

По вопросам продаж и поддержки обращайтесь:

| | | |
|-----------------------------|---------------------------------|--------------------------------|
| Архангельск (8182)63-90-72 | Краснодар (861)203-40-90 | Рязань (4912)46-61-64 |
| Астана (7172)727-132 | Красноярск (391)204-63-61 | Самара (846)206-03-16 |
| Белгород (4722)40-23-64 | Курск (4712)77-13-04 | Санкт-Петербург (812)309-46-40 |
| Брянск (4832)59-03-52 | Липецк (4742)52-20-81 | Саратов (845)249-38-78 |
| Владивосток (423)249-28-31 | Магнитогорск (3519)55-03-13 | Смоленск (4812)29-41-54 |
| Волгоград (844)278-03-48 | Москва (495)268-04-70 | Сочи (862)225-72-31 |
| Вологда (8172)26-41-59 | Мурманск (8152)59-64-93 | Ставрополь (8652)20-65-13 |
| Воронеж (473)204-51-73 | Набережные Челны (8552)20-53-41 | Тверь (4822)63-31-35 |
| Екатеринбург (343)384-55-89 | Нижний Новгород (831)429-08-12 | Томск (3822)98-41-53 |
| Иваново (4932)77-34-06 | Новокузнецк (3843)20-46-81 | Тула (4872)74-02-29 |
| Ижевск (3412)26-03-58 | Новосибирск (383)227-86-73 | Тюмень (3452)66-21-18 |
| Казань (843)206-01-48 | Орел (4862)44-53-42 | Ульяновск (8422)24-23-59 |
| Калининград (4012)72-03-81 | Оренбург (3532)37-68-04 | Уфа (347)229-48-12 |
| Калуга (4842)92-23-67 | Пенза (8412)22-31-16 | Челябинск (351)202-03-61 |
| Кемерово (3842)65-04-62 | Пермь (342)205-81-47 | Череповец (8202)49-02-64 |
| Киров (8332)68-02-04 | Ростов-на-Дону (863)308-18-15 | Ярославль (4852)69-52-93 |

Единый адрес: btk@nt-rt.ru **Веб-сайт:** www.burkert.nt-rt.ru

РЕГУЛИРУЮЩИЕ КЛАПАНЫ



Pneumatically operated 2 way Globe Control Valve

- Excellent control characteristics
- High cycle life and maintenance-free operation
- Flow optimised body in stainless steel
- Several K_{VS} value per port size due to removable valve seats
- Control units can be mounted directly without external tubing

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

Can be combined with

| | |
|--|---|
| | Type 8692 ▶ Digital electropneumatic Positioner for the integrated mounting on process control valves |
| | Type 8694 ▶ Digital electropneumatic positioner for the integrated mounting on process control valves |
| | Type 8693 ▶ Digital electropneumatic process controller for the integrated mounting on process control valves |
| | Type 8792 ▶ Digital electropneumatic Positioner SideControl |
| | Type 8791 ▶ Digital electropneumatic Positioner SideControl |
| | Type 8793 ▶ Digital electropneumatic Process Controller SideControl |
| | Type 8802 ▶ ELEMENT continuous control valve systems - overview |

Type description

In line with Bürkert's philosophy the construction of the type 2301 globe valve fulfils tough criteria for process environments. Unrivalled cycle life and sealing integrity is guaranteed by the proven self adjusting spindle packing with exchangeable V-seals. Each globe valve body can be fitted with up to five sizes of trim sets.

These parabolic trims provide a reliable and repeatable characteristic to vary the flow. The control cones are available in either stainless steel or with a durable PTFE seal or PEEK seal for tight shut-off. Leakage class III, IV or VI are available. The design enables the easy integration of automation modules whether they are digital electropneumatic positioner or process controller.

The fully integrated system has a compact and smooth design, integrated pneumatic lines, IP65/67 protection class and superior chemical resistance.

1. General technical data

| Product properties | |
|--|---|
| Dimensions | Detailed information can be found in chapter "6. Dimensions" on page 7. |
| Material | Detailed information can be found in chapter "5. Materials" on page 5. |
| Design | Globe control valve |
| Nominal diameter | DN10...DN100, NPS ¾...NPS 4 |
| Safety setting in case of power failure | Normally closed (control function A), normally open (control function B) |
| Flow direction | Flow to open (below seat) |
| Performance data | |
| Operating pressure | 0 bar(g) ... 25 bar(g), vacuum version up to -0.9 bar (g) (Option) see "7.1. Fluidic data" on page 13 |
| Nominal pressure | PN25 (DIN EN 1333), Class 150 (DIN EN 1759) |
| Seat leakage acc. to DIN EN 60534-4:2006 | Leakage class III and IV for stainless steel Leakage class VI for PTFE and PEEK (see "7.1. Fluidic data" on page 13) |
| K _v value | 0.1 m ³ /h...140 m ³ /h, see "7.1. Fluidic data" on page 13 |
| Operating characteristic | Linear or equal percentage |
| Theoretical rangeability | Up to 50:1 |
| 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 "7.2. Operating limits" on page 16 |
| Viscosity (max.) | Max. 600 mm ² /s |
| Control medium | Air, neutral gases |
| Process/Port connection & communication | |
| Port connection²⁾ | |
| Flange connection | DIN EN 1092-1 ANSI B 16.5 JIS 10K |
| Threaded connection | G (DIN ISO 228-1) NPT (ASME B1.20.1) Rc (ISO 7-1) |
| Welded connection | DIN EN ISO 1127 / ISO 4200 / DIN11866 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 |
| Approvals and certificates | |
| Conformity | Food contact 1935/2004(EG), FDA Drinking water Pressure Equipment Directive Gas Appliances Regulation Machinery Directive |
| Approvals | Explosion proof ATEX / IECex |
| Material certificate | 2.2, 3.1 |
| Environment and installation | |
| Degree of protection | IP65/67 |
| Installation position | As required, preferably with actuator upright |

ed: 26.03.2021

2. Product versions

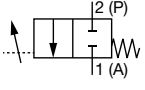
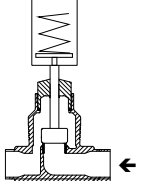
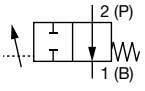
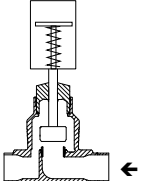
2.1. 2301 ELEMENT

| Product properties | |
|------------------------------|--|
| Nominal diameter | DN10...100 |
| Actuator size | 50 mm (D), 70 mm (M), 90 mm (N), 130 mm (P) |
| Performance data | |
| Maximum pilot pressure | 5.6...7 bar(g) |
| Medium data | |
| Medium temperature | -40 °C...230 °C, see "7.2. Operating limits" on page 16 |
| Environment and installation | |
| Ambient temperature | -10...80 °C (for positioner or process controller Type 8791/8792/8793) -10...55 °C (for positioner or process controller Type 8692/8693/8694) See "Operating limits for ambient and medium temperature" on page 17 |

2.2. 2712 CLASSIC

| Product properties | |
|------------------------------|---|
| Nominal diameter | DN65...100 |
| Actuator size | 225 mm (L) |
| Performance data | |
| Maximum pilot pressure | 5.0...6.0 bar(g) |
| Medium data | |
| Medium temperature | -40 °C...180 °C, see "7.2. Operating limits" on page 16 |
| Environment and installation | |
| Ambient temperature | -10...50 °C |

3. Circuit functions

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

4. Approvals

| Approval | Description |
|----------|--|
| | Food produce contact Materials in contact with the medium conform to EC regulation 1935/2004 (standard Type 2301, option Type 2712) Materials in contact with the medium conform to FDA (option) |
| | Drinking water Suitable for use with drinking water up to 85 °C according to KTW, W270 (option) |
| | Oxygen Suitable for use with gaseous oxygen for medium temperature up to 60 °C and operating pressure up to 25 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 Appliances Regulation (EU) 2016/426, DVGW DIN EN 161 and DIN EN 16678, Class D, suitable for medium temperature 0 °C...60 °C, ambient temperature -10...60 °C and operating pressures 0...25 bar(g) (option) |

ed: 26.03.2021

5. Materials

5.1. 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.

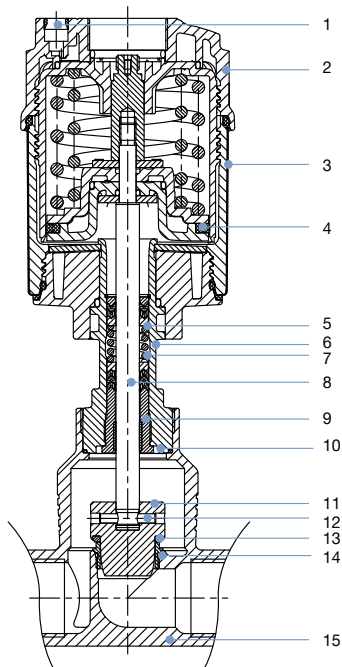
[Start Chemical Resistance Check](#)

5.2. Material specifications

2301 ELEMENT

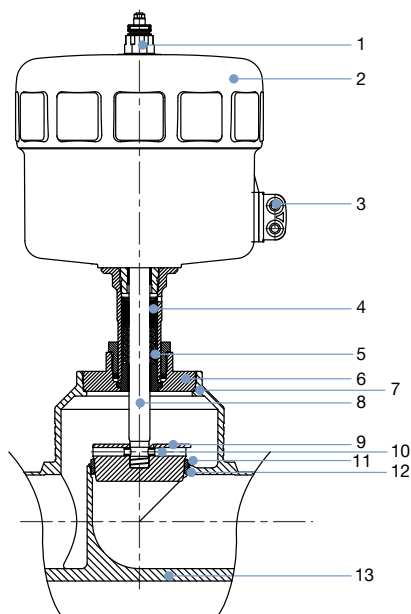
Note:

The Type 2301 globe control valve is supplied with different connection ports (flange, threaded, welded and clamp). These connections are not shown in the picture. They correspond to the material of the valve body.



| No. | Element | Material |
|-----|------------------------|---|
| 1 | Pilot air ports | Push-in connector PP |
| 2 | Actuator | PPS |
| 3 | Cover | Stainless steel 1.4561 (316Ti) |
| 4 | Piston seal | FKM |
| 5 | Spring | Stainless steel 1.4310 |
| 6 | Pipe | Stainless steel 1.4401 (316) |
| 7 | Spindle sealing | PTFE V-Rings (filled), with spring compensation |
| 8 | Spindle | Stainless steel 1.4401 (316)/1.4404 (316L) |
| 9 | Spindle guide | Stainless steel 1.4404 (316L), PTFE filled |
| 10 | Body seal | Graphite or PTFE |
| 11 | Control cone | Stainless steel 1.4571 |
| 12 | Spring straight pin | Stainless steel 1.4310 |
| 13 | Seat seal | Stainless steel 1.4571, PTFE or PEEK |
| 14 | Valve seat with O-Ring | Stainless steel 1.4571, EPDM |
| 15 | Valve body | Stainless steel CF3M |

2712 CLASSIC



| No.. | Element | Material |
|------|------------------------|---|
| 1 | Adapter | Stainless steel 1.4305 |
| 2 | Actuator | PA Polyamide |
| 3 | Pilot air ports | Stainless steel 1.4305 |
| 4 | Spindle sealing | PTFE V-Rings (filled), with spring compensation |
| 5 | Spring | Stainless steel 1.4568 |
| 6 | Nipple | Stainless steel 1.4404 |
| 7 | Body seal | Graphite or PTFE |
| 8 | Spindle | Stainless steel 1.4404 |
| 9 | Control cone | Stainless steel 1.4571 |
| 10 | Spring straight pin | Stainless steel 1.4310 |
| 11 | Seat seal | Stainless steel 1.4571, PTFE or PEEK |
| 12 | Valve seat with O-Ring | Stainless steel 1.4571, EPDM |
| 13 | Valve body | Stainless steel CF3M |

ed: 26.03.2021

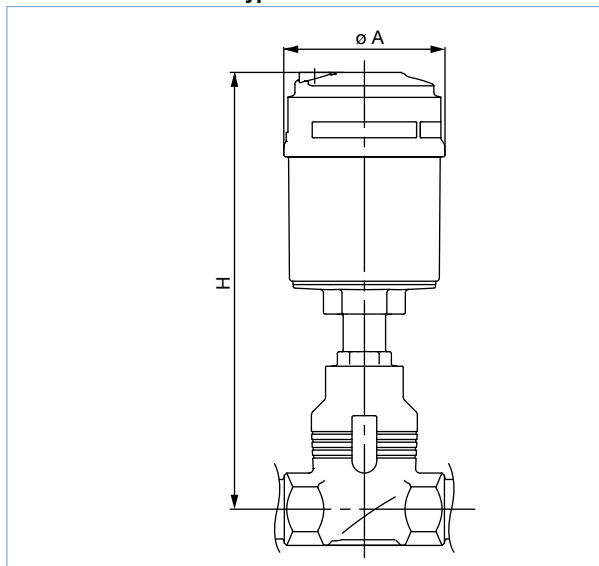
6. Dimensions

6.1. Actuator

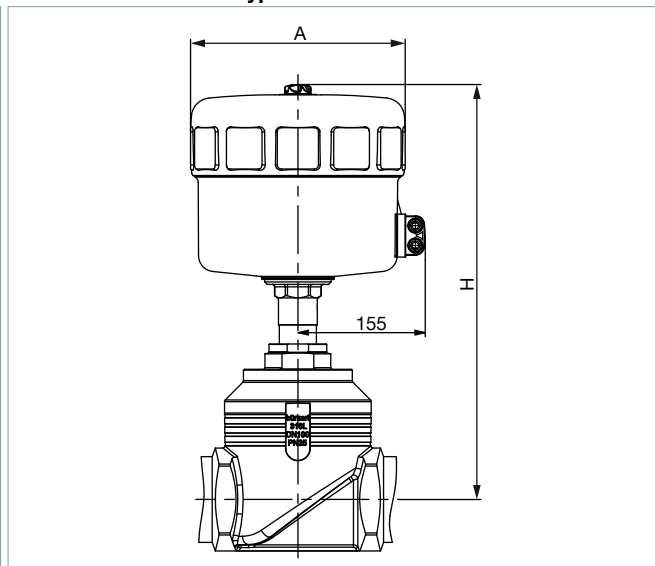
Note:

Dimensions in mm, unless otherwise stated

Continuous ELEMENT Type 2301 valve



Continuous ELEMENT Type 2712 valve



ed: 26.03.2021

| Nominal diameter (pipe) | | Actuator size | $\varnothing A$ | H |
|-------------------------|-------|---------------|-----------------|-----|
| DN | NPS | | | |
| 10 | 3/8 | 50 | 64.5 | 226 |
| | | 70 | 91 | 239 |
| 15 | 1/2 | 50 | 64.5 | 226 |
| | | 70 | 91 | 239 |
| 20 | 3/4 | 50 | 64.5 | 232 |
| | | 70 | 91 | 245 |
| 25 | 1 | 50 | 64.5 | 235 |
| | | 70 | 91 | 248 |
| | | 90 | 120 | 301 |
| 32 | 1 1/4 | 90 | 120 | 329 |
| | | 130 | 159 | 381 |
| 40 | 1 1/2 | 90 | 120 | 334 |
| | | 130 | 159 | 386 |
| 50 | 2 | 90 | 120 | 340 |
| | | 130 | 159 | 392 |
| 65 | 2 1/2 | 130 | 159 | 446 |
| | | 225 | 261 | 474 |
| 80 | 3 | 130 | 159 | 454 |
| | | 225 | 261 | 482 |
| 100 | 4 | 130 | 159 | 464 |
| | | 225 | 261 | 492 |

6.2. Valve system Continuous ELEMENT

Note:

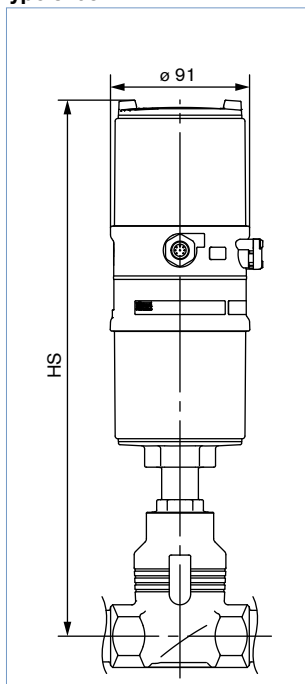
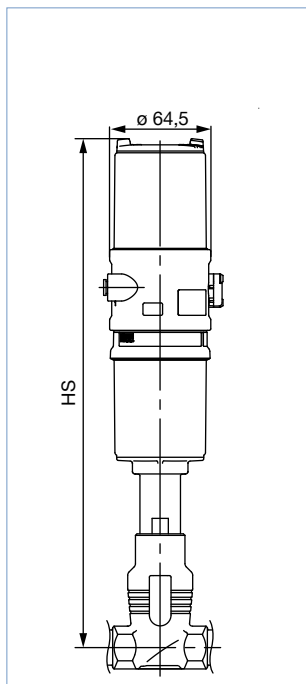
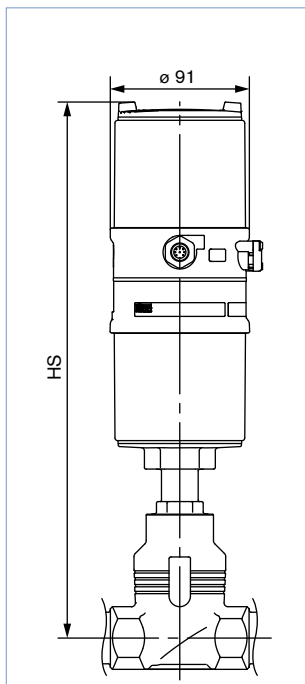
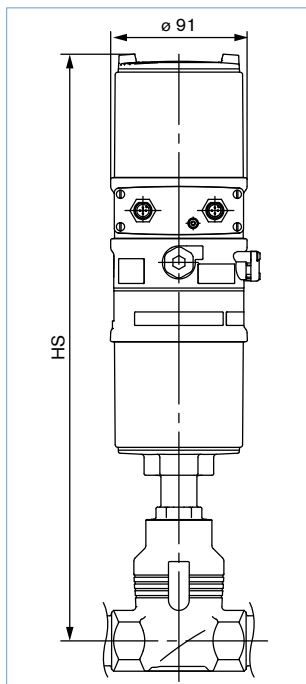
- Dimensions in mm, unless otherwise stated
- Please note actuator size A in table “6.1. Actuator” on page 7

With positioner
TopControl, **Type 8692**
or
with process controller
TopControl, **Type 8693**

With positioner
TopControl Basic,
Type 8694

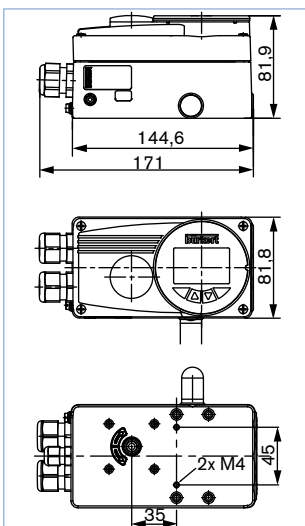
With positioner
TopControl Basic,
Type 8696

With remote positioner SideControl, **Type 8792**
or
with remote process controller
SideControl,
Type 8793



ed: 26.03.2021

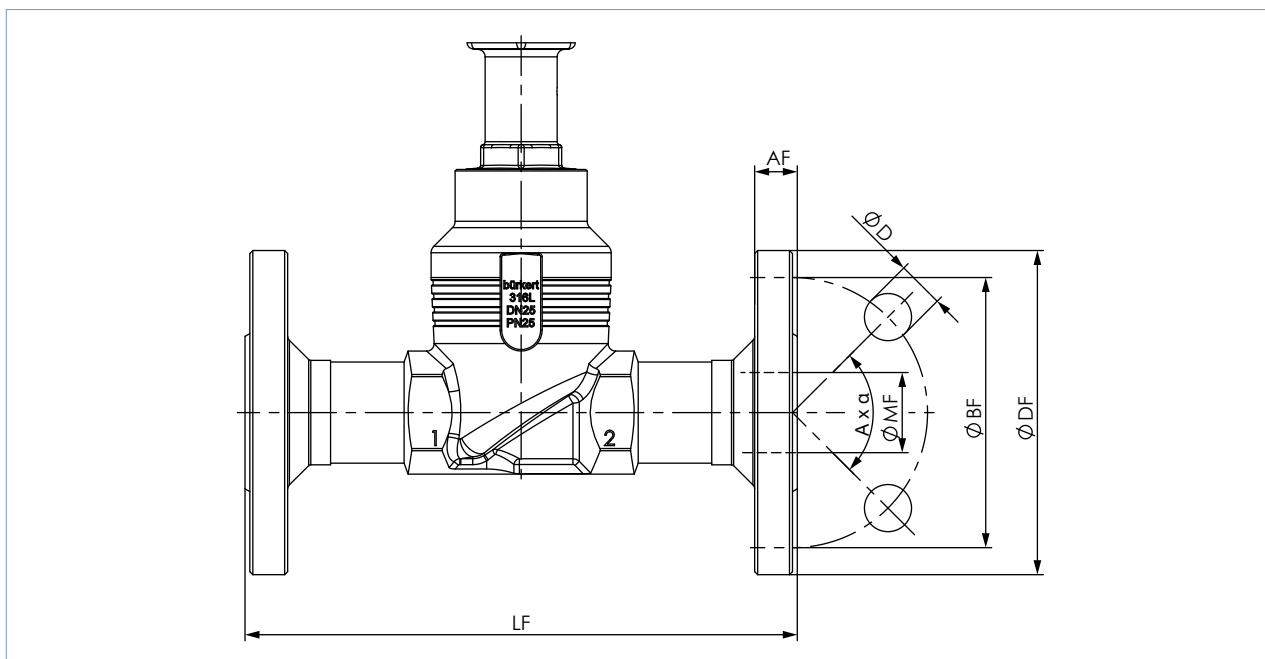
| Nominal diameter (pipe) | | Actuator size | HS with | | |
|-------------------------|-------|---------------|--------------|--------------|--------------|
| DN | NPS | | 8692 or 8693 | 8694 or 8696 | 8792 or 8793 |
| 10 | 3/8 | 50 | – | 329 | – |
| | | 70 | 383 | 342 | 342 |
| 15 | 1/2 | 50 | – | 329 | – |
| | | 70 | 383 | 342 | 342 |
| 20 | 3/4 | 50 | – | 335 | – |
| | | 70 | 389 | 348 | 348 |
| 25 | 1 | 50 | – | 342 | – |
| | | 70 | 392 | 351 | 351 |
| | | 90 | 445 | 404 | 404 |
| 32 | 1 1/4 | 90 | 473 | 432 | 432 |
| | | 130 | 525 | 484 | 484 |
| 40 | 1 1/2 | 90 | 478 | 437 | 437 |
| | | 130 | 530 | 489 | 489 |
| 50 | 2 | 90 | 484 | 443 | 443 |
| | | 130 | 536 | 495 | 495 |
| 65 | 2 1/2 | 130 | 590 | 549 | 549 |
| | | 225 | 629 | 586 | 586 |
| 80 | 3 | 130 | 598 | 557 | 557 |
| | | 225 | 637 | 594 | 594 |
| 100 | 4 | 130 | 608 | 567 | 567 |
| | | 225 | 647 | 604 | 604 |



6.3. Body with flange connection

Note:

Dimensions in mm, unless otherwise stated



ed: 26.03.2021

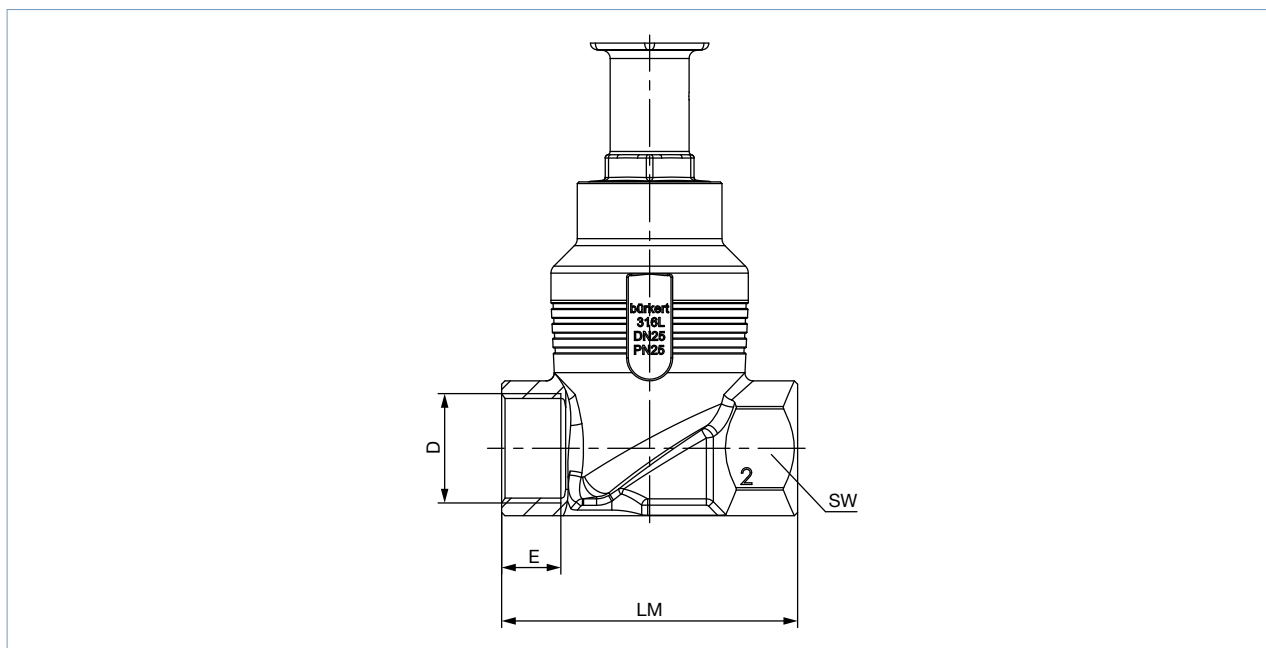
| Nominal diameter (pipe) | DIN EN 1092 PN25 FTF 1 acc. to DIN EN 558-1 | | | | | | | JIS 10K FTF 10 acc. to DIN EN 558-2 | | | | | | |
|-------------------------|--|-----|------|----|-----|---------|-------|--|-----|------|----|-----|---------|-------|
| | Ø DF | LF | Ø BF | AF | Ø D | A x α | Ø MF | Ø DF | LF | Ø BF | AF | Ø D | A x α | Ø MF |
| 10 | 90 | 130 | 60 | 16 | 14 | 4 x 90° | 13.6 | - | - | - | - | - | - | - |
| 15 | 95 | 130 | 65 | 16 | 14 | 4 x 90° | 18.1 | 95 | 108 | 70 | 12 | 15 | 4 x 90° | 18.1 |
| 20 | 105 | 150 | 75 | 18 | 14 | 4 x 90° | 23.7 | 100 | 117 | 75 | 14 | 15 | 4 x 90° | 23.7 |
| 25 | 115 | 160 | 85 | 18 | 14 | 4 x 90° | 29.7 | 125 | 127 | 90 | 14 | 19 | 4 x 90° | 29.7 |
| 32 | 140 | 180 | 100 | 18 | 18 | 4 x 90° | 38.4 | 135 | 140 | 100 | 16 | 19 | 4 x 90° | 38.4 |
| 40 | 150 | 200 | 110 | 18 | 18 | 4 x 90° | 44.3 | 140 | 165 | 105 | 16 | 19 | 4 x 90° | 44.3 |
| 50 | 165 | 230 | 125 | 20 | 18 | 4 x 90° | 56.3 | 155 | 203 | 120 | 16 | 19 | 4 x 90° | 56.3 |
| 65 | 185 | 290 | 145 | 22 | 18 | 8 x 45° | 66.0 | 175 | 216 | 140 | 18 | 19 | 4 x 90° | 71.5 |
| 80 | 200 | 310 | 160 | 24 | 18 | 8 x 45° | 81.0 | 185 | 241 | 150 | 18 | 19 | 8 x 45° | 84.3 |
| 100 | 235 | 350 | 190 | 24 | 22 | 8 x 45° | 100.0 | 292 | 292 | 175 | 18 | 19 | 8 x 45° | 109.1 |

| Nominal diameter (pipe) | ANSI B 16.5 Class 150 FTF 37 acc. to DIN EN 558-2 | | | | | | |
|-------------------------|--|------|-------|------|------|---------|-------|
| | NPS | Ø DF | LF | Ø BF | AF | Ø D | A x α |
| ½ | 89 | 184 | 60.5 | 11.2 | 15.7 | 4 x 90° | 15.7 |
| ¾ | 99 | 184 | 69.9 | 12.7 | 15.7 | 4 x 90° | 20.8 |
| 1 | 108 | 184 | 79.2 | 14.2 | 15.7 | 4 x 90° | 26.7 |
| 1½ | 127 | 222 | 98.6 | 17.5 | 15.7 | 4 x 90° | 40.9 |
| 2 | 152 | 254 | 120.7 | 19.1 | 19.1 | 4 x 90° | 52.6 |
| 2½ | 178 | 276 | 139.7 | 22.3 | 19.1 | 4 x 90° | 62.7 |
| 3 | 190 | 298 | 152.5 | 23.9 | 19.1 | 4 x 90° | 78.0 |
| 4 | 229 | 432 | 190.5 | 23.9 | 19.1 | 8 x 45° | 102.4 |

6.4. Body with threaded connection

Note:

Dimensions in mm, unless otherwise stated



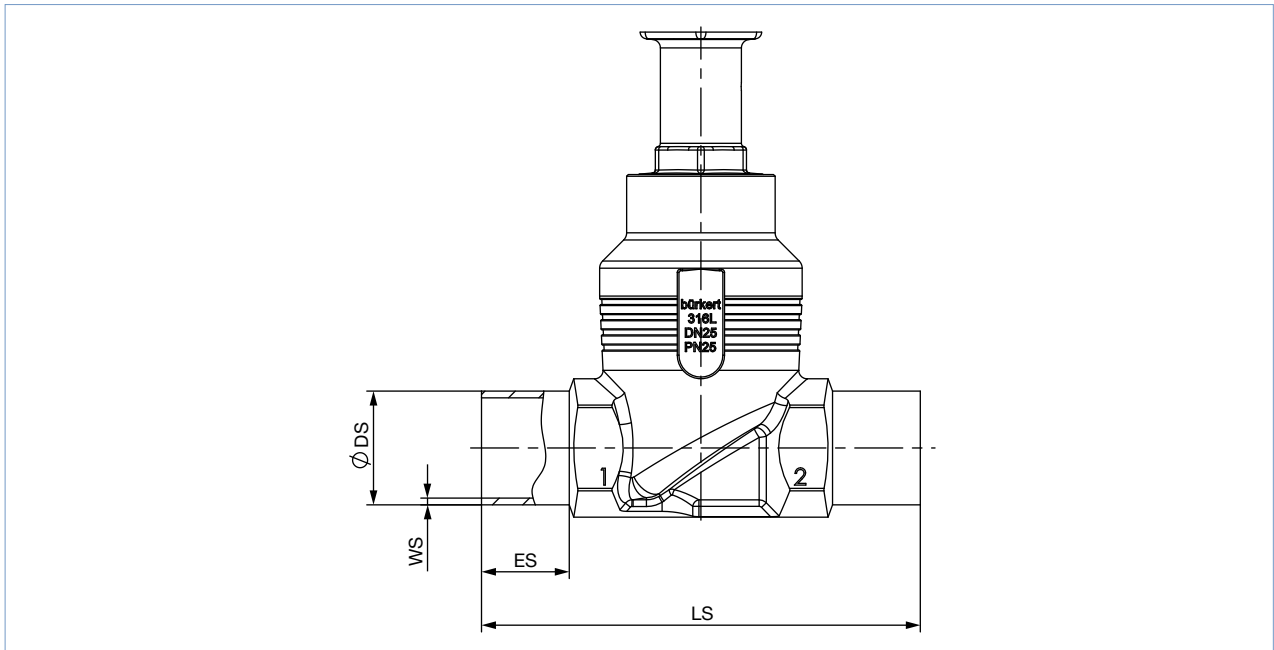
ed: 26.03.2021

| Nominal diameter (pipe) | G, Rc, NPT (EN ISO 228-1, ISO 7/1/DIN EN 10226-2, ASME B 1.20.1) | | | | LM | SW |
|----------------------------|--|-----|-------|-------|-----|-----|
| | D | E | [G] | [NPT] | | |
| DN | NPS | [G] | [NPT] | [Rc] | | |
| 10 | 3/8 | 12 | 10.3 | 10.1 | 65 | 27 |
| 15 | 1/2 | 14 | 13.7 | 13.2 | 65 | 27 |
| 20 | 3/4 | 16 | 14 | 14.5 | 75 | 34 |
| 25 | 1 | 18 | 16.8 | 16.8 | 90 | 41 |
| 32 | 1 1/4 | 20 | 17.3 | 19.1 | 110 | 50 |
| 40 | 1 1/2 | 22 | 17.3 | 19.1 | 120 | 55 |
| 50 | 2 | 24 | 17.6 | 23.4 | 150 | 70 |
| 65 | 2 1/2 | 26 | 23.7 | 26.7 | 185 | 85 |
| 80 | 3 | 28 | 30.5 | 29.8 | 205 | 100 |
| 100 | 4 | 32 | 33 | 35.8 | 240 | 125 |

6.5. Body with welded connection

Note:

Dimensions in mm, unless otherwise stated



ed: 26.03.2021

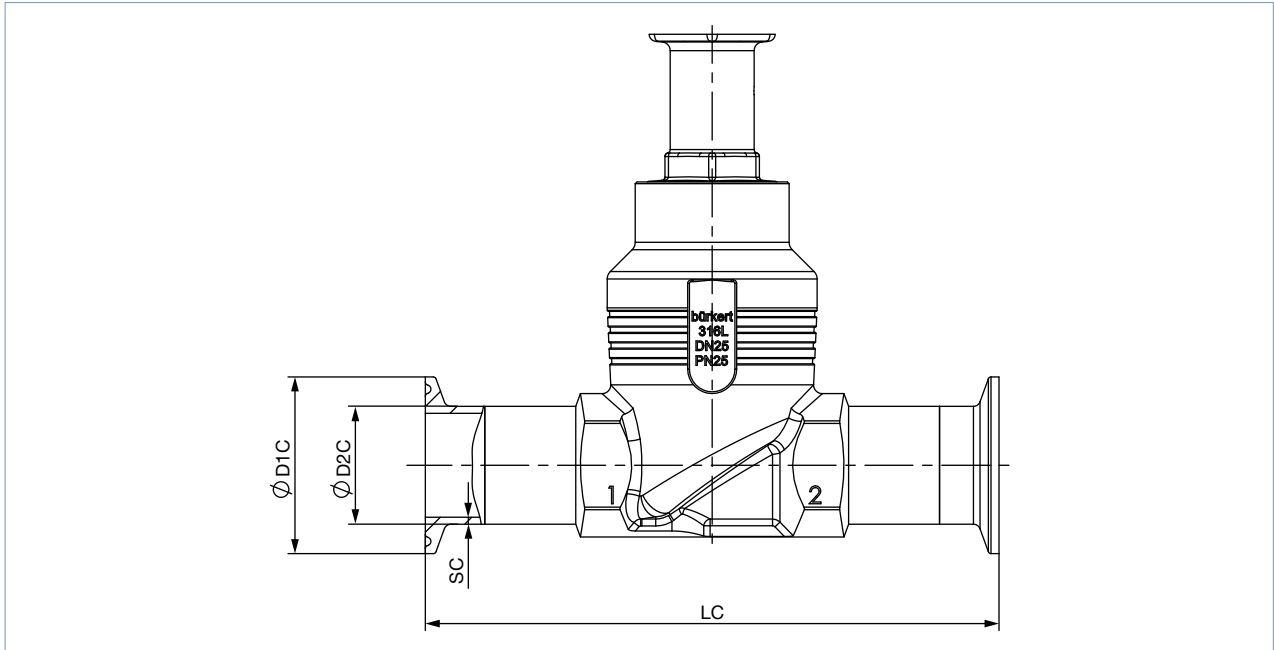
| Nominal diameter (pipe) DN | ES | LS | EN ISO 1127 1/ISO 4200/DIN 11866 B | | DIN 11850 2/DIN 11866 A/DIN EN 10357 A | |
|-------------------------------|----|-----|------------------------------------|-----|--|-----|
| | | | Ø DS | WS | Ø DS | WS |
| 10 | 20 | 90 | 17.2 | 1.6 | 13 | 1.5 |
| 15 | 20 | 90 | 21.3 | 1.6 | 19 | 1.5 |
| 20 | 20 | 100 | 26.9 | 1.6 | 23 | 1.5 |
| 25 | 26 | 130 | 33.7 | 2.0 | 29 | 1.5 |
| 32 | 26 | 140 | 42.4 | 2.0 | 35 | 1.5 |
| 40 | 26 | 150 | 48.3 | 2.0 | 41 | 1.5 |
| 50 | 26 | 175 | 60.3 | 2.0 | 53 | 1.5 |
| 65 | 26 | 210 | 76.1 | 2.3 | 70 | 2.0 |
| 80 | 26 | 230 | 88.9 | 2.3 | 85 | 2.0 |
| 100 | 26 | 260 | 114.3 | 2.6 | 104 | 2.0 |

| Nominal diameter (pipe) NPS | ES | LS | ASME BPE/DIN 11866 C | |
|--------------------------------|----|-----|----------------------|------|
| | | | Ø DS | WS |
| ½ | 20 | 90 | 12.7 | 1.65 |
| ¾ | 20 | 90 | 19.05 | 1.65 |
| 1 | 20 | 100 | 25.4 | 1.65 |
| 1½ | 26 | 140 | 38.1 | 1.65 |
| 2 | 26 | 150 | 50.8 | 1.65 |
| 2½ | 26 | 175 | 63.5 | 1.65 |
| 3 | 26 | 210 | 76.2 | 1.65 |
| 4 | 26 | 260 | 101.6 | 2.11 |

6.6. Body with clamp connection

Note:

Dimensions in mm, unless otherwise stated



| Nominal diameter (pipe) | Clamp: DIN 32676 A | | | | Clamp: DIN 32676 B | | | |
|-------------------------|--|-------|-------|-----|--|-------|-------|-----|
| | Pipe: DIN 11850 2 DIN 11866 A DIN EN 10357 A | | | | Pipe: EN ISO 1127 1 ISO 4200 DIN 11866 B | | | |
| DN | LC | Ø D2C | Ø D1C | SC | LC | Ø D2C | Ø D1C | SC |
| 15 | 126 | 19 | 34 | 1.5 | 146 | 21.3 | 50.5 | 1.6 |
| 20 | 136 | 23 | 34 | 1.5 | 136 | 26.9 | 50.5 | 1.6 |
| 25 | 173 | 29 | 50.5 | 1.5 | 164 | 33.7 | 50.5 | 2.0 |
| 40 | 193 | 41 | 50.5 | 1.5 | 193 | 48.3 | 64.0 | 2.0 |
| 50 | 218 | 53 | 64 | 1.5 | 218 | 60.3 | 77.5 | 2.0 |

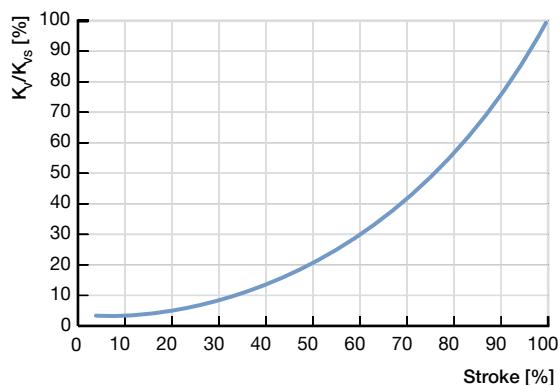
| Nominal diameter (pipe) | Clamp: ASME BPE DIN 32676 C | | | |
|-------------------------|--------------------------------|-------|-------|------|
| | Pipe: ASME BPE DIN 11866 C | | | |
| NPS | LC | Ø D2C | Ø D1C | SC |
| ½ | 122 | 12.7 | 25.0 | 1.65 |
| ¾ | 126 | 19.05 | 25.0 | 1.65 |
| 1 | 126 | 25.4 | 50.5 | 1.65 |
| 1½ | 172 | 38.1 | 50.5 | 1.65 |
| 2 | 182 | 50.8 | 64.0 | 1.65 |
| 2½ | 231 | 63.5 | 77.5 | 1.65 |
| 3 | 265 | 76.2 | 91.0 | 1.65 |
| 4 | 315 | 101.6 | 119.0 | 2.11 |

7. Performance specifications

7.1. Fluidic data

Flow characteristics

- Flow characteristic acc. to DIN EN 60534-2-4
- K_{VR} value at 5 % of stroke for $DN > 10$ mm
 K_{VR} value at 10 % of stroke for $DN \leq 10$ mm
- Actuator size 70 offers a better control quality compared to actuator size 50 and is therefore preferred (K_{VR} value = smallest K_V value, at which the tilt tolerance according to DIN EN 60534-2-4 is still maintained).



Equal percentage flow curve - detailed values please see below

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

Note:

- K_V value [m^3/h]: Measured with water acc. to DIN EN 60534-2-3
- See "7.2. Operating limits" on page 16.

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | Operating pressure max. | | | Characteristic curve (theoretical rangeability) | K _v value at stroke [m^3/h] | | | | | | K _{vs} value | | |
|-------------------------|------------------|-----------|-----------------|----------------------------|----------|----------|---|--|-------------------------|-------|-------|-------|-------------|-----------------------|-----|------|
| | | | | SF: A (Seat leakage class) | | | | | | | | | | | | |
| | | | | Seat seal | | | | | | | | | | | | |
| | | | | Stainless steel | PTFE | PEEK | | | | | | | | | | |
| DN | NPS | | [mm] | [bar(g)] | [bar(g)] | [bar(g)] | 5% | 10% | 30% | 50% | 70% | 90% | [m^3/h] | | | |
| 10 | ¾ ⁽¹⁾ | 3 | 50 (D) | 16 (IV) | - | - | Linear (10:1) | - | 0.003 | 0.015 | 0.037 | 0.065 | 0.090 | 0.10 | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | |
| | | 4 | 50 (D) | 16 (IV) | | | Linear (25:1) | - | 0.015 | 0.10 | 0.19 | 0.27 | 0.33 | 0.35 | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | |
| | | 4 | 50 (D) | 16 (IV) | | | Linear (10:1) | - | 0.050 | 0.16 | 0.27 | 0.36 | 0.44 | 0.50 | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | |
| | | 6 | 50 (D) | 16 (IV) | | | Linear (25:1) | - | 0.12 | 0.48 | 0.76 | 0.98 | 1.1 | 1.2 | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | |
| | | 6 | 50 (D) | 16 (IV) | | | 16 (VI) | 10 (VI) | Equal percentage (50:1) | - | 0.007 | 0.045 | 0.16 | 0.41 | 1.1 | 1.25 |
| | | | 70 (M) | 25 (IV) | | | 25 (VI) | 25 (VI) | | | | | | | | |
| | | 8 | 50 (D) | 16 (IV) | | | 16 (VI) | 10 (VI) | - | 0.070 | 0.12 | 0.26 | 0.61 | 1.5 | 2.0 | |
| | | | 70 (M) | 25 (IV) | | | 25 (VI) | 25 (VI) | | | | | | | | |
| 10 | 50 (D) | 16 (IV) | 16 (VI) | 10 (VI) | - | 0.11 | 0.19 | 0.48 | 1.0 | 2.3 | 2.7 | | | | | |
| | 70 (M) | 25 (IV) | 25 (VI) | 25 (VI) | | | | | | | | | | | | |

ed: 26.03.2021

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | Operating pressure max. SF: A (Seat leakage class) | | | Characteristic curve (theoretical rangeability) | K _v value at stroke [m³/h] | | | | | | K _{vs} value | | | | | | | |
|-------------------------|-------------------|-----------|--------------------------|--|---------------|---------------------------|---|---------------------------------------|-------|-------|-------|-------|-------|-----------------------|------|-------|------|------|------|-----|-----|
| | | | | Seat seal | | | | 5% | 10% | 30% | 50% | 70% | 90% | | | | | | | | |
| DN | NPS | [mm] | Stainless steel [bar(g)] | PTFE [bar(g)] | PEEK [bar(g)] | [m³/h] | | | | | | | | | | | | | | | |
| 15 | ½ ^{1,3} | 3 | 50 (D) | 16 (IV) | - | - | Linear (10:1) | - | 0.003 | 0.015 | 0.037 | 0.065 | 0.090 | 0.10 | | | | | | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | | | | | | |
| | | 4 | 50 (D) | 16 (IV) | | | Linear (25:1) | - | 0.015 | 0.10 | 0.19 | 0.27 | 0.33 | 0.35 | | | | | | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | | | | | | |
| | | 4 | 50 (D) | 16 (IV) | | | Linear (10:1) | - | 0.050 | 0.16 | 0.27 | 0.36 | 0.44 | 0.50 | | | | | | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | | | | | | |
| | | 6 | 50 (D) | 16 (IV) | | | Linear (25:1) | - | 0.12 | 0.48 | 0.76 | 0.98 | 1.1 | 1.2 | | | | | | | |
| | | | 70 (M) | 25 (IV) | | | | | | | | | | | | | | | | | |
| | 6 | 50 (D) | 16 (IV) | 16 (VI) | 10 (VI) | Equal percentage (50:1) | - | 0.007 | 0.045 | 0.16 | 0.41 | 1.1 | 1.25 | | | | | | | | |
| | | | 70 (M) | 25 (IV) | 25 (VI) | | | | | | | | | 25 (VI) | | | | | | | |
| | | 8 | 50 (D) | 16 (IV) | 16 (VI) | | | | | | | | | 10 (VI) | - | 0.080 | 0.13 | 0.27 | 0.63 | 1.6 | 2.1 |
| | | | 70 (M) | 25 (IV) | 25 (VI) | | | | | | | | | 25 (VI) | | | | | | | |
| | | 10 | 50 (D) | 16 (IV) | 16 (VI) | | | | | | | | | 10 (VI) | - | 0.11 | 0.19 | 0.49 | 1.1 | 2.5 | 3.1 |
| | | | 70 (M) | 25 (IV) | 25 (VI) | | | | | | | | | 25 (VI) | | | | | | | |
| | | 15 | 50 (D) | 16 (IV) | 16 (VI) | | | | | | | | | 10 (VI) | 0.14 | 0.17 | 0.35 | 0.80 | 1.8 | 3.7 | 4.3 |
| | | | 70 (M) | 25 (IV) | 25 (VI) | | | | | | | | | 25 (VI) | | | | | | | |
| 20 | ¾ ^{1,3} | 10 | 50 (D) | 16 (IV) | 16 (VI) | 10 (VI) | 0.11 | 0.12 | 0.20 | 0.52 | 1.2 | 2.6 | 3.2 | | | | | | | | |
| | | | 70 (M) | 25 (IV) | 25 (VI) | 10 (VI) | | | | | | | | | | | | | | | |
| | | 15 | 50 (D) | 16 (IV) | 16 (VI) | 10 (VI) | 0.14 | 0.17 | 0.35 | 0.80 | 1.8 | 4.0 | 5.2 | | | | | | | | |
| | | | 70 (M) | 25 (IV) | 25 (VI) | 25 (VI) | | | | | | | | | | | | | | | |
| | | 20 | 70 (M) | 16 (IV) | 16 (VI) | 10 (VI) | 0.20 | 0.25 | 0.45 | 1.1 | 2.4 | 5.2 | 7.1 | | | | | | | | |
| | | | 90 (N) | 25 (IV) | 25 (VI) | 25 (VI) | | | | | | | | | | | | | | | |
| 25 | 1 | 15 | 50 (D) | 16 (IV) | 16 (VI) | 10 (VI) | 0.14 | 0.17 | 0.35 | 0.80 | 1.8 | 4.1 | 5.3 | | | | | | | | |
| | | | 70 (M) | 25 (IV) | 25 (VI) | 25 (VI) | | | | | | | | | | | | | | | |
| | | 20 | 70 (M) | 16 (IV) | 16 (VI) | 10 (VI) | 0.20 | 0.25 | 0.47 | 1.1 | 2.5 | 5.4 | 7.2 | | | | | | | | |
| | | | 90 (N) | 25 (IV) | 25 (VI) | 25 (VI) | | | | | | | | | | | | | | | |
| | | 25 | 70 (M) | 12 (IV) | 12 (VI) | 7 (VI) | 0.35 | 0.38 | 1.0 | 2.2 | 5.1 | 9.4 | 12.0 | | | | | | | | |
| | | | 90 (N) | 25 (IV) | 25 (VI) | 20 (VI) | | | | | | | | | | | | | | | |
| 32 | 1¼ ^{1,3} | 20 | 90 (N) | 25 (IV) | 25 (VI) | 25 (VI) | 0.21 | 0.24 | 0.45 | 0.85 | 1.8 | 3.8 | 5.5 | | | | | | | | |
| | | | 130 (P) | | 25 (VI) | | | | | | | | | | | | | | | | |
| | | 25 | 90 (N) | | 20 (VI) | | 0.38 | 0.45 | 0.93 | 1.8 | 3.7 | 6.7 | 8.9 | | | | | | | | |
| | | | 130 (P) | | 25 (VI) | | | | | | | | | | | | | | | | |
| | | 32 | 90 (N) | 16 (IV) | 16 (VI) | 10 (VI) | 0.45 | 0.58 | 1.1 | 2.5 | 4.9 | 10.1 | 13.4 | | | | | | | | |
| | | | 130 (P) | 25 (IV) | 25 (VI) | 20 (VI) | | | | | | | | | | | | | | | |
| | | 40 | 90 (N) | 16 (IV) | 16 (VI) | 10 (VI) | 0.48 | 0.60 | 1.3 | 3.1 | 6.8 | 14.0 | 17.8 | | | | | | | | |
| | | | 130 (P) | 25 (IV) | 25 (VI) | 20 (VI) | | | | | | | | | | | | | | | |
| | | 40 | 1½ ^{1,3} | 25 | 90 (N) | 25 (IV) | 25 (VI) | 10 (VI) | 0.38 | 0.48 | 0.95 | 1.9 | 3.7 | 7.2 | 9.4 | | | | | | |
| | | | | | 130 (P) | | 25 (VI) | | | | | | | | | | | | | | |
| | | | | 32 | 90 (N) | 16 (IV) | 16 (VI) | 10 (VI) | 0.45 | 0.55 | 1.1 | 2.5 | 5.0 | 10.8 | 14.4 | | | | | | |
| | | | | | 130 (P) | 25 (IV) | 25 (VI) | 20 (VI) | | | | | | | | | | | | | |
| 40 | 90 (N) | | | 12 (IV) | 12 (VI) | 7 (VI) | 0.55 | 0.67 | 1.5 | 3.2 | 6.5 | 13.6 | 17.5 | | | | | | | | |
| | 130 (P) | | | 25 (IV) | 25 (VI) | 20 (VI) | | | | | | | | | | | | | | | |
| 50 | 2 ^{1,3} | | | 32 | 90 (N) | 16 (IV) | 16 (VI) | 10 (VI) | 0.45 | 0.56 | 1.1 | 2.5 | 5.0 | 11.4 | 15.3 | | | | | | |
| | | | | | 130 (P) | 25 (20 ²)(IV) | 25 (20 ²)(IV) | 20 (VI) | | | | | | | | | | | | | |
| | | | | 40 | 90 (N) | 12 (IV) | 12 (VI) | 7 (VI) | 0.48 | 0.60 | 1.3 | 3.2 | 6.9 | 16.0 | 21.0 | | | | | | |
| | | | | | 130 (P) | 25 (20 ²)(IV) | 25 (20 ²)(IV) | 20 (VI) | | | | | | | | | | | | | |
| | | | | 50 | 90 (N) | 7 (III) | 7 (VI) | - | 0.57 | 0.68 | 1.5 | 3.2 | 6.4 | 13.8 | 18.0 | | | | | | |
| | | | | | 130 (P) | 25 (20 ²)(IV) | 25 (20 ²)(IV) | 20 (VI) | | | | | | | | | | | | | |
| | | 65 | 2½ ^{1,3} | 40 | 130 (P) | 25 (15 ²)(IV) | 25 (15 ²)(IV) | 20 (15 ²)(IV) | 0.65 | 0.75 | 1.8 | 4.3 | 10.4 | 22.0 | 29.0 | | | | | | |
| | | | | | 50 | 130 (P) | | | | | | | | | | | | | | | |
| | | | | 65 | 130 (P) | 16 (15 ²)(IV) | 16 (15 ²)(IV) | 10 (VI) | 1.0 | 1.2 | 3.1 | 6.7 | 16.0 | 35.0 | 45.0 | | | | | | |
| | | | | | 225 (L) | 25 (15 ²)(IV) | 25 (15 ²)(VI) | 10 (VI) | | | | | | | | | | | | | |
| | | | | 1.6 | 2.0 | 5.0 | 13.5 | 33.0 | 56 | 65 | | | | | | | | | | | |
| | | | | | 1.1 | 1.4 | 3.2 | 8.0 | 18.5 | 46.5 | 62 | | | | | | | | | | |

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | Operating pressure max. SF: A (Seat leakage class) | | | Characteristic curve (theoretical rangeability) | K _v value at stroke [m³/h] | | | | | | K _{vs} value | | |
|-------------------------|-----------------|-----------|-----------------|--|-----------------------------|-----------------------------|---|---------------------------------------|---------|------|------|------|------|-----------------------|-----|-----|
| | | | | Stainless steel | PTFE | PEEK | | 5% | 10% | 30% | 50% | 70% | 90% | | | |
| DN | NPS | | [mm] | [bar(g)] | [bar(g)] | [bar(g)] | | [m³/h] | | | | | | | | |
| 80 | 3 ¹⁾ | 50 | 130 (P) | 25 (12.5 ²⁾ (IV) | 25 (12.5 ²⁾ (IV) | 20 (12.5 ²⁾ (IV) | Equal percent-age (50:1) | 1.0 | 1.2 | 3.4 | 8.3 | 19.0 | 35.0 | 45.0 | | |
| | | | 65 | 130 (P) | 16 (12.5 ²⁾ (IV) | 16 (12.5 ²⁾ (IV) | | 10 (VI) | 1.6 | 2.0 | 5.0 | 13.0 | 35.0 | 61 | 73 | |
| | | 80 | 225 (L) | 25 (12.5 ²⁾ (IV) | 25 (12.5 ²⁾ (IV) | 10 (VI) | | 1.4 | 1.7 | 3.8 | 8.2 | 19.5 | 50 | 70 | | |
| | | | 130 (P) | 10 (IV) | 10 (VI) | - | | 2.5 | 3.4 | 10.7 | 27.0 | 58 | 87 | 100 | | |
| | | 100 | 4 | 65 | 225 (L) | 12.5 (IV) | | 12.5 (VI) | 7 (VI) | 2.1 | 2.6 | 7.0 | 16.0 | 40.0 | 83 | 100 |
| | | | | | 130 (P) | 16 (10 ²)(IV) | | 16 (10 ²)(IV) | 10 (VI) | 1.4 | 1.8 | 5.0 | 15.0 | 37.0 | 64 | 77 |
| 100 | 4 | 80 | 225 (L) | 25 (10 ²)(IV) | 25 (10 ²)(IV) | 10 (VI) | | 1.4 | 1.7 | 3.8 | 8.3 | 20.0 | 51 | 75 | | |
| | | | 130 (P) | 10 (IV) | 10 (VI) | - | | 2.2 | 3.1 | 10.3 | 30.0 | 66 | 97 | 110 | | |
| | | 100 | 225 (L) | 12.5 (10 ²)(IV) | 12.5 (10 ²)(IV) | 7 (VI) | | 2.1 | 2.6 | 7.0 | 17.0 | 44.0 | 89 | 115 | | |
| | | | 130 (P) | 6 (IV) | 6 (VI) | - | | 3.8 | 5.2 | 15.0 | 46.5 | 90 | 128 | 140 | | |
| | | 100 | 4 | 100 | 225 (L) | 10 (IV) | | 10(VI) | - | 3.2 | 3.9 | 9.0 | 20.5 | 51 | 118 | 140 |

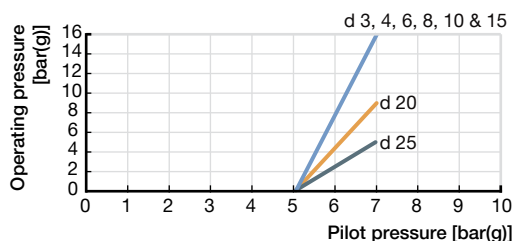
- 1.) Deviation for line connections according to ASME BPE: the next larger nominal connection size is used, e.g. NPS 1 instead of NPS ¾
- 2.) According to the Pressure Equipment Directive 97/23/EC for compressible fluids of group 1 (dangerous gases and vapours according to article 3 point 1.3 letter a, first indent)

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

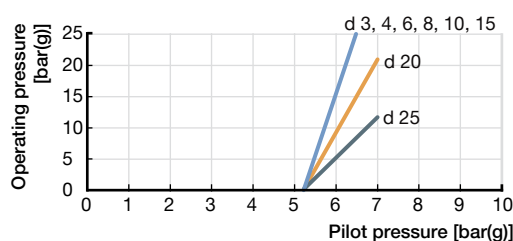
Note:

d = Seat size

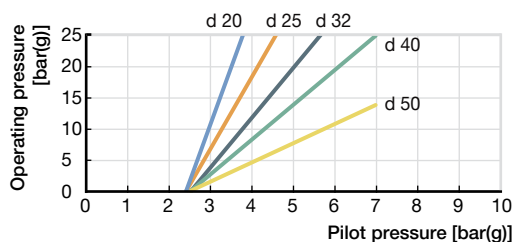
Actuator size Ø: 50 mm



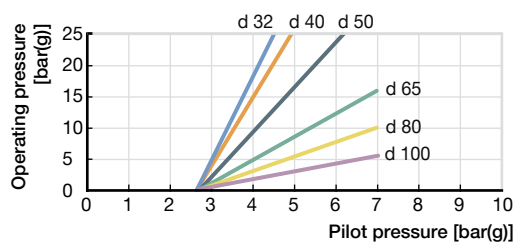
Actuator size Ø: 70 mm



Actuator size Ø: 90 mm



Actuator size Ø: 130 mm

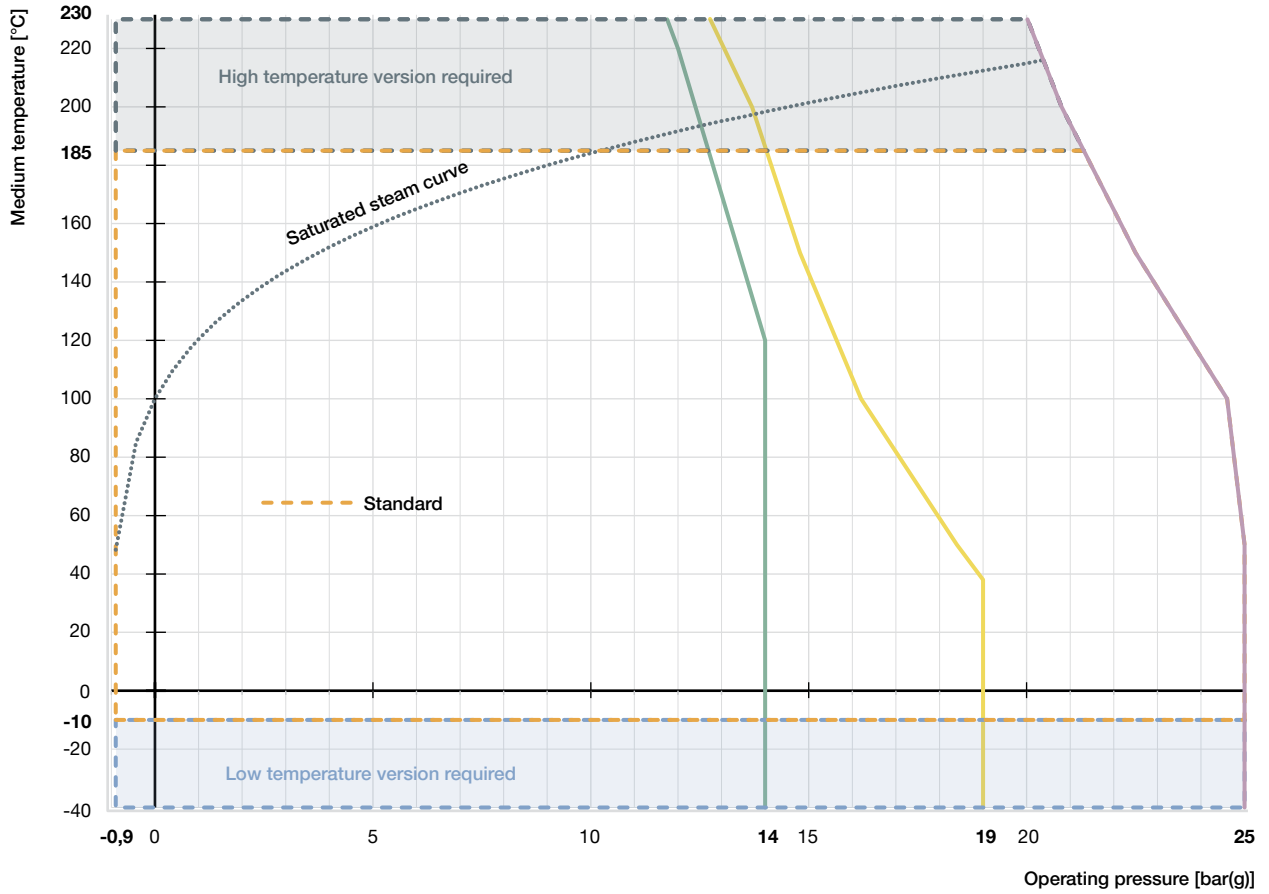


ed: 26.03.2021

7.2. 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.

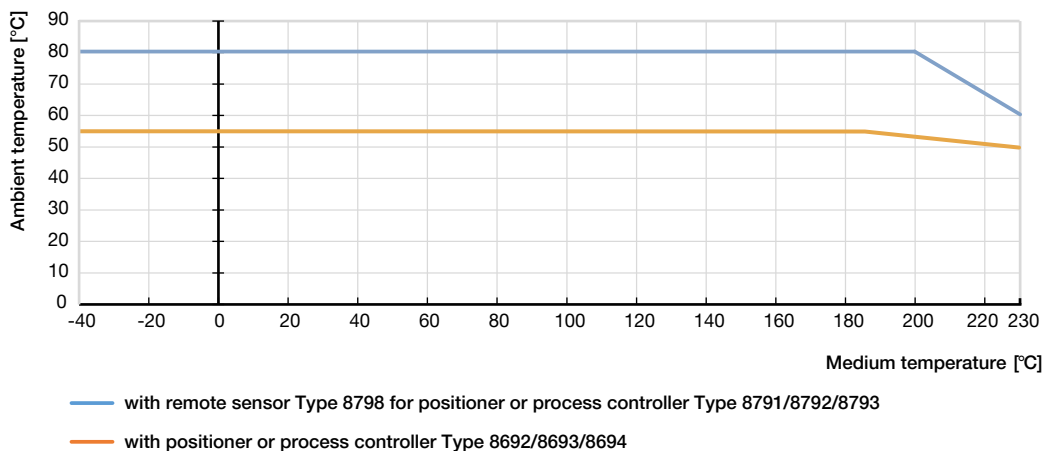


- Operating limits for PN25 acc. to DIN EN 12516-1
- Operating limits for flange 10K acc. to JIS B 2220
- Operating limits for Class 150 acc. to ASME B16.34
- Saturated steam curve for water

ed: 26.03.2021

Operating limits for ambient and medium temperature

ELEMENT Actuator



Operating limits seat seal

| Tight sealing required | Leakage class (DIN EN 60534-4) | Medium temperature | Seat seal |
|---|--|--|-----------------|
| No An additional shut-off valve is recommended | III / IV (metal seals) Metal-sealed valves have larger leakages (0.1 % or 0.01 % of the nominal flow rate are permissible). Metallic seals are impervious even under demanding process conditions. | -40...230 °C | Stainless steel |
| Yes An additional shut-off valve is often unnecessary. | VI (soft seals) By using plastics as sealing material, the control valves can close tightly. Their use is not recommended in cases of increased erosion due to demanding process conditions. | -40...130 °C (recommended for ≤ 130 °C) | PTFE |
| | | -10...230 °C (recommended for > 130 °C) | PEEK |

ed: 26.03.2021

Operating limits for optional versions

High temperature version

By adapting the spindle sealing 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.

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 for pressures down to -0.9 bar(g).


Low temperature version

Suitable for minimum medium temperatures down to -40 °C

Version for oxygen


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

8. Product accessories




| Process controller TopControl | |
|---|---|
| Type 8693 ▶ Actuator size Ø 70/90/130 mm | Description |
|  | <p>The intelligent process controller Type 8693 is designed for integrated mounting on pneumatic actuators from the process control valve series Type 23xx/2103 and especially for the requirements of hygienic process conditions. Using the TUNE-Functions, the process and positioner can be initialized automatically. Easy operation and selection of additional software functions as well as parameterization are carried out via the large graphic display and the membrane keypad. Device configuration and parameterization can also be conveniently carried out by the Bürkert Communicator software tool via a PC interface.</p> <p>Features</p> <ul style="list-style-type: none"> • Contactless position sensor • Universal control system for single and double acting actuators • Highly dynamic actuating system without internal control air consumption in the balanced state • Integrated diagnostic functions for valve monitoring • Automatic initialization of the positioner and process controller using the TUNE-Function • Safeguarding in the event of failure of the electrical or pneumatic auxiliary power • PROFIBUS DP-V1, DeviceNet, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büS) • Compact and robust hygienic stainless steel design <p>Customer benefits</p> <ul style="list-style-type: none"> • Quick and easy commissioning • Intuitive and simple operation via graphic display with backlight and membrane keyboard • High system availability due to increased drive service life by means of spring chamber ventilation • Guaranteed reliability and predictable maintenance through valve monitoring and diagnostics • Easy maintenance and process monitoring |

ed: 26.03.2021

| Positioner TopControl | |
|---|--|
| Type 8692 ▶ Actuator size Ø 70/90/130 mm | Description The intelligent electropneumatic positioner Type 8692 is designed for integrated attachment to pneumatic actuators of the process control valve series Type 23xx/2103 and especially for the requirements of hygienic process conditions. The positioner can be initialized automatically using the TUNE-Function. Easy operation and the selection of the extensive additional software functions as well as parameterization are carried out via the large graphic display and the membrane keypad. The device configuration and parameterization can also be conveniently carried out using the Bürkert Communicator software tool via a PC interface. |
|  | Features <ul style="list-style-type: none"> • Contactless position sensor • Universal positioning system for single and double-acting actuators • Highly dynamic positioning system without internal control air consumption • Integrated diagnostic functions for valve monitoring • Automatic initialization of the positioner by means of the TUNE-Function • Safeguard in the event of failure of the electrical or pneumatic auxiliary power • PROFIBUS DP-V1, DeviceNet, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büs) • Compact and robust hygienic stainless steel design |
| | Customer benefits <ul style="list-style-type: none"> • Quick and easy commissioning • Intuitive and simple operation via graphic display with backlight and touch keypad • Guaranteed reliability and predictable maintenance through valve monitoring and diagnostics • A high degree of system availability due to increased drive service life by means of spring chamber ventilation |
| Positioner TopControl BASIC | |
| Type 8694 ▶ Actuator size Ø 70/90/130 mm | Description The compact positioner Type 8694/8696 is designed for integrated attachment to pneumatic actuators of the Type 23xx/2103 Process Control Valve series and especially for the requirements of hygienic process conditions. Operation and parameterization are performed via push buttons and DIP switches. The device configuration and parameterization can also be conveniently carried out using the Bürkert Communicator software tool via a PC interface. |
|  | Features <ul style="list-style-type: none"> • Contactless position sensor • Universal positioning system for single and double-acting actuators • Ultra dynamic positioning system without internal control air consumption • AS-Interface, IO-Link, Bürkert system bus (büs) (only 8694) • Compact and robust hygienic stainless steel design |
| | Type 8696 ▶ Actuator size Ø 50 mm |
|  | |

| Process controller SideControl Remote | |
|---|--|
| <p>Type 8793 ▶ with Remote Sensor 8798 ▶ Actuator size Ø 70/90/130 mm</p>  | <p>Description</p> <p>The intelligent digital positioner/process controller Type 8793 is designed for mounting on lift or swivel drives with standardization in accordance with IEC 534-6 or VDI/VDE 3845 and is designed for demanding control tasks. The version with remote position sensor Type 8798 is used to control Bürkert process control valves. It is operated via a backlit graphic display. The initialization of process and positioner can be done automatically by means of TUNE-Function. Here the type of controlled system is automatically recognized and the appropriate controller structure with the corresponding optimum parameter set is determined.</p> <p>Features</p> <ul style="list-style-type: none"> • Universal control system for single and double acting actuators • Integrated diagnostic functions for valve monitoring • Automatic initialization of the position and process controller by means of TUNE-Function • Ultra dynamic actuating system without internal control air consumption. • Illuminated graphic display with touch screen • PROFIBUS DP-V1, DeviceNet, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (bÜS) • Compact and robust design • Adaptation acc. to IEC 534-6 or VDI / VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves <p>Customer benefits</p> <ul style="list-style-type: none"> • Quick and easy commissioning • Intuitive and simple operation via graphic display with backlight and touch keypad. • Guaranteed reliability and scheduled maintenance thanks to valve monitoring and diagnostics. • Easy maintenance and process monitoring • Long service life |

ed: 26.03.2021

| Positioner SideControl Remote | |
|--|--|
| <p>Positioner Type 8792 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø 70/90/130 mm</p>  | <p>Description</p> <p>The intelligent digital position/process controller Type 8792 is designed for attachment to lift and swivel drives with standardization according to IEC 534-6 or VDI/VDE 3845 for demanding control tasks. The Type 8798 version with remote position sensor is used to control Bürkert process control valves. It is operated via a backlit graphic display. The initialization of process and positioner can be done automatically by means of TUNE-Function.</p> <p>Features</p> <ul style="list-style-type: none"> • Illuminated graphic display with touch screen • Universal control system for single and double acting actuators • Ultra dynamic actuating system without internal control air consumption. • Integrated diagnostic functions for valve monitoring • PROFIBUS DP-V1, DeviceNet, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büS) • Compact and robust design • Adaptation acc. to IEC 534-6 or VDI / VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves <p>Customer benefits</p> <ul style="list-style-type: none"> • Quick and easy commissioning • Intuitive and simple operation via backlit graphic display and touch keypad. • Guaranteed reliability and scheduled maintenance thanks to valve monitoring and diagnostics. • Long service life |
| <p>Positioner SideControl BASIC Remote</p> <p>Positioner Type 8791 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø 70/90/130 mm</p>  | <p>Description</p> <p>The positioner Type 8791 is designed for mounting on lift or swivel drives with standardization in accordance with IEC 534-6 or VDI/VDE 3845 designed for simple control tasks. The variant with the remote sensor Type 8798 is used to control Bürkert process control valves. All operating elements are located inside the housing.</p> <p>Features</p> <ul style="list-style-type: none"> • Simple design • Universal control system for single and double acting actuators • Highly dynamic actuating system without internal control air consumption in the balanced state • Adaptation according to IEC 534-6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves • AS-Interface, IO-Link, Bürkert system bus (büS) (only for Positioner Type 8791 BASIC Remote) <p>Customer benefits</p> <ul style="list-style-type: none"> • Simple commissioning • Simple device for simple control tasks • Low energy consumption |
| <p>Positioner IP20 Type 8791 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø 70/90/130 mm</p>  | <p>Description</p> <p>The positioner Type 8791 is designed for mounting on lift or swivel drives with standardization in accordance with IEC 534-6 or VDI/VDE 3845 designed for simple control tasks. The variant with the remote sensor Type 8798 is used to control Bürkert process control valves. All operating elements are located inside the housing.</p> <p>Features</p> <ul style="list-style-type: none"> • Simple design • Universal control system for single and double acting actuators • Highly dynamic actuating system without internal control air consumption in the balanced state • Adaptation according to IEC 534-6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves • AS-Interface, IO-Link, Bürkert system bus (büS) (only for Positioner Type 8791 BASIC Remote) <p>Customer benefits</p> <ul style="list-style-type: none"> • Simple commissioning • Simple device for simple control tasks • Low energy consumption |

9. Networking and combination with other Bürkert products

The **Type 2301 Globe Control Valve** can be combined with our extensive range of positioners and process controllers to form the **Continuous ELEMENT valve system, Type 8802-GD**.

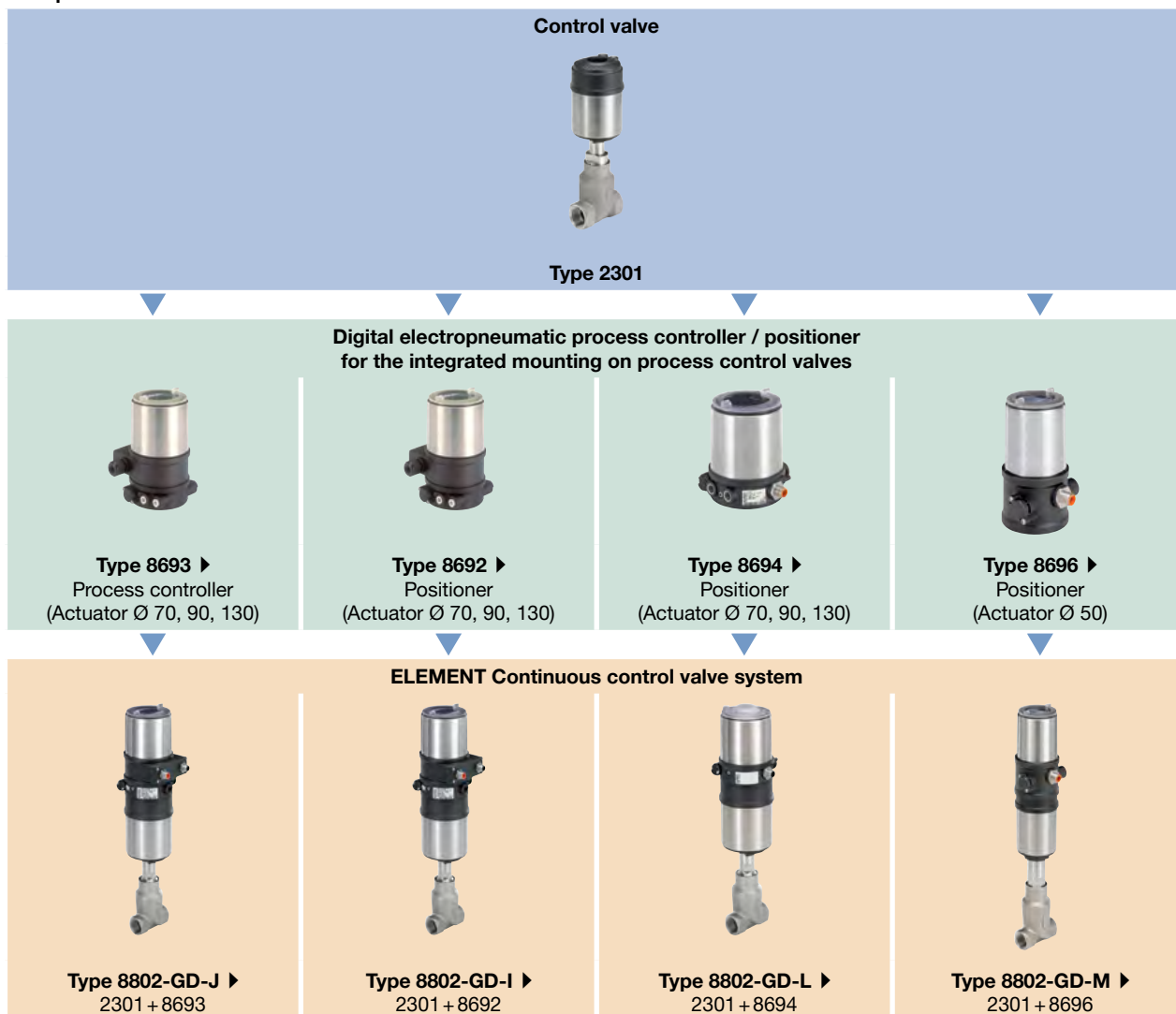
The range of the control unit consists of;

- A digital electropneumatic positioner/process controller **Type 8692/8693** (for valve actuator sizes Ø 70/90/130 mm)
- A digital electropneumatic positioner, basic **Type 8694** (for valve actuator size Ø 70/90/130 mm)
- A digital electropneumatic positioner, basic **Type 8696** (for valve actuator size Ø 50 mm)
- An electropneumatic positioner, SideControl **Type 8792** or an electropneumatic process controller, **Type 8793** (for valve actuator size Ø 70/90/130 mm) and a remote sensor, **Type 8798**
- An electropneumatic positioner, SideControl Basic **Type 8791** (for valve actuator size Ø 70/90/130 mm) and a remote sensor, **Type 8798**

Note:

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

Example with threaded connection



ed: 26.03.2021

Control valve



Type 2301

Digital electropneumatic process controller / positioner SideControl



Type 8793 ▶
Process controller
+
Type 8798 ▶
Remote sensor

(Actuator Ø 70, 90, 130)



Type 8792 ▶
Positioner
+
Type 8798 ▶
Remote sensor

(Actuator Ø 70, 90, 130)



or

Type 8791 ▶
Positioner
+
Type 8798 ▶
Remote sensor

SideControl Basic IP20
Positioner
(Actuator Ø 50)

(Actuator Ø 70, 90, 130)

ELEMENT Continuous control valve system



Type 8802-GD-Q ▶
2301 + 8793 + 8798



Type 8802-GD-P ▶
2301 + 8792 + 8798



Type 8802-GD-O ▶
2301 + 8791 + 8798

ed: 26.03.2021

10. Ordering information

10.1. 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](#)

10.2. 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](#)

ed: 26.03.2021

10.3. Ordering chart flange connection

Valve with flow direction below seat

| Nominal diameter (pipe) | | Seat size | Actuator size Ø [mm] | K _{vs} value [m ³ /h] | Article no. | |
|-------------------------|-----|-----------|----------------------------|--|-------------|-----------------|
| DN | NPS | | | | Seat seal | |
| DIN EN 1092-1 | | | | | PTFE | Stainless steel |
| 10 | ¾ | 3 | 70 | 0.1 | - | On request |
| | | 4 | 70 | 0.5 | - | 215207 |
| | | 6 | 70 | 1.25 | - | 215209 |
| | | 8 | 70 | 2.0 | 213985 | 215212 |
| | | 10 | 70 | 2.7 | 213989 | 215215 |
| 15 | ½ | 3 | 70 | 0.1 | - | 233165 |
| | | 4 | 70 | 0.5 | - | 210529 |
| | | 6 | 70 | 1.25 | - | 215211 |
| | | 8 | 70 | 2.1 | 213987 | 215214 |
| | | 10 | 70 | 3.1 | 213991 | 215217 |
| | | 15 | 70 | 4.3 | 204932 | 205010 |
| 20 | ¾ | 10 | 70 | 3.2 | 210530 | 215218 |
| | | 15 | 70 | 5.2 | 213993 | 214030 |
| | | 20 | 70 | 7.1 | 204935 | 205012 |
| 25 | 1 | 15 | 70 | 5.3 | 213994 | 214031 |
| | | 20 | 70 | 7.2 | 213995 | 214032 |
| | | 25 | 70 | 12.0 | 204937 | 205014 |
| | | 90 | 70 | 12.0 | 242054 | 229421 |
| 32 | 1¼ | 25 | 90 | 8.9 | 213997 | 210446 |
| | | | 130 | 13.0 | 222634 | 222655 |
| | | 32 | 90 | 13.4 | 204939 | 205016 |
| | | | 130 | 17.8 | 223597 | 223598 |
| 40 | 1½ | 32 | 90 | 14.4 | 213999 | 214035 |
| | | | 130 | 20.2 | 222636 | 222657 |
| | | 40 | 90 | 17.5 | 204941 | 205018 |
| | | | 130 | 23.8 | 219791 | 222659 |
| 50 | 2 | 40 | 90 | 18.0 | 214001 | 214037 |
| | | | 130 | 24.6 | 222638 | 222660 |
| | | 50 | 90 | 28.0 | 204942 | 205019 |
| | | | 130 | 37.0 | 214003 | 214039 |
| 65 | 2½ | 50 | 130 | 45.0 | 214005 | 214040 |
| | | 65 | 130 | 65.0 | 217772 | 219618 |
| 80 | 3 | 65 | 130 | 73.0 | 239545 | 239581 |
| | | 80 | 130 | 100.0 | 239540 | 239576 |
| 100 | 4 | 80 | 130 | 110.0 | 239561 | 239597 |
| | | 100 | 130 | 140.0 | 239556 | 331125 |




ed: 26.03.2021

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Article no. | |
|-------------------------|-----|-----------|--------------------|-----------------------|-------------|-----------------|
| DN | NPS | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | PTFE | Stainless steel |
| JIS 10K | | | | | | |
| 15 | ½ | 3 | 70 | 0.1 | - | On request |
| | | 4 | 70 | 0.5 | - | 215226 |
| | | 6 | 70 | 1.25 | - | 215227 |
| | | 8 | 70 | 2.1 | 215203 | 215228 |
| | | 10 | 70 | 3.1 | 213913 | 213911 |
| | | 15 | 70 | 4.3 | 204953 | 205030 |
| 20 | ¾ | 10 | 70 | 3.2 | 215204 | 215229 |
| | | 15 | 70 | 5.2 | 213936 | 213933 |
| | | 20 | 70 | 7.1 | 204955 | 205032 |
| 25 | 1 | 15 | 70 | 5.3 | 214020 | 214059 |
| | | 20 | 70 | 7.2 | 213930 | 213914 |
| | | 25 | 70 | 12.0 | 204957 | 205034 |
| | | | 90 | 12.0 | 242165 | 242199 |
| 32 | 1¼ | 25 | 90 | 8.9 | 213939 | 213937 |
| | | | 130 | 13.0 | 222643 | 222665 |
| | | 32 | 90 | 13.4 | 213177 | 213178 |
| | | | 130 | 17.8 | 222645 | 222667 |
| 40 | 1½ | 32 | 90 | 14.4 | 213932 | 213931 |
| | | | 130 | 20.2 | 222647 | 222668 |
| | | 40 | 90 | 17.5 | 204959 | 205037 |
| | | | 130 | 23.8 | 222649 | 222670 |
| 50 | 2 | 40 | 90 | 18.0 | 213941 | 213940 |
| | | | 130 | 24.6 | 222650 | 222671 |
| | | 50 | 90 | 28.0 | 204960 | 205038 |
| | | | 130 | 37.0 | 214023 | 214062 |
| 65 | 2½ | 50 | 130 | 45.0 | 214024 | 214063 |
| | | 65 | 130 | 65.0 | 219617 | 219620 |
| 80 | 3 | 65 | 130 | 73.0 | 239547 | 239584 |
| | | 80 | 130 | 100.0 | 239542 | 239578 |
| 100 | 4 | 80 | 130 | 110.0 | 239563 | 239599 |
| | | 100 | 130 | 140.0 | 239558 | 239594 |

ed: 26.03.2021

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Article no. | |
|-------------------------|-----|-----------|--------------------|-----------------------|-------------|-----------------|
| DN | NPS | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | PTFE | Stainless steel |
| ANSI B 16.5 | | | | | | |
| 15 | ½ | 3 | 70 | 0.1 | - | On request |
| | | 4 | 70 | 0.5 | - | 215219 |
| | | 6 | 70 | 1.25 | - | 215220 |
| | | 8 | 70 | 2.1 | 215198 | 215221 |
| | | 10 | 70 | 3.1 | 215199 | 215222 |
| | | 15 | 70 | 4.3 | 204944 | 205021 |
| 20 | ¾ | 10 | 70 | 3.2 | 215200 | 215223 |
| | | 15 | 70 | 5.2 | 214009 | 214046 |
| | | 20 | 70 | 7.1 | 204946 | 205023 |
| 25 | 1 | 15 | 70 | 5.3 | 214010 | 214047 |
| | | 20 | 70 | 7.2 | 214011 | 214048 |
| | | 25 | 70 | 12.0 | 204948 | 205025 |
| | | | 90 | 12.0 | 464851 | 464367 |
| 40 | 1½ | 32 | 90 | 14.4 | 215201 | 215224 |
| | | | 130 | 20.2 | 463905 | 463913 |
| | | 40 | 90 | 17.5 | 204950 | 205027 |
| | | | 130 | 23.8 | 463907 | 463915 |
| 50 | 2 | 40 | 90 | 18.0 | 214013 | 214050 |
| | | | 130 | 24.6 | 463908 | 463916 |
| | | 50 | 90 | 28.0 | 204951 | 205028 |
| | | | 130 | 37.0 | 214015 | 214052 |
| 65 | 2½ | 50 | 130 | 45.0 | 239537 | 239573 |
| | | 65 | 130 | 65.0 | 239535 | 239572 |
| 80 | 3 | 65 | 130 | 73.0 | 239546 | 239582 |
| | | 80 | 130 | 100.0 | 239541 | 239577 |
| 100 | 4 | 80 | 130 | 110.0 | 239562 | 239598 |
| | | 100 | 130 | 140.0 | 239557 | 239593 |

ed: 26.03.2021

| Further versions on request | |
|---|---|
|  Approval FDA, ATEX, (EG Gas Appliances Directive 2009/142/EG) |  Control function/Circuit function B (normally open: NO) |
|  Process connection Further housing connections | |

10.4. Ordering chart threaded connection

Valve with flow direction below seat

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Article no. | |
|-------------------------------|--------|-----------|--------------------|-----------------------|-------------|-----------------|
| [mm] | [inch] | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | PTFE | Stainless steel |
| G thread, EN ISO 228-1 | | | | | | |
| 10 | 3/8 | 3 | 70 | 0.1 | - | 284168 ☒ |
| | | 4 | 70 | 0.5 | - | 215238 ☒ |
| | | 6 | 70 | 1.25 | - | 215240 ☒ |
| | | 8 | 70 | 2.0 | 215233 ☒ | 215242 ☒ |
| | | 10 | 70 | 2.7 | 215235 ☒ | 215245 ☒ |
| 15 | 1/2 | 3 | 70 | 0.1 | - | 227784 ☒ |
| | | 4 | 70 | 0.5 | - | 208843 ☒ |
| | | 6 | 70 | 1.25 | - | 215241 ☒ |
| | | 8 | 70 | 2.1 | 212964 ☒ | 215243 ☒ |
| | | 10 | 70 | 3.1 | 215236 ☒ | 215246 ☒ |
| | | 15 | 70 | 4.3 | 206432 ☒ | 213955 ☒ |
| 20 | 3/4 | 10 | 70 | 3.2 | 215237 ☒ | 215247 ☒ |
| | | 15 | 70 | 5.2 | 214067 ☒ | 215248 ☒ |
| | | 20 | 70 | 7.1 | 206584 ☒ | 211239 ☒ |
| 25 | 1 | 15 | 70 | 5.3 | 206588 ☒ | 210460 ☒ |
| | | 20 | 70 | 7.2 | 206586 ☒ | 210721 ☒ |
| | | 25 | 70 | 12.0 | 189145 ☒ | 210485 ☒ |
| | | 90 | 12.0 | 242203 ☒ | 242207 ☒ | |
| 32 | 1 1/4 | 25 | 90 | 8.9 | 214070 ☒ | 210407 ☒ |
| | | | 130 | 13.0 | 222677 ☒ | 222687 ☒ |
| | | 32 | 90 | 13.4 | 210097 ☒ | 210458 ☒ |
| | | | 130 | 17.8 | 223599 ☒ | 223600 ☒ |
| 40 | 1 1/2 | 32 | 90 | 14.4 | 214072 ☒ | 214084 ☒ |
| | | | 130 | 20.2 | 222679 ☒ | 222689 ☒ |
| | | 40 | 90 | 17.5 | 210098 ☒ | 207800 ☒ |
| | | | 130 | 23.8 | 222681 ☒ | 222691 ☒ |
| 50 | 2 | 40 | 90 | 18.0 | 214074 ☒ | 214086 ☒ |
| | | | 130 | 24.6 | 222682 ☒ | 222692 ☒ |
| | | 50 | 90 | 28.0 | 210099 ☒ | 203693 ☒ |
| | | | 130 | 37.0 | 214076 ☒ | 214088 ☒ |
| 65 | 2 1/2 | 50 | 130 | 45.0 | 214077 ☒ | 214089 ☒ |
| | | 65 | 130 | 65.0 | 219621 ☒ | 219622 ☒ |

ed: 26.03.2021

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Article no. | |
|---|--------|-----------|--------------------|-----------------------|-------------|-----------------|
| [mm] | [inch] | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | PTFE | Stainless steel |
| NPT thread, ISO 7/1/DIN EN 10226-2 | | | | | | |
| 10 | 3/8 | 3 | 70 | 0.1 | - | On request |
| | | 4 | 70 | 0.5 | - | 220447 |
| | | 6 | 70 | 1.25 | - | 220450 |
| | | 8 | 70 | 2.0 | 220418 | 220453 |
| | | 10 | 70 | 2.7 | 220421 | 220457 |
| 15 | 1/2 | 3 | 70 | 0.1 | - | 466159 |
| | | 4 | 70 | 0.5 | - | 220884 |
| | | 6 | 70 | 1.25 | - | 220452 |
| | | 8 | 70 | 2.1 | 220881 | 220455 |
| | | 10 | 70 | 3.1 | 220423 | 220459 |
| | | 15 | 70 | 4.3 | 220882 | 220886 |
| 20 | 3/4 | 10 | 70 | 3.2 | 220425 | 220461 |
| | | 15 | 70 | 5.2 | 220427 | 220463 |
| | | 20 | 70 | 7.1 | 220430 | 220466 |
| 25 | 1 | 15 | 70 | 5.3 | 220428 | 220464 |
| | | 20 | 70 | 7.2 | 220431 | 220467 |
| | | 25 | 70 | 12.0 | 220434 | 220470 |
| | | 90 | 12.0 | 464864 | 464867 | |
| 32 | 1 1/4 | 25 | 90 | 8.9 | 220435 | 220471 |
| | | | 130 | 13.0 | 463921 | 463931 |
| | | 32 | 90 | 13.4 | 220437 | 220473 |
| | | | 130 | 17.8 | 463956 | 463957 |
| 40 | 1 1/2 | 32 | 90 | 14.4 | 220438 | 463803 |
| | | | 130 | 20.2 | 463923 | 463933 |
| | | 40 | 90 | 17.5 | 220440 | 220476 |
| | | | 130 | 23.8 | 463925 | 463935 |
| 50 | 2 | 40 | 90 | 18.0 | 220441 | 220477 |
| | | | 130 | 24.6 | 463926 | 463936 |
| | | 50 | 90 | 28.0 | 220443 | 220479 |
| | | | 130 | 37.0 | 220444 | 220480 |
| 65 | 2 1/2 | 50 | 130 | 45.0 | 239536 | 239620 |
| | | 65 | 130 | 65.0 | 239534 | 239571 |

ed: 26.03.2021

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Article no. RC (ASME B 1.20.1) | |
|---------------------------------|--------|-----------|--------------------|-----------------------|-----------------------------------|-----------------|
| [mm] | [inch] | | | | Seat seal | |
| | | | [mm] | [m³/h] | PTFE | Stainless steel |
| Rc thread, ASME B 1.20.1 | | | | | | |
| 10 | 3/8 | 3 | 70 | 0.1 | - | On request |
| | | 4 | 70 | 0.5 | - | 220513 |
| | | 6 | 70 | 1.25 | - | 220516 |
| | | 8 | 70 | 2.0 | 220484 | 220519 |
| | | 10 | 70 | 2.7 | 220487 | 220523 |
| 15 | 1/2 | 3 | 70 | 0.1 | - | 233369 |
| | | 4 | 70 | 0.5 | - | 220891 |
| | | 6 | 70 | 1.25 | - | 220518 |
| | | 8 | 70 | 2.1 | 220888 | 220521 |
| | | 10 | 70 | 3.1 | 220489 | 220525 |
| | | 15 | 70 | 4.3 | 220889 | 220894 |
| 20 | 3/4 | 10 | 70 | 3.2 | 220491 | 220527 |
| | | 15 | 70 | 5.2 | 220493 | 220529 |
| | | 20 | 70 | 7.1 | 220496 | 220532 |
| 25 | 1 | 15 | 70 | 5.3 | 220494 | 220530 |
| | | 20 | 70 | 7.2 | 220497 | 220533 |
| | | 25 | 70 | 12.0 | 220500 | 220536 |
| | | | 90 | 12.0 | 242377 | 242380 |
| 32 | 1 1/4 | 25 | 90 | 8.9 | 220501 | 220537 |
| | | | 130 | 13.0 | 222740 | 222777 |
| | | 32 | 90 | 13.4 | 220503 | 220539 |
| | | | 130 | 17.8 | 223605 | 223606 |
| | | | 40 | 14.4 | 220504 | 220540 |
| 40 | 1 1/2 | 32 | 130 | 20.2 | 222742 | 222763 |
| | | | 40 | 90 | 17.5 | 220506 |
| | | 40 | 130 | 23.8 | 222767 | 222765 |
| | | | 50 | 18.0 | 220507 | 220543 |
| 50 | 2 | 40 | 130 | 24.6 | 222768 | 222766 |
| | | | 50 | 90 | 28.0 | 220509 |
| | | 50 | 130 | 37.0 | 220510 | 220546 |
| | | | 65 | 45.0 | 220511 | 220547 |
| | | | 65 | 130 | 65.0 | 220512 |

Further versions on request



Approval
FDA, ATEX, (EG Gas Appliances Directive 2009/142/EG)



Control function/Circuit function
B (normally open: NO)



Process connection
Further housing connections

10.5. Ordering chart welded connection

Valve with flow direction below seat

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Connection MW x TW | Article no. | |
|---|--------|-----------|-----------------|-----------------------|--------------------|-------------|-----------------|
| [mm] | [inch] | | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | | PTFE | Stainless steel |
| EN ISO 1127 1/ISO 4200/DIN 11866 B | | | | | | | |
| 10 | 3/8 | 3 | 70 | 0.1 | 17.2 x 1.6 | - | On request |
| | | 4 | 70 | 0.5 | 17.2 x 1.6 | - | On request |
| | | 6 | 70 | 1.25 | 17.2 x 1.6 | - | On request |
| | | 8 | 70 | 2.0 | 17.2 x 1.6 | On request | On request |
| | | 10 | 70 | 2.7 | 17.2 x 1.6 | On request | On request |
| 15 | 1/2 | 3 | 70 | 0.1 | 21.3 x 1.6 | - | 259240 |
| | | 4 | 70 | 0.5 | 21.3 x 1.6 | - | 215254 |
| | | 6 | 70 | 1.25 | 21.3 x 1.6 | - | 215255 |
| | | 8 | 70 | 2.1 | 21.3 x 1.6 | 212392 | 216407 |
| | | 10 | 70 | 3.1 | 21.3 x 1.6 | 212393 | 215873 |
| | | 15 | 70 | 4.3 | 21.3 x 1.6 | 209571 | 216409 |
| 20 | 3/4 | 15 | 70 | 5.2 | 26.9 x 1.6 | 214094 | 214132 |
| | | 20 | 70 | 7.1 | 26.9 x 1.6 | 214096 | 210696 |
| 25 | 1 | 20 | 70 | 7.2 | 33.7 x 2.0 | 214097 | 214135 |
| | | 25 | 70 | 12.0 | 33.7 x 2.0 | 209572 | 214138 |
| 32 | 1 1/4 | 25 | 90 | 8.9 | 42.4 x 2.0 | 214101 | 214139 |
| | | 32 | 90 | 13.4 | 42.4 x 2.0 | 214103 | 214141 |
| 40 | 1 1/2 | 32 | 90 | 14.4 | 48.3 x 2.0 | 214104 | 214142 |
| | | | 130 | 20.2 | 48.3 x 2.0 | 222700 | 222721 |
| | | 40 | 90 | 17.5 | 48.3 x 2.0 | 209440 | 214144 |
| | | | 130 | 23.8 | 48.3 x 2.0 | 222702 | 222723 |
| 50 | 2 | 40 | 90 | 18.0 | 60.3 x 2.0 | 210756 | 213561 |
| | | | 130 | 24.6 | 60.3 x 2.0 | 222703 | 222724 |
| | | 50 | 90 | 28.0 | 60.3 x 2.0 | 214107 | 214146 |
| | | | 130 | 37.0 | 60.3 x 2.0 | 214108 | 214147 |
| 65 | 2 1/2 | 65 | 130 | 65.0 | 76.1 x 2.3 | 219623 | 219626 |
| 80 | 3 | 80 | 130 | 100.0 | 88.9 x 2.3 | 239543 | 239579 |
| 100 | 4 | 100 | 130 | 140.0 | 114.3 x 2.6 | 239559 | 239595 |




ed: 26.03.2021

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Connection MW x TW | Article no. | |
|---|--------|-----------|-----------------|-----------------------|--------------------|-------------|-----------------|
| [mm] | [inch] | | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | | PTFE | Stainless steel |
| DIN 11850 2 / DIN 11866 A / DIN EN 10357 A | | | | | | | |
| 10 | 3/8 | 3 | 70 | 0.1 | 13.0 x 1.5 | - | 250658 |
| | | 4 | 70 | 0.5 | 13.0 x 1.5 | - | 284171 |
| | | 6 | 70 | 1.25 | 13.0 x 1.5 | - | 284177 |
| | | 8 | 70 | 2.0 | 13.0 x 1.5 | On request | 284179 |
| | | 10 | 70 | 2.7 | 13.0 x 1.5 | 257412 | 208553 |
| 15 | 1/2 | 3 | 70 | 0.1 | 19.0 x 1.5 | - | 225130 |
| | | 4 | 70 | 0.5 | 19.0 x 1.5 | - | 215257 |
| | | 6 | 70 | 1.25 | 19.0 x 1.5 | - | 215258 |
| | | 8 | 70 | 2.1 | 19.0 x 1.5 | 215250 | 215911 |
| | | 10 | 70 | 3.1 | 19.0 x 1.5 | 215251 | 215913 |
| | | 15 | 70 | 4.3 | 19.0 x 1.5 | 215253 | 209173 |
| 20 | 3/4 | 15 | 70 | 5.2 | 23.0 x 1.5 | 214113 | 208555 |
| | | 20 | 70 | 7.1 | 23.0 x 1.5 | 211937 | 211953 |
| 25 | 1 | 20 | 70 | 7.2 | 29.0 x 1.5 | 214116 | 214154 |
| | | 25 | 70 | 12.0 | 29.0 x 1.5 | 209384 | 209089 |
| 32 | 1 1/4 | 25 | 90 | 8.9 | 35.0 x 1.5 | 214119 | 214156 |
| | | 32 | 90 | 13.4 | 35.0 x 1.5 | 211965 | 209181 |
| 40 | 1 1/2 | 32 | 90 | 14.4 | 41.0 x 1.5 | 214121 | 213487 |
| | | | 130 | 20.2 | 41.0 x 1.5 | 222711 | 222732 |
| | | 40 | 90 | 17.5 | 41.0 x 1.5 | 211967 | 209110 |
| | | | 130 | 23.8 | 41.0 x 1.5 | 222713 | 222734 |
| 50 | 2 | 40 | 90 | 18.0 | 53.0 x 1.5 | 214123 | 213411 |
| | | | 130 | 24.6 | 53.0 x 1.5 | 222714 | 222735 |
| | | 50 | 90 | 28.0 | 53.0 x 1.5 | 211968 | 209185 |
| | | | 130 | 37.0 | 53.0 x 1.5 | 214125 | 214159 |
| 65 | 2 1/2 | 65 | 130 | 65.0 | 70.0 x 2.0 | 219625 | 219628 |
| 80 | 3 | 80 | 130 | 100.0 | 85.0 x 2.0 | 239544 | 239580 |
| 100 | 4 | 100 | 130 | 140.0 | 104.0 x 2.0 | 239560 | 239596 |

ed: 26.03.2021

| Nominal diameter (pipe) | Seat size | Actuator size Ø | Operating pressure | K _{vs} value | Connection Ø DS x WS | Article no. | |
|-----------------------------|-----------|-----------------|--------------------|-----------------------|----------------------|-------------|----------------------|
| | | | | | | Seat seal | |
| NPS | | [mm] | | [m ³ /h] | | PTFE (VI) | Stainless steel (IV) |
| ASME BPE/DIN 11866 C | | | | | | | |
| ½ | 3 | 70 (M) | 25 (IV) | 0.10 (lin) | 12.7 x 1.65 | - | 353371 |
| | 4 | 70 (M) | 25 (IV) | 0.50 (lin) | 12.7 x 1.65 | - | 226776 |
| | 6 | 70 (M) | 25 (IV) | 1.2 (lin) | 12.7 x 1.65 | On request | 316765 |
| | 6 | 70 (M) | 25 (IV) | 1.25 | 12.7 x 1.65 | 226651 | 20001538 |
| | 8 | 70 (M) | 25 (IV) | 2.0 | 12.7 x 1.65 | 379940 | 216879 |
| | 10 | 70 (M) | 25 (IV) | 2.7 | 12.7 x 1.65 | 225463 | 313806 |
| ¾ | 10 | 70 (M) | 25 (IV) | 3.1 | 19.05 x 1.65 | 241143 | On request |
| | 15 | 70 (M) | 25 (IV) | 4.3 | 19.05 x 1.65 | 335739 | 335741 |
| 1 | 10 | 70 (M) | 25 (IV) | 3.2 | 25.4 x 1.65 | 241633 | 242576 |
| | 15 | 70 (M) | 25 (IV) | 5.2 | 25.4 x 1.65 | 226329 | 242579 |
| | 20 | 70 (M) | 16 (IV) | 7.1 | 25.4 x 1.65 | 230405 | 216902 |
| 1½ | 32 | 90 (N) | 16 (IV) | 13.4 | 38.1 x 1.65 | 230409 | 242587 |
| | | 130 (P) | 25 (IV) | 17.8 | 38.1 x 1.65 | 242557 | 242589 |
| 2 | 40 | 90 (N) | 12 (IV) | 17.5 | 50.8 x 1.65 | 211655 | 242592 |
| | | 130 (P) | 25 (IV) | 23.8 | 50.8 x 1.65 | 242561 | 242593 |
| 2½ | 50 | 130 (P) | 25 (20*)(IV) | 37.0 | 63.5 x 1.65 | 335735 | 335737 |
| 3 | 65 | 130 (P) | 16 (15*)(IV) | 65 | 76.2 x 1.65 | 268682 | 350667 |
| 4 | 80 | 130 (P) | 10 (IV) | 110 | 101.6 x 2.11 | 298386 | On request |
| | 100 | 130 (P) | 6 (IV) | 140 | 101.6 x 2.11 | 275103 | 289251 |

ed: 26.03.2021

| Further versions on request | |
|---|---|
|  Approval FDA, ATEX, (EG Gas Appliances Directive 2009/142/EG) |  Control function/Circuit function B (normally open: NO) |
|  Process connection Further housing connections | |

10.6. Ordering chart clamp connection

Valve with flow direction below seat

| Nominal diameter (pipe) | | Seat size | Actuator size Ø | K _{vs} value | Connection MC x TC, CC | Article no. | |
|-------------------------|--------|-----------|-----------------|-----------------------|------------------------|-------------|-----------------|
| [mm] | [inch] | | | | | Seat seal | |
| | | | [mm] | [m ³ /h] | | PTFE | Stainless steel |
| DIN 32676 A | | | | | | | |
| 15 | | 15 | 70 | 4.3 | 19 x 1.5, 34 | 222593 | 282208 |
| 20 | ¾ | 20 | 70 | 7.1 | 23 x 1.5, 34 | 225647 | 282209 |
| 25 | 1 | 25 | 90 | 12.0 | 29 x 1.5, 50.5 | 222594 | 282210 |
| 32 | 1¼ | 32 | 90 | 13.4 | 35 x 1.5, 50.5 | 240415 | 282211 |
| 40 | 1½ | 40 | 130 | 23.8 | 41 x 1.5, 50.5 | 240351 | 282212 |
| 50 | 2 | 50 | 130 | 37.0 | 53 x 1.5, 64 | 282258 | 282259 |
| DIN 32676 B | | | | | | | |
| 15 | ½ | 15 | 70 | 4.3 | 21.3 x 1.6, 50.5 | 273974 | 282213 |
| 20 | ¾ | 20 | 70 | 7.1 | 26.9 x 1.6, 50.5 | 209438 | 282214 |
| 25 | 1 | 25 | 90 | 12.0 | 33.7 x 2.0, 50.5 | 241115 | 282215 |
| 40 | 1½ | 40 | 130 | 23.8 | 48.3 x 2.0, 64.0 | 209880 | 284181 |
| 50 | 2 | 50 | 130 | 37.0 | 60.3 x 2.0, 77.5 | 282261 | 282263 |

Further versions on request

| | | | |
|--|---|--|---|
| | Approval FDA, ATEX, (EG Gas Appliances Directive 2009/142/EG) | | Control function/Circuit function B (normally open: NO) |
| | Process connection Further housing connections | | |

ed: 26.03.2021



| Valve data | | |
|-------------------------|--------------------|------------------|
| Circuit Function | A: Normally closed | B: Normally open |

| 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 |
|-----------------------------------|
| |

Positioner / process controller TopControl for control valves of the ELEMENT series


For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm

| Process Controller TopControl Type 8693 ▶ | | Positioner TopControl Type 8692 ▶ | |
|---|--|--|--|
|  | <ul style="list-style-type: none"> Intelligent digital positioners and process controllers with integrated PID controller for accurate process control Lighted graphic display with membrane keypad Tune function for automatic start-up Field bus communication Diagnostic functions |  | <ul style="list-style-type: none"> Digital positioner without sensor input Lighted graphic display with membrane keypad Tune function for automatic start-up Field bus communication Diagnostic functions |
| Pneumatic function Single-acting Double-acting | | Electrical connection Cable gland M12 Multipole connection Without | |
| Digital Communication PROFIBUS DP-V1 DeviceNet EtherNet/IP PROFINET Bürkert Systembus (bùS) ^{1.)} Modbus TCP Without | | Approvals ATEX cat. 3GD, IECEx Without | |
| Analogue feedback 0/4...20 mA 0/4...20 mA + 2 binary outputs | | Digital outputs and diagnostics Yes No | |

1.) Based on CANopen

For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm

For actuator size $\varnothing 50$ mm

| Positioner TopControl BASIC Type 8694 ▶ | | Positioner TopControl BASIC Type 8696 ▶ | |
|--|--|--|---|
|  | <ul style="list-style-type: none"> Status LED and DIP switches Tune-function for automatic start-up Positioning system for single-acting actuators Field bus communication |  | <ul style="list-style-type: none"> Status LED and DIP switches Tune-function for automatic start-up Positioning system for single-acting actuators |
| Pneumatic function Single-acting | | Electrical connection Cable gland ^{1.)} M12 Multipole connection Without | |
| Digital Communication AS-Interface ^{1.)} IO-Link Bürkert Systembus (bùS) ^{2.)} Without | | Approvals ATEX cat. 3GD, IECEx Without | |
| Analogue feedback Yes No | | | |



1.) Only available for Type 8694. Not available for Type 8696.

2.) Based on CANopen

ed: 26.03.2021

Positioner / process controller SideControl Remote for control valves of the ELEMENT series



For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm

| Process Controller SideControl Type 8793 with Remote sensor Type 8798 | | Positioner SideControl Type 8792 with Remote sensor Type 8798 | |
|---|--|---|--|
|  | <ul style="list-style-type: none"> Intelligent digital positioners and process controllers with integrated PID controller Lighted graphic display with membrane keypad Tune-function for automatic start-up, linearization and optimization of process characteristics Field bus communication Diagnostic functions |  | <ul style="list-style-type: none"> Digital positioner without sensor input Lighted graphic display with membrane keypad Tune function for automatic start-up Field bus communication Diagnostic functions |
| Pneumatic function | | Electrical connection | |
| Single-acting | Single- and double-acting | Cable gland ^{1.)} | M12 Multipole connection |
| Digital communication | | Approvals | |
| PROFIBUS DP-V1 | DeviceNet | EtherNet/IP | ATEX cat. 3GD, IECEx |
| PROFINET | Bürkert Systembus (büS) ^{2.)} | | Without |
| Modbus TCP | Without | | |
| Analogue feedback | | Digital outputs and diagnostics | |
| 0/4...20 mA | 0/4...20 mA + 2 binary outputs | Yes | No |
| 0/5...10 V | 0/5...20 V + 2 binary outputs | | |

1.) With a cable gland the selection of a fieldbus communication PROFIBUS, EtherNet etc. is not possible. Only variants with M12 Multipole are offered as standard for fieldbus communication.

2.) Based on CANopen

For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm

| Positioner SideControl BASIC Type 8791 with Remote sensor Type 8798 | | Positioner SideControl BASIC IP20 Type 8791 with Remote sensor Type 8798 | |
|---|---|---|---|
|  | <ul style="list-style-type: none"> „simple positioner“ Universal positioning system for single and double acting actuators Tune function for automatic start-up Field bus communication |  | <ul style="list-style-type: none"> „simple positioner“ Universal positioning system for single and double acting actuators Tune function for automatic start-up Switchgear cabinet assembly |
| Pneumatic function | | Electrical connection | |
| Single-acting (actuator size $\varnothing 70/90$) | Single- and double-acting (actuator size $\varnothing 130$) | Cable gland ^{1.)} | M12 Multipole connection |
| Digital communication | | Approvals | |
| AS-Interface ^{2.)} : | | ATEX cat. 3GD, IECEx ^{2.)} | Without |
| Analogue profile S-7.3.4 (only set point) | | | |
| Analogue profile S-7.A.5 (set point and feedback) | | | |
| IO-Link | Bürkert Systembus (büS) ^{3.)} | Without | |
| Analogue feedback | | | |
| 0/4...20 mA | No | | |

1.) With a cable gland, the selection of a fieldbus communication AS-Interface is not possible. For fieldbus communication, only variants with M12 Multipole are offered as standard.

2.) Only available for Positioner SideControl BASIC Type 8791. Not available for Positioner SideControl BASIC IP20 Type 8791.

3.) Based on CANopen, IO-Link and büS not available for IP20 Type 8791

ed: 26.03.2021

