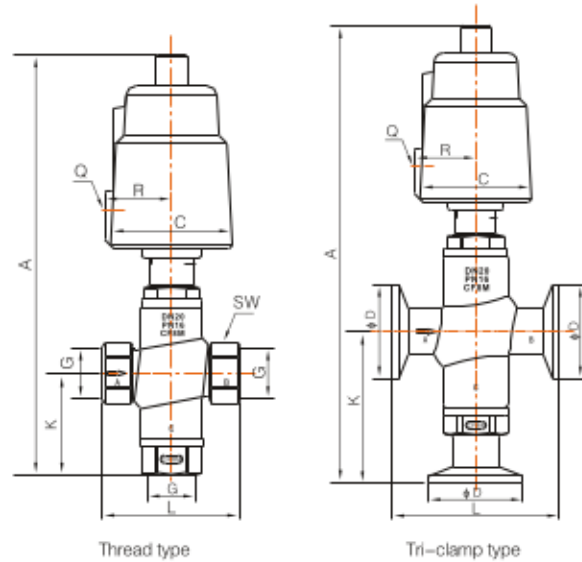
Dimension

Thread type

| Size | Actuator | Q | C | R | G | A | K | L | SW | Weight (kg) |
|------|----------|------|------|----|--------|-----|-----|-----|----|-------------|
| DN15 | 40 | G1/8 | 50.5 | 27 | 1/2" | 195 | 50 | 68 | 27 | 0.91 |
| DN20 | 50 | G1/8 | 60 | 33 | 3/4" | 230 | 60 | 75 | 32 | 1.25 |
| DN25 | 50 | G1/8 | 60 | 33 | 1" | 242 | 68 | 90 | 40 | 1.64 |
| DN32 | 90 | G1/8 | 106 | 55 | 1 1/4" | 355 | 86 | 116 | 50 | 4.62 |
| DN40 | 90 | G1/8 | 106 | 55 | 1 1/2" | 360 | 90 | 116 | 56 | 5.15 |
| DN50 | 90 | G1/8 | 106 | 55 | 2" | 382 | 102 | 138 | 69 | 6.52 |

Tri-clamp type

| Size | Actuator | Q | C | R | D | A | K | L | Weight (kg) |
|------|----------|------|------|----|------|-----|-----|-----|-------------|
| DN15 | 40 | G1/8 | 50.5 | 27 | 34 | 223 | 80 | 90 | 0.99 |
| DN20 | 50 | G1/8 | 60 | 33 | 50.5 | 246 | 80 | 90 | 1.48 |
| DN25 | 50 | G1/8 | 60 | 33 | 50.5 | 262 | 90 | 100 | 1.78 |
| DN32 | 90 | G1/8 | 106 | 55 | 50.5 | 373 | 104 | 130 | 4.75 |
| DN40 | 90 | G1/8 | 106 | 55 | 64 | 381 | 111 | 150 | 5.45 |
| DN50 | 90 | G1/8 | 106 | 55 | 64 | 408 | 128 | 160 | 6.65 |



Pressure Data

Type 1 : Single acting , with Normal Spring

| Size | Actuator | Interface | Inner hole | Flow rate KV (m ³ /h) | | Differential pressure range $\Delta P(\text{MPa})A \rightarrow B/A \rightarrow C$ | Differential pressure range $\Delta P(\text{MPa})C \rightarrow A$ | Control pressure (MPa) |
|------|----------|-----------|------------|------------------------------------|-------|--|--|--------------------------|
| | | | | A → B | A → C | | | |
| DN15 | 40 | 1/2" | 14 | 4.1 | 4.9 | 0-1.6 | 1.2 | 0.4-0.6 |
| DN20 | 50 | 3/4" | 18 | 5.8 | 6.5 | 0-1.6 | 0.8 | 0.3-0.5 |
| DN25 | 50 | 1" | 24 | 13.9 | 14.4 | 0-1.4 | 0.4 | 0.3-0.65 |
| DN32 | 90 | 1 1/4" | 31 | 20.9 | 22.8 | 0-1.6 | 0.2 | 0.3-0.45 |
| DN40 | 90 | 1 1/2" | 35 | 24.4 | 26.6 | 0-1.6 | 0.1 | 0.3-0.5 |
| DN50 | 90 | 2" | 45 | 29.3 | 31.9 | 0-1.6 | 0.1 | 0.3-0.6 |

Type 2 : Single acting , with Strong Spring

| Size | Actuator | Interface | Inner hole | Flow rate KV (m ³ /h) | | Differential pressure range $\Delta P(\text{MPa})A \rightarrow B/A \rightarrow C$ | Differential pressure range $\Delta P(\text{MPa})C \rightarrow A$ | Control pressure (MPa) |
|------|----------|-----------|------------|------------------------------------|-------|--|--|--------------------------|
| | | | | A → B | A → C | | | |
| DN15 | 40 | 1/2" | 14 | 4.1 | 4.9 | 0-1.6 | 1.2 | 0.4-0.6 |
| DN20 | 50 | 3/4" | 18 | 5.8 | 6.5 | 0-1.6 | 1.4 | 0.45-0.65 |
| DN25 | 50 | 1" | 24 | 13.9 | 14.4 | 0-1.1 | 0.6 | 0.45-0.65 |
| DN32 | 90-A | 1 1/4" | 31 | 20.9 | 22.8 | 0-0.55 | 1.6 | 0.6-0.7 |
| | 90-B | | | | | 0-1.4 | 1.2 | 0.45-0.7 |
| DN40 | 90-A | 1 1/2" | 35 | 24.4 | 26.6 | 0-0.45 | 1.6 | 0.6-0.7 |
| | 90-B | | | | | 0-1.2 | 1.0 | 0.45-0.7 |
| DN50 | 90-A | 2" | 45 | 29.3 | 31.9 | 0-0.25 | 0.9 | 0.6-0.7 |
| | 90-B | | | | | 0-0.9 | 0.5 | 0.45-0.7 |

Type 3 : Double acting , with Normal Spring

| Size | Actuator | Interface | Inner hole | Flow rate KV (m ³ /h) | | Differential pressure range $\Delta P(\text{MPa})A \rightarrow B/A \rightarrow C$ | Differential pressure range $\Delta P(\text{MPa})C \rightarrow A$ | Control pressure (MPa) |
|------|----------|-----------|------------|------------------------------------|-------|--|--|--------------------------|
| | | | | A → B | A → C | | | |
| DN15 | 40 | 1/2" | 14 | 4.1 | 4.9 | 0-1.6 | 1.6 | 0.4-0.6 |
| DN20 | 50 | 3/4" | 18 | 5.8 | 6.5 | 0-1.6 | 1.6 | 0.3-0.5 |
| DN25 | 50 | 1" | 24 | 13.9 | 14.4 | 0-1.4 | 1.4 | 0.3-0.65 |
| DN32 | 90 | 1 1/4" | 31 | 20.9 | 22.8 | 0-1.6 | 1.6 | 0.3-0.55 |
| DN40 | 90 | 1 1/2" | 35 | 24.4 | 26.6 | 0-1.6 | 1.6 | 0.3-0.6 |
| DN50 | 90 | 2" | 45 | 29.3 | 31.9 | 0-1.6 | 1.6 | 0.3-0.65 |

Proportional Control Angle Seat Valve(105 series)



Function Principle

Positioner receives 4–20mA electrical signals from controls system and converts them into air signals to control the valve and make precise flow adjustment using the adjustable seat.

Advantages

- Convenient to adjust and easy to operate.
- Stable operation with minimal vibration.
- The unique design of adjustable seat establishes a proportional linear relationship between open/close state of the valve with the flow rate, achieving precise flow adjustment.

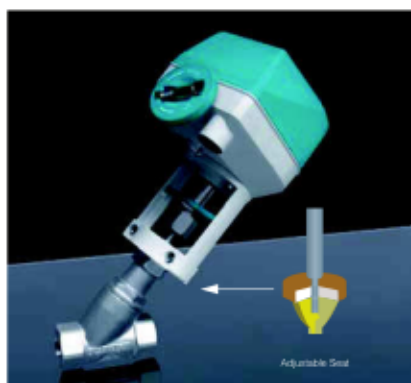
Attention

- If the valve body needs to be taken off during installation, please recalibrate the zero-point. Keep the positioner upright at all time.
- To ensure accurate adjustment, please install the valve in below seat direction.
- Please ensure water proof of the positioner.

Technical Specification

| | | | |
|------------------------------------|---|------------------------|--|
| Size | DN15–DN100 | Protection Level | IP65 |
| Connection Type | Threaded, Welded, Flanged, Tri-clamp | Fluid Pressure | ≤1.0MPa |
| Medium Temperature | –10°C — +180°C, +25°C — +220°C | Control Pressure | 0.3–0.7MPa |
| Ambient Temperature | 0–+60°C (Customization for high temperature available) | Control Power | 24VDC ± 10% |
| Air Quality Requirements | ISO8573–1 Clean and dry air, gas quality accord with ISO8573–1 | Valve Setting Signal | 0/4–20 mA or 0–5/10V |
| Maximum Density of Solid Particles | 10mg/m ³ | Power Consumption | < 5W |
| Maximum Particle Diameter | 40μm | Input Signal Impedance | 0/4–20 mA input signal 240 Ω, 0–5/10V input signal 21 k Ω |
| Maximum Oil Content | 25mg/m ³ | Analog Output Signal | 0/4–20mA Max load 560 Ω, 0–5/10V Max current 10mA |

Motor Control Angle seat Valve(106 series)



Function Principle

Positioner receives 4–20mA electrical signals from controls system and converts them into air signals to control the valve and make precise flow adjustment using the adjustable seat.

Advantages

- Convenient to adjust and easy to operate.
- Stable operation with minimal vibration.
- The unique design of adjustable seat establishes a proportional linear relationship between open/close state of the valve with the flow rate, achieving precise flow adjustment.

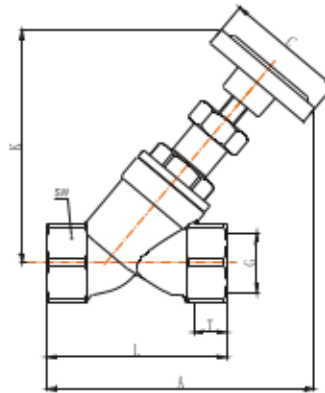
Attention

- If the valve body needs to be taken off during installation, please recalibrate the zero-point. Keep the positioner upright at all time.
- To ensure accurate adjustment, please install the valve in below seat direction.
- Please ensure water proof of the positioner.

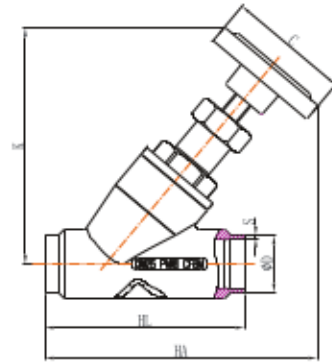
Technical Specification

| | | | |
|---------------|--------------------|------------------|--------------------------------------|
| Size | DN10–DN100 | Connection | Threaded, Welded, Flanged, Tri-clamp |
| Voltage | 220V AC or 24V AC | Actuator | GINICE Motor control actuator |
| Control Power | 4–20mA or 0–10V DC | Protection Level | IP54 |

Y-Type Manual Angle Seat Valve



Threaded Connection



Welded Connection

Technical Specification

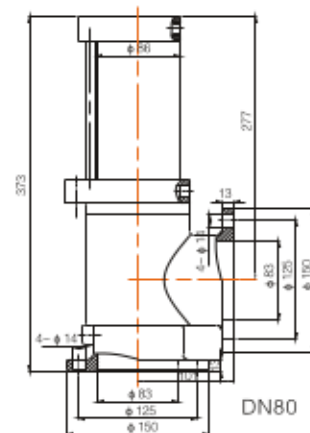
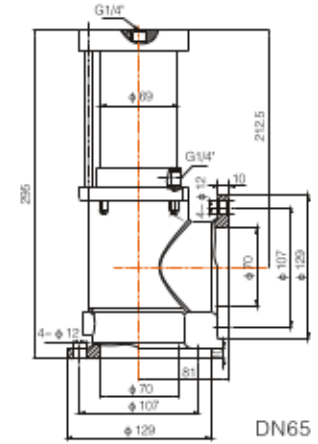
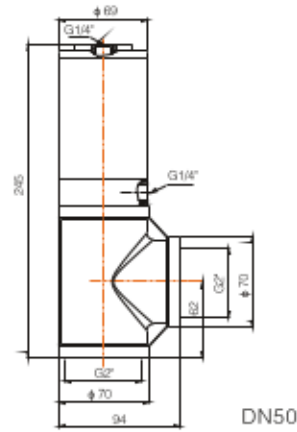
| | |
|--------------------|--|
| Fluid Pressure | 0–1.6Mpa |
| Body Material | CF8M/CF8 |
| Valve Seal | PTFE |
| Valve Size | DN10–DN65 |
| Applicable Medium | Water, Alcohol, Oil, Fuel, Steam, Neutral gas or liquid, Organic solvent, Acid and lye |
| Medium Temperature | –10°C — +180°C |
| Medium Viscosity | 600mm ² /s |
| Connection Type | Threaded (BSP, BSPT, NPT), Welded, Flanged, Tri-clamp |

Note: Adjustable seat for manual control is also available.

Main Dimension

| Size | C | K | Threaded | | | | | Welding type | | | | | | |
|------|----|-----|----------|----|-----|-----|----|--------------|-----|------------|-----|------------|---|--|
| | | | G | T | A | L | SW | HA | HL | DIN11850-2 | | DIN11850-3 | | |
| | | | | | | | | | | D | S | D | S | |
| DN10 | 62 | 115 | 3/8" | 12 | 128 | 68 | 27 | – | – | – | – | – | – | |
| DN15 | 62 | 115 | 1/2" | 15 | 128 | 68 | 27 | 120 | 70 | 19 | 1.5 | 20 | 2 | |
| DN20 | 62 | 120 | 3/4" | 16 | 133 | 75 | 32 | 128 | 82 | 23 | 1.5 | 24 | 2 | |
| DN25 | 62 | 125 | 1" | 17 | 142 | 90 | 40 | 144 | 100 | 29 | 1.5 | 30 | 2 | |
| DN32 | 62 | 146 | 1 1/4" | 21 | 166 | 116 | 50 | 165 | 125 | 35 | 1.5 | 36 | 2 | |
| DN40 | 62 | 148 | 1 1/2" | 21 | 168 | 116 | 56 | 168 | 130 | 41 | 1.5 | 42 | 2 | |
| DN50 | 62 | 155 | 2" | 22 | 182 | 138 | 69 | 182 | 155 | 53 | 1.5 | 54 | 2 | |
| DN65 | 80 | 202 | 2 1/2" | 26 | 233 | 178 | 85 | – | – | – | – | – | – | |
| DN65 | 80 | 211 | 2 1/2" | 26 | 226 | 178 | 85 | 270 | 270 | 70 | 2 | | | |

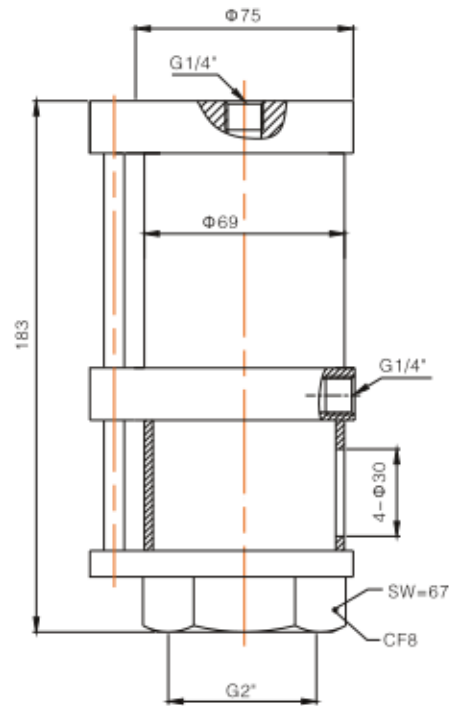
Drain Valve



Technical Specification

| | |
|----------------------------|--|
| Size | DN50: Threaded Type DN65、DN80: Flanged Type |
| Fluid Pressure | 0-1.6MPa |
| Control Pressure | 0.3-0.8MPa |
| Control Medium | Neutral gas, Air |
| Body Material | CF8 |
| Seal Material | PTFE |
| Applicable Medium | Water, Gas, Pulp and other liquid |
| Cylinder Size | 108 Series: 63mm, 80mm |
| Medium Temperature | -10 — +120℃ |
| Ambient Temperature | -10 — +80℃ |
| Control Type | Double acting |

Exhaust Valve

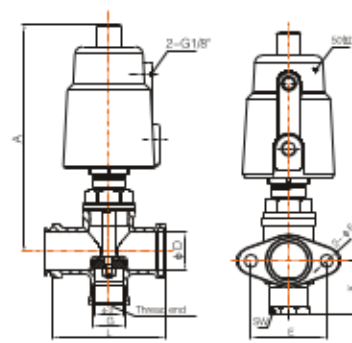
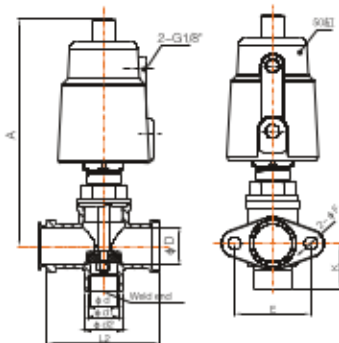
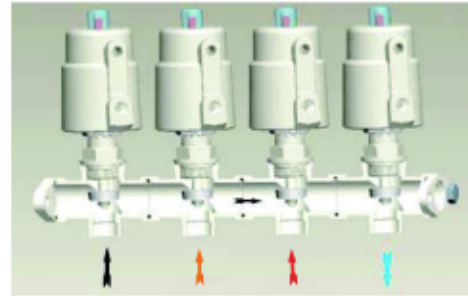


DN50-I

Technical Specification

| | |
|---------------------|------------------------|
| Size | DN50: Threaded Type |
| Fluid Pressure | 0-1.0MPa |
| Control Pressure | 0.3-0.8MPa |
| Control Medium | Neutral gas, Air |
| Body Material | CF8 |
| Seal Material | PTFE |
| Applicable Medium | Gas |
| Cylinder Size | 109 Series: 63mm, 80mm |
| Medium Temperature | -10 — +120°C |
| Ambient Temperature | -10 — +80°C |
| Control Type | Double acting |

Pneumatic Manifold Valve



Main Dimension

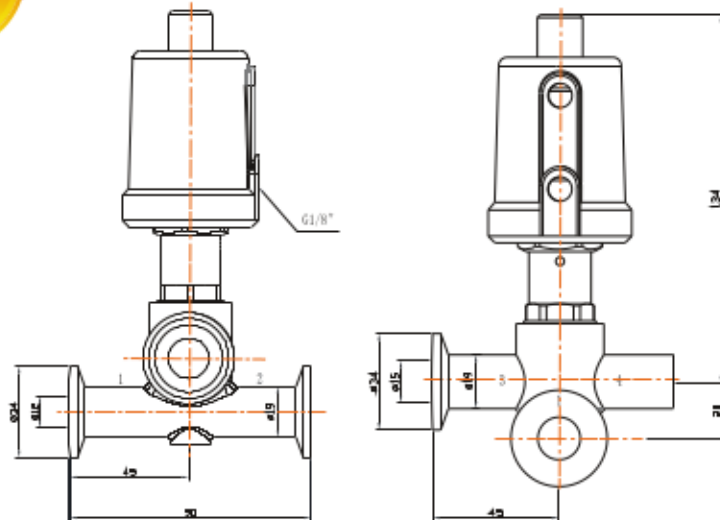
| Size | A | K | L | D | d | d1 | d2 | ΦE | 2-ΦF | Kv (m ³ /h) | Weld end | |
|------|-----|----|----|----|----|----|----|----|------|---------------------------|----------------|--|
| | | | | | | | | | | | Weight (kg) | |
| DN20 | 153 | 30 | 76 | 25 | 18 | 21 | 25 | 50 | 8.5 | 8.1 | 1.2 | |
| DN25 | 153 | 36 | 90 | 32 | 24 | 27 | 32 | 57 | 8.5 | 14.8 | 1.6 | |

| Size | A | K | L | D | d | G | SW | ΦE | 2-ΦF | Kv (m ³ /h) | Thread end | |
|------|-----|----|----|----|----|------|----|----|------|---------------------------|----------------|--|
| | | | | | | | | | | | Weight (kg) | |
| DN15 | 153 | 35 | 76 | 25 | 18 | 1/2" | 27 | 50 | 8.5 | 8.1 | 1.2 | |
| DN25 | 153 | 46 | 90 | 32 | 24 | 1" | 39 | 57 | 8.5 | 14.8 | 1.6 | |

Technical Specification

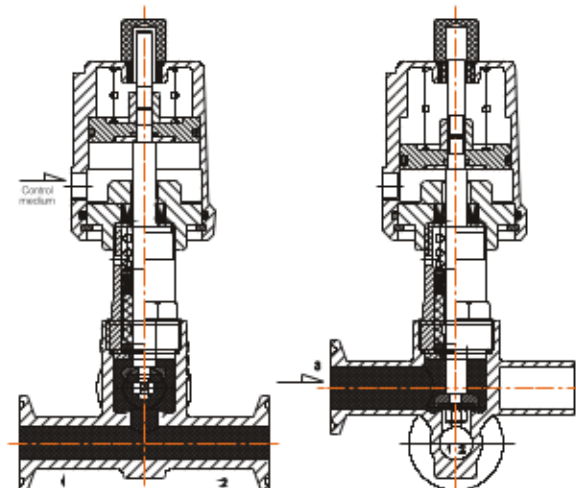
| | |
|----------------------------|--|
| Fluid Pressure | 0-1.6MPa |
| Control Pressure | 0.3-0.8MPa |
| Advantages | 3-Way body; Assemble easily and save space; Best choice for mixing fluids. |
| Control Medium | Neutral gas, Air |
| Seal Material | PTFE |
| Applicable Medium | Water, Oil, Air and other liquid |
| Medium Temperature | -10°C — +180°C, +25°C — +220°C |
| Ambient Temperature | -10°C — +80°C |
| Connection Type | Flanged |
| Control Type | Normally closed, Double acting with spring, Double acting |

Modular Valve System



Function Principle

When the valve is in idle state, due to the spring force the valve is Normally Closed(No.3 port), the bottom two ports are Normally Open(No.2 port); When the actuator piston is pressed by air, the valve opens, fluids from NO.3 port goes into No.1 and No.2 ports. When Double Acting, the valve opens/closes by compressed air.



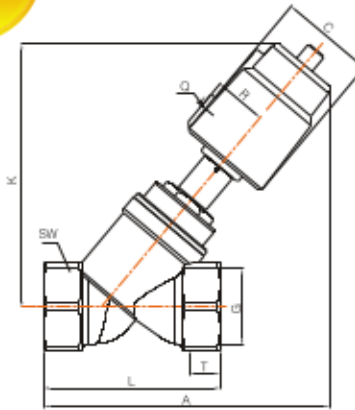
Technical Specification

Fluid pressure: Max1.6MPa
 Control pressure: 0.3–0.8MPa
 Control medium: Neutral gas, Air
 Body material: CF8M
 Actuator material: CF8
 Seal material: PTFE
 Medium temperature: -10°C — +180°C
 Ambient temperature: -10°C — +80°C
 Control type: Normally Closed, Double Acting With Spring, Double Acting, Normally Open
 Connection type: Tri-clamp
 Applicable medium: Water, Seam, Oil, Neutral gas or Liquid, Organic solvent, Acid and lye

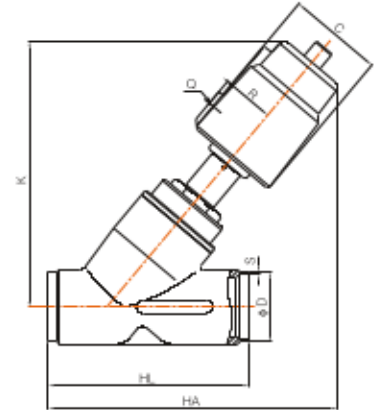
Advantages

1. Easy to clean
 - a. Seat is separate from the public ports. Well machined inner wall of the public ports ensures a smooth flow.
 - b. The valve utilizes bottom seal and seal ring for connection to valve stem in order to avoid fluid residue and allow effortless cleaning.
2. The modular valve system is easy to install and assemble, allowing many different layouts. It is a good choice for mixing, distributing and collecting fluids.

Balance Type Pneumatic Angle Seat Valve



Threaded Connection



Welded Connection

Function Principle

This product uses a smaller cylinder to achieve high sealing pressure protection. As the medium enters sealing cavity between the valve core and connecting piece through small holes in the valve core, it applies secondary force on the valve core, thereby further improving valve sealing pressure protection. Because the valve sealing force is applied mainly by medium, this valve can achieve high reverse valve sealing pressure protection with minimal valve control force.

Technical Specification

| | |
|--------------------|--|
| Fluid Pressure | Max 1.6 Mpa |
| Control Pressure | 0.4 MPa |
| Body Material | CF8/CF8M |
| Seal Material | FKM, PTFE |
| Medium Temperature | -10°C — +180 °C |
| Control Type | Single acting normally closed |
| Control Medium | Air or gas |
| Applicable Medium | Water, Alcohol, Oil, gas or liquid, organic solvents, such as the viscous medium |

Main Dimension

| Size | Actuator | Q | C | R | K | Threaded Connection | | | | | | Welded Connection | | | | |
|------|----------|------|-----|----|-----|---------------------|----|-----|-----|-----|-----|-------------------|------------|-----|------------|---|
| | | | | | | G | T | A | L | SW | HA | HL | DIN11850-2 | | DIN11850-3 | |
| | | | | | | | | | | | | | D | S | D | S |
| DN50 | 63 | 1/8" | 75 | 41 | 210 | 2" | 22 | 228 | 138 | 69 | 230 | 155 | 53 | 1.5 | 54 | 2 |
| DN65 | 63 | 1/8" | 75 | 41 | 235 | 2 1/2" | 26 | 235 | 178 | 85 | 280 | 270 | 70 | 2 | — | — |
| DN80 | 90 | 1/8" | 106 | 55 | 340 | 3" | 27 | 329 | 210 | 100 | 346 | 284 | 85 | 2 | — | — |

Pneumatic Shuttle Valve



Function Principle

This valve opens and closes through piston motion forced by compressed air. As fluid pressure acts onto valve seat, the piston experiences little resistance and thereby enables the valve to quickly open/close. The latest design improvement results in more efficient fluid dynamics and less pressure loss.

Advantages

- Compact and aesthetic design. Stainless steel body ensures superb durability.
- Easy to use with many possible mounting positions. Valve operates efficiently with minimum pressure loss.
- Excellent sealing, work well with relative vacuum

Applications

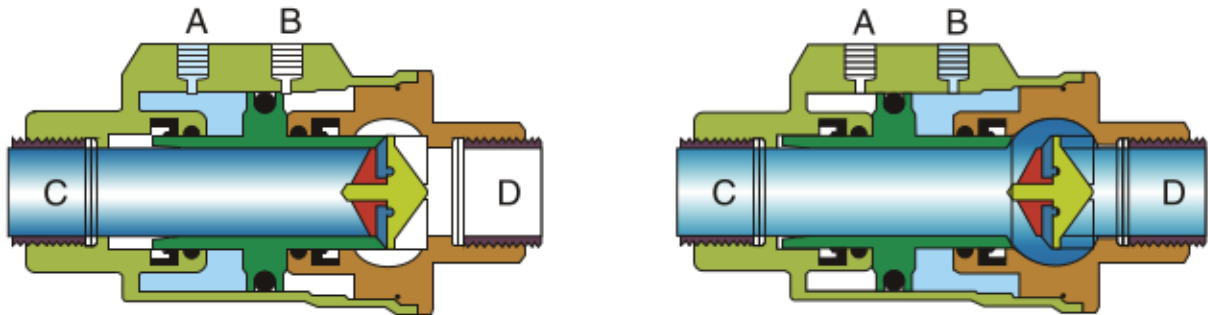
- Beer & Drinks Filling Machinery
- Textile Printing & Dyeing
- Gas Industry
- Pharmacy & Medical Equipment
- Rubber Machinery
- Chemical Industry
- Disinfection
- Frothing Equipment
- Water/sewage Disposal

Technical Specification

| | |
|----------------------------|---|
| Fluid Pressure | Max 1.6MPa (232psi) |
| Control Pressure | 0.3–0.8MPa (43.5–116psi) |
| Control Medium | Neutral gas, Air |
| Body Material | CF8M/CF8 |
| Seal Material | EPDM / FKM (VITON) |
| Applicable Medium | FKM–Suitable for most fluid, except for steam. EPDM–Suitable for steam and hot water, unsuitable for oils, greases, fuels etc. |
| Medium Temperature | –20°C — +150°C(FKM), –20°C — +130°C(EPDM) |
| Ambient Temperature | –20°C — +80°C |
| Control Type | Normally closed, Normally open, Double acting with spring, Double acting |
| Connection Type | Threaded(BSP,NPT,BSPT) |

Pneumatic Shuttle Valve

Open/Close



Closing

When hole "A" is supplied with air (hole "B" must be discharging), the piston moves towards and eventually presses onto the seat, thereby closing the valve.

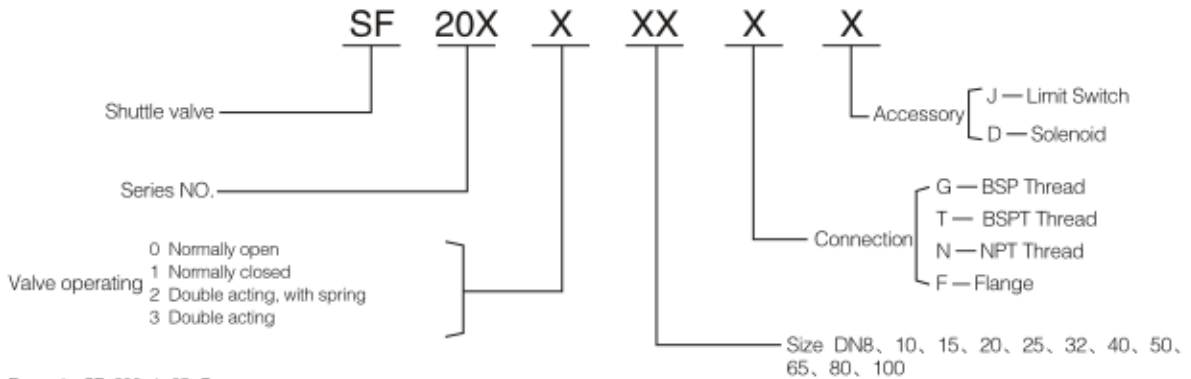
For a single acting N.C. shuttle valve, a spring is installed in "A" pressing the piston against seat seal and allowing the valve to remain closed in its idle state.

Opening

When hole "B" is supplied with air (hole "A" must be discharging), the piston move towards "C" and away from seat seal, thereby opening the valve.

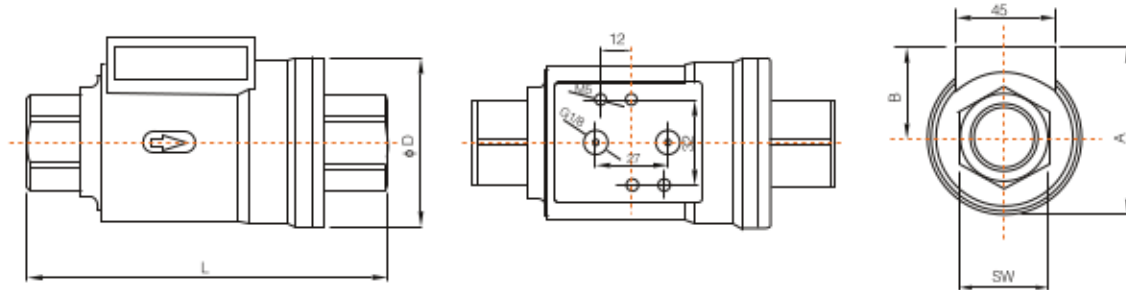
For a single-acting N.O. shuttle valve, a spring is installed in "B", forcing the piston away from seat seal and allowing the valve to remain open in its idle state.

Order Instruction



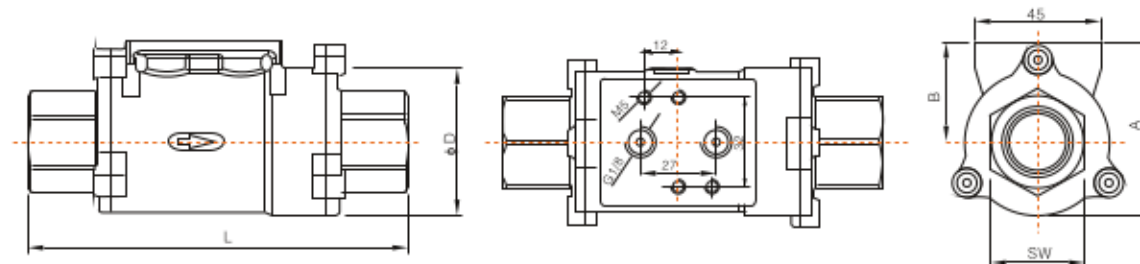
Pneumatic Shuttle Valve

Main Dimension for 200 Series



| Size | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|-------------|------|------|------|------|--------|--------|------|
| Thread End | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| A (mm) | 56 | 61 | 72 | 78 | 94 | 104 | 116 |
| D (mm) | 46 | 52 | 64 | 69 | 86 | 96 | 108 |
| SW (mm) | 22 | 26.5 | 32 | 41 | 50 | 56 | 70 |
| B (mm) | 33 | 35 | 40 | 43 | 51 | 56 | 62 |
| L (mm) | 98 | 112 | 135 | 143 | 165 | 180 | 207 |
| Weight (Kg) | 0.76 | 0.94 | 1.43 | 1.85 | 2.98 | 3.66 | 5.64 |

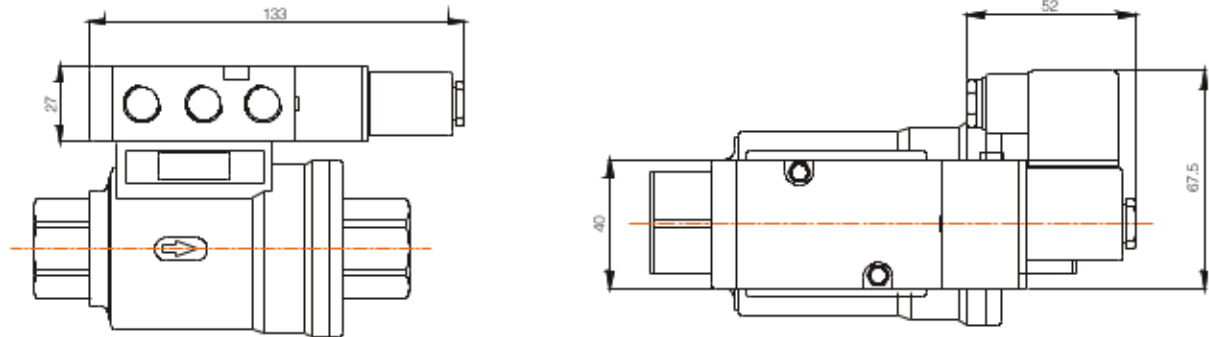
Main Dimension for 201 Series



| Size | DN8 | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|-------------|------|------|------|------|------|--------|--------|------|
| Thread End | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| A (mm) | 49.5 | 49.5 | 53.3 | 63.5 | 70 | 85.5 | 95 | 109 |
| D (mm) | 37 | 37 | 42.5 | 52 | 60 | 75 | 84 | 97 |
| SW (mm) | 22 | 22 | 26 | 32 | 40 | 49 | 53 | 68 |
| B (mm) | 31 | 31 | 32 | 37.5 | 40 | 48 | 53 | 60 |
| L (mm) | 98 | 98 | 112 | 135 | 143 | 165 | 180 | 207 |
| Weight (Kg) | 0.54 | 0.54 | 0.67 | 1.05 | 1.45 | 2.32 | 2.82 | 4.38 |

Shuttle Valve Accessory

NAMUR Solenoid Valve



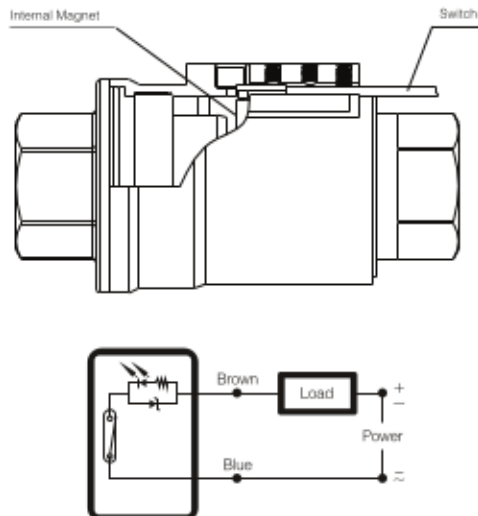
2/5 way NAMUR solenoid valve is suitable for 200 and 201 series.

Technical Specification

| | |
|---------------------|------------------|
| Connection | G1/4" |
| Control Pressure | 0.3–0.8Mpa |
| Power | AC: 220V DC: 24V |
| Voltage Range | ± 10% |
| Power Consumption | AC 4.5W DC 3W |
| Ambient Temperature | 5 — 55°C |
| Max Frequency | 3 times/second |
| Protection Level | IP65 |

Magnetic limit switch

The valve can be provided with magnetic limit switches and signaling LED.

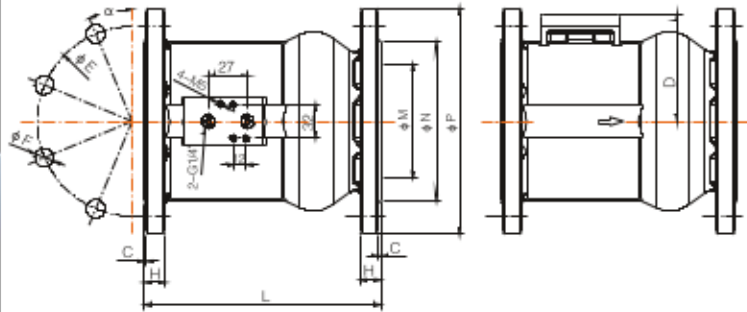


Technical Specification

| | |
|---------------------|-------------------|
| Size | DN10–DN50 |
| Indication | Red LED |
| Power | 5–120V DC/AC |
| Max.current | 100mA |
| Cable | PVC; 2 PVC cables |
| Working temperature | -10 — +70°C |
| Protection Level | IP67 |

Note: Since the magnets must be assembled inside the valve, the limit switches must be requested when ordering the valve.

Flange End Pneumatic Shuttle Valve



Flange specification: JB/T82.1-1994; DIN2543-2000

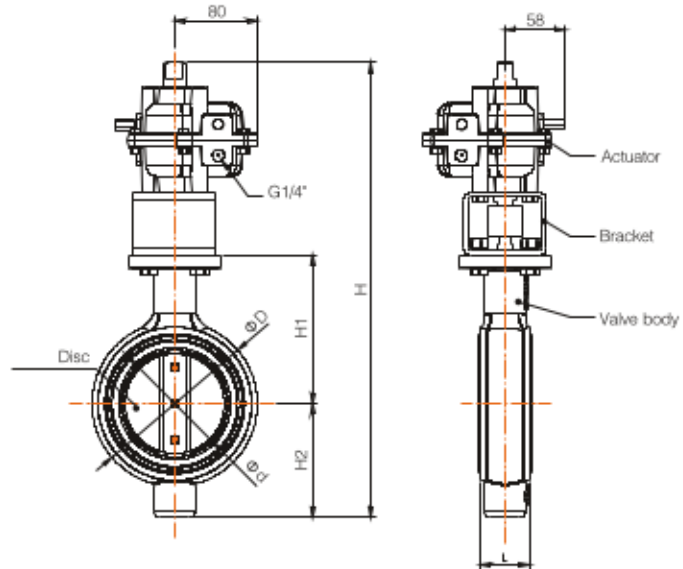
Technical Specification

| | |
|----------------------------|---|
| Fluid Pressure | (Above seat): Max 1.6MPa (232psi), (Below seat): Max 1.2MPa (174psi) |
| Control Pressure | 0.3-0.5MPa (43.5-72.5psi) |
| Control Medium | Neutral gas,Air |
| Body Material | CF8 |
| Seal Material | EPDM(FKM can be customized) |
| Applicable Medium | EPDM-Suitable for steam and hot water, unsuitable for oils, greases, fuels etc. FKM-Suitable for most fluid, except for steam. |
| Medium Temperature | -20°C — +130°C |
| Ambient Temperature | -20°C — +80°C |
| Control Type | Double acting |
| Connection Type | Flanged |

Main Dimension

| Size | D | L | φ E | φ F | H | C | φ M | φ N | φ P | α | Kv(m ³ /h) | weight(Kg) |
|-------|-----|-----|-----|--------|----|---|-----|-----|-----|-------|-----------------------|------------|
| DN65 | 85 | 192 | 145 | 4-φ 18 | 20 | 2 | 66 | 120 | 180 | 45° | 139.3 | 10.0 |
| DN80 | 92 | 212 | 160 | 8-φ 18 | 22 | 2 | 75 | 135 | 195 | 22.5° | 202.6 | 13.32 |
| DN100 | 102 | 227 | 180 | 8-φ 18 | 22 | 2 | 94 | 155 | 215 | 22.5° | 288 | 16.30 |

Pneumatic Butterfly Valve

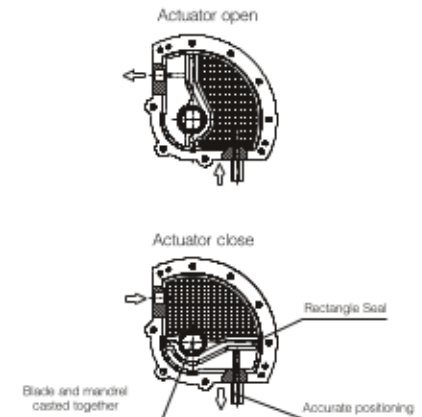


Function Principle

Compressed air rotates the blade, thereby opening and closing the valve. Unique valve design ensures low power loss, high efficiency, long maintenance-free life, and stable operation

Technical Specification

| | |
|---------------------|---|
| Fluid Pressure | Max 1.6MPa(232psi) |
| Control Pressure | 0.3-0.8MPa (43.5-116psi) |
| Applicable Medium | EPDM-Suitable for steam and hot water, unsuitable for oils, greases, fuels etc. |
| Medium Temperature | -10°C — +120°C |
| Valve Body Material | HT250 |
| Seal Material | EPDM |
| Disc Material | CF8 |
| Control Type | Double acting |



Main Dimension

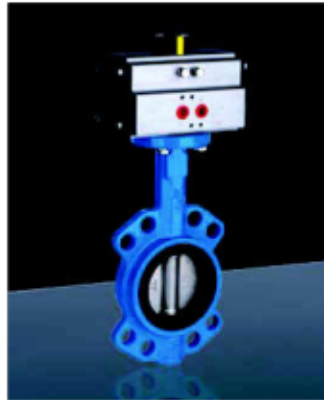
| Size | Fluid pressure (Mpa) | Control pressure (Mpa) | L (mm) | H (mm) | H1 (mm) | H2 (mm) | Φ d (mm) | D (mm) | Weight (Kg) |
|-------|----------------------|------------------------|--------|--------|---------|---------|----------|--------|-------------|
| DN50 | 0 — 1.6 | 0.3 — 0.8 | 38 | 372 | 110 | 75 | 52 | 102 | 4.7 |
| DN65 | 0 — 1.6 | 0.3 — 0.8 | 38 | 380 | 117 | 76 | 66.5 | 110 | 4.8 |
| DN80 | 0 — 1.6 | 0.3 — 0.8 | 42 | 395 | 120 | 89 | 76.5 | 128 | 5.3 |
| DN100 | 0 — 1.6 | 0.3 — 0.8 | 48 | 442 | 144 | 110 | 100.5 | 160 | 7.7 |
| DN150 | 0 — 1.6 | 0.3 — 0.8 | 52 | 512 | 180 | 145 | 152.5 | 218 | 10.8 |

Butterfly Valve

Pneumatic Butterfly Valve

Size: 50 65 80 100 125 150 200 250 300
 Face to face(mm): 42 44.7 45.2 52.1 54.4
 55.8 60.6 65.7 76.5
 Medium: Water, Steam, Corrosive Medium
 Body material: Castiron; Steel & Stainless stell 316/304
 Seal material: EPDM / PTFE
 Fluid pressure: 1.6Mpa(232psi)
 Disc material: CF8/CF8M

301 Series -A



301 Series -B



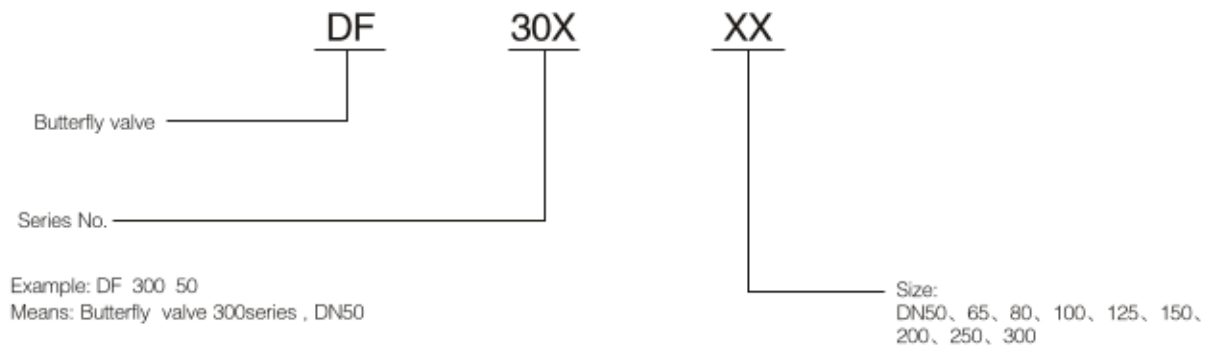
Manual Butterfly Valve

Size: 50 65 80 100 125 150 200 250 300
 Face to face(mm): 42 44.7 45.2 52.1 54.4
 55.8 60.6 65.7 76.5
 Medium: Water, Steam, Corrosive Medium
 Body material: Castiron; Steel & Stainless stell 316/304
 Seal material: EPDM / PTFE
 Fluid pressure: 1.6Mpa(232psi)
 Disc material: CF8/CF8M

302 Series



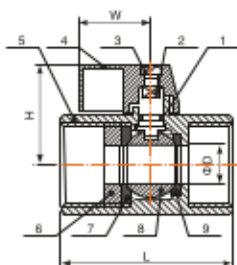
Order Instruction



Mini Ball Valve

Mini Ball Valve-1

Model: 400 001



Technical Specification

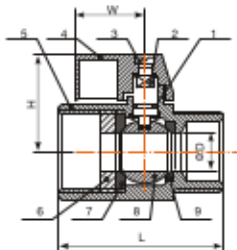
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — $+150^{\circ}\text{C}$
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| ITEM | SIZE | 1/8" | 1/4" | 3/8" | 1/2" | 3/4" | 1" |
|------|------|------|------|------|------|------|------|
| ΦD | | 7 | 7 | 7 | 9.2 | 12.5 | 15 |
| L | | 42 | 42 | 42 | 46 | 54 | 65 |
| H | | 26.5 | 26.5 | 26.5 | 28.3 | 31.5 | 34 |
| W | | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |

Mini Ball Valve-2

Model: 400 002



Technical Specification

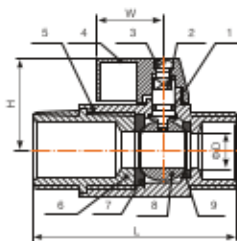
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — $+150^{\circ}\text{C}$
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| ITEM | SIZE | 1/8" | 1/4" | 3/8" | 1/2" | 3/4" | 1" |
|------|------|------|------|------|------|------|------|
| ΦD | | 7 | 7 | 7 | 9.2 | 12.5 | 15 |
| L | | 40 | 40 | 40 | 46 | 54 | 65 |
| H | | 26.5 | 26.5 | 26.5 | 28.3 | 31.5 | 34 |
| W | | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |

Mini Ball Valve-3

Model: 400 003



Technical Specification

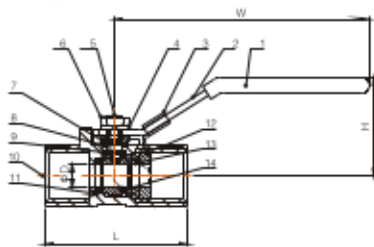
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — $+150^{\circ}\text{C}$
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| ITEM | SIZE | 1/8" | 1/4" | 3/8" | 1/2" | 3/4" | 1" |
|------|------|------|------|------|------|------|------|
| ΦD | | 7 | 7 | 7 | 9.2 | 12.5 | 15 |
| L | | 50 | 50 | 50 | 58 | 71.5 | 83 |
| H | | 26.5 | 26.5 | 26.5 | 28.3 | 31.5 | 34 |
| W | | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |

1-PC Ball Valve

Model: 400 101



Technical Specification

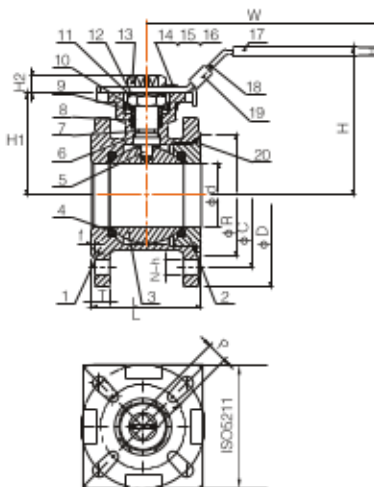
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
|--------------|------|------|------|------|-----|--------|--------|-----|--------|-----|
| ΦD | 5 | 7 | 9 | 13 | 16 | 20 | 25 | 32 | 38 | 50 |
| L | 39 | 44 | 57 | 58 | 71 | 78 | 82 | 100 | 127 | 153 |
| H | 33 | 36 | 37 | 42 | 52 | 56 | 65 | 70 | 70 | 77 |
| W | 68.5 | 67 | 93 | 93 | 103 | 103 | 125 | 125 | 189 | 189 |

1-PC Flanged Ball Valve With Mounting Pad

Model: 400 102



Technical Specification

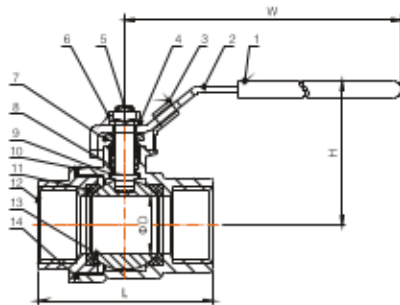
Nominal pressure: PN16
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)

Main Dimension

| SIZE | d | L | D | φC | φR | T | H | W | P | ISO5211 | N-h |
|--------|----|-----|-----|-----|-----|----|-----|-----|----|---------|-------|
| 1/2" | 15 | 36 | 95 | 65 | 45 | 11 | 89 | 120 | 9 | F03/F04 | 4-M12 |
| 3/4" | 20 | 38 | 105 | 75 | 58 | 11 | 94 | 120 | 9 | F03/F04 | 4-M12 |
| 1" | 25 | 50 | 115 | 85 | 68 | 12 | 90 | 160 | 11 | F04/F05 | 4-M12 |
| 1-1/4" | 32 | 53 | 140 | 100 | 78 | 14 | 100 | 160 | 11 | F04/F05 | 4-M16 |
| 1-1/2" | 40 | 65 | 150 | 110 | 88 | 15 | 106 | 200 | 14 | F05/F07 | 4-M16 |
| 2" | 50 | 78 | 165 | 125 | 102 | 16 | 125 | 200 | 14 | F05/F07 | 4-M16 |
| 2-1/2" | 65 | 98 | 185 | 145 | 122 | 16 | 140 | 255 | 17 | F07/F10 | 4-M16 |
| 3" | 76 | 118 | 200 | 160 | 138 | 18 | 145 | 255 | 17 | F07/F10 | 8-M16 |
| 4" | 94 | 140 | 220 | 180 | 158 | 18 | 175 | 300 | 17 | F07/F10 | 8-M16 |

2-PC Ball Valve(F/F)

Model: 400 201



Technical Specification

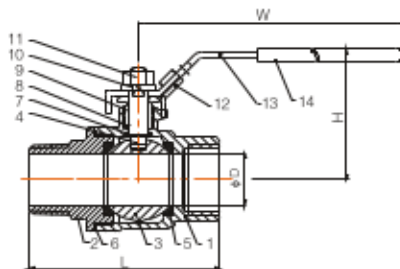
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" |
|--------------|------|------|------|------|-----|--------|--------|-----|--------|-----|-----|
| ΦD | 12.5 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 | 65 | 80 | 100 |
| L | 49 | 49 | 58 | 66 | 77 | 90 | 98 | 121 | 145 | 166 | 240 |
| H | 48 | 48 | 52 | 61 | 65 | 79 | 83 | 97 | 135 | 144 | 159 |
| W | 100 | 100 | 100 | 127 | 127 | 154 | 154 | 192 | 244 | 244 | 275 |

2-PC Ball Valve(F/M)

Model: 400 202



Technical Specification

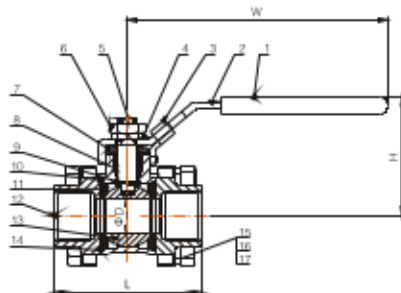
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|--------------|------|------|------|------|-----|--------|--------|-----|
| ΦD | 8 | 8 | 13.6 | 18.2 | 23 | 31 | 36 | 48 |
| L | 55 | 55 | 67.5 | 78 | 91 | 101 | 107 | 132 |
| W | 106 | 106 | 106 | 116 | 148 | 148 | 182 | 182 |
| H | 49 | 49 | 51 | 58 | 73 | 79 | 85 | 95 |

3-PC Thread Ball Valve

Model: 400 301



Technical Specification

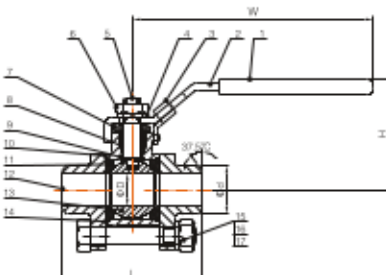
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" |
|--------------|------|------|------|------|------|--------|--------|-----|--------|-----|-----|
| ΦD | 12.5 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 | 65 | 80 | 100 |
| L | 50.5 | 50.5 | 61.5 | 70 | 80.5 | 93 | 103 | 125 | 158 | 179 | 213 |
| H | 48 | 48 | 52 | 61 | 65 | 79 | 83 | 97 | 135 | 144 | 149 |
| W | 100 | 100 | 100 | 127 | 127 | 154 | 154 | 192 | 244 | 244 | 285 |

3-PC Butt Weld Ball Valve

Model: 400 302



Technical Specification

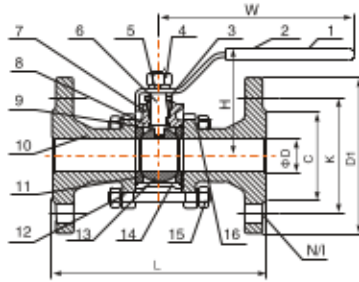
Nominal pressure: PA63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Welded Connection

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" |
|--------------|------|------|------|------|------|--------|--------|-------|--------|-------|-----|
| ΦD | 9.7 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 | 64 | 76 | 100 |
| Φd | 15.2 | 18 | 22 | 27.5 | 33.5 | 44 | 50 | 61.6 | 76 | 92 | 116 |
| L | 61 | 52.4 | 62.4 | 72.2 | 81.6 | 95 | 106 | 127.2 | 160.2 | 182.2 | 220 |
| H | 50 | 48 | 52 | 61 | 65 | 79 | 83 | 97 | 135 | 144 | 160 |
| W | 103 | 100 | 100 | 127 | 127 | 154 | 154 | 192 | 244 | 244 | 278 |

3-PC Flanged Ball Valve

Model: 400 303



Technical Specification

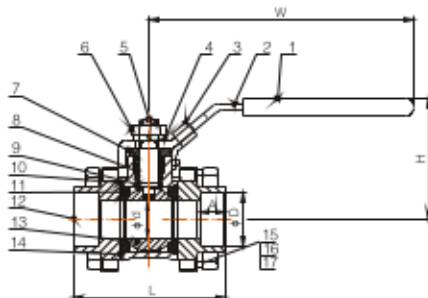
Nominal pressure: PN40
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Flange type: DIN2543

Main Dimension

| SIZE | φ D | D1 | K | C | L | H | W | N/I |
|--------|-----|-----|-----|-----|-----|-----|-----|------|
| 1/2" | 15 | 95 | 65 | 45 | 130 | 84 | 146 | 4-14 |
| 3/4" | 20 | 105 | 75 | 58 | 150 | 87 | 146 | 4-14 |
| 1" | 25 | 115 | 85 | 68 | 160 | 93 | 153 | 4-14 |
| 1-1/4" | 32 | 140 | 100 | 78 | 180 | 99 | 153 | 4-18 |
| 1-1/2" | 40 | 150 | 110 | 88 | 200 | 114 | 217 | 4-18 |
| 2" | 50 | 165 | 125 | 102 | 230 | 122 | 217 | 4-18 |
| 2-1/2" | 65 | 185 | 145 | 122 | 290 | 150 | 251 | 8-18 |
| 3" | 76 | 200 | 160 | 138 | 310 | 161 | 251 | 8-18 |
| 4" | 94 | 235 | 190 | 162 | 350 | 180 | 291 | 8-22 |

3-PC Socket Weld Ball Valve

Model: 400 305



Technical Specification

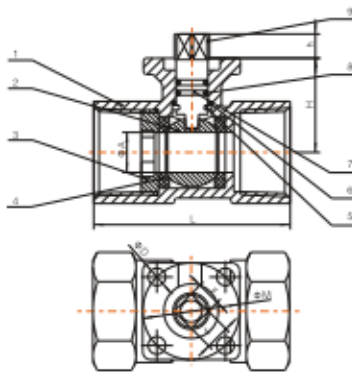
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Welded Connection

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|--------------|------|------|------|------|------|--------|--------|------|
| φ D | 14.1 | 17.6 | 21.7 | 27.1 | 33.9 | 42.6 | 48.7 | 61.1 |
| A | 10 | 10 | 10 | 13 | 13 | 13 | 13 | 16 |
| φ d | 12.5 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 |
| L | 50.5 | 50.5 | 61.5 | 70 | 80.5 | 93 | 103 | 125 |
| H | 48 | 48 | 52 | 61 | 65 | 79 | 83 | 97 |
| W | 100 | 100 | 100 | 127 | 127 | 154 | 154 | 192 |

1-PC Ball Valve With Mounting Pad

Model: 400 401



Technical Specification

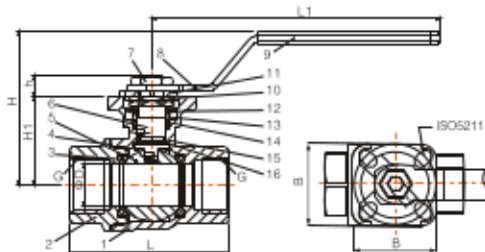
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| SIZE ITEM | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|--------------|------|------|------|-----|--------|--------|-----|
| L | 45 | 55 | 60 | 73 | 78 | 89 | 100 |
| A | 7 | 9.2 | 12.5 | 15 | 20 | 25 | 32 |
| H | 24 | 26 | 32 | 35 | 38 | 42 | 50 |
| C | 36 | 36 | 36 | 36 | 36 | 50 | 50 |
| H | 9 | 9 | 9 | 9 | 9 | 11 | 11 |
| D | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 7 | 7 |
| M | 36 | 36 | 36 | 36 | 36 | 50 | 50 |
| F | 9 | 9 | 9 | 9 | 9 | 11 | 11 |

2-PC Ball Valve With Mounting Pad

Model: 400 402



Technical Specification

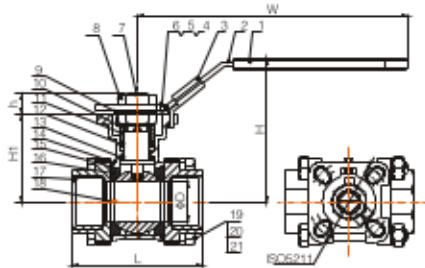
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| G | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|---------|---------|---------|---------|---------|---------|---------|
| φD | 15 | 20 | 25 | 32 | 38 | 50 |
| L | 58.6 | 66.5 | 79.5 | 94.5 | 103 | 125 |
| L1 | 140 | 140 | 160 | 160 | 185 | 185 |
| H | 68 | 72.5 | 87 | 100 | 109 | 118.5 |
| H1 | 36.5 | 40.5 | 49 | 62 | 68 | 77.5 |
| F | 9 | 9 | 11 | 11 | 14 | 14 |
| ISO5211 | F03/F04 | F03/F04 | F04/F05 | F04/F05 | F05/F07 | F05/F07 |

3-PC Ball Valve With Mounting Pad

Model: 400 403



Technical Specification

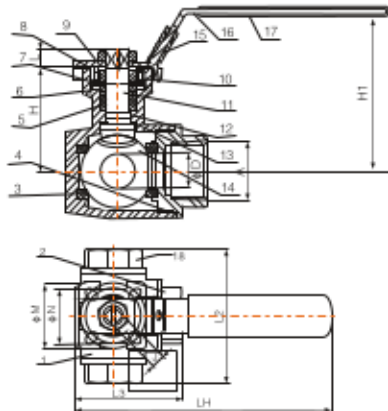
Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

Main Dimension

| SIZE | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" |
|---------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| D | 12.5 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 | 65 | 76 | 94 |
| L | 50.5 | 50.5 | 61.5 | 70 | 80.5 | 93 | 103 | 125 | 170 | 186 | 226 |
| H | 72 | 72 | 75 | 81 | 88 | 94 | 106 | 121 | 155 | 164 | 168 |
| W | 140 | 140 | 140 | 140 | 160 | 160 | 185 | 185 | 235 | 235 | 333 |
| H1 | 38 | 38 | 41 | 48 | 55 | 60 | 70 | 85 | 109 | 118 | 116 |
| h | 11 | 11 | 11 | 11 | 11 | 11 | 15 | 15 | 20 | 20 | 20 |
| E | 9 | 9 | 9 | 9 | 11 | 11 | 14 | 14 | 17 | 17 | 17 |
| ISO5211 | F03 F04 | F03 F04 | F03 F04 | F03 F04 | F04 F05 | F04 F05 | F05 F07 | F05 F07 | F07 F10 | F07 F10 | F07 F10 |

3-Way Ball Valve With Mounting Pad

Model: 400 404



Technical Specification

Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT

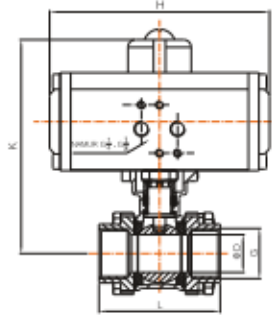
Main Dimension

| ITEM SIZE | A | ΦD | H | H1 | L | N | M | J | R1 | R2 | L2 | L3 | LH |
|-----------|--------|------|------|-----|----|----|----|----|-----|-----|-----|-----|-----|
| 1/2" | 1/2" | 12.5 | 42 | 75 | 9 | 36 | 42 | 9 | 3 | 3 | 79 | 64 | 163 |
| 3/4" | 3/4" | 16 | 49 | 82 | 9 | 36 | 42 | 9 | 3 | 3 | 83 | 68 | 165 |
| 1" | 1" | 20 | 59.5 | 97 | 11 | 42 | 50 | 11 | 3 | 3.5 | 104 | 82 | 190 |
| 1 1/4" | 1 1/4" | 25 | 63 | 101 | 11 | 42 | 50 | 11 | 3 | 3.5 | 111 | 90 | 195 |
| 1 1/2" | 1 1/2" | 32 | 73.5 | 115 | 14 | 50 | 70 | 14 | 3.5 | 4.5 | 126 | 106 | 227 |
| 2" | 2" | 38 | 82.5 | 122 | 14 | 50 | 70 | 14 | 3.5 | 4.5 | 147 | 123 | 235 |

Pneumatic Ball Valve



TYPE A



Technical Specification

Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP , BSPT, DIN2999, NPT
 Control type: Double acting
 (If single-acting control is needed instead, a special request should be made.)

Main Dimension

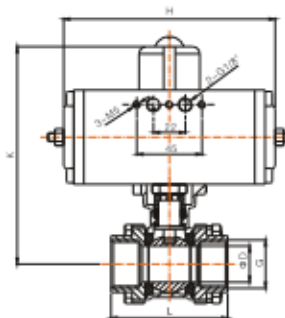
| SIZE ITEM | DN8 | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|--------------|------|------|------|------|------|--------|--------|------|
| G | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| D | 12.5 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 |
| L | 50 | 50 | 62 | 70 | 80 | 93 | 103 | 125 |
| H | 122 | 122 | 122 | 122 | 122 | 147 | 168 | 168 |
| K | 120 | 120 | 125 | 130 | 135 | 155 | 180 | 195 |

Note: this dimension is based on control air pressure of 5 bar

Model: 400 502



TYPE B



Technical Specification

Nominal pressure: PN63(1000Psi)
 Applicable temperature: -10°C — +150°C
 Body and Bonnet: CF8(304) or CF8M(316)
 Ball: CF8(304) or CF8M(316)
 Stem: 304 or 316
 Seal ring and Packing: (PTFE)
 Thread end: BSP, BSPT, DIN2999, NPT
 Control type: Double acting
 (If single-acting control is needed instead, a special request should be made.)

Main Dimension

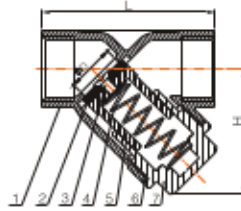
| SIZE ITEM | DN8 | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|--------------|------|------|------|------|------|--------|--------|------|
| G | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| D | 12.5 | 12.5 | 15 | 20 | 25 | 32 | 38 | 50 |
| L | 50 | 50 | 62 | 70 | 80 | 93 | 103 | 125 |
| H | 142 | 142 | 142 | 146 | 146 | 146 | 168 | 168 |
| K | 105 | 105 | 108 | 145 | 150 | 165 | 190 | 205 |

Note: this dimension is based on control air pressure of 5 bar

Check Valve

Y-Spring Check Valve (PN55)

Model: 500 001



Part List

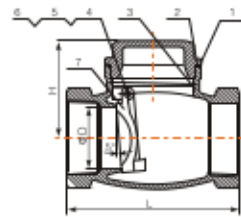
| NO | Name | Material |
|----|------------|----------|
| 1 | Body | CF8/CF8M |
| 2 | Seat | PTFE |
| 3 | Sunk Screw | 316 |
| 4 | Spring | 304 |
| 5 | Sleeve | CF8/CF8M |
| 6 | Gasket | PTFE |
| 7 | Bonnet | CF8/CF8M |

Main Dimension

| SIZE | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|------|------|------|------|------|----|--------|--------|-----|
| ΦD | 14 | 14 | 14 | 20 | 25 | 32 | 40 | 50 |
| H | 44 | 44 | 44 | 52 | 65 | 70 | 78 | 90 |
| L | 65 | 65 | 65 | 80 | 90 | 105 | 120 | 138 |

Swing Check Valve(PN16)

Model: 500 002



Part List

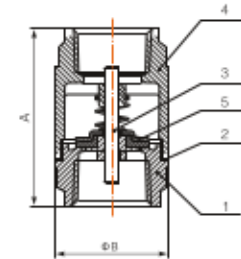
| NO | Name | Material |
|----|-------------|----------|
| 1 | Bonnet | CF8/CF8M |
| 2 | Gasket | PTFE |
| 3 | Body | CF8/CF8M |
| 4 | Pin | 304 |
| 5 | Plug gasket | PTFE |
| 6 | Plug | 304 |
| 7 | Disc | CF8/CF8M |

Main Dimension

| SIZE ITEM | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|--------------|------|------|----|--------|--------|-----|
| ΦD | 15 | 20 | 25 | 32 | 40 | 50 |
| L | 65 | 79 | 90 | 103.5 | 120 | 140 |
| H | 43 | 53 | 62 | 66.5 | 80.5 | 84 |

2-PC Spring Vertical Check Valve(PN63)

Model: 500 003



Part List

| NO | Name | Material |
|----|--------|----------|
| 1 | Bonnet | CF8/CF8M |
| 2 | Gasket | PTFE |
| 3 | Stem | 304/316 |
| 4 | Body | CF8M |
| 5 | Disc | 304/316 |

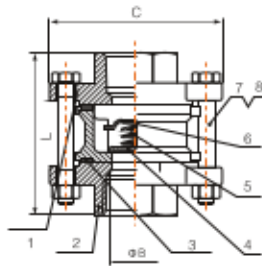
Main Dimension

| SIZE | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|------|------|------|------|------|----|--------|--------|-----|
| A | 51 | 51 | 61 | 69 | 82 | 92 | 107 | 120 |
| ΦB | 30.5 | 30.5 | 37 | 42 | 48 | 58 | 70 | 82 |

Check Valve

3-PC Spring Vertical Check Valve (PN63)

Model:500 004



Part List

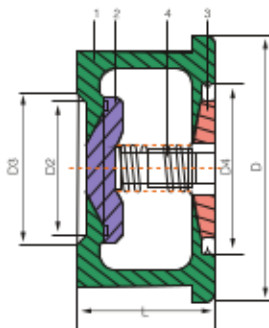
| NO | Name | Material |
|----|--------|----------|
| 1 | Body | CF8/CF8M |
| 2 | Bonnet | CF8M |
| 3 | Seal | PTFE |
| 4 | Disc | 304 |
| 5 | Spring | 304 |
| 6 | Plug | 304 |
| 7 | Bolt | 304 |
| 8 | Nut | 304 |

Main Dimension

| Size | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" |
|------|------|------|------|------|----|--------|--------|-----|--------|-----|-----|
| B | 8 | 10 | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 76 | 94 |
| C | 45 | 45 | 53.5 | 62.5 | 71 | 88 | 95 | 117 | 147 | 167 | 224 |
| L | 48.5 | 48.5 | 56.5 | 65 | 74 | 83 | 92 | 110 | 125.5 | 141 | 164 |

Wafer Type Disc Check Valve (PN25, PN40)

Model: 500 005



Part List

| NO | Name | Material |
|----|--------|---------------|
| 1 | Body | CS, CF8, CF8M |
| 2 | Disc | CF8, CF8M |
| 3 | Holder | CS, CF8, CF8M |
| 4 | Spring | 304, 316 |

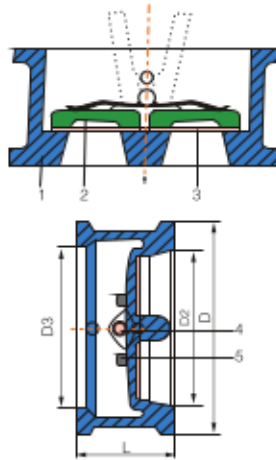
Main Dimension

| Size | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 |
|------|---|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| PN25 | L | 25 | 25 | 30 | 32 | 38 | 45 | 50 | 60 | 75 | 85 | 102 | 110 | 150 |
| | D | 52 | 62 | 72 | 83 | 93 | 108 | 128 | 142 | 168 | 194 | 224 | 284 | 341 |
| PN40 | L | 25 | 25 | 30 | 32 | 38 | 45 | 50 | 60 | 75 | 85 | 102 | 110 | 150 |
| | D | 52 | 62 | 72 | 83 | 93 | 108 | 128 | 142 | 168 | 194 | 224 | 291 | 353 |

Check Valve

Wafer Type Dual Disk Check Valve (PN16)

Model: 500 006



Part List

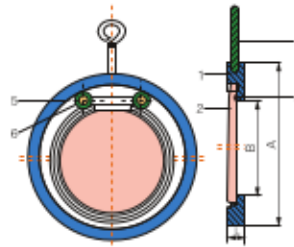
| NO | Name | Material |
|----|--------|------------------------------|
| 1 | Body | CF8, CF8M, |
| 2 | Disc | CF8, CF8M, |
| 3 | Seat | EPDM |
| 4 | Holder | Stainless steel (304 or 316) |
| 5 | Spring | Stainless steel (304 or 316) |

Main Dimension

| Size | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L | 60 | 67 | 73 | 73 | 86 | 98 | 127 | 146 | 181 | 184 | 191 | 203 | 219 | 222 |
| D | 108 | 128 | 142 | 162 | 192 | 218 | 273 | 328 | 378 | 438 | 489 | 539 | 594 | 695 |
| D2 | 51 | 65 | 80 | 102 | 127 | 152 | 203 | 254 | 305 | 350 | 400 | 450 | 500 | 600 |
| D3 | 56 | 73 | 88 | 108 | 132 | 160 | 210 | 266 | 310 | 355 | 405 | 455 | 505 | 605 |

Wafer Type Swing Check Valve (PN16)

Model: 500 007



Part List

| NO | Name | Material |
|----|----------|---------------------|
| 1 | Body | CS, CF8, CF8M, |
| 2 | Disc | CS, CF8, CF8M |
| 3 | Eye Bolt | Carbon Steel Plated |
| 4 | O-Ring | FKM, NBR, EPDM |
| 5 | Bolt | SS304, SS316 |
| 6 | Washer | FKM, NBR, EPDM |

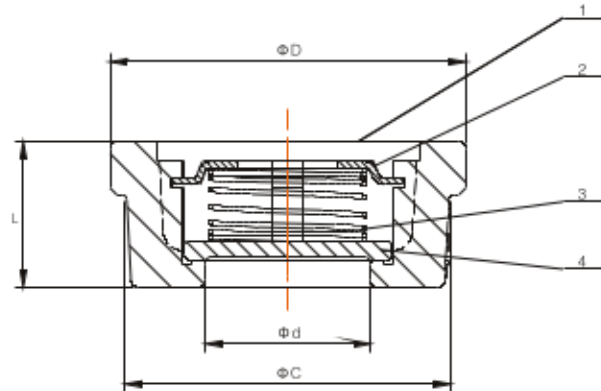
Main Dimension

| Size | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| B | 24 | 28 | 45 | 55 | 76 | 93 | 118 | 160 | 200 | 230 |
| A | 93 | 108 | 128 | 142 | 162 | 192 | 218 | 273 | 329 | 385 |
| L | 16 | 16 | 16 | 16 | 16 | 16 | 19 | 28 | 28 | 38 |

Check Valve

Wafer Type Disc Check Valve

Model: 500 008



Flange standards: DIN PN16, 25, 40
ANSI 150/300 Lbs
Structure length: DIN3202 – K4
Pressure level: PN40
Material: CF8 /CF8M

Technical Specification

| ITEM \ SIZE | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN65 | DN80 | DN100 |
|--|------|------|------|------|------|------|------|------|-------|
| MIN Open pressure (mbar) | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |
| Kv(m ³ /h) at 0.1bar ΔP | 0.45 | 0.75 | 1.2 | 1.8 | 2.6 | 4.2 | 5.8 | 9.5 | 15 |

Main Dimension

| ITEM \ SIZE | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN65 | DN80 | DN100 |
|-------------|------|------|------|------|------|------|------|------|-------|
| D | 39 | 46 | 54 | 70 | 80 | 94 | 112 | 132 | 150 |
| d | 15 | 20 | 25 | 32 | 40 | 46 | 62 | 75 | 86 |
| C | 34 | 40 | 50 | 62 | 70 | 85 | 100 | 120 | 140 |
| L | 16 | 19 | 22 | 28 | 32 | 40 | 46 | 50 | 60 |

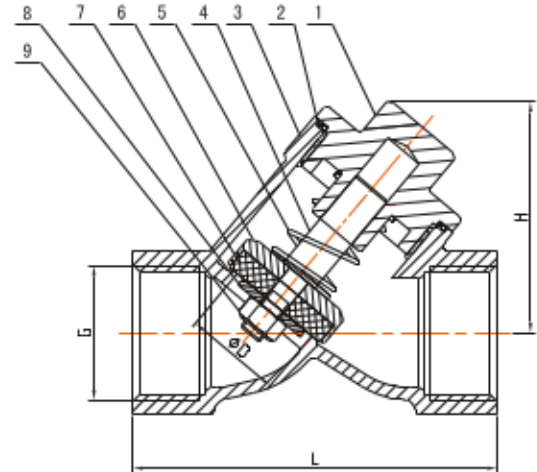
Part List

| NO | Name | Material |
|----|----------------|----------|
| 1 | Body | CF8/CF8M |
| 2 | Spring support | 316 |
| 3 | Spring | 304/316 |
| 4 | Disc | CF8/CF8M |

Check Valve

Y-Spring Check Valve (PN16)

Model: 500 009



Function Principle

The medium enters valve body through inlet opening, pushes the valve stem and valve core upward, and thereby opens the valve. When the medium starts to flow back from the outlet, the spring force and pressure applied by the medium itself push the valve stem and valve core down, and thereby close the valve.

Technical Specification

Nominal pressure: PN16
 Valve specification: DN15–DN50
 Medium temperature: -10°C — $+180^{\circ}\text{C}$
 Open pressure: 30–40mbar
 Connection: Thread, welding fast mounting, flange

Part List

| NO. | Name | Material |
|-----|------------------|----------|
| 1 | Bonnet | CF8/CF8M |
| 2 | Body seal | PTFE |
| 3 | Body | CF8/CF8M |
| 4 | Spring | 304 |
| 5 | Stem | 304/316 |
| 6 | Core | CF8/CF8M |
| 7 | Seat | PTFE |
| 8 | Core gasket | CF8/CF8M |
| 9 | Self-locking Nut | 304 |

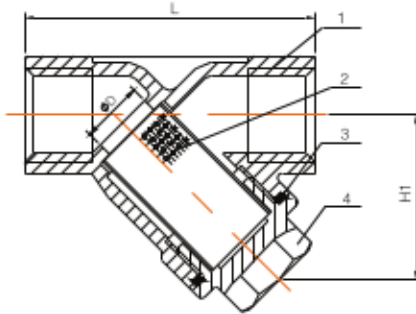
Main Dimension (thread type)

| SIZE | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|----------|------|------|----|--------|--------|-----|
| L | 68 | 75 | 90 | 116 | 116 | 138 |
| H | 43 | 48.5 | 57 | 72 | 77 | 89 |
| ϕD | 13 | 18 | 24 | 31 | 35 | 45 |
| G | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |

Y-Type Strainer

Single Cap Type

Model: 600 001



Technical Specification

Nominal pressure: 5.5MPa

Part List

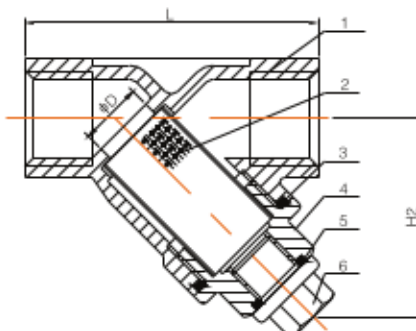
| NO | Name | Material |
|----|--------|-------------------------------|
| 1 | Body | CF8M/CF8 |
| 2 | Filter | 304(Wired or perforated mesh) |
| 3 | Gasket | PTFE |
| 4 | Bonnet | CF8M/CF8 |

Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
|-----------|------|------|------|------|----|--------|--------|-----|--------|-----|
| D | 14 | 14 | 14 | 20 | 25 | 32 | 40 | 50 | 60 | 80 |
| H1 | 37 | 37 | 37 | 45 | 54 | 59 | 66 | 77 | 93 | 118 |
| L | 65 | 65 | 65 | 80 | 90 | 105 | 120 | 138 | 178 | 210 |

Double Cap Type

Model: 600 002



Technical Specification

Nominal pressure: 5.5MPa

Part List

| NO | Name | Material |
|----|----------------|-------------------------------|
| 1 | Body | CF8M/CF8 |
| 2 | Filter | 304(Wired or perforated mesh) |
| 3 | Gasket | PTFE |
| 4 | Bonnet | CF8M/CF8 |
| 5 | Bolt Seal | PTFE |
| 6 | Discharge Plug | CF8M/CF8 |

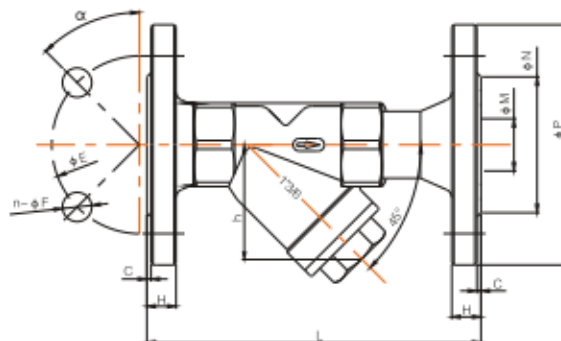
Main Dimension

| SIZE ITEM | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
|-----------|------|------|------|------|----|--------|--------|-----|--------|-----|
| D | 14 | 14 | 14 | 20 | 25 | 32 | 40 | 50 | 60 | 80 |
| H2 | 44 | 44 | 44 | 52 | 63 | 67 | 74 | 86 | 104 | 128 |
| L | 65 | 65 | 65 | 80 | 90 | 105 | 120 | 138 | 178 | 210 |

Y-Type Flange End Strainer

Flange End Strainer

Model: 600 003



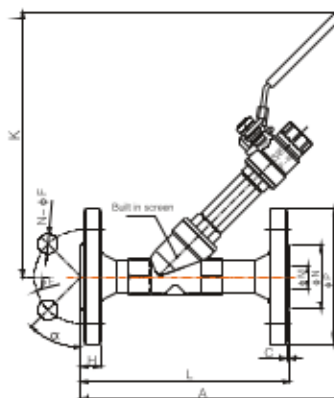
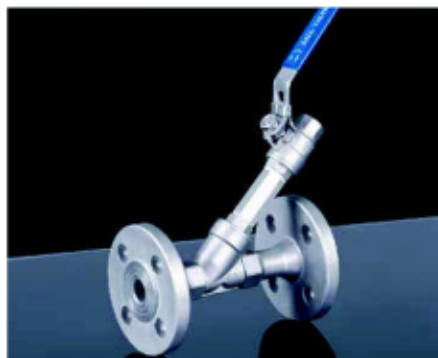
Flange specification: JB/T82.1-1994; ISO/DIN/JIS is also available

Main Dimension

| Size | L | C | H | h | ϕE | $n-\phi F$ | ϕM | ϕN | ϕP | α |
|------|-----|---|----|-----|----------|------------|----------|----------|----------|----------|
| DN15 | 145 | 2 | 14 | 37 | 65 | 4-14 | 16 | 45 | 95 | 45° |
| DN20 | 155 | 2 | 14 | 45 | 75 | 4-14 | 20 | 56 | 105 | 45° |
| DN25 | 155 | 2 | 14 | 54 | 85 | 4-14 | 25 | 65 | 115 | 45° |
| DN32 | 185 | 2 | 16 | 59 | 100 | 4-18 | 32 | 78 | 140 | 45° |
| DN40 | 200 | 3 | 16 | 66 | 110 | 4-18 | 36 | 84 | 150 | 45° |
| DN50 | 215 | 3 | 16 | 77 | 125 | 4-18 | 49 | 100 | 165 | 45° |
| DN65 | 290 | 3 | 18 | 93 | 145 | 4-18 | 66 | 120 | 185 | 45° |
| DN80 | 315 | 3 | 20 | 118 | 160 | 4-18 | 78 | 135 | 200 | 22.5° |

Filter Discharge Valve

Model: 600 004

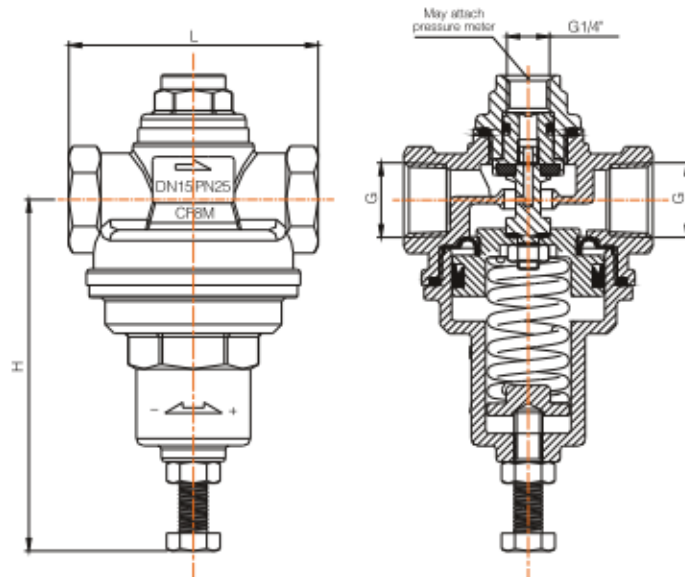


Flange specification: JB/T82.1-1994; ISO/DIN/JIS is also available

Main Dimension

| Size | L | C | H | ϕE | ϕF | ϕM | ϕN | ϕP | A | K | α |
|------|-----|---|----|----------|----------|----------|----------|----------|-----|-----|----------|
| DN15 | 145 | 2 | 14 | 65 | 4-14 | 16 | 45 | 95 | 256 | 205 | 45° |
| DN20 | 155 | 2 | 14 | 75 | 4-14 | 20 | 56 | 105 | 270 | 215 | 45° |
| DN25 | 155 | 2 | 14 | 85 | 4-14 | 25 | 65 | 115 | 280 | 235 | 45° |
| DN32 | 185 | 2 | 16 | 100 | 4-18 | 32 | 78 | 140 | 300 | 240 | 45° |
| DN40 | 200 | 3 | 16 | 110 | 4-18 | 36 | 84 | 150 | 310 | 250 | 45° |
| DN50 | 215 | 3 | 16 | 125 | 4-18 | 49 | 100 | 165 | 320 | 260 | 45° |
| DN65 | 290 | 3 | 18 | 145 | 4-18 | 66 | 120 | 185 | 340 | 265 | 45° |
| DN80 | 315 | 3 | 20 | 160 | 8-18 | 78 | 135 | 200 | 385 | 300 | 22.5° |

Pressure Reducing Valve



Function Principle

Pressure reducing valve is a N.O. valve that controls incoming fluid pressure to a desired range at outlet, by adjusting spring force and balancing it with the pressure applied by the passing medium. It ensures stabilized fluid pressure in a pipeline after the valve.

Advantages

1. All valve parts are made of stainless steel CF8M, suitable for water, weak acid and weak base, etc.
2. The valve combines the structure design of a piston type valve and a diaphragm type valve to achieve superior service life.
3. Simple structure, fast reaction and accurate pressure adjustment.

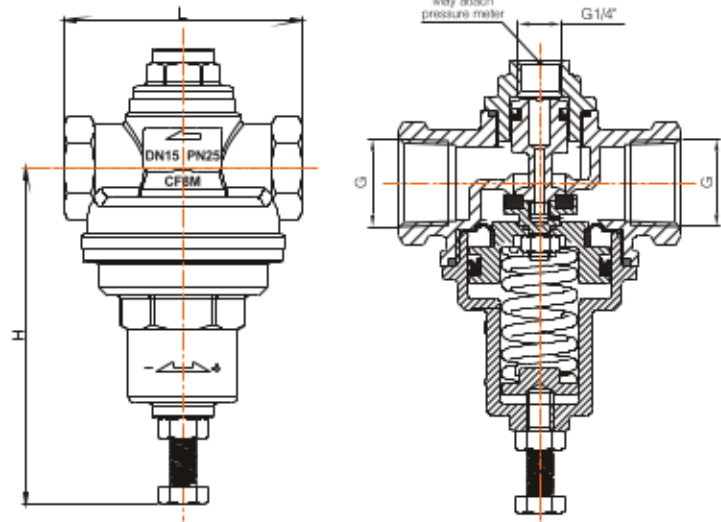
Technical Specification

Nominal Pressure: PN25
 Pressure Range : 1–6bar, 4–10bar, 8–13bar(3 options available)
 Medium Temperature: -15°C — +100°C
 Seal Material: FPM
 Connection: Thread(BSP,BSPT,NPT)

Main Dimension

| Size | G | H | L | Kv(m ² /h) |
|------|------|-----|----|-----------------------|
| DN15 | 1/2" | 100 | 70 | 2.1 |
| DN20 | 3/4" | 100 | 85 | 3.4 |
| DN25 | 1" | 105 | 92 | 5.5 |

Overflow valve



Function Principle

Overflow valve is a N.C valve that limits fluid pressure under a desired threshold, by adjusting the spring force and balancing it with the pressure applied by medium at the inlet. It ensures stabilized fluid pressure in a pipeline before the valve.

Advantages

1. All valve parts are made of stainless steel CF8M, suitable for water, weak acid and weak base, etc.
2. The valve combines the structure design of a piston type valve and a diaphragm type valve to achieve better service life.
3. Simple structure, fast reaction and accurate pressure adjustment

Technical Specification

Nominal pressure: PN25
 Pressure range: 1–10bar
 Medium temperature: -15°C — $+100^{\circ}\text{C}$
 Seal material: FPM
 Connection: Thread end

Dimension

| Size | G | H | L | Kv(m ³ /h) |
|------|------|-----|----|-----------------------|
| DN15 | 1/2" | 100 | 70 | 2.1 |
| DN20 | 3/4" | 100 | 85 | 3.4 |
| DN25 | 1" | 105 | 92 | 5.5 |

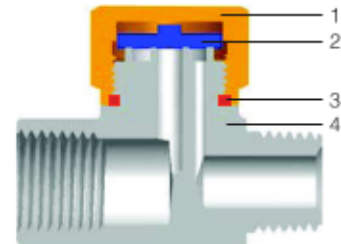
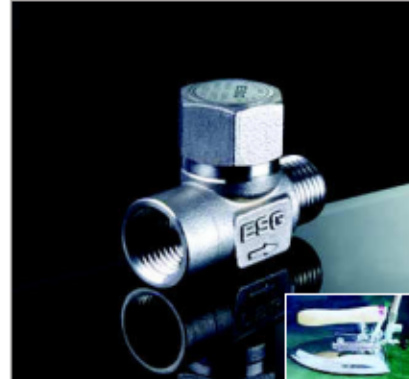
Thermodynamic Steam Trap

DN8 Advantages

1. Small and compact, highly efficient.
 2. Superb energy efficiency.
 3. Easy to install and operate.
- Application: Drip legs, steam tracing, laundry equipment.

DN8 Part list

| NO | Name | Material |
|----|--------|---------------------------|
| 1 | Bonnet | Stainless steel 304 (CF8) |
| 2 | Disk | Stainless steel 420 |
| 3 | O-ring | Silicon rubber |
| 4 | Body | Stainless steel 304 (CF8) |

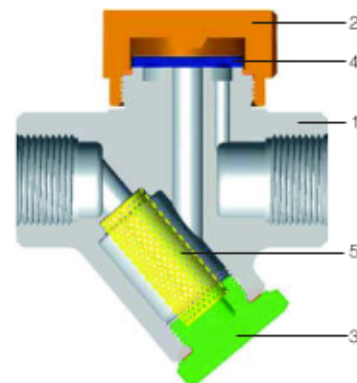


DN15/20/25 Advantages

1. Compact structure.
 2. High durability due to stainless steel inner components and valve body.
 3. Long service life.
- Application: Steam pipelines, iron machines, drying units, etc.

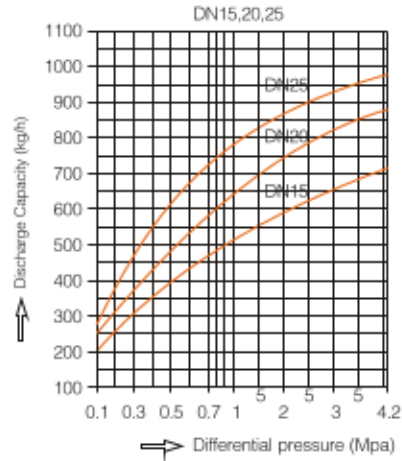
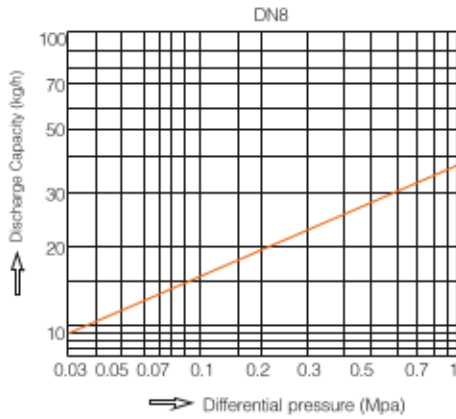
DN15/20/25 Part list

| NO | Name | Material |
|----|-----------------|--------------------------|
| 1 | Body | ASTM CA40 |
| 2 | Bonnet | Stainless steel 304(CF8) |
| 3 | Discharge Bolt | Stainless steel 304(CF8) |
| 4 | Disk | Stainless steel 420 |
| 5 | Strainer Screen | Stainless steel 304 |

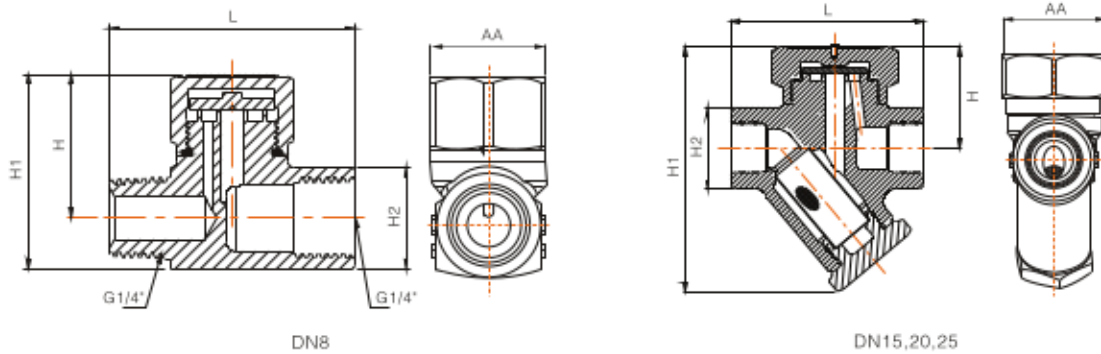


Thermodynamic Steam Trap

Discharge Capacity

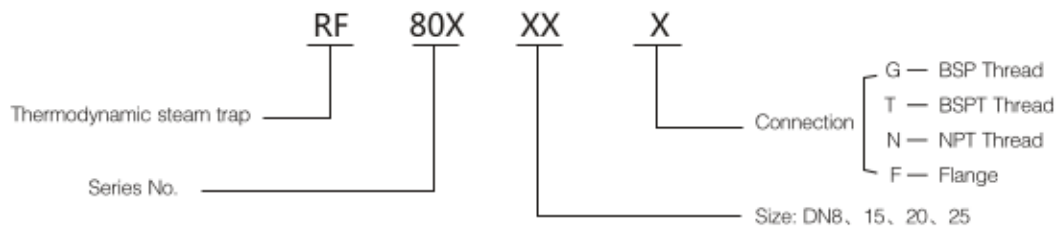


Dimension



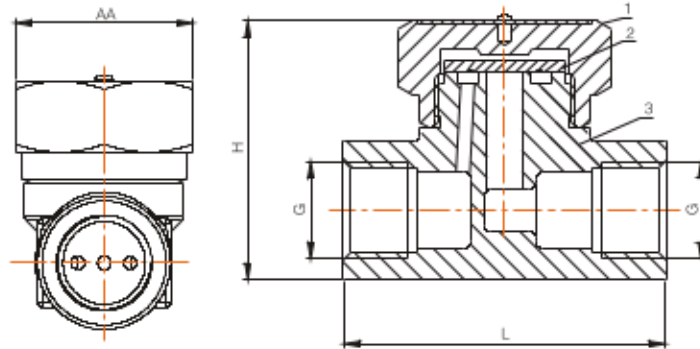
| Size | Thread end | Dimension(mm) | | | | | Operating Pressure (Mpa) | Max. Operating Temp (°C) | Weight (kg) |
|------|------------|---------------|------|-------|------|----|--------------------------|--------------------------|-------------|
| | | L | H | H1 | H2 | AA | | | |
| DN8 | 1/4" | 40 | 23 | 31 | 16.5 | 18 | 0.03-1.0 | 200 | 0.07 |
| DN15 | 1/2" | 78 | 40 | 99.6 | 33 | 44 | 0.15-4.2 | 400 | 0.9 |
| DN20 | 3/4" | 90 | 49.2 | 109.2 | 39 | 48 | | | 1.2 |
| DN25 | 1" | 95 | 57.5 | 121.6 | 45 | 56 | | | 1.7 |

Order Instruction

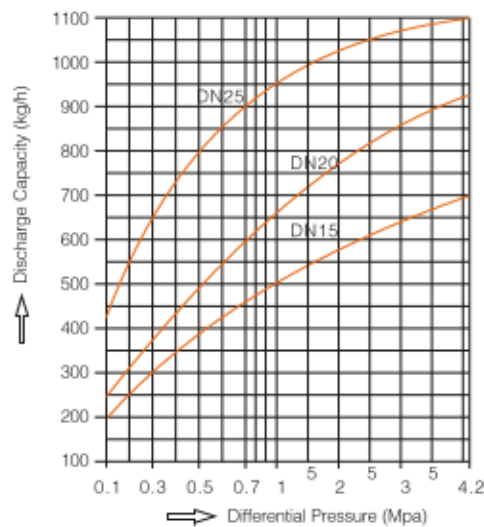


Example: RF 800 25 G
 Means: Steam Trap, Series 800, DN25, BSP thread.

Thermodynamic Steam Trap



Discharge Capacity



Part List

| NO | Name | Material |
|----|--------|--------------------------|
| 1 | Bonnet | Stainless Steel 304(CF8) |
| 2 | Disk | Stainless Steel 420 |
| 3 | Body | ASTM CA40 |

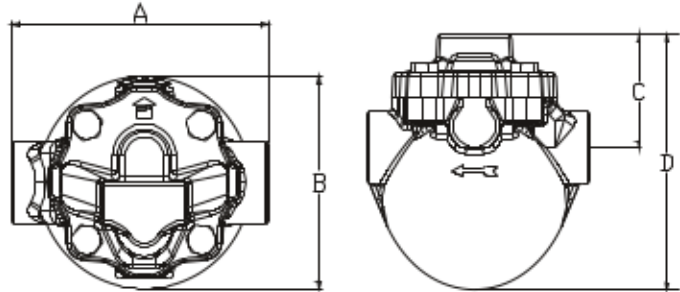
Advantages

1. Compact structure.
 2. High durability due to stainless steel inner components and valve body.
 3. Long service life.
 4. Easy to service and repair.
- Application: Steam pipelines, iron machines, drying units, etc.

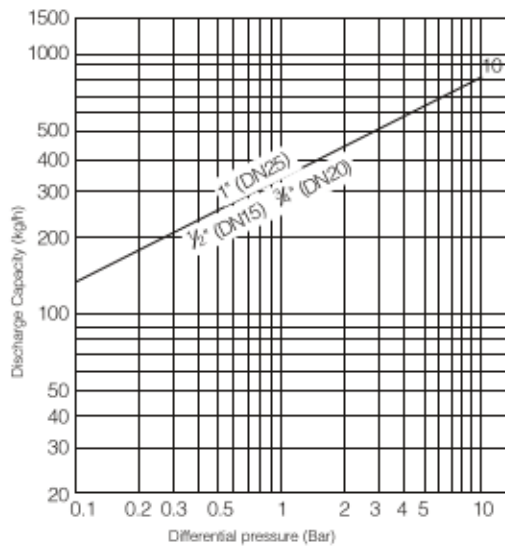
Dimension

| Size | G | L | H | AA | Operating Pressure (Mpa) | Max. Operating Temp (°C) | Weight (Kg) |
|------|------|----|----|----|--------------------------|--------------------------|-------------|
| DN15 | 1/2" | 41 | 70 | 40 | 0.25-4.2 | 400 | 0.5 |
| DN20 | 3/4" | 43 | 80 | 44 | | | 0.8 |
| DN25 | 1" | 52 | 89 | 55 | | | 1.25 |

Ball Float Steam Traps



Discharge Capacity



Advantages

1. Support both horizontal and vertical installation.
2. Stainless steel material with excellent corrosion resistance and durability.
3. Continuous discharge, with no impact from temperature, pressure and flow. Prevent water hammer due to steam condensation.
4. No steam leakage, minimal heat loss.
5. Automatically discharge non-condensing gas to avoid air resistance.
6. Large discharge capacity improves work efficiency.

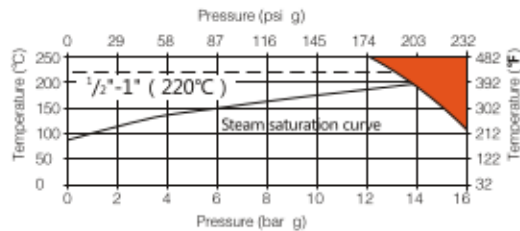
Technical Specification

1. Nominal pressure: PN16
2. PMA Max.Allowable pressure: 16Bar
3. TMA Max.Allowable temperature: 250°C
4. Max.Differential pressure: 10Bar
5. Connection: Thread (BSP, BSPT, NPT)

Dimension

| Size | A | B | C | D |
|------|-----|-----|----|-----|
| DN15 | 145 | 108 | 74 | 169 |
| DN20 | 145 | 108 | 74 | 169 |
| DN25 | 145 | 108 | 74 | 169 |

Operating Condition

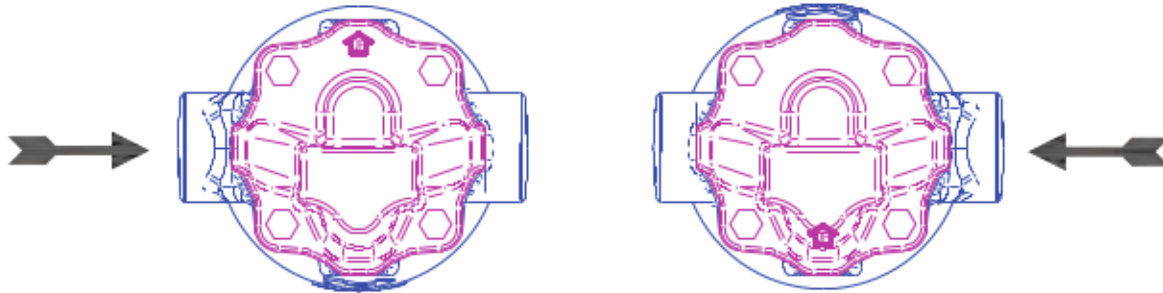


■ The product must not be used under the red condition.

Part List

| | |
|---------------------------|-----------------|
| Body and Bonnet | CF8/CF8M |
| Bolt | 304 |
| Gasket | Soft Graphite |
| Internal component | Stainless Steel |

Ball Float Steam Traps



Attention

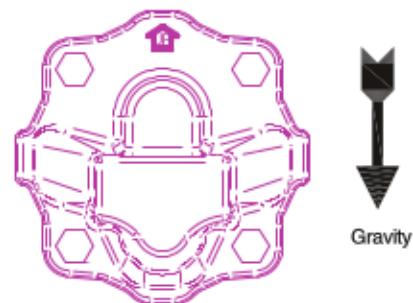
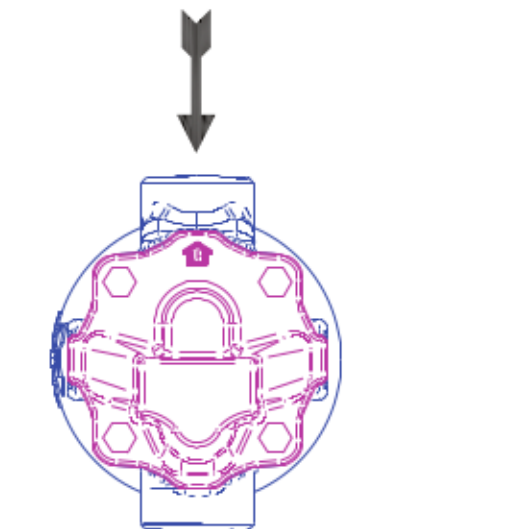
1. The steam trap can be applied in three directions (as shown below), please indicate when ordering.
2. BSP、BSPT、NPT、SW can be provided.
3. Steam lock module is available as add-on. Please indicate before ordering .

Advantages

1. Work efficiently under both light and heavy condensate loads.
2. Large discharge capacity ensures minimal condensation .
3. Strong structure and compact in size.
4. Support both vertical and horizontal installation, reducing installation cost .
5. Stainless steel material, corrosion-resistant, superb service life .

Special note

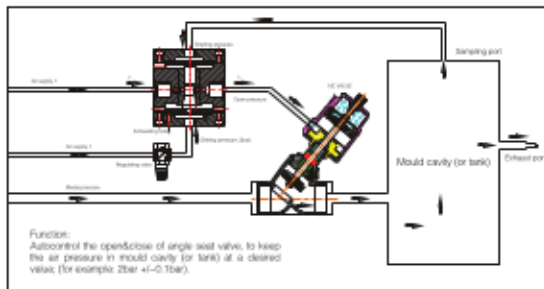
Please keep valve in opposite direction of gravity.
(As shown on the right).



Pneumatic Balancing Valve



Work Flow Chart

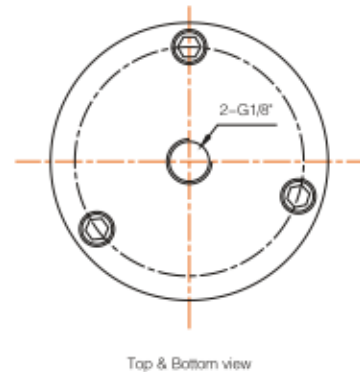
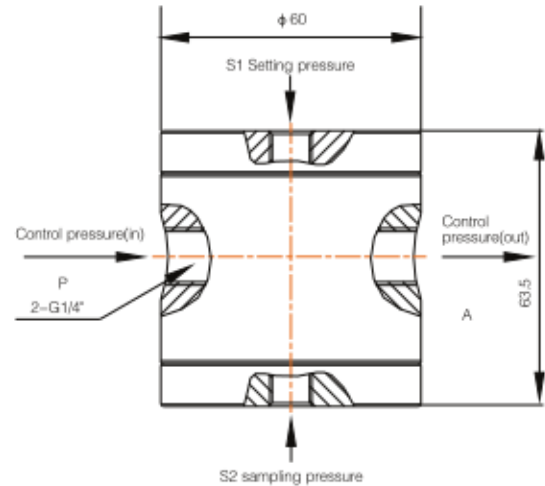


Function Principle

The balancing valve automatically controls the connected valve to maintain a certain working pressure of the equipment. Port A is controlled by fixing air pressure at S1 and adjusting it at S2. When $(S1 - S2) > 0.1\text{bar}$, Port A will open and the connected valve will open. When $(S2 - S1) > 0.1\text{bar}$, port A will close and the connected valve will also close.

Advantages

Automatically adjusting and operating with no manual input required. High sensitivity: when the pressure changes by $\pm 0.1\text{bar}$, balancing valve will auto switch.



Technical Specification

Port Size:

P, A: G1/4", S1, S2: G1/8"

Pressure range:

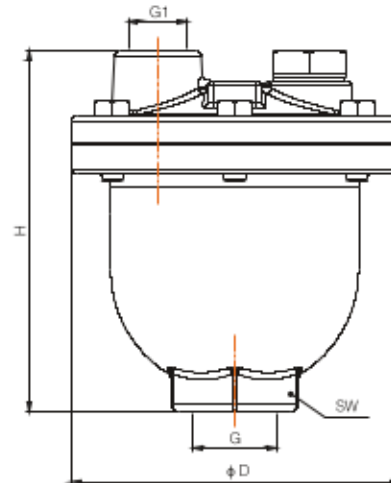
S1 port: setting pressure 0.2–4bar, depending on specific application. Filtered compressed air is commonly used.

S2 port: sampling pressure from equipment pipelines, will be $S1 \pm 0.1\text{bar}$

P, A port: dependent on the control pressure of the connected angle seat valve, normally 2–8bar

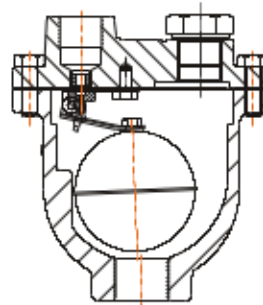
Temperature range: 0 — 100°C

Air Eliminator (Float Type)

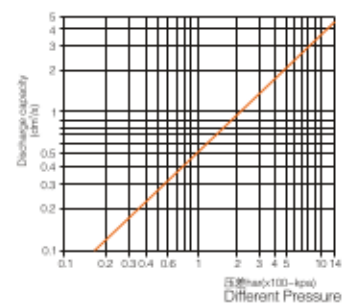


Function Principle

This valve operates automatically due to density difference between gas and liquid. When a mixture of gas and liquid enters from bottom of the valve, gas exits through the outlet at the top, while liquid pushes the float ball up and blocks the gas outlet. This valve could be easily dismantled for maintenance, usually without disturbing pipe connections.



Different pressure/discharge capacity curve



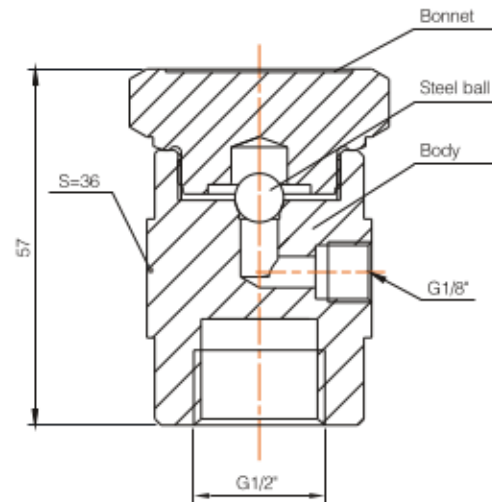
Technical Specification

| | | | |
|-----------------------|-------------|---------------------------|--|
| Fluid pressure | Max 1.6 MPa | Control type | Automatic |
| Body material | CF8M | Medium temperature | -20 °C to + 200 °C |
| Seal material | FKM | Applicable medium | Can be used for hot and cold water systems as well as other types of liquid medium |

Main Dimension

| Size | G | G1 | D | H | SW |
|------|------|------|-----|-----|------|
| 1/2" | 1/2" | 1/2" | 122 | 134 | 47.5 |
| 3/4" | 3/4" | 1/2" | 122 | 134 | 47.5 |
| 1" | 1" | 1/2" | 122 | 134 | 47.5 |

Vacuum Breaker



Function Principle

Under normal condition, a steel ball inside the valve blocks connection to atmosphere due to gravity and pressure from pipeline. When vacuum occurs inside pipeline, the steel ball gets pushed out by atmospheric pressure, allowing air into the pipeline and breaking vacuum inside the pipeline.

Special Note

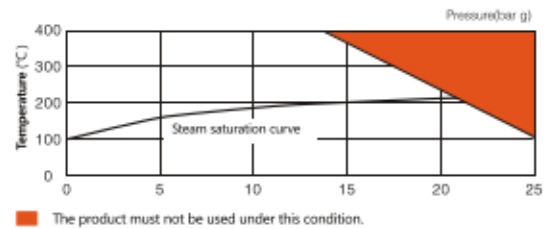
Valve installation: must be installed in vertical position. The system connection port is located at the bottom of the valve. If used for steam system, it must be installed at the top of the system to prevent the valve from being immersed in condensation.

Technical Specification

Valve specification: DN15
 Nominal pressure: PN25
 Body material: 316/304
 Applicable media: Mainly used for steam or liquid system

Operating Condition

Pressure/temperature limits



PMA Max.Allowable Pressure: 25bar, 120°C
 TMA Max.Allowable Temperature: 400°C, 13bar
 Max.Operating Pressure for saturated steam service: PMO:
 21bar
 TMO Max.Operating Temperature: 400°C, 13Bar
 Min.Operating Temperature: 0°C

Diaphragm Valve



Application Industry

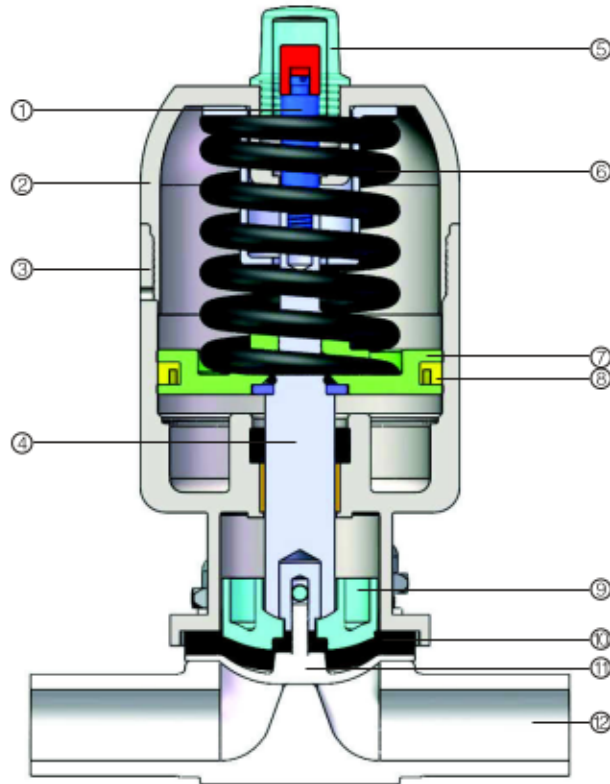
Pharmaceutical, food and beverages, cosmetics, brewing, chemicals, etc.



Typical Applications

Fermentation tank, Preparation vessel, Filling machine, Sterilizing equipment, Aseptic fluid transfer, CIP/SIP, etc.

Diaphragm Valve



- ① Indication Rod (nylon)
- ② Actuator Lid (CF8)
- ③ Actuator Body (CF8)
- ④ Stem (AISI316/304)
- ⑤ Cap (PC)
- ⑥ Spring (Steel 65Mn)
- ⑦ Piston (Alu.alloy)
- ⑧ Piston Seal (Viton)
- ⑨ Valve Core (CF8M/CF8)
- ⑩ Diaphragm 1 (EPDM)
- ⑪ Diaphragm 2 (PTFE)
- ⑫ Valve body (CF8M/CF8)

Technical Specification

Fluid pressure: Max 1.0MPa (145 psi)
 Control pressure: 0.45–0.7MPa (65–102 psi)
 Diaphragm material: EPDM+PTFE
 Body material: SS316L
 Actuator material: SS304 (CF8)
 Internal surface finish: Ra ≤0.4μm, mechanically polished
 Fluid temperature: -5°C – 150°C
 Connection: Welded, Tri-clamp



Diaphragm Valve



Diaphragm Introduction

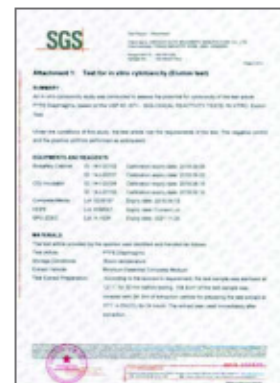
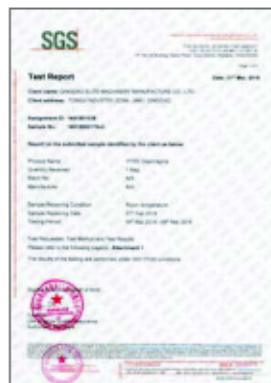
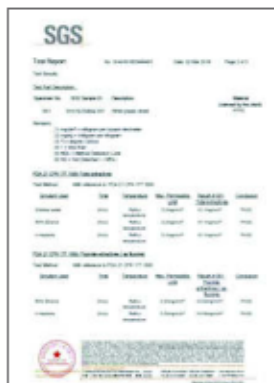
Safety, reliability and durability of diaphragm valves are heavily dependent upon performance of the diaphragm. Diaphragm is the soul of diaphragm valve. PTFE/EPDM two-piece diaphragm is a high-standard diaphragm typically used for aseptic and hygienic applications. PTFE diaphragms are developed and manufactured by ESG. High quality raw materials sourced globally are manufactured into highly dense, smooth and flexible diaphragm products. Our diaphragms are SIP-capable and autoclavable thanks to its high-temperature performance. We have tested our diaphragms through accredited institutions and obtained FDA 21CFR 177.1550 and USP40-NF25 certifications, which correspond to the highest standards in food, beverage and pharmaceutical industries.

ESG ensures its high diaphragm quality through the following measures:

1. All raw materials are sourced from ESG-approved vendors
2. Extensive testing on raw materials by accredited institutions
3. Storage of raw materials under controlled temperature and humidity
4. State-of-the-art manufacturing equipment and facilities
5. Closely monitored, controlled and documented production process
6. Diaphragm testing is conducted with test rigs developed by ESG

Diaphragm certificate

ESG PTFE diaphragms are tested and certified by accredited 3rd party institution (SGS in Switzerland)

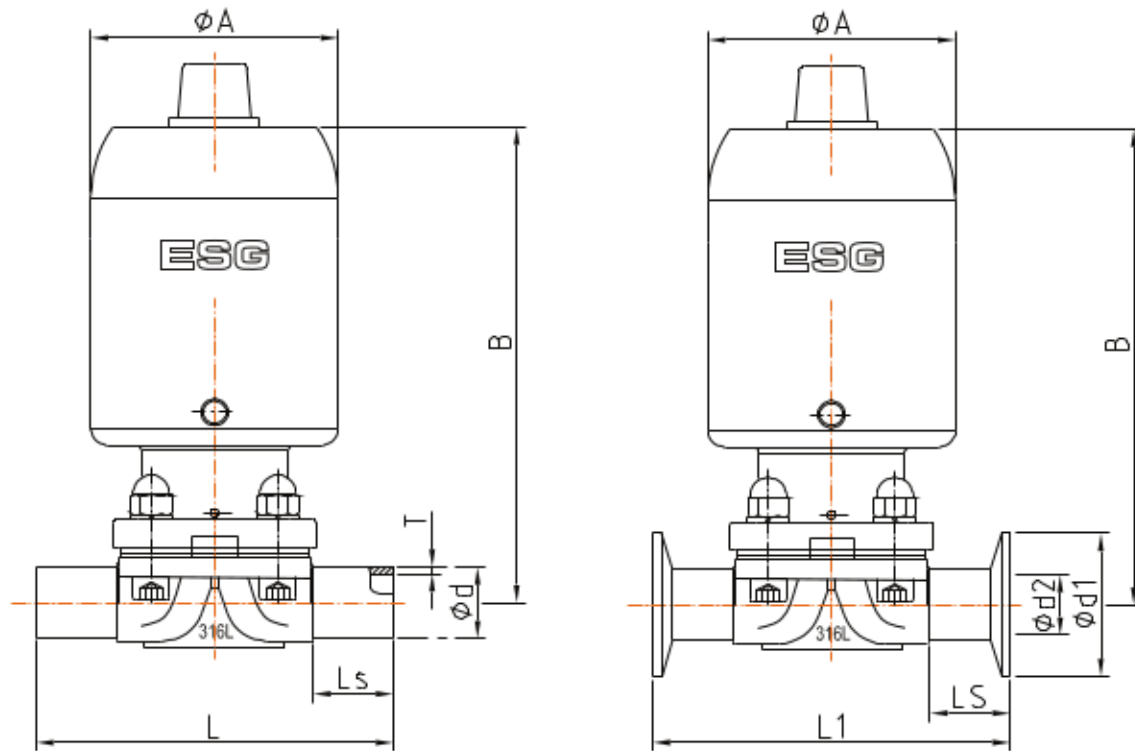


● FDA (Food and Drug Administration) Certificate

● USP (US Pharmacopeia) Certificate

We Can Also Provide Test Certificate In Accordance With EN 10204

Diaphragm Valve



Welded

Tri-clamp

Dimension

| Welded | | | | | | | ASME-BPE | SMS3008 | JIS-G3447 |
|--------|------|----|----------|-----|-----|------|--------------|------------|------------|
| DN | NPS | MG | ϕA | B | L | LS | ϕdxT | ϕdxT | ϕdxT |
| DN15 | 1/2" | 15 | 56 | 106 | 72 | 20 | 12.7 × 1.65 | - | - |
| DN20 | 3/4" | 20 | 64 | 134 | 108 | 29.5 | 19.05 × 1.65 | - | - |
| DN25 | 1" | 25 | 88 | 169 | 130 | 26.5 | 25.4 × 1.65 | 25.0 × 1.2 | 25.4 × 1.2 |

Other specifications available for customization.

| Tri-clamp | | | | | | | ASME-BPE | SMS3008 | JIS-G3447 | |
|-----------|------|----|----------|-----|------|------|-----------|-----------|-----------|-----------|
| DN | NPS | MG | ϕA | B | L1 | LS | $\phi d1$ | $\phi d2$ | $\phi d2$ | $\phi d2$ |
| DN15 | 1/2" | 15 | 56 | 106 | 63.5 | 15.5 | 25 | 9.4 | - | - |
| DN20 | 3/4" | 20 | 64 | 134 | 117 | 34 | 25 | 15.75 | 15.75 | - |
| DN25 | 1" | 25 | 88 | 169 | 127 | 30 | 50.5 | 22.1 | 22.6 | 23 |

Other specifications available for customization.

Seal Materials Chemical Compatibility Guide

| Chemicals | NBR | EPDM | FPM | PTFE |
|---|-----|------|-----|------|
| Acetic acid–pure | – | ○ | – | + |
| Acetone–pure | – | + | – | + |
| Ammonia (gaseous)–pure | – | + | ○ | + |
| Ammonia (liquid)–pure | – | ○ | ○ | + |
| Battery acid (sulphuric acid 20%) | ○ | + | + | + |
| Brine (cooling brine) | + | + | + | + |
| Calcium hydroxide (lime water)–Aqueous | + | + | + | + |
| Calcium hypochlorite (chlorinated lime)–aqueous | – | + | ○ | + |
| Carbon dioxide (dry) pure | + | ○ | + | + |
| Carbon dioxide (humid) | + | ○ | ○ | + |
| Chlorinated lime (calcium hypochlorite)–aqueous | – | + | ○ | + |
| Chlorine bleaching lye (sodium hypo–chlorite)–aqueous | – | + | ○ | + |
| Chlorine (gaseous)–dry | – | – | ○ | + |
| Chlorine (liquid)–pure | – | – | ○ | + |
| Chlorine water (chlorine–humid) | – | – | ○ | + |
| Citric acid–aqueous | + | + | + | + |
| Dextrose (glycose)–aqueous | + | + | + | + |
| Ethanol (ethyl alcohol)–pure | ○ | + | ○ | + |
| Ethyl alcohol (ethanol)–pure | ○ | + | ○ | + |
| Ethyl alcohol + acetic acid | ○ | + | ○ | + |
| Ethyl alcohol–fermented mash | + | + | + | + |
| Ethylene glycol (glycol)–pure | + | + | + | + |
| Formaldehyde solution (formalin)–aqueous | ○ | ○ | ○ | + |

Seal Materials Chemical Compatibility Guide

| Chemicals | NBR | EPDM | FPM | PTFE |
|---|-----|------|-----|------|
| Glycerine–aqueous | + | + | + | + |
| Glycerine–pure | O | + | + | + |
| Inert gases–pure | + | + | + | + |
| Lactic acid–aqueous | O | O | + | + |
| Malic acid–aqueous | + | + | + | + |
| Methanol (methyl alcohol)–pure | – | + | – | + |
| Methyl alcohol (methanol)–pure | – | + | – | + |
| Nitrogen–pure | + | + | + | + |
| Oxygen–pure | O | O | + | + |
| Ozone (humid and dry) | – | O | O | + |
| Silicone oil | + | + | + | + |
| Soda lye (sodium hydroxide)–aqueous | O | + | O | + |
| Sodium carbonate (soda)–aqueous | + | + | + | + |
| Sodium chloride (table salt)–aqueous | + | + | + | + |
| Sodium hydrogen carbonate (sodium bi–carbonate)–aqueous | + | + | + | + |
| Sodium hypochlorite (chlorine bleachinglye)–aqueous | – | O | + | + |
| Starch solution–aqueous | + | + | + | + |
| Toluene–pure | – | – | O | + |
| Water–distilled | + | + | + | + |
| Water (seawater) | + | + | + | + |
| Water vapour (130 °C) | O | + | + | + |
| Yeast–aqueous | + | + | + | + |

+: suitable O: limited suitability –: unsuitable

Limited suitability parts are rated as wear parts and are not included in the standard warranty conditions.