



Pneumatically operated 2/2-way angle seat valve ELEMENT for decentralized automation

- High flow rates
- Long service life
- Easy integration of automation units with ELEMENT
- Flow-optimised stainless steel valve body with sleeve, clamp or weld connection
- Suitable for steam



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

Can be combined with

| | |
|---|--|
|  | Type 8690 ▶ Pneumatic control for decentralised automation of ELEMENT process valves |
|  | Type 8691 ▶ Control head for decentralised automation of ELEMENT process valves |
|  | Type 8695 ▶ Control head for decentralised automation of ELEMENT process valves |
|  | Type 8697 ▶ Pneumatic control for decentralised automation of ELEMENT process valves |
|  | Type 8801 ▶ ELEMENT On/Off Valve Systems with decentralized automation – overview |
|  | Type 8840 ▶ Modular process valve cluster – distribution and collecting |

Type description

The Type 2100 angle seat valve is specially optimised for decentralized process automation and fulfils the tough criteria in process environments. Its unique design allows easy the integration of automation units in all expansion stages, from electrical/optical position feedback to pneumatic control and integrated fieldbus interface. Maximum service life and tightness are achieved by the proven self-adjusting v-seal packing gland. The highly integrated system of valve and automation unit is characterised by its compact and smooth design, integrated pilot air ducts, protection classes IP65/67, NEMA Type 4X and high resistance to chemicals.

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1. General technical data

| Product properties | |
|---|---|
| Dimensions | Detailed information can be found in chapter “5. Dimensions” on page 7. |
| Material | Detailed information can be found in chapter “4. Materials” on page 6. |
| Design | Angle seat valve |
| Nominal diameter | DN 10...DN 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 bar(g)...25 bar(g), vacuum up to -0.9 bar (g) (option), see “6.2. Operating limits” on page 15 |
| Nominal pressure | PN 25 (DIN EN 1333), Class 150 (DIN EN 1759) |
| Pilot pressure | 2.5 bar(g)...10 bar(g), see “6. Performance specifications” on page 12 |
| K _v value | 4.8 m ³ /h...140 m ³ /h, see “6. Performance specifications” on page 12 |
| Medium data | |
| Medium | Steam, water, neutral gases, alcohol, oils, fuels, hydraulic fluids, salt solution, alkali solutions, organic solvents, for fuel gases of category I, II and III acc. to Gas Appliances Regulation (EU) 2016/426 and oxygen |
| Medium temperature | -40 °C...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 connection | |
| 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 | Push-in connector (external Ø 6 mm or ¼") or thread G ⅛" (on request) |
| Approvals and certificates | |
| Conformity | Food contact 1935/2004(EG), FDA Drinking water Pressure equipment directive Gas Appliances Regulation Machinery Directive, see “3. Approvals” on page 5 |
| Explosion proof | Explosion proof ATEX / IECex, see “3. Approvals” on page 5 |
| Material certificate | 2.2, 3.1 |
| Environment and installation | |
| Ambient temperature | -10 °C...100 °C, see “6.2. Operating limits” on page 15 |
| Degree of protection | IP65/67 |
| Installation position | As required, preferably with actuator in upright position |

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 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-position actuator | | |
| Flow direction below seat | | |
| For valves with 3-position actuator an adjustable middle position is possible (option) | | |
| | CF: A, pneumatically operated 3-position valve 3/4-way Flow direction below seat Normally closed by spring force | |

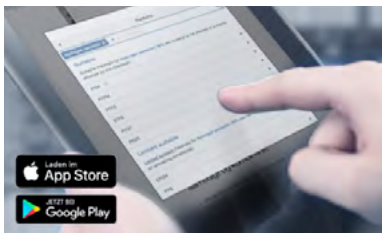
DTS 1000496323 EN Version: G Status: RL (released | freigegeben | valide) printed: 09.03.2023

3. Approvals

| Approvals | Description |
|--|---|
| FDA  | Food contact Materials in contact with the medium conform to EC Regulation 1935/2004 Materials in contact with the medium conform to FDA (option) |
|  | Drinking water Suitable for use with drinking water for medium temperatures up to 85 °C in accordance with the Drinking Water Ordinance §17 and the assessment principles of the Federal Environment Agency (option). |
|  | Oxygen Suitable for use with gaseous oxygen with medium temperature up to 60 °C and operating pressure up to 20 bar(g) (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 |
|  | Fuel gases Approval according to the European Gas Appliance Regulation (EU) 2016/426, DVGW DIN EN 161 and DIN EN 16678, Class A or Class D, suitable for medium temperature 0...+160 °C, ambient temperature -10...+60 °C and operating pressure 0...16 bar(g) (option) |
|  | Safety requirements Evaluation of functional safety according to IEC 61508 (on request) |

4. Materials

4.1. Chemical Resistance Chart – Bürkert resistApp



Bürkert resistApp – Chemical Resistance Chart

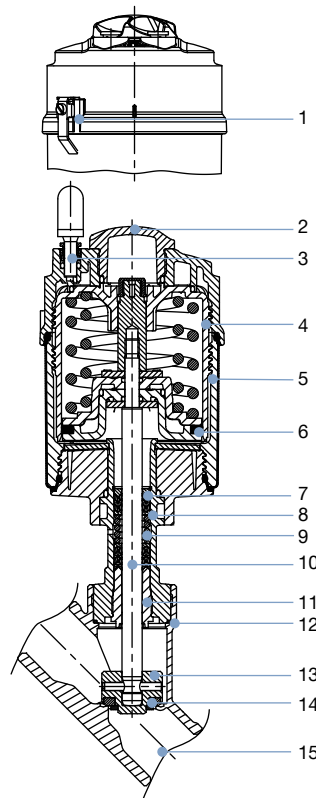
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

Start Chemical Resistance Check

4.2. Material specifications

Note:

The lubricants for the spindle seal and actuator are classified acc. to NSF H1.



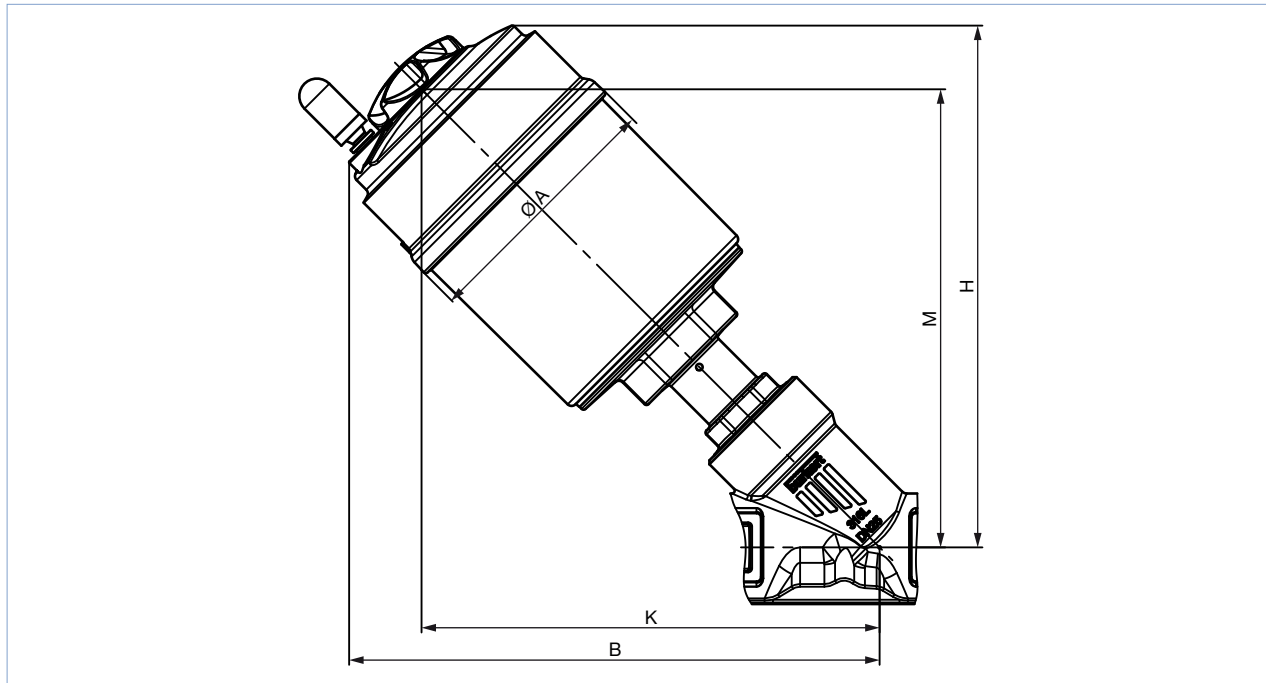
| No. | Element | Material |
|-----|----------------------------|---|
| 1 | Ground terminal | Stainless steel 1.4301/1.4305 only for ATEX version |
| 2 | Optical position indicator | Optical position indicator Polysulfone PSU |
| 3 | Pilot air ports | Push-in connector PP (Standard) On request: Thread G 1/8" Stainless steel 1.4305 |
| 4 | Actuator | PPS |
| 5 | Cover | Stainless steel 1.4561 (316Ti) |
| 6 | Piston seal | FKM |
| 7 | Spring | Stainless steel 1.4310 |
| 8 | Pipe | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 9 | Spindle seal | PTFE V-Rings (filled), with spring compensation |
| 10 | Spindle | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 11 | Spindle guide | PEEK |
| 12 | Body seal | Graphite, PTFE (Option) |
| 13 | Swivel plate | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 14 | Seat seal | PTFE, PEEK (Option) |
| 15 | Valve body | Stainless steel CF3M |

5. Dimensions

5.1. Actuator

Note:

Dimensions in mm, unless otherwise stated



| Nominal diameter (pipe) | | Actuator size | Ø A | B ^{1.)} | H ^{1.)} | K/M ^{1.)} |
|-------------------------|-------|---------------|------|------------------|------------------|--------------------|
| DN | NPS | [mm] | | | | |
| 10 | 3/8 | 50(D) | 64.5 | 166 | 163 | 147 |
| | | 70(M) | 91 | 182 | 178 | 156 |
| 15 | 1/2 | 50(D) | 64.5 | 166 | 163 | 147 |
| | | 70(M) | 91 | 182 | 178 | 156 |
| 20 | 3/4 | 50(D) | 64.5 | 174 | 171 | 155 |
| | | 70(M) | 91 | 189 | 186 | 163 |
| 25 | 1 | 50(D) | 64.5 | 175 | 173 | 156 |
| | | 70(M) | 91 | 191 | 188 | 165 |
| | | 90(N) | 120 | 229 | 228 | 203 |
| 32 | 1 1/4 | 70(M) | 91 | 201 | 197 | 174 |
| | | 90(N) | 120 | 243 | 242 | 217 |
| | | 130(P) | 159 | 293 | 293 | 254 |
| 40 | 1 1/2 | 70(M) | 91 | 204 | 201 | 178 |
| | | 90(N) | 120 | 246 | 245 | 220 |
| | | 130(P) | 159 | 296 | 296 | 257 |
| 50 | 2 | 70(M) | 91 | 223 | 219 | 196 |
| | | 90(N) | 120 | 262 | 261 | 236 |
| | | 130(P) | 159 | 312 | 312 | 273 |
| 65 | 2 1/2 | 90(N) | 120 | 274 | 273 | 248 |
| | | 130(P) | 159 | 324 | 324 | 285 |
| 80 | 3 | 130(P) | 159 | 344 | 344 | 305 |

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

Valve system On/Off ELEMENT

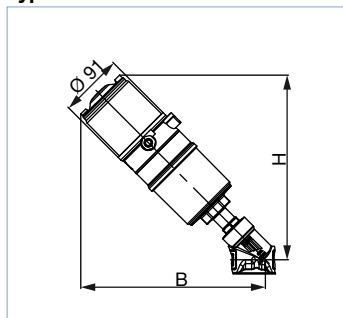
Actuator with control head and pneumatic controls/position feedback

Note:

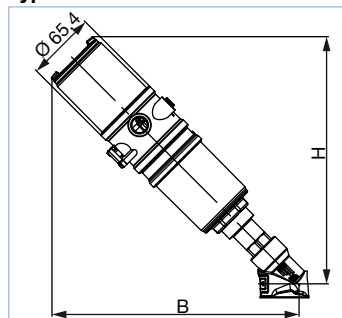
- More information see “7. Product accessories” on page 17
- Dimensions in mm, unless otherwise stated

Control head

Type 8691

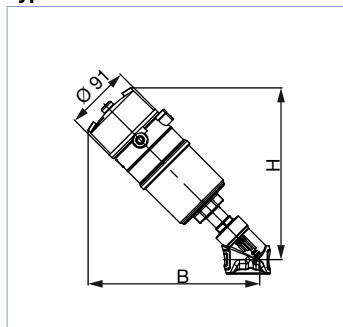


Type 8695

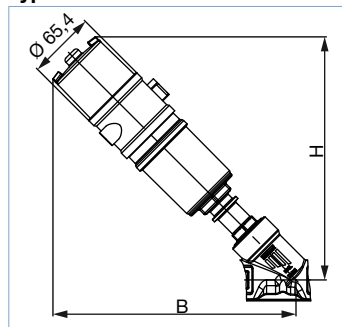


Pneumatic control unit/Position feedback

Type 8690



Type 8697



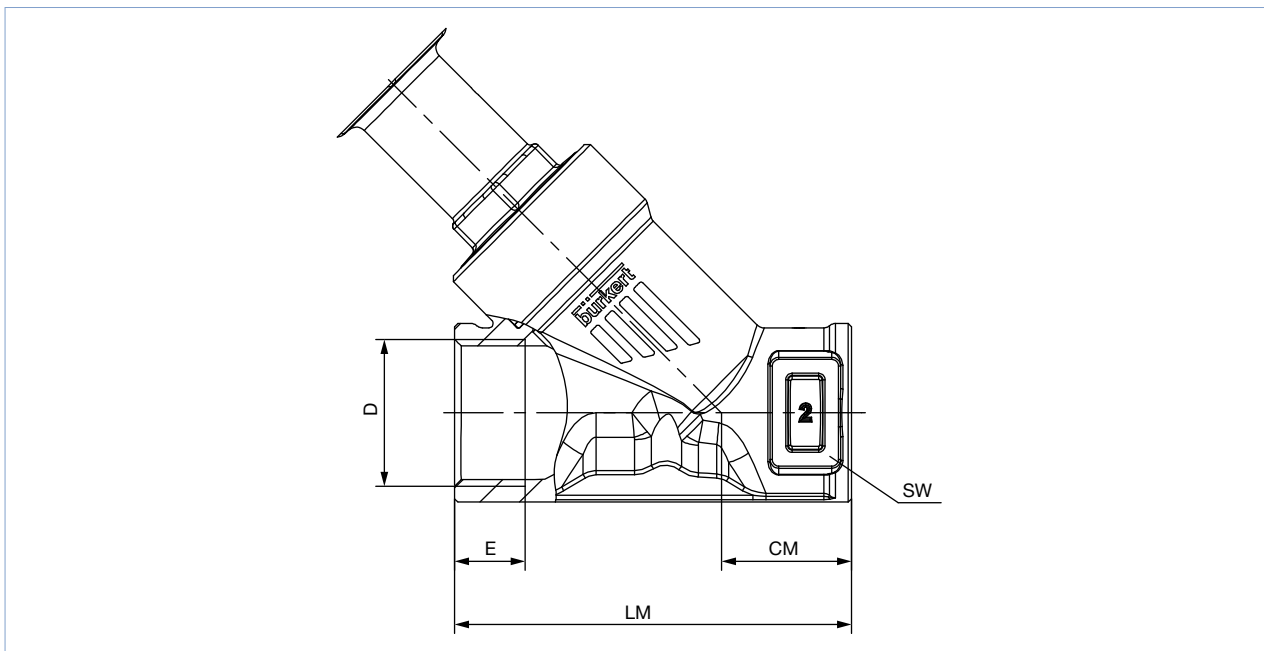
| Nominal diameter (pipe) | | Actuator size [mm] | B/H ¹⁾ with | |
|-------------------------|-------|-----------------------|------------------------|--------------|
| DN | NPS | | 8690 or 8697 | 8691 or 8695 |
| 10 | 3/8 | 50(D) | 226 | 239 |
| | | 70(M) | 232 | 256 |
| 15 | 1/2 | 50(D) | 226 | 239 |
| | | 70(M) | 232 | 256 |
| 20 | 3/4 | 50(D) | 234 | 247 |
| | | 70(M) | 240 | 264 |
| 25 | 1 | 50(D) | 236 | 249 |
| | | 70(M) | 242 | 266 |
| | | 90(N) | 276 | 303 |
| 32 | 1 1/4 | 70(M) | 252 | 275 |
| | | 90(N) | 294 | 318 |
| | | 130(P) | 328 | 353 |
| 40 | 1 1/2 | 70(M) | 255 | 279 |
| | | 90(N) | 297 | 321 |
| | | 130(P) | 334 | 358 |
| 50 | 2 | 70(M) | 274 | 297 |
| | | 90(N) | 313 | 337 |
| | | 130(P) | 351 | 374 |
| 65 | 2 1/2 | 90(N) | 325 | 349 |
| | | 130(P) | 362 | 386 |
| 80 | 3 | 130(P) | 382 | 406 |

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

5.2. Body with threaded connection

Note:

Dimensions in mm, unless otherwise stated



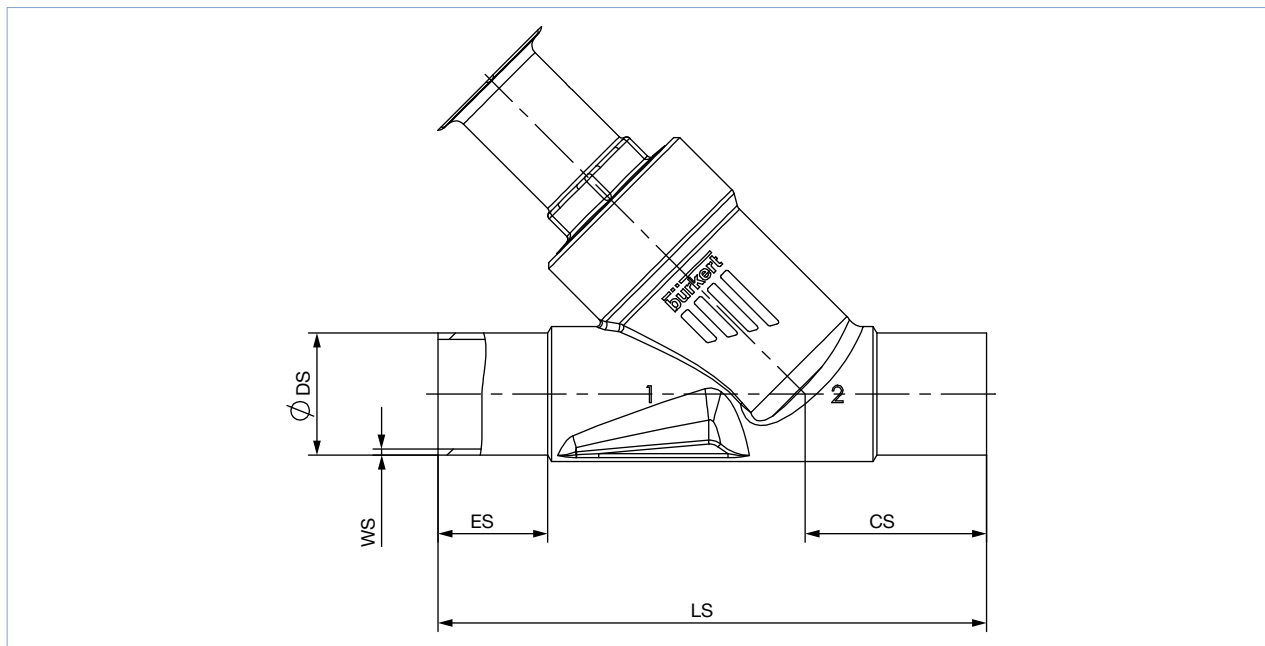
| Nominal diameter (pipe) | G (DIN ISO 228 - 1), NPT (ASME B 1.20.1), Rc (ISO7 - 1) | | | | | CM | LM | SW |
|-------------------------|---|----|------|------|------|-----|-----|----|
| | D | E | G | NPT | Rc | | | |
| DN | NPS | | | | | | | |
| 15 | ½ | 14 | 13.7 | 13.2 | 24 | 65 | 27 | |
| 20 | ¾ | 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 | |

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5.3. Body with welded connection

Note:

Dimensions in mm, unless otherwise stated



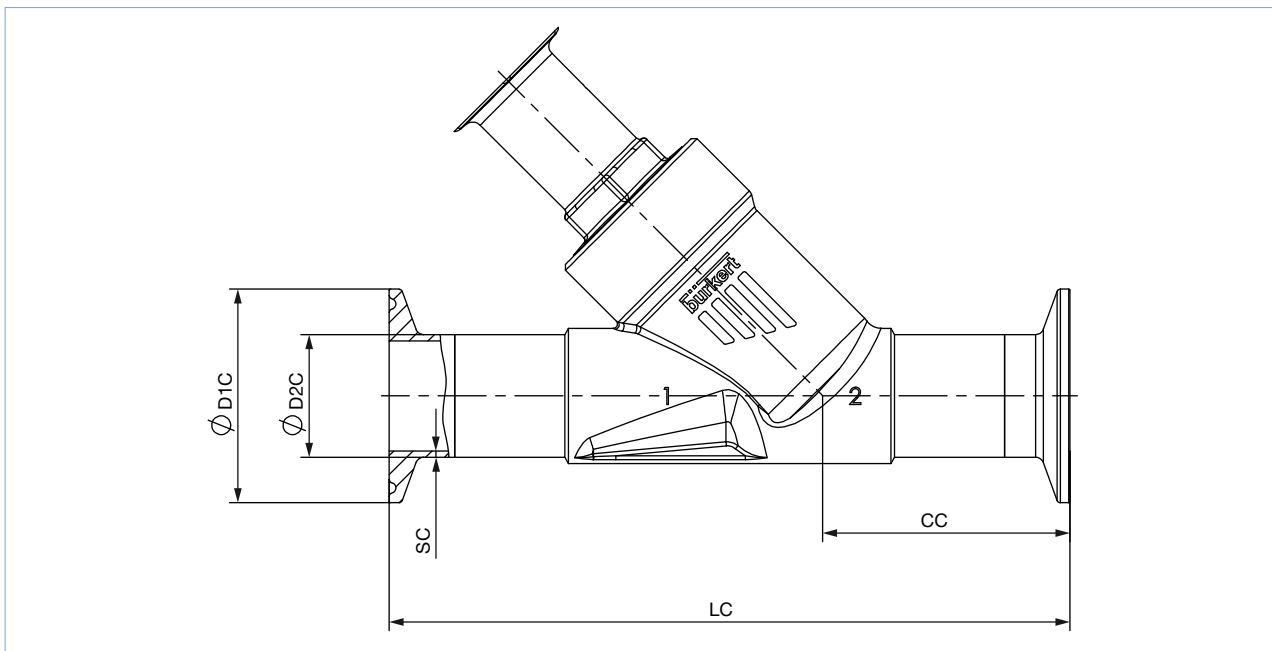
| Nominal diameter (pipe) | DIN EN ISO 1127 ISO 4200 DIN 11866 B | | | | | DIN 11850 2 DIN 11866 A | | | | |
|-------------------------|--|----|-----|------|-----|----------------------------|----|-----|----|-----|
| | DN | ES | CS | LS | ØDS | WS | ES | CS | LS | ØDS |
| 15 | 19 | 34 | 100 | 21.3 | 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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5.4. Body with clamp connection

Note:
Dimensions in mm



| Nominal diameter (pipe) | Clamp: DIN 32676 B | | | | | Clamp: DIN 32676 A (DN 15 similar DIN 32676 B) | | | | |
|-------------------------|--|------|-------|-------|-----|--|------|-------|-------|-----|
| | Pipe: EN ISO 1127 1 ISO 4200 DIN 11866 B | | | | | Pipe: DIN 11850 2 DIN 11866 A | | | | |
| DN | LC | CC | ØD1 C | ØD2 C | SC | LC | CC | ØD1 C | ØD2 C | SC |
| 15 | 156 | 49.0 | 50.5 | 21.3 | 1.6 | 130 | 49.5 | 34.0 | 19 | 1.5 |
| 20 | 150 | 56.5 | 50.5 | 26.9 | 1.6 | 150 | 57.0 | 34.0 | 23 | 1.5 |
| 25 | 160 | 58.0 | 50.5 | 33.7 | 2.0 | 160 | 58.5 | 50.5 | 29 | 1.5 |
| 32 | 200 | 57.5 | 50.5 | 42.4 | 2.0 | 180 | 58.0 | 50.5 | 35 | 1.5 |
| 40 | 200 | 69.0 | 64.0 | 48.3 | 2.0 | 200 | 69.5 | 50.5 | 41 | 1.5 |
| 50 | 230 | 77.5 | 77.5 | 60.3 | 2.6 | 230 | 78.0 | 64.0 | 53 | 1.5 |

| Nominal diameter (pipe) | Clamp: ASME BPE | | | | |
|-------------------------|-------------------------------|------|-------|-------|------|
| | Pipe: ASME BPE DIN 11866 C | | | | |
| NPS | LC | CC | ØD1 C | ØD2 C | 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 liquids and gases)

Note:

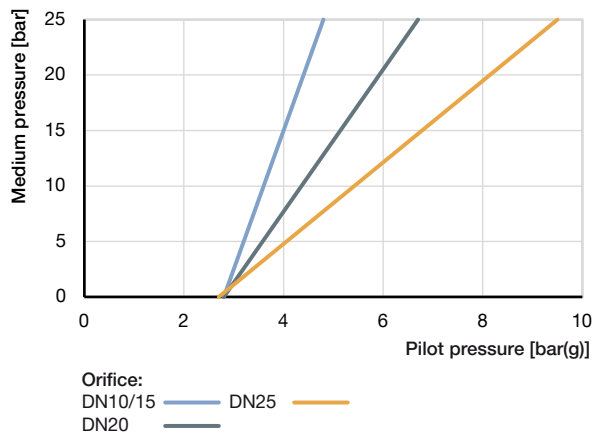
- K_v value [m^3/h]: Measured with water at +20 °C, 1 bar pressure at valve inlet and free outlet
- Pressure data [bar]: Overpressure to atmospheric pressure

| Nominal diameter | | Actuator size | K_v value | Pilot pressure min. | Operating pressure max. [bar(g)] | | |
|------------------|-------|---------------|-------------|---------------------|----------------------------------|-------------------------|-------------------------|
| DN | NPS | | | | CF: A | CF: B | |
| | | [mm] | [m^3/h] | | Seat seal | | |
| | | | | CF: A [bar(g)] | PTFE | PEEK | PTFE |
| 10 | 3/8 | 50(D) | 4.8 | 5.2 | 25 | 25 | 25 |
| | | 70(M) | 4.8 | 5 | 25 | 25 | 25 |
| 15 | 1/2 | 50(D) | 5 | 5.2 | 25 | 25 | 25 |
| | | 70(M) | 5 | 5 | 25 | 25 | 25 |
| 20 | 3/4 | 50(D) | 10 | 5.2 | 16 | 13.5 | 25 |
| | | 70(M) | 11 | 5 | 25 | 25 | 25 |
| 25 | 1 | 50(D) | 14 | 5.2 | 9 | – | 25 |
| | | 70(M) | 18 | 5 | 16 | 13.5 | 25 |
| | | 90(N) | 18 | 5 | 25 | 25 | 25 |
| 32 | 1 1/4 | 70(M) | 27 | 5 | 8.5 | – | 25 |
| | | 90(N) | 28 | 5 | 25 | 19.5 | 25 |
| | | 130(P) | 28 | 5 | – | 25 | – |
| 40 | 1 1/2 | 70(M) | 38 | 5 | 6 | – | 25 |
| | | 90(N) | 40 | 5 | 16 | 13.5 | 25 |
| | | 130(P) | 42 | 4.9 | 25 | 25 | 25 |
| 50 | 2 | 70(M) | 52 | – | – | – | 16 |
| | | 90(N) | 55 | 5 | 10 | 8 | 25 |
| | | 130(P) | 62 | 5 | 25 (20 ^{1.)}) | 23 (20 ^{1.)}) | 25 (20 ^{1.)}) |
| 65 | 2 1/2 | 90(N) | 85 | 5 | 5 | – | 14 |
| | | 130(P) | 95 | 5.6 | 16 (15 ^{1.)}) | 12.5 | 16 (15 ^{1.)}) |
| 80 | 3 | 130(P) | 140 | 5.6 | 10 | 8 | 11 |

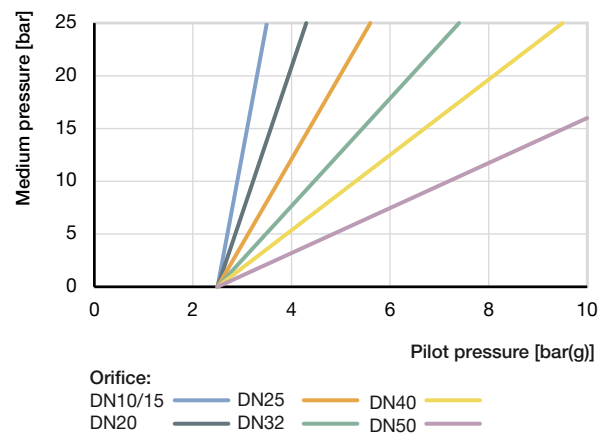
1.) According to pressure equipment directive 2014/68/EU for compressible fluids of group 1 (dangerous gases and vapours acc. to Article 4, paragraph (1), c), i), first indent)

Pilot pressure diagram with flow direction below seat (Control function B)

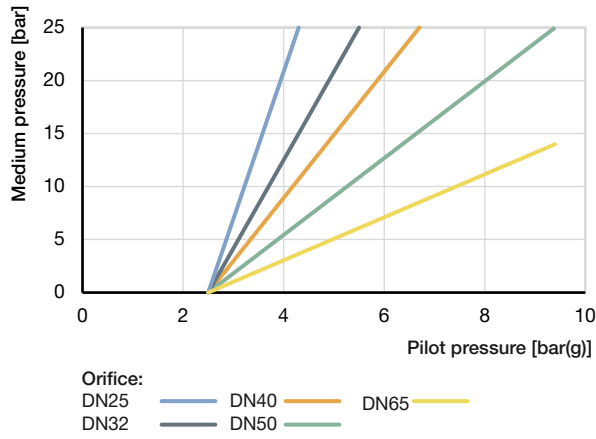
Actuator size: Ø50



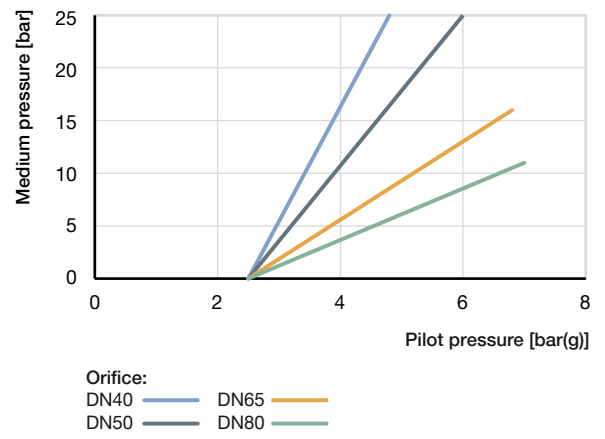
Actuator size: Ø70



Actuator size: Ø90



Actuator size: Ø130



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

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..

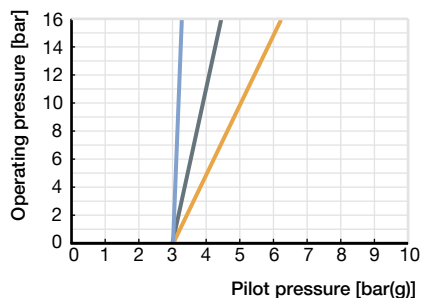
Note:

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

| Nominal diameter DN | Actuator size [mm] | K_v value [m³/h] | Operating pressure max. up to +185 °C CF: A [bar(g)] PTFE |
|------------------------|-----------------------|-----------------------|--|
| 15 | 50(D) | 5 | 16 |
| | 70(M) | 5.1 | 16 |
| 20 | 50(D) | 10 | 16 |
| | 70(M) | 12 | 16 |
| 25 | 50(D) | 15 | 16 |
| | 70(M) | 19 | 16 |
| 32 | 70(M) | 28 | 16 |
| 40 | 70(M) | 38 | 16 |
| | 90(N) | 40 | 16 |
| 50 | 70(M) | 50 | 12 |
| | 90(N) | 55 | 16 |

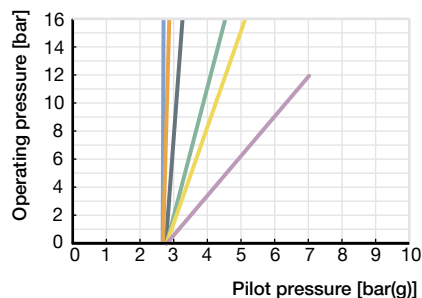
Pilot pressure diagram with flow direction above seat (Control function A)

Actuator size: Ø50



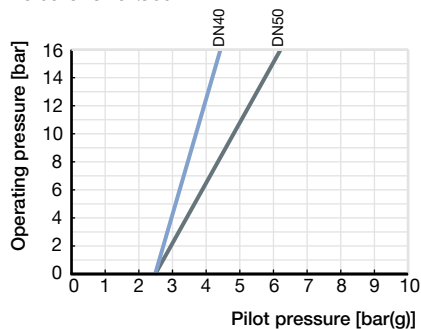
Orifice:
 DN15 — DN25 —
 DN20 —

Actuator size: Ø70



Orifice:
 DN15 — DN32 —
 DN20 — DN40 —
 DN25 — DN50 —

Actuator size: Ø90



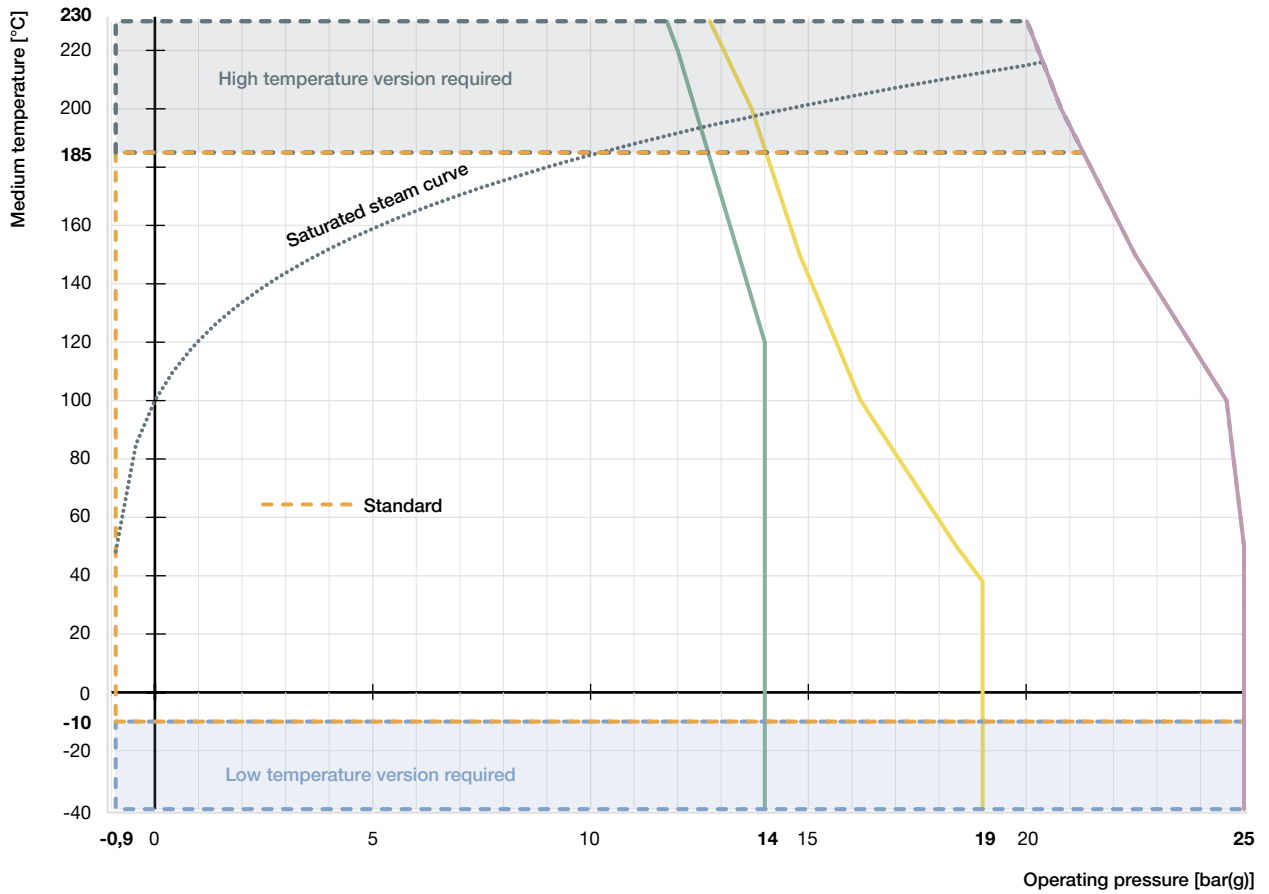
Orifice:
 DN40 —
 DN50 —

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6.2. Operating limits

Operating limits for medium temperature and operating pressure

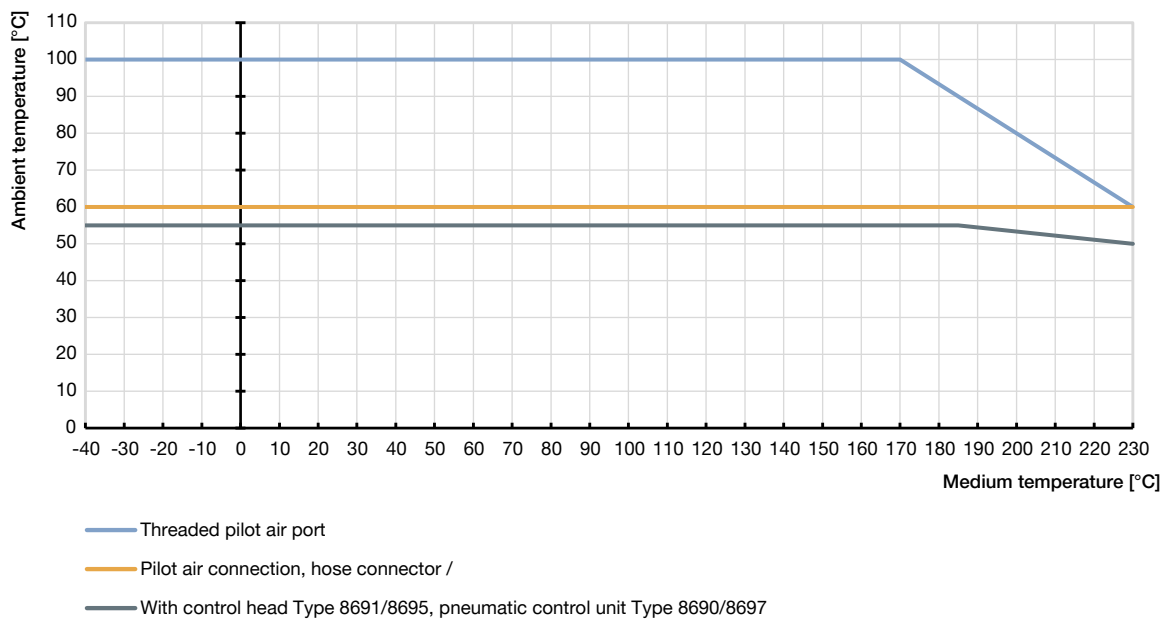
The operating range of Bürkert process valves is in addition to the maximum operating pressures limited by the nominal pressure according to the relevant standard.



- 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

ELEMENT On/Off valve



Operating limits for optional versions

High temperature version

By adjusting the spindle seal, this version is suitable for applications with steam, neutral gases and other heat transfer media up to 230 °C.

Hot water version

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

Drinking water version

Materials in contact with the medium are tested for suitability with drinking water up to 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

Version for oxygen

Non-metallic wetted materials are tested for suitability with oxygen and suitable for operating pressures up to 25 bar(g) and medium temperatures up to 60 °C.

7. Product accessories

| Control head | |
|--|--|
| Type 8691 ▶ Actuator size Ø 70/90/130 mm  | Description The control heads, Type 8691 and 8695, are optimized for integrated mounting on process valves of the 21XX series. The valve position is detected without contact via an analog sensor element, which automatically detects and stores the valve end positions during commissioning using the Teach-In function. The integrated pilot valve controls single or double-acting actuators. The switching status of the valve is indicated by coloured high-performance LEDs. |
| Type 8695 ▶ Actuator size Ø 50 mm  | Features <ul style="list-style-type: none"> • Status indication via coloured high-power LEDs • Non-wearing inductive position sensor • Pilot valve with manual override • Teach-In function for automatic recognition of the valve end positions • Hygienic stainless steel design • Easy to clean chemical resistant housing according to IP65/67, 4X rating • AS-Interface, IO-Link, Bürkert system bus (büS) Customer benefits <ul style="list-style-type: none"> • Simple and safe commissioning by means of Teach-In function • Easy process monitoring and fault detection through visible coloured high-power LEDs • High degree of system availability due to increased actuator service life by means of spring chamber ventilation • Minimal space requirement in the plant piping for more flexibility in plant design |
| Pneumatic Control unit/Position feedback | |
| Type 8690 ▶ Actuator size Ø 70/90/130 mm  | Description The pneumatic control units, Type 8690 and 8697, are optimized for integrated mounting on process valves of the 21XX series. Mechanical or inductive limit switches detect the valve position. The integrated pilot valve controls single or double-acting (Type 8690) actuators. |
| Type 8697 ▶ Actuator size Ø 50 mm  | Features <ul style="list-style-type: none"> • Optical position indicator • Mechanical or inductive proximity switches for end position detection • Pilot valve with manual override • Compact design • Easy to clean, chemical resistant housing according to IP65/67, 4X rating • Optional intrinsically safe design according to ATEX/IECEx Customer benefits <ul style="list-style-type: none"> • Simple and safe commissioning using the Teach-In function (Type 8697) • Signal reliability due to the automatic adjustment of the limit position switches • Minimal space requirement in the plant piping for more flexibility in plant design |

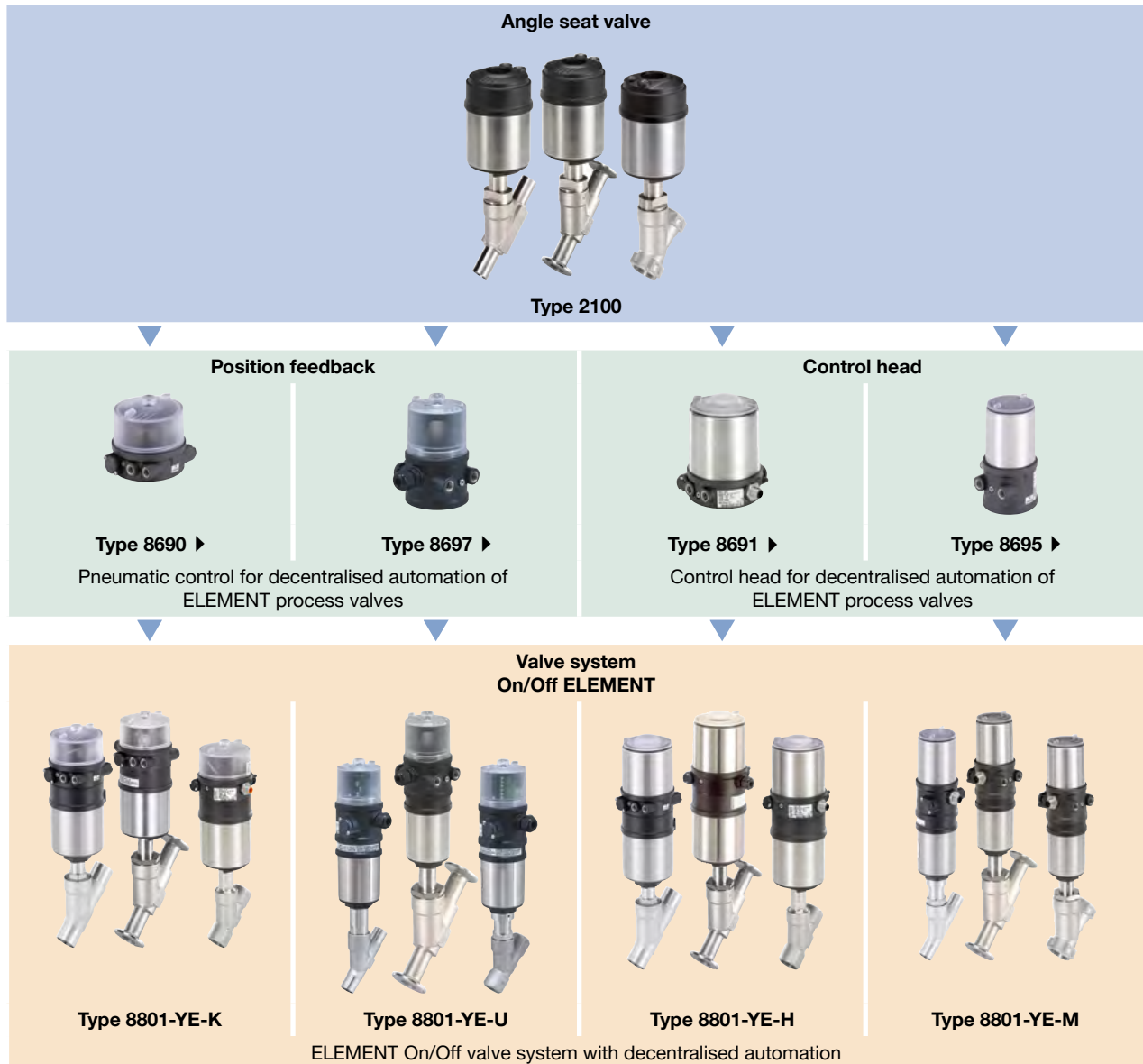
8. Networking and combination with other Bürkert products

Note:

The **angle seat valve Type 2100** can be combined with the **position feedback Type 8690/8697** and the **control head Type 8691/8695** to valve system **On/Off ELEMENT Type 8801-YE**.

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.



DTS 1000496323 EN Version: G Status: RL (released | freigegeben | validé) printed: 09.03.2023

9. Ordering information

9.1. Bürkert eShop – Easy ordering and quick delivery



Bürkert eShop – Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

9.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

9.3. Ordering chart threaded connection

























Valves with flow direction below seat

| Control function | Nominal diameter | Threaded port connection | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. | Article no. ATEX II 2GD certified (mechanical) |
|---|------------------|--------------------------|-----------------|----------------------------|------------------------|-------------|--|
| | DN | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | G ½" | 50(D) | 5.2 | 25 | 213619 | 259510 |
| | | G ½" | 70(M) | 5.0 | 25 | 213620 | 259511 |
| | 20 | G ¾" | 50(D) | 5.2 | 16 | 227616 | 259513 |
| | | G ¾" | 70(M) | 5.0 | 25 | 213621 | 259515 |
| | 25 | G 1" | 50(D) | 5.2 | 9 | 227617 | 259516 |
| | | G 1" | 70(M) | 5.0 | 16 | 213622 | 259517 |
| | 32 | G 1¼" | 70(M) | 5.0 | 8.5 | 213623 | 259519 |
| | | G 1¼" | 90(N) | 5.0 | 25 | 213624 | 259521 |
| | 40 | G 1½" | 70(M) | 5.0 | 6 | 213625 | 259523 |
| | | G 1½" | 90(N) | 5.0 | 16 | 213627 | 259524 |
| | 50 | G 2" | 90(N) | 5.0 | 10 | 175108 | 259525 |
| | | G 2" | 130(P) | 5.0 | 25(20 ^{3.)}) | 188610 | 259526 |
| | 65 | G 2½" | 90(N) | 5.0 | 5 | 239456 | 259527 |
| | | G 2½" | 130(P) | 5.6 | 16(15 ^{3.)}) | 239472 | 259530 |
| CF: B, see control functions ^{1.)} | 15 | G ½" | 50(D) | See diagram ^{2.)} | 25 | 213637 | 259531 |
| | | G ½" | 70(M) | | 25 | 213638 | 259532 |
| | 20 | G ¾" | 50(D) | | 25 | 213639 | 259533 |
| | | G ¾" | 70(M) | | 25 | 213640 | 259535 |
| | 25 | G 1" | 70(M) | | 25 | 213641 | 259537 |
| | 32 | G 1¼" | 70(M) | | 25 | 213642 | 259538 |
| | 40 | G 1½" | 70(M) | | 25 | 213643 | 259539 |
| | 50 | G 2" | 70(M) | | 16 | 175123 | 259540 |
| | 65 | G 2½" | 90(N) | | 14 | 239464 | 259565 |
| | | G 2½" | 130(P) | | 16(15 ^{3.)}) | 239479 | 259566 |

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)" on page 13

3.) 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)

| Control function | Nominal diameter | Threaded port connection | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. |
|---|------------------|--------------------------|-----------------|----------------------------|------------------------|--|
| | DN | [inch] | [mm] | [bar] | [bar] | |
| CF: A, see control functions ^{1.)} | 15 | NPT ½" | 50(D) | 5.2 | 25 | 213644  |
| | | NPT ½" | 70(M) | 5.0 | 25 | 213645  |
| | 20 | NPT ¾" | 50(D) | 5.2 | 16 | 227618  |
| | | NPT ¾" | 70(M) | 5.0 | 25 | 213646  |
| | 25 | NPT 1" | 50(D) | 5.2 | 9 | 227619  |
| | | NPT 1" | 70(M) | 5.0 | 16 | 213647  |
| | 32 | NPT 1¼" | 70(M) | 5.0 | 8.5 | 213648  |
| | | NPT 1¼" | 90(N) | 5.0 | 25 | 213649  |
| | 40 | NPT 1½" | 70(M) | 5.0 | 6 | 213650  |
| | | NPT 1½" | 90(N) | 5.0 | 16 | 213651  |
| | 50 | NPT 2" | 90(N) | 5.0 | 10 | 188641  |
| | | NPT 2" | 130(P) | 5.0 | 25(20 ^{3.)}) | 188642  |
| | 65 | NPT 2½" | 90(N) | 5.0 | 5 | 239457  |
| | | NPT 2½" | 130(P) | 5.6 | 16(15 ^{3.)}) | 239473  |
| CF: B, see control functions ^{1.)} | 15 | NPT ½" | 50(D) | See diagram ^{2.)} | 25 | 213661  |
| | | NPT ½" | 70(M) | | 25 | 213662  |
| | 20 | NPT ¾" | 50(D) | | 25 | 213663  |
| | | NPT ¾" | 70(M) | | 25 | 213664  |
| | 25 | NPT 1" | 70(M) | | 25 | 213665  |
| | 32 | NPT 1¼" | 70(M) | | 25 | 213666  |
| | 40 | NPT 1½" | 70(M) | | 25 | 213667  |
| | 50 | NPT 2" | 70(M) | | 16 | 188656  |
| | 65 | NPT 2½" | 90(N) | | 14 | 239465  |
| | | NPT 2½" | 130(P) | | 16(15 ^{3.)}) | 239480  |

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)" on page 13






3.) 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)

| Control function | Nominal diameter | Threaded port connection | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. |
|---|------------------|--------------------------|-----------------|----------------------------|------------------------|-------------|
| | DN | [inch] | [mm] | [bar] | [bar] | |
| CF: A, see control functions ^{1.)} | 15 | RC ½" | 50(D) | 5.2 | 25 | 213668 |
| | | RC ½" | 70(M) | 5.0 | 25 | 213669 |
| | 20 | RC ¾" | 50(D) | 5.2 | 16 | 227621 |
| | | RC ¾" | 70(M) | 5.0 | 25 | 213670 |
| | 25 | RC 1" | 50(D) | 5.2 | 9 | 227622 |
| | | RC 1" | 70(M) | 5.0 | 16 | 213671 |
| | 32 | RC 1¼" | 70(M) | 5.0 | 8.5 | 213672 |
| | | RC 1¼" | 90(N) | 5.0 | 25 | 213673 |
| | 40 | RC 1½" | 70(M) | 5.0 | 6 | 213674 |
| | | RC 1½" | 90(N) | 5.0 | 16 | 213675 |
| | 50 | RC 2" | 90(N) | 5.0 | 10 | 188664 |
| | | RC 2" | 130(P) | 5.0 | 25(20 ^{3.)}) | 188665 |
| | 65 | RC 2½" | 90(N) | 5.0 | 5 | 239458 |
| | | RC 2½" | 130(P) | 5.6 | 16(15 ^{3.)}) | 239474 |
| CF: B, see control functions ^{1.)} | 15 | RC ½" | 50(D) | See diagram ^{2.)} | 25 | 213685 |
| | | RC ½" | 70(M) | | 25 | 213686 |
| | 20 | RC ¾" | 50(D) | | 25 | 213687 |
| | | RC ¾" | 70(M) | | 25 | 213688 |
| | 25 | RC 1" | 70(M) | | 25 | 213689 |
| | 32 | RC 1¼" | 70(M) | | 25 | 213690 |
| | 40 | RC 1½" | 70(M) | | 25 | 213691 |
| | 50 | RC 2" | 70(M) | | 16 | 188679 |
| | 65 | RC 2½" | 90(N) | | 14 | 239466 |
| | | RC 2½" | 130(P) | | 16(15 ^{3.)}) | 239481 |

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)" on page 13

3.) 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)

| Further versions on request | |
|--|---|
|  Approval Food processing, drinking water, oxygen, fuel gases, explosion protection |  Pressure Other versions for operating pressures up to 25 bar(g) Vacuum version down to -0.9 bar(g) |
|  Material Seal: NBR, FKM, EPDM |  Temperature High temperature version up to 230 °C Hot water version up to 200 °C Low temperature version down to -40 °C |
|  Process connection Clamp connection, welded connection | |

Valves with flow direction above seat

| Control function | Nominal diameter | Threaded port connection | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. | Article no. ATEX II 2GD certified (mechanical) |
|---|------------------|--------------------------|-----------------|----------------------------|--------------------|-------------|--|
| | DN | [inch] | [mm] | [bar] | [bar] | | |
| CF: A, see control functions ^{1.)} | 15 | G ½" | 50(D) | See diagram ^{2.)} | 16 | 213628 | 259567 |
| | | G ½" | 70(M) | | 16 | 213629 | 259568 |
| | 20 | G ¾" | 50(D) | | 16 | 213630 | 259569 |
| | | G ¾" | 70(M) | | 16 | 213631 | 259571 |
| | 25 | G 1" | 50(D) | | 16 | 213632 | 259573 |
| | | G 1" | 70(M) | | 16 | 213633 | 259575 |
| | 32 | G 1¼" | 70(M) | | 16 | 213634 | 259576 |
| | | 40 | G 1½" | | 70(M) | 16 | 213635 |
| | 50 | | G 1½" | | 90(N) | 16 | 213636 |
| | | 50 | G 2" | | 70(M) | 12 | 175115 |
| | G 2" | | 90(N) | | 16 | 175116 | 259580 |

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

| Control function | Nominal diameter | Threaded port connection | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. |
|---|------------------|--------------------------|-----------------|----------------------------|--------------------|-------------|
| | DN | [inch] | [mm] | [bar] | [bar] | |
| CF: A, see control functions ^{1.)} | 15 | NPT ½" | 50(D) | See diagram ^{2.)} | 16 | 213652 |
| | | NPT ½" | 70(M) | | 16 | 213653 |
| | 20 | NPT ¾" | 50(D) | | 16 | 213654 |
| | | NPT ¾" | 70(M) | | 16 | 213655 |
| | 25 | NPT 1" | 50(D) | | 16 | 213656 |
| | | NPT 1" | 70(M) | | 16 | 213657 |
| | 32 | NPT 1¼" | 70(M) | | 16 | 213658 |
| | 40 | NPT 1½" | 70(M) | | 16 | 213659 |
| | 50 | NPT 2" | 70(M) | | 12 | 188649 |

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

| Control function | Nominal diameter | Threaded port connection | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. |
|---|------------------|--------------------------|-----------------|----------------------------|--------------------|-------------|
| | DN | [inch] | [mm] | [bar] | [bar] | |
| CF: A, see control functions ^{1.)} | 15 | RC ½" | 50(D) | See diagram ^{2.)} | 16 | 213676 |
| | | RC ½" | 70(M) | | 16 | 213677 |
| | 20 | RC ¾" | 50(D) | | 16 | 213678 |
| | | RC ¾" | 70(M) | | 16 | 213679 |
| | 25 | RC 1" | 50(D) | | 16 | 213680 |
| | | RC 1" | 70(M) | | 16 | 213681 |
| | 32 | RC 1¼" | 70(M) | | 16 | 213682 |
| | 40 | RC 1½" | 70(M) | | 16 | 213683 |
| | 50 | RC 2" | 70(M) | | 12 | 188672 |

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 welded connection

Valves with flow direction below seat

| Control function | Nominal diameter | Port connection pipe Ø | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. | | |
|---|---|------------------------|-----------------|------------------------|----------------------------|-------------|--------|--------|
| | DN | | | | | | [mm] | [mm] |
| ASME BPE | | | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | 12.7 × 1.65 | 50(D) | 5.2 | 25 | 187077 | | |
| | | 12.7 × 1.65 | 70(M) | 5.0 | 25 | 188726 | | |
| | 20 | 19.05 × 1.65 | 50(D) | 5.2 | 16 | 227607 | | |
| | | 19.05 × 1.65 | 70(M) | 5.0 | 25 | 188727 | | |
| | 25 | 25.4 × 1.65 | 50(D) | 5.2 | 9 | 227608 | | |
| | | 25.4 × 1.65 | 70(M) | 5.0 | 16 | 188728 | | |
| | 40 | 38.1 × 1.65 | 70(M) | 5.0 | 6 | 188729 | | |
| | | 38.1 × 1.65 | 90(N) | 5.0 | 16 | 188730 | | |
| | 50 | 50.8 × 1.65 | 90(N) | 5.0 | 10 | 188731 | | |
| | | 50.8 × 1.65 | 130(P) | 5.0 | 25(20 ^{3.)}) | 188732 | | |
| | 65 | 63.5 × 1.65 | 90(N) | 5.0 | 5 | 239461 | | |
| | | 63.5 × 1.65 | 130(P) | 5.6 | 16(15 ^{3.)}) | 239478 | | |
| | CF: B, see control functions ^{1.)} | 15 | 12.7 × 1.65 | 50(D) | See diagram ^{2.)} | 25 | 187082 | |
| | | | 12.7 × 1.65 | 70(M) | | 25 | 188740 | |
| 20 | | 19.05 × 1.65 | 50(D) | 25 | | 187083 | | |
| | | 19.05 × 1.65 | 70(M) | 25 | | 188741 | | |
| 25 | | 25.4 × 1.65 | 70(M) | 25 | | 188742 | | |
| | | 25.4 × 1.65 | 70(M) | 25 | | 188742 | | |
| 40 | | 38.1 × 1.65 | 70(M) | 25 | | 188781 | | |
| | | 38.1 × 1.65 | 70(M) | 16 | | 188744 | | |
| 50 | | 50.8 × 1.65 | 70(M) | 14 | | 239469 | | |
| | | 50.8 × 1.65 | 90(N) | 16(15 ^{3.)}) | | 239484 | | |
| 65 | | 63.5 × 1.65 | 90(N) | | | | | |
| | | 63.5 × 1.65 | 130(P) | | | | | |
| SMS 3008 | | | | | | | | |
| CF: A, see control functions ^{1.)} | | 15 | 12 × 1.0 | 50(D) | | 5.2 | 25 | 187084 |
| | 12 × 1.0 | | 70(M) | 5.0 | 25 | 188745 | | |
| | 20 | 18 × 1.0 | 50(D) | 5.2 | 16 | 227609 | | |
| | | 18 × 1.0 | 70(M) | 5.0 | 25 | 188746 | | |
| | 25 | 25 × 1.2 | 50(D) | 5.2 | 9 | 227610 | | |
| | | 25 × 1.2 | 70(M) | 5.0 | 16 | 188747 | | |
| | 40 | 38 × 1.2 | 70(M) | 5.0 | 6 | 188748 | | |
| | | 38 × 1.2 | 90(N) | 5.0 | 16 | 188749 | | |
| | 50 | 51 × 1.2 | 90(N) | 5.0 | 10 | 188750 | | |
| | | 51 × 1.2 | 130(P) | 5.0 | 25(20 ^{3.)}) | 188751 | | |
| | 65 | 63.5 × 1.65 | 90(N) | 5.0 | 5 | 239462 | | |
| | | 63.5 × 1.65 | 130(P) | 5.6 | 16(15 ^{3.)}) | 239477 | | |
| | CF: B, see control functions ^{1.)} | 15 | 12 × 1.0 | 50(D) | See diagram ^{2.)} | 25 | 187089 | |
| | | | 12 × 1.0 | 70(M) | | 25 | 188759 | |
| 20 | | 18 × 1.0 | 50(D) | 25 | | 187090 | | |
| | | 18 × 1.0 | 70(M) | 25 | | 188760 | | |
| 25 | | 25 × 1.2 | 70(M) | 25 | | 188761 | | |
| | | 25 × 1.2 | 70(M) | 25 | | 188762 | | |
| 40 | | 38 × 1.2 | 70(M) | 25 | | 188762 | | |
| | | 38 × 1.2 | 70(M) | 16 | | 188763 | | |
| 50 | | 51 × 1.2 | 70(M) | 14 | | 239470 | | |
| | | 51 × 1.2 | 90(N) | 16(15 ^{3.)}) | | 239485 | | |
| 65 | | 63.5 × 1.65 | 90(N) | | | | | |
| | | 63.5 × 1.65 | 130(P) | | | | | |

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)" on page 13

3.) 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)

Valves with flow direction above seat

| Control function | Nominal diameter | Port connection pipe Ø | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. |
|---|------------------|------------------------|-----------------|----------------------------|--------------------|-------------|
| | DN | [mm] | [mm] | [bar] | [bar] | |
| EN ISO 1127/ISO 4200 | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | 21.3×1.6 | 50(D) | See diagram ^{2.)} | 16 | 187066 |
| | 20 | 26.9×1.6 | 50(D) | | 16 | 187067 |
| | 25 | 33.7×2 | 50(D) | | 16 | 187068 |
| | 32 | 42.4×2 | 70(M) | | 16 | 188692 |
| | 40 | 48.3×2 | 70(M) | | 16 | 188693 |
| | 50 | 60.3×2.0 | 70(M) | | 12 | 274663 |
| DIN 11850 R2 | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | 19×1.5 | 50(D) | See diagram ^{2.)} | 16 | 187072 |
| | 20 | 23×1.5 | 50(D) | | 16 | 187073 |
| | 25 | 29×1.5 | 50(D) | | 16 | 187074 |
| | 32 | 35×1.5 | 70(M) | | 16 | 188715 |
| | 40 | 41×1.5 | 70(M) | | 16 | 188716 |
| | 50 | 53×1.5 | 70(M) | | 12 | 188718 |
| ASME BPE | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | 12.7×1.65 | 50(D) | See diagram ^{2.)} | 16 | 187078 |
| | 20 | 19.05×1.65 | 50(D) | | 16 | 187079 |
| | 25 | 25.4×1.65 | 50(D) | | 16 | 187080 |
| | 40 | 38.1×1.65 | 70(M) | | 16 | 188736 |
| | 50 | 50.8×1.65 | 70(M) | | 12 | 188738 |
| SMS 3008 | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | 12×1.0 | 50(D) | See diagram ^{2.)} | 16 | 187085 |
| | 20 | 18×1.0 | 50(D) | | 16 | 187086 |
| | 25 | 25×1.2 | 50(D) | | 16 | 187087 |
| | 40 | 38×1.2 | 70(M) | | 16 | 188755 |
| | 50 | 51×1.2 | 70(M) | | 12 | 188757 |

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






9.5. Ordering chart clamp connection

Valves with flow direction below seat












| Control function | Nominal diameter | Port connection external clamp Ø | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. | | |
|---|---|----------------------------------|-----------------|---------------------|----------------------------|-------------|--------|--------|
| | DN | [mm] | [mm] | [bar] | [bar] | | | |
| DIN 32676 B (pipe ISO 4200) | | | | | | | | |
| CF: A, see control functions ^{1.)} | 15 | 34.0 | 50(D) | 5.2 | 25 | 187097 | | |
| | | 34.0 | 70(M) | 5.0 | 25 | 188783 | | |
| | 20 | 50.5 | 50(D) | 5.2 | 16 | 209437 | | |
| | | 50.5 | 70(M) | 5.0 | 25 | 188784 | | |
| | 25 | 50.0 | 50(D) | 5.2 | 9 | 227613 | | |
| | | 50.5 | 70(M) | 5.0 | 16 | 188785 | | |
| | 32 | 50.5 | 70(M) | 5.0 | 8.5 | 188786 | | |
| | | 50.5 | 90(N) | 5.0 | 25 | 188787 | | |
| | 40 | 64.0 | 70(M) | 5.0 | 6 | 188788 | | |
| | | 64.0 | 90(N) | 5.0 | 16 | 188789 | | |
| | 50 | 77.5 | 90(N) | 5.0 | 10 | 188790 | | |
| | | 77.5 | 130(P) | 5.0 | 25(20 ^{3.)}) | 188791 | | |
| | CF: B, see control functions ^{1.)} | 15 | 34.0 | 50(D) | See diagram ^{2.)} | 25 | 187101 | |
| | | | 34.0 | 70(M) | | 25 | 188800 | |
| 20 | | 50.5 | 50(D) | 25 | | 187102 | | |
| | | 50.5 | 70(M) | 25 | | 188801 | | |
| 25 | | 50.5 | 70(M) | 25 | | 188802 | | |
| | | 50.5 | 70(M) | 25 | | 188803 | | |
| 40 | | 64.0 | 70(M) | 25 | | 188804 | | |
| | | 77.5 | 70(M) | 16 | | 188805 | | |
| ASME BPE | | | | | | | | |
| CF: A, see control functions ^{1.)} | | 15 | 25.0 | 50(D) | | 5.2 | 25 | 187103 |
| | 25.0 | | 70(M) | 5.0 | 25 | 188806 | | |
| | 20 | 25.5 | 50(D) | 5.2 | 16 | 227614 | | |
| | | 25.5 | 70(M) | 5.0 | 25 | 188807 | | |
| | 25 | 50.5 | 50(D) | 5.2 | 9 | 227615 | | |
| | | 50.5 | 70(M) | 5.0 | 16 | 188808 | | |
| | 40 | 50.5 | 70(M) | 5.0 | 6 | 188809 | | |
| | | 50.5 | 90(N) | 5.0 | 16 | 188810 | | |
| | 50 | 64.0 | 90(N) | 5.0 | 10 | 188811 | | |
| | | 64.0 | 130(P) | 5.0 | 25(20 ^{3.)}) | 188812 | | |
| | CF: B, see control functions ^{1.)} | 15 | 25.0 | 50(D) | See diagram ^{2.)} | 25 | 187107 | |
| | | | 25.0 | 70(M) | | 25 | 188820 | |
| 20 | | 25.0 | 50(D) | 25 | | 187108 | | |
| | | 50.5 | 70(M) | 25 | | 188821 | | |
| 25 | | 50.5 | 70(M) | 25 | | 188822 | | |
| | | 50.5 | 70(M) | 25 | | 188823 | | |
| 50 | | 64.0 | 70(M) | 16 | | 188824 | | |

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)" on page 13

| Further versions on request | |
|--|---|
|  Approval Food processing, drinking water, oxygen, fuel gases, explosion protection |  Pressure Other versions for operating pressures up to 25 bar(g) Vacuum version down to -0.9 bar(g) |
|  Material Seal: NBR, FKM, EPDM |  Temperature High temperature version up to 230 °C Hot water version up to 200 °C Low temperature version down to -40 °C |
|  Process connection Clamp connection, welded connection | |

Valves with flow direction above seat

| Control function | Nominal diameter | Port connection external clamp Ø | Actuator size Ø | Pilot pressure min. | Operating pressure | Article no. |
|---|------------------|----------------------------------|-----------------|----------------------------|--------------------|--|
| | DN | [mm] | [mm] | [bar] | [bar] | |
| DIN 32676 B (pipe ISO 4200) | | | | | | |
| CF: A , see control functions ^{1.)} | 15 | 34.0 | 50(D) | See diagram ^{2.)} | 16 | 187098  |
| | 20 | 50.5 | 50(D) | | 16 | 187099  |
| | 25 | 50.5 | 50(D) | | 16 | 187100  |
| | 32 | 50.5 | 70(M) | | 16 | 188795  |
| | 40 | 64.0 | 70(M) | | 16 | 188796  |
| | 50 | 77.5 | 70(M) | | 12 | 188798  |
| ASME BPE | | | | | | |
| CF: A , see control functions ^{1.)} | 15 | 25.0 | 50(D) | See diagram ^{2.)} | 16 | 187104  |
| | 20 | 25.0 | 50(D) | | 16 | 187105  |
| | 25 | 50.5 | 50(D) | | 16 | 187106  |
| | 40 | 50.5 | 70(M) | | 16 | 188816  |
| | 50 | 64.0 | 70(M) | | 12 | 188818  |

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

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|----------|------------------------|
| 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 ^{1.)} | | Globe valve | |
| Actuator material | Stainless steel/PPS | | Stainless steel ^{1.)} | PPS PA |
| Housing material | Stainless steel | | Gunmetal ^{1.)} | |
| 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 ^{1.)} | DIN EN 1092-1 | | ANSI B16.5 JIS 10K |
| | Thread | G | | NPT RC |
| | Weld ^{1.)} | DIN EN ISO 1127 / ISO 4200 | | DIN 11850 2 / DIN 11866 A ASME BPE |
| | Clamp ^{1.)} | ASME BPE | | DIN 32676 A (tube ISO 4200) DIN 32676 B (tube DIN 11850) |
| | Other | | | |

1.) Not available for Type 2006 and 2106.

| Valve data | | | |
|------------------|--------------------|------------------|---------------------------------|
| Circuit Function | A: Normally closed | B: Normally open | I: Double-acting ^{2.)} |
| Control pressure | Min. | Max. | |

2.) Not available for Type 2006 and 2106.

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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 |
| Suitable for drinking water ^{3.)} |
| 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) |

3.) For use with drinking water for medium temperatures up to 85 °C in accordance with the Drinking Water Ordinance §17 and the assessment principles of the Federal Environment Agency.



| Additional Requirements / Comment |
|-----------------------------------|
| |

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Control heads / pneumatic control for on/off process valves of the ELEMENT series

| For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm | | | For actuator size $\varnothing 50$ mm | | |
|--|---------------|--|---|---------------|--|
| Control head Type 8691 ▶ | | | Control head Type 8695 ▶ | | |
|  | | |  | | |
| <ul style="list-style-type: none"> Inductive position sensor with automatic Teach function Coloured high power LEDs With/without pilot valve for single or double-acting actuators Fieldbus communication Hygienic stainless steel design | | | | | |
| Pneumatic function | | | Electrical connection | | |
| Single-acting | Double-acting | Without pilot valve | Cable gland | M12 connector | |
| Communication | | | Approvals | | |
| AS-Interface | IO-Link | Bürkert Systembus (büS) ^{1.)} | ATEX cat. 3GD, IECEx | Without | |
| Without | | | | | |

1.) Based on CANopen

| For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm | | | For actuator size $\varnothing 50$ mm | | |
|--|---------------------------|---|---|----------------------|--|
| Pneumatic control unit / feedback Type 8690 ▶ | | | Pneumatic control unit / feedback Type 8697 ▶ | | |
|  | | |  | | |
| <ul style="list-style-type: none"> Visual status indicator Micro- or proximity switches for end position feedback With/without pilot valve for single- or double-acting actuators Optional intrinsically safe version acc. to ATEX / IECEx | | | | | |
| Pneumatic function | | | Electrical connection | | |
| Single-acting | Double-acting (Type 8690) | | Cable gland | M12 connector | |
| Without pilot valve | | | | | |
| Number of position feedback switches | | | Approvals | | |
| 1x | 2x | | ATEX cat. 3GD, IECEx | ATEX cat. 2DG, IECEx | |
| | | | Without | | |
| Position feedback switch | | | | | |
| Micro-switch 24 V DC | | Micro-switch 50...225 V DC/AC (Type 8690) | Inductive switch 3-wire PNP | | |
| Inductive switch 2-wire NAMUR | | Inductive switch 2-wire 24 V DC | Without | | |

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