



Pneumatically operated 2/2 way angle seat valve with stainless steel actuator

- Flow optimised stainless steel body with various line connections
- Trusted components for the longest life time
- Stainless steel actuator suitable for demanding environments
- Modular accessory program with stroke limitation and position feedback available

Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with

| | |
|---|--|
|  | Type 8640 ▶ Customized Pneumatic Systems Solutions for the Processing Industries |
|  | Type 8644 ▶ Remote Process Actuation Control System AirLINE |
|  | Type 8697 ▶ Pneumatic control for decentralised automation of ELEMENT process valves |

Type description

The pneumatically operated angle seat valve with stainless steel actuators fulfils the demands of tough process environments. Unrivalled life time and sealing integrity is guaranteed by the trusted self-adjusting spindle sealing. The stainless steel actuator has been designed for tough applications. Laser welding ensures it is both cleanable and robust. With a ducted exhaust air port, the actuator can be operated isolated from the environment to guarantee an optimum life time and hygiene. High flow rates are attained with the optimised stainless steel angle seat body. As part of the Bürkert process valve range a large accessory program is available. All wetted parts comply with the EC Directive 1935/2004, variants with FDA conformity are available on request, also explosion proof variants are available.

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1. General technical data

| Product properties | |
|---|--|
| Dimensions | More detailed information can be found in the chapter “5. Dimensions” on page 7. |
| Material | More detailed information can be found in the chapter “4. Materials” on page 5. |
| Design | Angle seat valve |
| Port connection size | DN10...80; NPS ¾...NPS 3 |
| Safety setting in case of power failure | Normally closed (control function A), normally open (control function B) |
| Flow direction | Flow to open (below seat), Flow to close (above seat) |
| Performance data | |
| Operating pressure | 0...25 bar(g), Vacuum up to -0.9 bar (g) (option), see |
| Nominal pressure | PN25 (DIN EN 1333), Class 150 (DIN EN 1759) |
| Pilot pressure | 2...10.5 bar(g), see “6.1. Fluidic data” on page 12 |
| K_v value | 3.8...140 m ³ /h |
| Media data | |
| Medium | Steam, water, neutral gases, alcohol, oils, fuels, hydraulic fluids, salt solution, alkali solutions, organic solvents |
| Medium temperature | -40...230 °C, see “6.2. Operating limits” on page 15 |
| Viscosity | Max. 600 mm ² /s |
| Control medium | Air, neutral gases |
| Process/Port connection & communication | |
| Port Connections¹⁾ | |
| Threaded connection | G (DIN ISO 228 - 1) NPT (ASME B 1.20.1) Rc (ISO 7 - 1) |
| Welded connection | DIN EN ISO 1127/ISO 4200/DIN 11866 B DIN 11850 2/DIN 11866 A ASME BPE/DIN 11866 C SMS 3008 |
| Clamp connection | DIN 32676 B (pipe ISO 4200) DIN 32676 A (pipe DIN 11850 2) ASME BPE |
| Pilot air port | |
| Actuator size Ø 50(D)...130(P) | Thread G ½ |
| Actuator size Ø 32 (B) | Thread M5 |
| Approvals and certificates | |
| Conformity | Food contact 1935/2004(EG), FDA Drinking water Pressure Equipment Directive Machinery Directive |
| Approvals | Explosion proof ATEX / IECex |
| Material certificate | 2.2, 3.1 |
| Environment and installation | |
| Ambient temperature | -10...130 °C, see “Operating limits for ambient and medium temperature” on page 16 |
| Degree of protection | IP65/67 |
| Installation position | As required, preferably with actuator upright |

2. Circuit functions

CAUTION

Risk of damage due to bursting pipes and bursting equipment when the flow is above the seat. In the case of liquid mediums, water hammer can occur causing pipes and the device to burst.
Do not use valves with flow above the seat for liquid mediums..

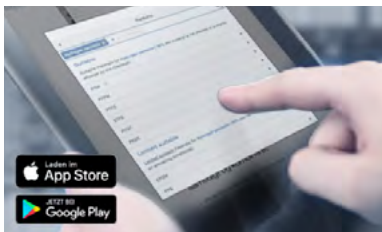
| Control function (CF) | Description | |
|---|--|--|
| Flow direction below seat for liquids, steam and gases | | |
| | CF: A, pneumatically operated on/off valve 2/2 way Flow direction below seat Normally closed by spring force | |
| | CF: B, pneumatically operated on/off valve 2/2 way Flow direction below seat Normally open by spring force | |
| Flow direction above seat for steam and gases | | |
| | CF: A, pneumatically operated on/off valve 2/2 way Flow direction above seat Normally closed by spring force | |

3. Approvals

| Approvals | Description |
|-----------|---|
| | Food contact Materials in contact with the medium conform to EC Regulation 1935/2004 (option) Materials in contact with the medium conform to FDA (option) |
| | Drinking water Suitable for use with drinking water with medium temperature up to 85 °C according to KTW, W270 (option) |
| | Explosion proof As category 2 device suitable for zone 1/21 and zone 2/22 (option) ATEX II 2G Ex h IIC T4 Gb II 2D Ex h IIIC T135 °C Db IECEX Ex h IIC T4 Gb Ex h IIIC T135 °C Db |

4. Materials

4.1. Chemical Resistance Chart – Bürkert resistApp



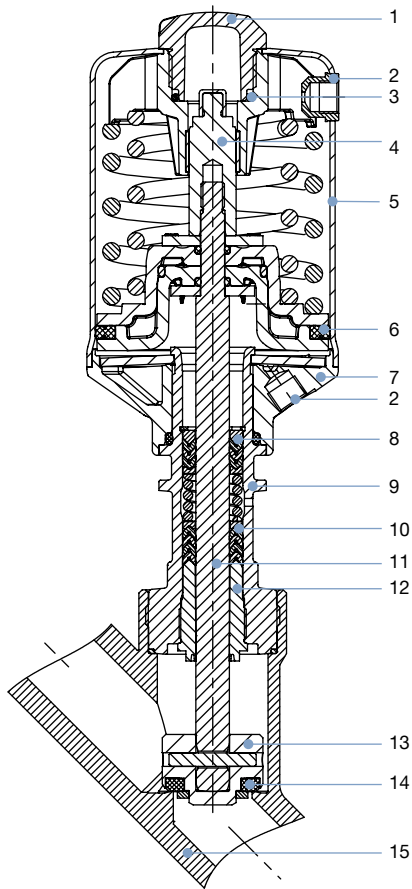
Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

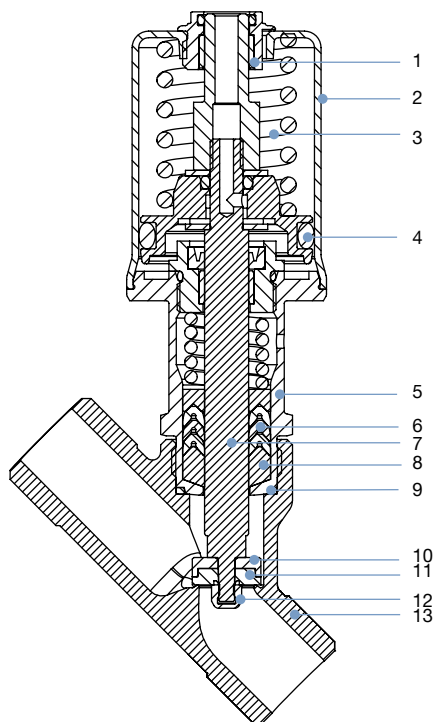
4.2. Material specifications

Actuator size 50(D), 70(M), 90(N), 130(P)



| No. | Element | Material |
|-----|---------------------------|---|
| 1 | Transparent cover | Optical position indicator Polysulfone PSU |
| 2 | Pilot air ports | Threaded bushing G 1/8" Stainless steel 1.4404 (316L) |
| 3 | Spring support | Stainless steel 1.4308 |
| 4 | Spindle extension | Stainless steel 1.4104 |
| 5 | Actuator cover | Stainless steel 1.4404 (316L) |
| 6 | Piston seal | FKM |
| 7 | Actuator base (interface) | Stainless steel 1.4308 |
| 8 | Spring | Stainless steel 1.4310 |
| 9 | Pipe | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 10 | Spindle sealing | PTFE V-Rings (filled), with spring compensation |
| 11 | Spindle | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 12 | Spindle guide | PTFE (filled) for actuator size 50(D)/PEEK for actuator size 70(M), 90(N), 130(P) |
| 13 | Swivel plate | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 14 | Seat seal | PTFE, PEEK (optional), NBR (optional), FKM (optional) |
| 15 | Valve body | Stainless steel CF3M |

Actuator size 32(B)



| No. | Element | Material |
|-----|--|---|
| 1 | Optical position indicator/ Pilot air ports | Stainless steel 1.4104/ Thread M5 |
| 2 | Actuator cover | Stainless steel 1.4404 |
| 3 | Spring | 1.4310 |
| 4 | Piston seal | FPM |
| 5 | Pipe | Stainless steel 1.4404 |
| 6 | Spindle seal | PTFE V-Rings (filled) with spring compen- sation |
| 7 | Spindle | Stainless steel 1.4404 |
| 8 | Wiper | PTFE (filled) |
| 9 | Body seal | Graphite |
| 10 | Seal holder | Stainless steel 1.4404 |
| 11 | Seat seal | PTFE |
| 12 | Dome nut | Stainless steel 1.4404 |
| 13 | Body | Stainless steel CF3M |

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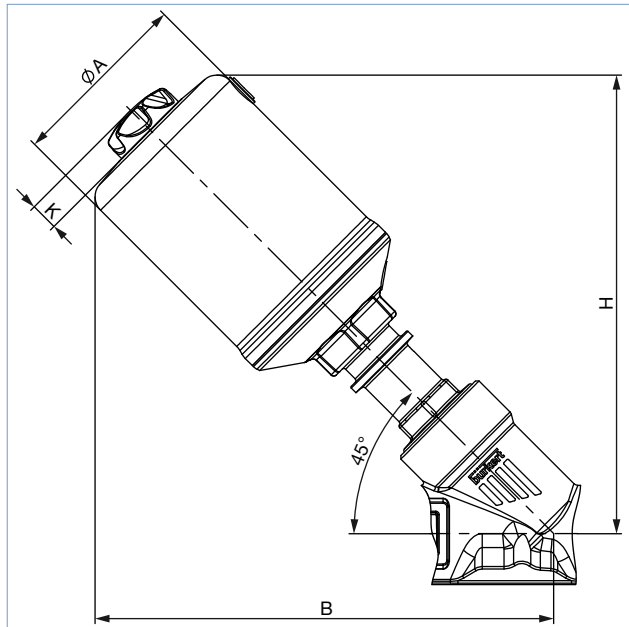
5. Dimensions

5.1. Angle seat valve Type 2060

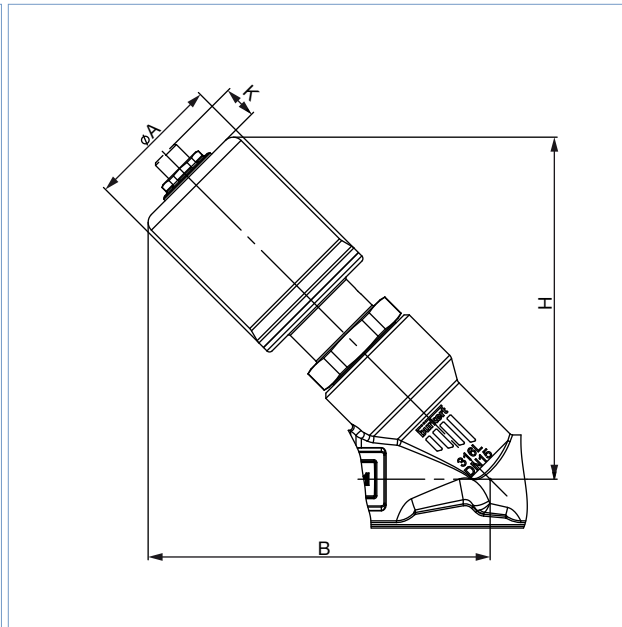
Note:

Dimensions in mm

Actuator size 50(D)...130(P)



Actuator size 32(B)

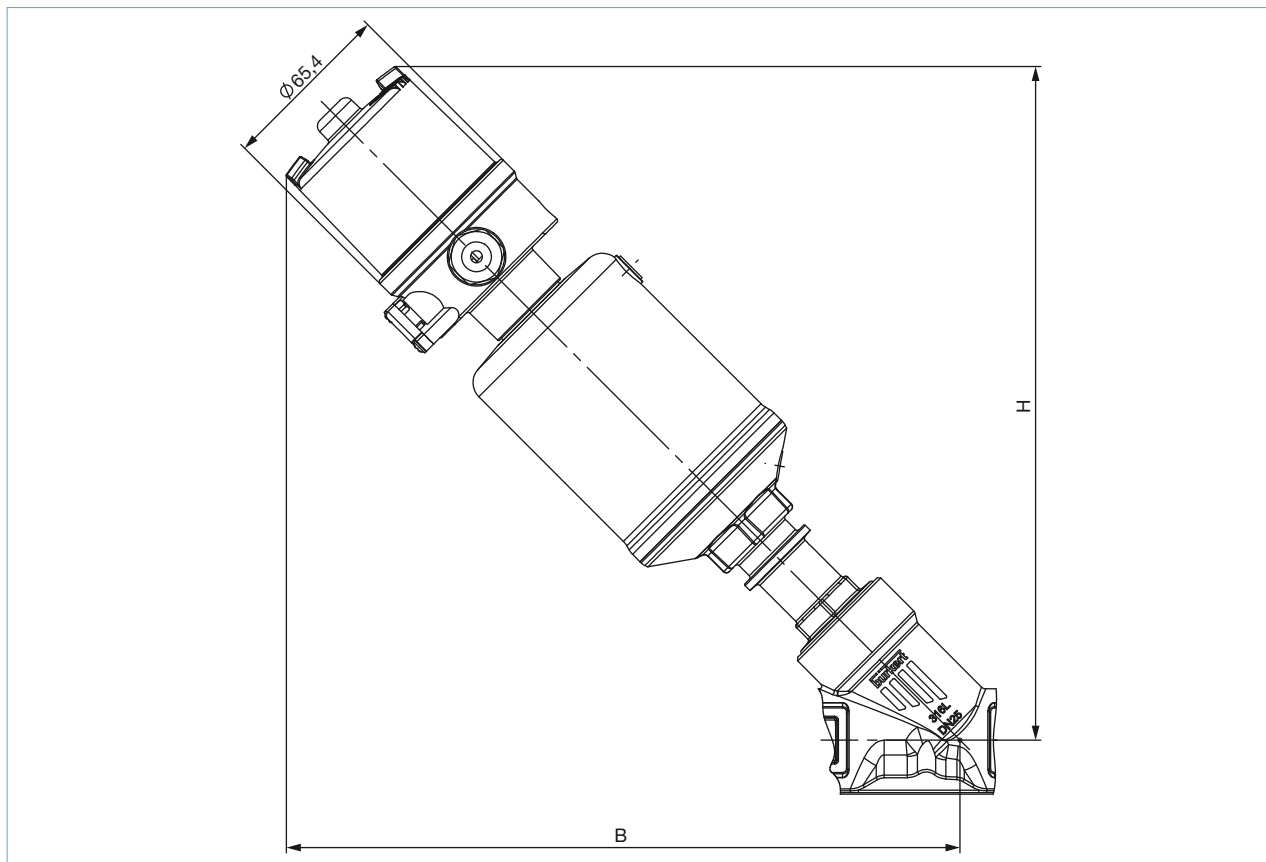


| Nominal diameter (pipe) | Actuator size Ø | Ø A | B/H ^{1.)} | K ^{1.)} | P | |
|-------------------------|-----------------|---------|--------------------|------------------|-----|-------|
| DN | NPS | | | | | |
| 10 | 3/8 | 32 (B) | 36.4 | 87 | 9.1 | M5 |
| | | 50 (D) | 55 | 154 | 11 | G 1/8 |
| | | 70 (M) | 75 | 174 | 11 | G 1/8 |
| 15 | 1/2 | 32 (B) | 36.4 | 98 | 9.1 | M5 |
| | | 50 (D) | 55 | 154 | 11 | G 1/8 |
| | | 70 (M) | 75 | 174 | 11 | G 1/8 |
| 20 | 3/4 | 50 (D) | 55 | 157 | 11 | G 1/8 |
| | | 70 (M) | 75 | 180 | 11 | G 1/8 |
| 25 | 1 | 50 (D) | 55 | 169 | 11 | G 1/8 |
| | | 70 (M) | 75 | 184 | 11 | G 1/8 |
| | | 90 (N) | 96 | 233 | 14 | G 1/8 |
| 32 | 1 1/4 | 70 (M) | 75 | 193 | 11 | G 1/8 |
| | | 90 (N) | 96 | 238 | 14 | G 1/8 |
| | | 130 (P) | 137 | 283 | 14 | G 1/8 |
| 40 | 1 1/2 | 70 (M) | 75 | 196 | 11 | G 1/8 |
| | | 90 (N) | 96 | 242 | 14 | G 1/8 |
| | | 130 (P) | 137 | 286 | 14 | G 1/8 |
| 50 | 2 | 70 (M) | 75 | 214 | 11 | G 1/8 |
| | | 90 (N) | 96 | 257 | 14 | G 1/8 |
| | | 130 (P) | 137 | 301 | 14 | G 1/8 |
| 65 | 2 1/2 | 90 (N) | 96 | 269 | 11 | G 1/8 |
| | | 130 (P) | 137 | 314 | 14 | G 1/8 |
| 80 | 3 | 130 (P) | 137 | 334 | 14 | G 1/8 |

1.) Dimensions for B, H and K are maximum dimensions and can be up to 6 mm smaller depending on the nominal diameter and port connection.

5.2. Valve system On/Off ELEMENT Type 8801-YV

Note:
Dimensions in mm



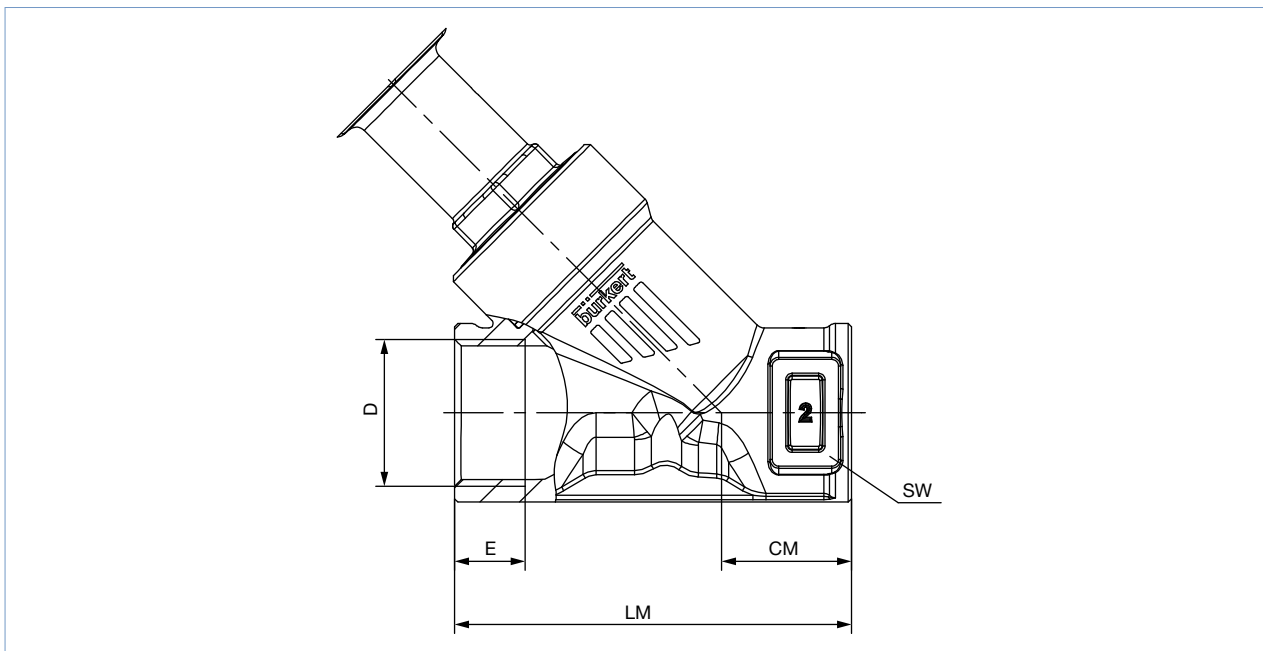
| Nominal diameter | | Actuator size \varnothing | B/H ^{1.)} |
|------------------|-------|-----------------------------|--------------------|
| DN | NPS | | |
| 10 | 3/8 | 50 (D) | 230 |
| | | 70 (M) | 244 |
| 15 | 1/2 | 50 (D) | 230 |
| | | 70 (M) | 244 |
| 20 | 3/4 | 50 (D) | 233 |
| | | 70 (M) | 250 |
| 25 | 1 | 50 (D) | 245 |
| | | 70 (M) | 254 |
| | | 90 (N) | 287 |
| 32 | 1 1/4 | 70 (M) | 263 |
| | | 90 (N) | 301 |
| | | 130 (P) | 332 |
| 40 | 1 1/2 | 70 (M) | 266 |
| | | 90 (N) | 305 |
| | | 130 (P) | 335 |
| 50 | 2 | 70 (M) | 284 |
| | | 90 (N) | 320 |
| | | 130 (P) | 350 |
| 65 | 2 1/2 | 90 (N) | 332 |
| | | 130 (P) | 363 |
| 80 | 3 | 130 (P) | 383 |

1.) Dimensions for B and H are maximum dimensions and can be up to 6 mm smaller depending on the nominal diameter and port connection.

5.3. Body with threaded connection

Note:

Dimensions in mm

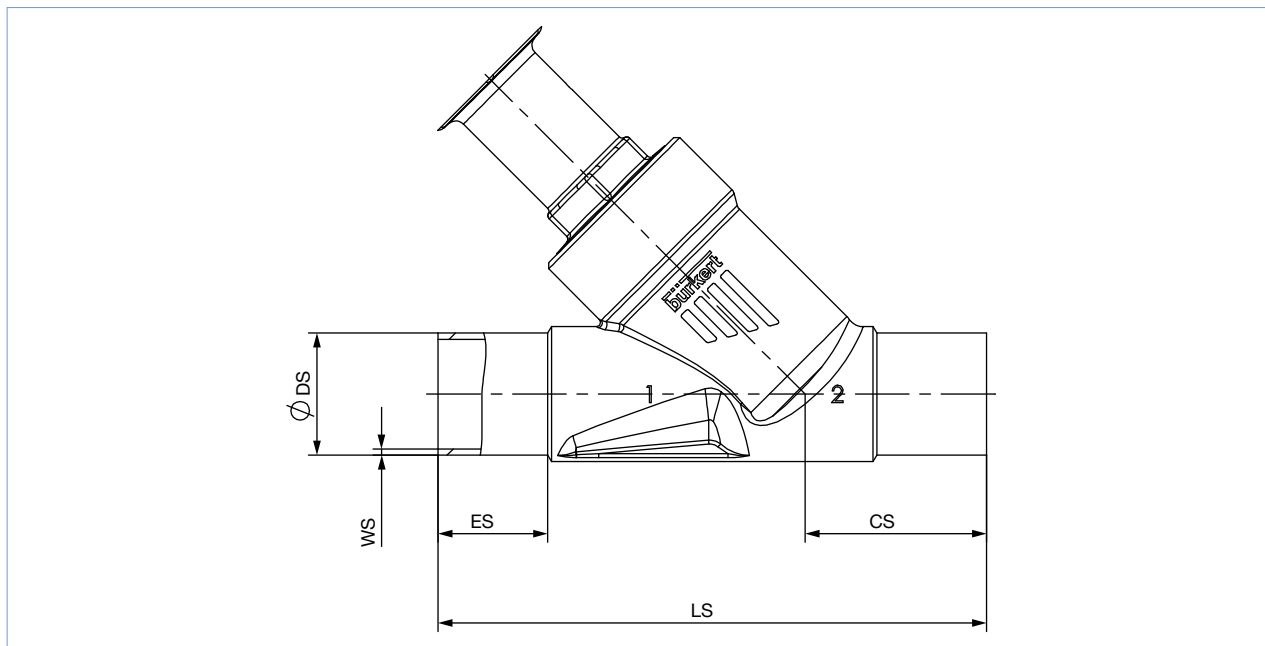


| Nominal diameter (pipe) | G, Rc, NPT (EN ISO 228-1, ISO 7/1/DIN EN 10226-2, ASME B 1.20.1) | | | | | CM | LM | SW |
|----------------------------|--|-----|-------|------|------|-----|-----|----|
| | D | E | | | | | | |
| [DN] | [NPS] | [G] | [NPT] | [Rc] | | | | |
| 15 | ½ | 14 | 13.7 | 13.2 | 24 | 65 | 27 | |
| 20 | ¾ | 16 | 14.0 | 14.5 | 27 | 75 | 34 | |
| 25 | 1 | 18 | 16.8 | 16.8 | 29.5 | 90 | 41 | |
| 32 | 1¼ | 16 | 17.3 | 19.1 | 36 | 110 | 50 | |
| 40 | 1½ | 18 | 17.3 | 19.1 | 35 | 120 | 55 | |
| 50 | 2 | 24 | 17.6 | 23.4 | 45 | 150 | 70 | |
| 65 | 2½ | 26 | 23.7 | 26.7 | 57 | 185 | 85 | |
| 80 | 3 | 28 | - | - | 71 | 220 | 100 | |

5.4. Body with welded connection

Note:

Dimensions in mm



| Nominal diameter (pipe) | DIN EN ISO 1127 ISO 4200 DIN 11866 B | | | | | DIN 11850 2 DIN 11866 A | | | | |
|-------------------------|--|----|-----|------|-----|----------------------------|----|-----|-----|-----|
| | ES | CS | LS | ØDS | WS | ES | CS | LS | ØDS | WS |
| [DN] 15 | 19 | 34 | 100 | 21.3 | 1.6 | 19 | 34 | 100 | 19 | 1.5 |
| 20 | 20 | 39 | 115 | 26.9 | 1.6 | 20 | 39 | 115 | 23 | 1.5 |
| 25 | 26 | 43 | 130 | 33.7 | 2.0 | 26 | 43 | 130 | 29 | 1.5 |
| 32 | 26 | 45 | 145 | 42.4 | 2.0 | 26 | 45 | 145 | 35 | 1.5 |
| 40 | 26 | 49 | 160 | 48.3 | 2.0 | 26 | 49 | 160 | 41 | 1.5 |
| 50 | 26 | 50 | 175 | 60.3 | 2.0 | 26 | 50 | 175 | 53 | 1.5 |
| 65 | 26 | 50 | 210 | 76.1 | 2.3 | 26 | 50 | 210 | 70 | 2 |

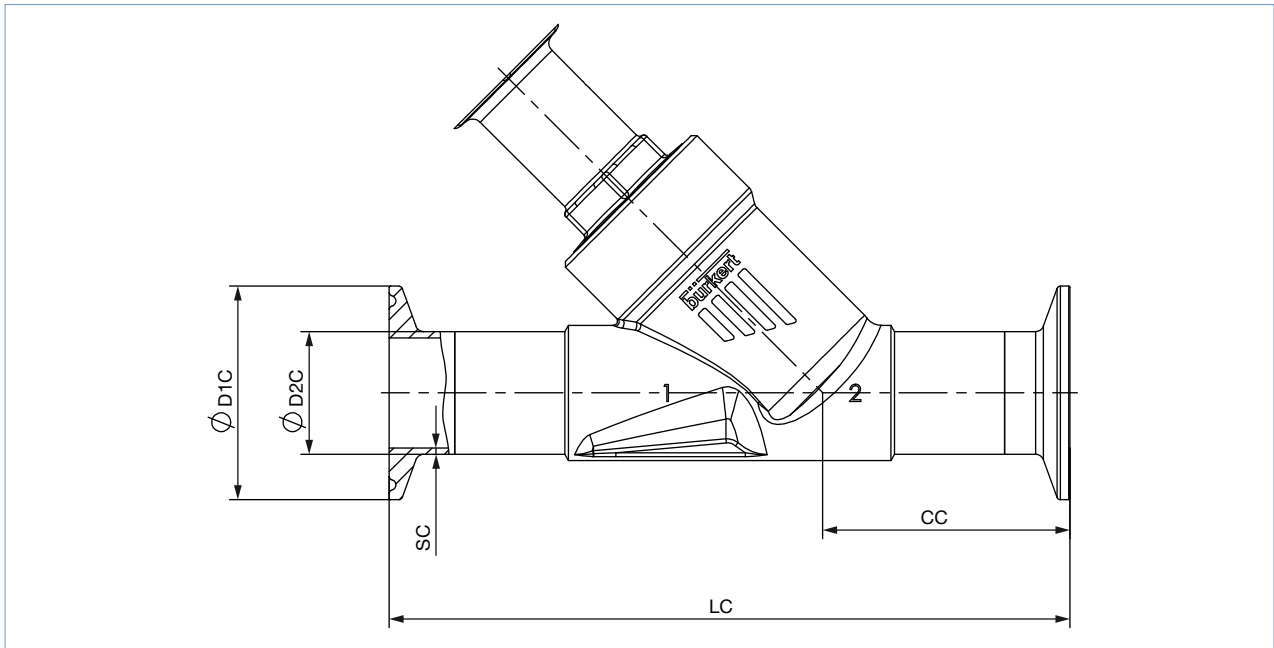
| Nominal diameter (pipe) | ASME BPE DIN 11866 C | | | | |
|-------------------------|-------------------------|----|-----|-------|------|
| [NPS] | ES | CS | LS | ØDS | WS |
| ½ | 30 | 46 | 135 | 12.7 | 1.65 |
| ¾ | 30 | 52 | 145 | 19.05 | 1.65 |
| 1 | 30 | 51 | 152 | 25.4 | 1.65 |
| 1½ | 30 | 60 | 182 | 38.1 | 1.65 |
| 2 | 30 | 64 | 210 | 50.8 | 1.65 |
| 2½ | 26 | 56 | 230 | 63.5 | 1.65 |

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5.5. Body with clamp connection

Note:

Dimensions in mm



| Nominal diameter (pipe) | Clamp: DIN 32676 B | | | | | Clamp: DIN 32676 A | | | | |
|-------------------------|--|------|------|------|-----|----------------------------------|------|------|------|-----|
| | Pipe: EN ISO 1127 1 ISO 4200 DIN 11866 B | | | | | Pipe: DIN 11850 2 DIN 11866 A | | | | |
| [DN] | LC | CC | ØDC1 | ØDC2 | SC | LC | CC | ØDC1 | ØDC2 | SC |
| 15 | 156 | 49.0 | 50.5 | 21.3 | 1.6 | 130 | 49.5 | 19 | 34.0 | 1.5 |
| 20 | 150 | 56.5 | 50.5 | 26.9 | 1.6 | 150 | 57.0 | 23 | 34.0 | 1.5 |
| 25 | 160 | 58.0 | 50.5 | 33.7 | 2.0 | 160 | 58.5 | 29 | 50.5 | 1.5 |
| 32 | 200 | 57.5 | 50.5 | 42.4 | 2.0 | 180 | 58.0 | 35 | 50.5 | 1.5 |
| 40 | 200 | 69.0 | 64.0 | 48.3 | 2.0 | 200 | 69.5 | 41 | 50.5 | 1.5 |
| 50 | 230 | 77.5 | 77.5 | 60.3 | 2.6 | 230 | 78.0 | 53 | 64.0 | 1.5 |

| Nominal diameter (pipe) | Clamp: ASME BPE | | | | |
|-------------------------|-------------------------------|------|------|-------|------|
| | Pipe: ASME BPE DIN 11866 C | | | | |
| [NPS] | LC | CC | ØDC1 | ØDC2 | SC |
| ½ | 130 | 49.0 | 25.0 | 12.7 | 1.65 |
| ¾ | 150 | 56.5 | 25.0 | 19.05 | 1.65 |
| 1 | 160 | 58.0 | 50.5 | 25.4 | 1.65 |
| 1½ | 200 | 69.0 | 50.5 | 38.1 | 1.65 |
| 2 | 230 | 77.5 | 64.0 | 50.8 | 1.65 |

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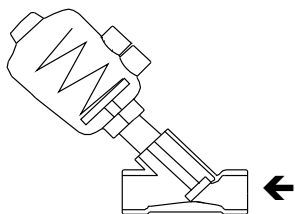
6. Performance specifications

6.1. Fluidic data

Overview of fluidic data for flow below seat (for gases, steam and liquids)

Note:

- K_v value [m³/h]: Measured with water at +20 °C, 1 bar pressure at valve inlet and free outlet
- Pressure data [bar]: Overpressure to atmospheric pressure

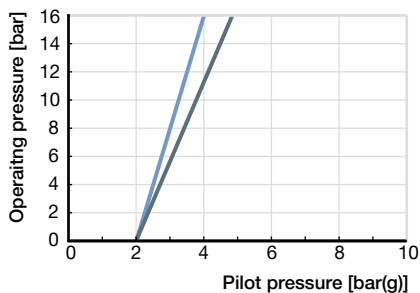


| Nominal diameter | | Actuator size Ø | K_v value | Pilot pressure min. | Max. operating pressure | | |
|------------------|-------|-----------------|---------------------|---------------------|-------------------------|-------------------------|-------------------------|
| | | | | | CF: A | CF: A | CF: B |
| | | | | | Seat seal | | |
| | | | | | PTFE | PEEK | PTFE |
| DN | NPS | [mm] | [m ³ /h] | [bar(g)] | [bar(g)] | [bar(g)] | [bar(g)] |
| 10 | 3/8 | 32 (B) | 2.4 | 5.5 | 16 | – | 16 |
| | | 50(D) | 4.2 | 4.1 | 16 | – | 16 |
| | | 70(M) | 4.8 | 4.8 | 25 | 25 | 25 |
| 15 | 1/2 | 32 (B) | 4 | 5.5 | 11 | – | – |
| | | 50(D) | 4.2 | 4.1 | 16 | – | 16 |
| | | 70(M) | 5 | 4.8 | 25 | 25 | 25 |
| 20 | 3/4 | 50(D) | 8 | 4.1 | 11 | 8.5 | 16 |
| | | 70(M) | 11 | 4.8 | 25 | 25 | 25 |
| 25 | 1 | 50(D) | 14 | 4.1 | 5.2 | – | 16 |
| | | 70(M) | 18 | 4.8 | 16 | 13.5 | 25 |
| | | 90 (N) | 18 | 5 | 25 | 25 | 25 |
| 32 | 1 1/4 | 70(M) | 27 | 4.8 | 8.5 | – | 25 |
| | | 90 (N) | 28 | 5 | 25 | 19.5 | 25 |
| | | 130(P) | 28 | 5 | – | 25 | – |
| 40 | 1 1/2 | 70(M) | 38 | 4.8 | 6 | – | 25 |
| | | 90 (N) | 40 | 5 | 16 | 13.5 | 25 |
| | | 130(P) | 42 | 5 | 25 | 25 | 25 |
| 50 | 2 | 90 (N) | 55 | 5 | 10 | – | 25 |
| | | 130(P) | 62 | 5 | 25 (20 ^{1.)}) | 23 (20 ^{1.)}) | 25 (20 ^{1.)}) |
| 65 | 2 1/2 | 90 (N) | 85 | 5 | 5 | – | 11 |
| | | 130(P) | 95 | 5.6 | 16 | 12.5 | 17 (15 ^{1.)}) |
| 80 | 3 | 130(P) | 140 | 5.6 | 10 | 8 | 11 |

1.) According to pressure equipment directive 2014/68/EU for compressible fluids of group 1 (dangerous gases and vapours according to article 4, paragraph (1), c), i), first indent)

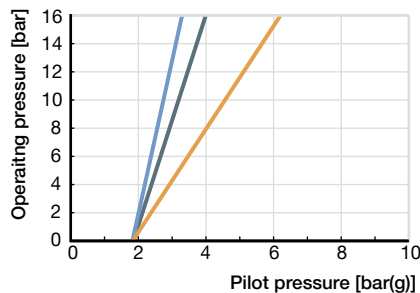
Pilot pressure diagram with flow direction below seat (control function B, seat seal PTFE)

Actuator size: Ø32(B)



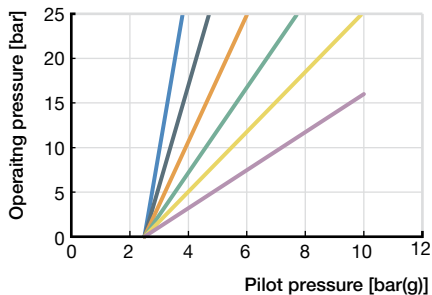
Orifice:
 DN10 — (blue)
 DN15 — (grey)

Actuator size: Ø50(D)



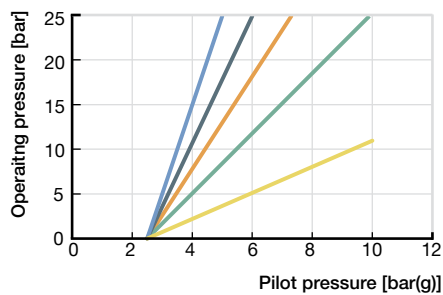
Orifice:
 DN15 — (blue)
 DN20 — (grey)
 DN25 — (orange)

Actuator size: Ø70(M)



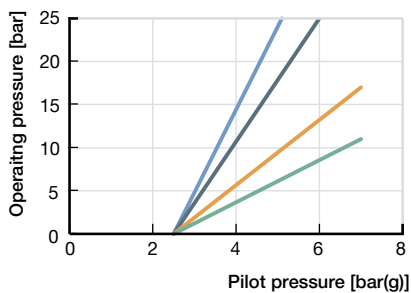
Orifice:
 DN15 — (blue) DN32 — (green)
 DN20 — (grey) DN40 — (yellow)
 DN25 — (orange) DN50 — (purple)

Actuator size: Ø90(N)



Orifice:
 DN25 — (blue) DN50 — (green)
 DN32 — (grey) DN65 — (yellow)
 DN40 — (orange)

Actuator size: Ø130(P)



Orifice:
 DN40 — (blue) DN65 — (orange)
 DN50 — (grey) DN80 — (green)

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Overview of fluidic data with flow above seat (for gases and steam)

Note:

- K_v value [m^3/h]: Measured with water at +20 °C, 1 bar pressure at valve inlet and free outlet
- Pressure data [bar]: Overpressure to atmospheric pressure

CAUTION

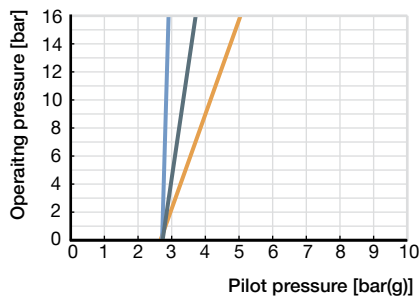
Risk of damage due to bursting pipes and bursting equipment when the flow is above the seat. In the case of liquid mediums, water hammer can occur causing pipes and the device to burst.

Do not use valves with flow above the seat for liquid mediums..

| Nominal diameter/ Orifice | | Actuator size [mm] | K_v value water [m^3/h] | Max. operating pressure bis + 185 °C |
|------------------------------|--------|-----------------------|----------------------------------|---|
| [mm] | [inch] | | | CF: A [bar] |
| 15 | 1/2" | 50(D) | 4.2 | 16 |
| 20 | 3/4" | 50(D) | 8 | 16 |
| 25 | 1" | 50(D) | 14 | 16 |
| 32 | 1 1/4" | 70(M) | 28 | 16 |
| 40 | 1 1/2" | 70(M) | 38 | 16 |
| 50 | 2" | 70(M) | 50 | 12 |
| | | 90(N) | 55 | 15 |

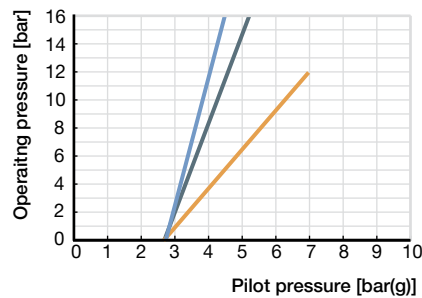
Pilot pressure diagram with flow direction above seat (control function A)

Actuator size: Ø50(D)



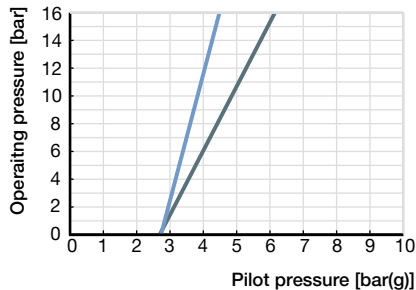
Orifice:
 DN15 — (blue line)
 DN20 — (grey line)
 DN25 — (orange line)

Actuator size: Ø70(M)



Orifice:
 DN32 — (blue line)
 DN40 — (grey line)
 DN50 — (orange line)

Actuator size: Ø90(N)



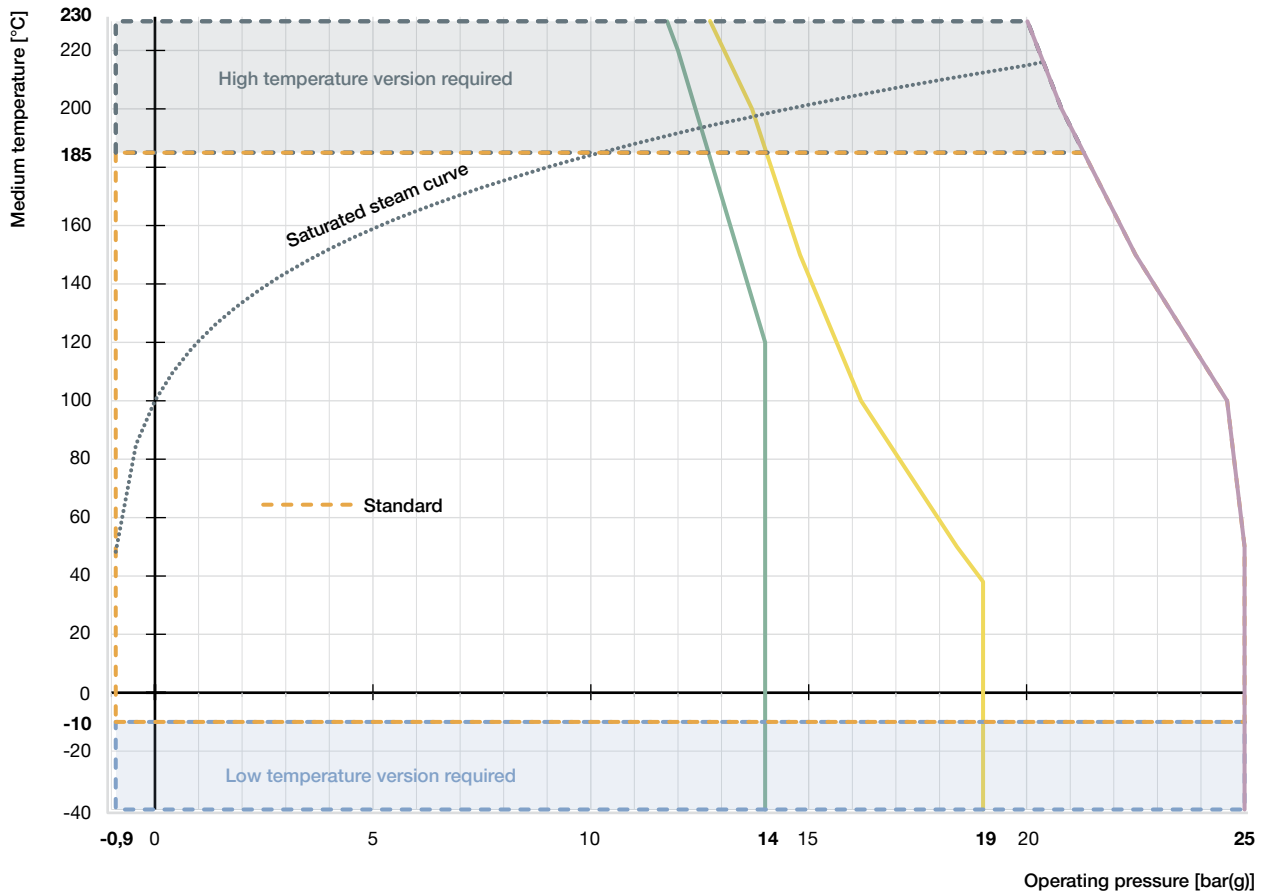
Orifice:
 DN40 — (blue line)
 DN50 — (grey line)

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6.2. Operating limits

Operating limits for medium temperature and operating pressure

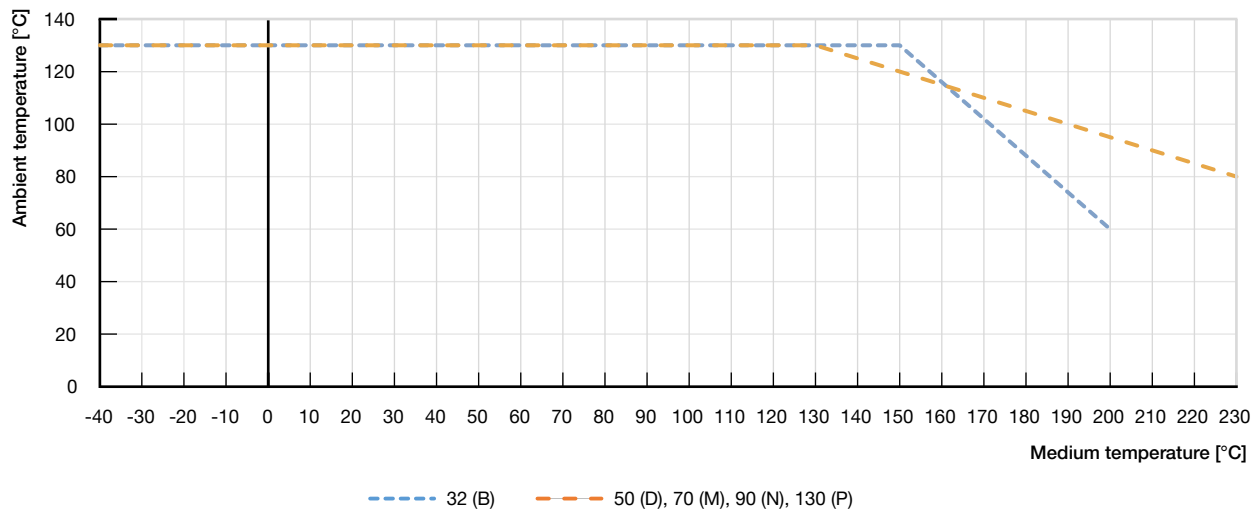
The operating range of Bürkert process valves is in addition to the maximum operating pressures limited by the nominal pressure according to the relevant standard.



- Operating limits for PN25 acc. to DIN EN 12516-1
- Operating limits for flange 10K acc. to JIS B 2220
- Operating limits for Class 150 acc. to ASME B16.34
- ⋯ Saturated steam curve for water

Operating limits for ambient and medium temperature

Stainless steel actuator



Operating limits for optional versions

High temperature version

By adapting the spindle sealing and seat seal in PEEK, this version is suitable for applications with steam, neutral gases and other heat transfer mediums up to 230 °C.

Hot water version

For applications with hot water up to 200 °C a special configuration of the spindle seal increases the lifetime significantly. It is recommended for water temperatures starting at 85 °C.

Vacuum version

Without leakage bore, this design is suitable down to -0.9 bar(g).

Low temperature version

Suitable for minimum medium temperatures down to -40 °C

7. Product accessories

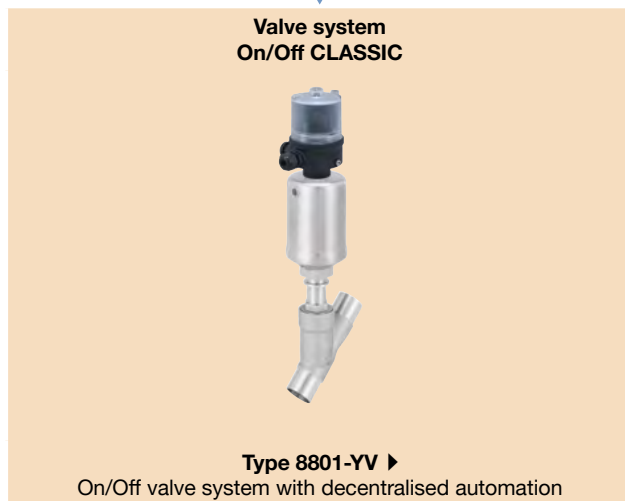
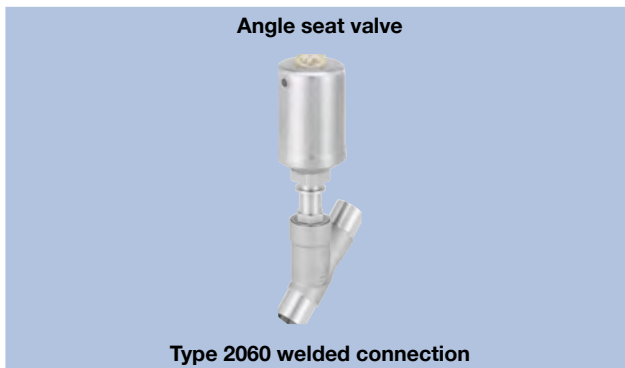
| Electric position feedback sensor | |
|---|---|
| Type 8697 ▶ Actuator size 50(D) ... 130(P) | Description The position feedback Type 8697 is designed for integrated mounting on CLASSIC series 20XX process valves suiting the requirements of hygienic process environment Mechanical or inductive limit switches register the position of the valve Features <ul style="list-style-type: none"> • Compact design • LED position indicator • Mechanical or inductive limit switches for end position registering • Easy to clean chemically resistant housing featuring IP65/IP67, 4X Rating • Optional intrinsically safe version acc. to ATEX Customer benefits <ul style="list-style-type: none"> • Easy and quick installation • High level of signal reliability thanks to self adjusting limit switches • Minimised space requirement in the plant piping for more flexibility in plant design |
|  | |
| Adaptation for proximity switch | |
| Type 2xxx ▶ | Description Various options for the use of inductive proximity switches are available for the actuators of the CLASSIC series: <ul style="list-style-type: none"> • Nipple • Support bracket, 1-fold • Support bracket, 2-fold |
| Stroke limiter | |
| Type 2xxx ▶ | Description Stroke limitations can be used to limit the minimum (min.) and maximum (max.) flow rate of the valves. Different versions are available: <ul style="list-style-type: none"> • Max. Stroke Limitation • Max. and min. stroke limitation with optical position indicator |

8. Networking and combination with other Bürkert products

The angled seat valve Type 2060 can be combined with the feedback positioner Type 8697 to form the valve system On/Off Type 8801-YV.

Note:

- For the configuration of further valve systems please use the product enquiry form at the end of this document.
- You order two components and receive a completely assembled and tested valve.



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9. Ordering information

9.1. Bürkert eShop – Easy ordering and quick delivery



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Bürkert product filter – Get quickly to the right product

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9.3. Ordering chart welded connection

Valve with flow direction below seat





| Control function | Nominal diameter/ Orifice | | Port connection pipe-Ø x wall thick- ness | Actuator size | Pilot pres- sure | Operating pressure bis + 185 °C | Article no. |
|--|------------------------------|------------|---|------------------|---------------------|---------------------------------------|-------------|
| | [mm] | [inch] | | | | | |
| EN ISO 1127/ISO 4200/DIN 11866 series B | | | | | | | |
| CF: A, pneumatically operated on/off valve ¹⁾ | 10 | 3/8 | 17.2 x 1.6 | 32(B) | 5.5...10 | 16 | 387585 |
| | 15 | 1/2 | 21.3 x 1.6 | 32(B) | 5.5...10 | 11 | 387629 |
| | | | | 50(D) | 4.1...10.5 | 16 | 285215 |
| | 20 | 3/4 | 26.9 x 1.6 | 50(D) | 4.1...10.5 | 11 | 285217 |
| | | | | 70(M) | 4.8...10.5 | 25 | 285218 |
| | 25 | 1 | 33.7 x 2.0 | 50(D) | 4.1...10.5 | 5.2 | 285219 |
| | | | | 70(M) | 4.8...10.5 | 16 | 285220 |
| | 32 | 1 1/4 | 42.4 x 2.0 | 70(M) | 4.8...10.5 | 8.5 | 285221 |
| | | | | 90(N) | 5.0...10.5 | 25 | 285222 |
| | 40 | 1 1/2 | 48.3 x 2.0 | 70(M) | 4.8...10.5 | 6 | 285223 |
| | | | | 90(N) | 5.0...10.5 | 16 | 285224 |
| | 50 | 2 | 60.3 x 2.0 | 90(N) | 5.0...10.5 | 10 | 285515 |
| 130(P) | | | | 5.0...7.5 | 25 | 285705 | |
| 65 | 2 1/2 | 76.1 x 2.3 | 90(N) | 5.0...10.5 | 5 | 285227 | |
| | | | 130(P) | 5.6...7.5 | 12 | 285228 | |

| Control function | Nominal diameter/ Orifice | | Port connection pipe-Ø x wall thick- ness | Actuator size | Pilot pres- sure | Operating pressure bis + 185 °C | Article no. |
|--|------------------------------|------------|---|------------------|---|---------------------------------------|-------------|
| | [mm] | [inch] | | | | | |
| CF: B, pneumatically operated on/off valve ^{1.)} | 10 | 3/8 | 17.2 x 1.6 | 32 (B) | 5.5...10 | 16 | 387647 |
| | 15 | 1/2 | 21.3 x 1.6 | 32 (B) | 5.5...10 | 16 | 387651 |
| | | | | 50(D) | See diagram for valves with Flow direction below seat ^{2.)} | 16 | 285500 |
| | 70(M) | 25 | 287565 | | | | |
| | 20 | 3/4 | 26.9 x 1.6 | 50(D) | | 16 | 285501 |
| | | | | 70(M) | | 25 | 287566 |
| | 25 | 1 | 33.7 x 2.0 | 70(M) | 25 | 285503 | |
| | 32 | 1 1/4 | 42.4 x 2.0 | 70(M) | 25 | 285504 | |
| | 40 | 1 1/2 | 48.3 x 2.0 | 70(M) | 25 | 285505 | |
| | 50 | 2 | 60.3 x 2.0 | 70(M) | 16 | 287567 | |
| 65 | 2 1/2 | 76.1 x 2.3 | 90(N) | 11 | 285511 | | |
| DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A | | | | | | | |
| CF: A, pneumatically operated on/off valve ^{1.)} | 10 | 3/8 | 13.0 x 1.5 | 32 (B) | 5.5...10 | 16 | 387605 |
| | 15 | 1/2 | 19.0 x 1.5 | 32 (B) | 5.5...10 | 11 | 387596 |
| | | | | 50(D) | 4.1...10.5 | 16 | 285201 |
| | 20 | 3/4 | 23.0 x 1.5 | 50(D) | 4.1...10.5 | 11 | 285203 |
| | | | | 70(M) | 4.8...10.5 | 25 | 285204 |
| | 25 | 1 | 29.0 x 1.5 | 50(D) | 4.1...10.5 | 5.2 | 285205 |
| | | | | 70(M) | 4.8...10.5 | 16 | 285206 |
| | 32 | 1 1/4 | 35.0 x 1.5 | 70(M) | 4.8...10.5 | 8.5 | 285207 |
| | | | | 90(N) | 5.0...10.5 | 25 | 285208 |
| | 40 | 1 1/2 | 41.0 x 1.5 | 70(M) | 4.8...10.5 | 6 | 285209 |
| | | | | 90(N) | 5.0...10.5 | 16 | 285210 |
| | 50 | 2 | 53.0 x 1.5 | 90(N) | 5.0...10.5 | 10 | 285211 |
| | | | | 130(P) | 5.0...7.5 | 25 | 285212 |
| | 65 | 2 1/2 | 70.0 x 2.0 | 90(N) | 5.0...10.5 | 5 | 285213 |
| 130(P) | | | | 5.6...7.5 | 12 | 285214 | |
| CF: B, pneumatically operated on/off valve ^{1.)} | 10 | 3/8 | 13.0 x 1.5 | 32 (B) | 5.5...10 | 16 | 387633 |
| | 15 | 1/2 | 19.0 x 1.5 | 32 (B) | 5.5...10 | 16 | 387623 |
| | | | | 50(D) | See diagram for valves with Flow direction below seat ^{2.)} | 16 | 287555 |
| | 70(M) | 25 | 287556 | | | | |
| | 20 | 3/4 | 23.0 x 1.5 | 50(D) | | 16 | 287557 |
| | | | | 70(M) | | 25 | 287558 |
| | 25 | 1 | 29.0 x 1.5 | 70(M) | 25 | 287559 | |
| | 32 | 1 1/4 | 35.0 x 1.5 | 70(M) | 25 | 287560 | |
| | 40 | 1 1/2 | 41.0 x 1.5 | 70(M) | 25 | 287561 | |
| | 50 | 2 | 53.0 x 1.5 | 90(N) | 16 | 287562 | |
| 65 | 2 1/2 | 70.0 x 2.0 | 90(N) | 11 | 287563 | | |

| Control function | Nominal diameter/ Orifice | | Port connection pipe-Ø x wall thick- ness | Actuator size | Pilot pres- sure | Operating pressure bis + 185 °C | Article no. |
|---|---|--------|---|------------------|---|---------------------------------------|-------------|
| | [mm] | [inch] | | | | | |
| ASME BPE/DIN 11866 series C | | | | | | | |
| CF: A, pneumatically operated on/off valve ^{1.)} | 10 | 3/8 | 12.7 x 1.65 | 32 (B) | 5.5...10 | 16 | 387603 |
| | 15 | 1/2 | 12.7 x 1.65 | 32 (B) | 5.5...10 | 11 | 387637 |
| | | | | 50(D) | 4.1...10.5 | 16 | 285189 |
| | 20 | 3/4 | 19.05 x 1.65 | 50(D) | 4.1...10.5 | 11 | 285191 |
| | | | | 70(M) | 4.8...10.5 | 25 | 285192 |
| | 25 | 1 | 25.4 x 1.65 | 50(D) | 4.1...10.5 | 5.2 | 285193 |
| | | | | 70(M) | 4.8...10.5 | 16 | 285194 |
| | 40 | 1 1/2 | 38.1 x 1.65 | 70(M) | 4.8...10.5 | 6 | 285195 |
| | | | | 90(N) | 5.0...10.5 | 25 | 285196 |
| | 50 | 2 | 50.8 x 1.65 | 90(N) | 5.0...10.5 | 10 | 285197 |
| | | | | 130(P) | 5.0...7.5 | 25 | 285198 |
| | 65 | 2 1/2 | 63.5 x 1.65 | 90(N) | 5.0...10.5 | 5 | 285199 |
| | | | | 130(P) | 5.6...7.5 | 12 | 285200 |
| | CF: B, pneumatically operated on/off valve ^{1.)} | 10 | 3/8 | 12.7 x 1.65 | 32 (B) | 5.5...10 | 16 |
| 15 | | 1/2 | 12.7 x 1.65 | 32 (B) | 5.5...10 | 16 | On request |
| | | | | 50(D) | See diagram for valves with Flow direction below seat ^{2.)} | 16 | 285499 |
| 20 | | 3/4 | 19.05 x 1.65 | 70(M) | | 25 | 287548 |
| | | | | 50(D) | 16 | 287549 | |
| 25 | | 1 | 25.4 x 1.65 | 70(M) | 25 | 287550 | |
| | | | | 70(M) | 25 | 287551 | |
| 40 | | 1 1/2 | 38.1 x 1.65 | 70(M) | 25 | 287552 | |
| 50 | | 2 | 50.8 x 1.65 | 70(M) | 16 | 285509 | |
| 65 | | 2 1/2 | 63.5 x 1.65 | 90(N) | 11 | 287553 | |

1.) Further information in chapter "2. Circuit functions" on page 4

2.) See diagram in chapter "Pilot pressure diagram with flow direction below seat (control function B, seat seal PTFE)" on page 13

| Further versions on request | |
|---|---|
|  Approval Drinking water, explosion protection |  Pressure Other versions for operating pressures up to 25 bar(g) Vacuum version down to -0.9 bar(g) |
|  Temperature High temperature version up to 230 °C Hot water version up to 200 °C Low temperature version down to -40 °C |  Process connection Threaded/Clamp |

Valves with flow direction above seat

| Control function | Nominal diameter/ Orifice | | Port connection pipe-Ø x wall thick- ness | Actuator size | Pilot pres- sure | Operating pressure bis+ 185 °C | Article no. |
|--|------------------------------|--------|---|------------------|---|--------------------------------------|-------------|
| | [mm] | [inch] | | | | | |
| EN ISO 1127/ISO 4200/DIN 11866 series B | | | | | | | |
| CF: A, pneumatically operated on/off valve ^{1.)} | 15 | ½ | 21.3 × 1.6 | 50(D) | See diagram for valves with Flow direction above seat ^{2.)} | 16 | 287541 |
| | 20 | ¾ | 26.9 × 1.6 | 50(D) | | 16 | 287542 |
| | 25 | 1 | 33.7 × 2.0 | 50(D) | | 16 | 287543 |
| | 32 | 1¼ | 42.4 × 2.0 | 70(M) | | 16 | 287544 |
| | 40 | 1½ | 48.3 × 2.0 | 70(M) | | 16 | 287545 |
| | 50 | 2 | 60.3 × 2.0 | 70(M) | | 16 | 287546 |
| | | | | 90(N) | | 16 | 287547 |
| DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A | | | | | | | |
| CF: A, pneumatically operated on/off valve ^{1.)} | 15 | ½ | 19.0 × 1.5 | 50(D) | See diagram for valves with Flow direction above seat ^{2.)} | 16 | 287534 |
| | 20 | ¾ | 23.0 × 1.5 | 50(D) | | 16 | 287535 |
| | 25 | 1 | 29.0 × 1.5 | 50(D) | | 16 | 287536 |
| | 32 | 1¼ | 35.0 × 1.5 | 70(M) | | 16 | 287537 |
| | 40 | 1½ | 41.0 × 1.5 | 70(M) | | 16 | 287538 |
| | 50 | 2 | 53.0 × 1.5 | 70(M) | | 12 | 287539 |
| | | | | 90(N) | | 16 | 287540 |
| ASME BPE/DIN 11866 series C | | | | | | | |
| CF: A, pneumatically operated on/off valve ^{1.)} | 15 | ½ | 12.7 × 1.65 | 50(D) | See diagram for valves with Flow direction above seat ^{2.)} | 16 | 287528 |
| | 20 | ¾ | 19.05 × 1.65 | 50(D) | | 16 | 287529 |
| | 25 | 1 | 25.4 × 1.65 | 50(D) | | 16 | 287530 |
| | 40 | 1½ | 38.1 × 1.65 | 70(M) | | 16 | 287531 |
| | 50 | 2 | 50.8 × 1.65 | 70(M) | | 12 | 287532 |
| | | | | 90(N) | | 16 | 287533 |

1.) Further information in chapter "2. Circuit functions" on page 4

2.) See diagram in chapter "Pilot pressure diagram with flow direction above seat (control function A)" on page 14

9.4. Ordering chart accessories

Note:

- For further accessories see separate data sheet, Accessories **Type 2XXX** ▶, for the complete range of accessories.
- Accessories must be ordered separately

| Accessories | For actuator size | Article no. |
|---|-------------------|----------------------|
| Stainless steel silencer set (St. st. silencer incl. PTFE sealing ring) | Universal | 696931 |
| Max. stroke limitation | Ø50(D), Ø70(M) | 699550 |
| | Ø90(N), Ø130(P) | 699994 |
| Min./Max. stroke limitation | Ø50(D), Ø70(M) | 699986 |
| | Ø90(N), Ø130(P) | 699998 |
| Proximity switch (single) | Ø50(D), Ø70(M) | 699989 |
| | Ø90(N), Ø130(P) | 699991 |
| Proximity switch (double) | Ø50(D), Ø70(M) | 699990 |
| | Ø90(N), Ø130(P) | 699992 |
| Adaption set Type 8697 | Ø50(D), Ø70(M) | 699551 |
| | Ø90(N), Ø130(P) | 580000 |
| Type 8697 | Universal | Depending on version |
| Angled screw-in connector 45° - M5...Ø 4 mm | Ø32(B) | 903383 |
| Angled screw-in connector 45° - M5...Ø 6 mm | Ø32(B) | 771077 |

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Thank you for your interest in our products! In order to provide you with optimum advice, please fill out the following form and send it to your **Bürkert representative** or e-mail address: info@burkert.com. All information submitted will of course be kept strictly confidential.

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|----------------------|--|--|-----------------|--|
| Company | | | Contact person | |
| Customer no. | | | Department | |
| Street | | | Postcode / Town | |
| Telephone no. | | | Email | |

| Delivery | |
|----------|------------------------|
| Quantity | Required delivery date |

| Operating data | | | | |
|---|-------|-------|------|----|
| Function <small>(Function of the control valve in the process / process description)</small> | | | | |
| Pipeline | DN | | | PN |
| Operating medium | | | | |
| Type of medium | Fluid | Steam | Gas | |
| Operating pressure | | | Unit | |
| Medium temperature | | | °C / | °F |
| Ambient temperature | | | °C / | °F |

| Valve body | | | | |
|-----------------------|---------------------|----------------------------|-----------------|--|
| Construction | Angle seat valve | | Globe valve | |
| Actuator material | Stainless steel/PPS | | Stainless steel | PPS PA |
| Housing material | Stainless steel | | Gunmetal | |
| Seat seal | PTFE EPDM | | NBR Other | PEEK FKM |
| DN / Nominal pressure | DN | | PN | |
| Flow coefficient | K_v | m^3/h | C_v | GPM(US) |
| Connection | Flange | DIN EN 1092-1 | | ANSI B16.5 JIS 10K |
| | Thread | G | | NPT RC |
| | Weld | DIN EN ISO 1127 / ISO 4200 | | DIN 11850 2 / DIN 11866 A ASME BPE |
| | Clamp | ASME BPE | | DIN 32676 A (tube ISO 4200) DIN 32676 B (tube DIN 11850) |
| | Other | | | |

| Valve data | |
|------------------|--|
| Circuit Function | A: Normally closed B: Normally open I: Double acting |
| Control pressure | Min. Max. |

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Approvals / Conformities


| |
|---|
| For use with food (conform to EG regulation no. 1935/2004) |
| For use with food (conform to FDA) |
| Explosion protection in accordance with ATEX II 2GD mech. / IECEx |
| European Gas Appliances Directive (EU) 2016/426, DVGW DIN EN 161 and DIN EN 16678 |
| For potable water according to KTW/W270 |
| Certificate for the fulfilment of the order EN-ISO 10204 2.1 (Article no. 440788) |
| Test report EN-ISO 10204 2.2 (Article no. 803722) |
| Conformity certification for raw material EN-ISO 10204 3.1 (included) |

Additional Requirements / Comment

Automation unit features

For actuator size ø40 to 225 mm

Electrical position feedback Type 8697 ▶

| | | | |
|--|---|--|--|
|  | <ul style="list-style-type: none"> • Optical position indicator • Mechanical or inductive limit switches for end position registering • Optional intrinsically safe version acc. to ATEX / IECEx | | |
| | Electrical connection Cable gland M12 connector ^{1.)} | | Number of end position feedback switches 2x Micro – or inductive |
| Approvals ATEX cat. 3GD, IECEx ATEX cat. 2DG, IECEx Without | | | |
| Position feedback switch Micro switch 24 V DC Micro switch 50...225 V DC/AC Inductive switch 3-wire PNP Inductive switch 2-wire NAMUR Inductive switch 2-wire 24 V DC Without | | | |

1.) Applicable only with inductive switch 3-wire PNP

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