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Type 2031 with weld end connection

Type 2031 with clamp connection

Type 2031 can be combined with...



Type 8691

Control head



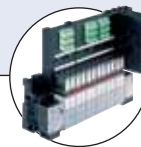
Type 8690

Pneum. control unit with feedback



Type 1062

Electrical position feedback



Type 8640/8644

Valve block



Type 6012/6014 P

Pilot valve



Type 8311

Pressure Sensor/ Switch

The externally piloted diaphragm valve consists of a pneumatically operated piston actuator, a diaphragm and a 2-way valve housing made of investment cast stainless steel.

The standard material of the actuator is PPS. With its favourable flow characteristics and zero dead volume, the valve housing enables high flow capacities and a variety of applications to be realized.

Applications

- Water treatment
- Biotechnology
- Food industry

- Hermetical separation of fluids from the operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes
- Quality certifications / USP

| Technical data | |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Orifice | DN 4 - 50 |
| Body material | Cast stainless steel 316 L/1.4435 |
| Actuator material | PPS (PA polyamide on request) |
| Pilot air ports | Stainless steel 1.4305 |
| Seal materials | EPDM, PTFE/EPDM (advanced PTFE/EPDM, FKM on request) |
| Medium | Neutral gases and liquids, high purity, sterile, aggressive or abrasive fluids |
| Viscosity | up to viscous |
| Surface finish | (average surface finish) |
| internal mechanical polished (external cast surface) | Ra ≤ 0.8 µm |
| internal electro polished (external cast surface electro polished) (more on request) | Ra ≤ 0.6 µm |
| Medium temperatures | EPDM, PTFE/EPDM, advanced PTFE/EPDM ¹⁾ , FKM |
| | -10 to +130°C (briefly up to +150°C for steam sterilisation) |
| | -10 to +130°C |
| Ambient temperature | |
| Actuator size < 100 | +5 to +140°C |
| Actuator size ≥ 100 | +5 to +90°C Briefly up to +140°C |
| Control medium | neutral gases; air |
| Pilot pressure max. | max. 7 bar, see table p. 2 |
| Port connections | |
| Weld end acc. | EN ISO 1127/ISO 4200, DIN 11850 S0 to S3, SMS 3008 |
| Clamp acc. | ISO 2852/SMS 3017, DIN 32676, BS 4825 |
| Sterile threaded ends | on request DIN 11851, SMS 1145 |
| Installation | As required, preferably with actuator in upright position |

¹⁾ Advanced PTFE/EPDM is recommended for sterilization cycle

Content



Valve specifications

Type 2031 cast

Technical data & ordering info.

p. 1-8



System spec. On/Off Classic

**Type 8801-DB/
8803-DB**

Ordering info. & technical data

p. 9-12

Request for quotation

**Type 8801-DB/
8803-DB**

p. 13

Technical data

Kv-values

| Port connection | | Kv-value water ¹⁾ [m ³ /h] | Actuator size Ø [mm] | Pilot pressure (bar) | | Max. operating pressure for seal material [bar] | | Weight [kg] |
|-----------------|--------|-----------------------------------------------------|-------------------------|----------------------|------|-------------------------------------------------|-------------------------------|-------------|
| [mm] | [inch] | | | min. | max. | EPDM, FKM | PTFE/EPDM, advanced PTFE/EPDM | |
| 4/6 | – | 0.8 | 40 | 5.0 | 7 | 10 | 10 | 0.4 |
| 8 | 1/4 | 1.0 | 40 | 5.0 | 7 | 10 | 10 | 0.4 |
| 10 | 3/8" | 1.0 | 40 | 5.0 | 7 | 10 | 10 | 0.4 |
| 15 | 1/2" | 4.0 | 50 | 5.0 | 7 | 8.5 | – | 0.7 |
| | | 4.5 | 63 | 5.0 | 7 | – | 10 | 0.9 |
| 20 | 3/4" | 7.0 | 63 | 5.5 | 7 | 10 | – | 1.3 |
| | | 7.5 | 80 | 5.0 | 7 | – | 10 | 2.0 |
| 25 | 1" | 12.0 | 80 | 5.0 | 7 | 10 | – | 2.2 |
| | | 12.0 | 80 | 5.5 | 7 | – | 7.5 | 2.2 |
| 32 | 1 1/4" | 30.0 | 100 | 5.5 | 7 | 6.5 | – | 4.2 |
| | | 30.5 | 125 | 5.5 | 7 | – | 10 | 5.7 |
| 40 | 1 1/2" | 30.0 | 100 | 5.5 | 7 | 6.5 | – | 4.2 |
| | | 30.5 | 125 | 5.5 | 7 | – | 10 | 5.7 |
| 50 | 2" | 51.5 | 125 | 5.5 | 7 | 8 | – | 7.6 |
| | | 51.5 | 125 | 5.5 | 7 | – | 7 | 7.6 |

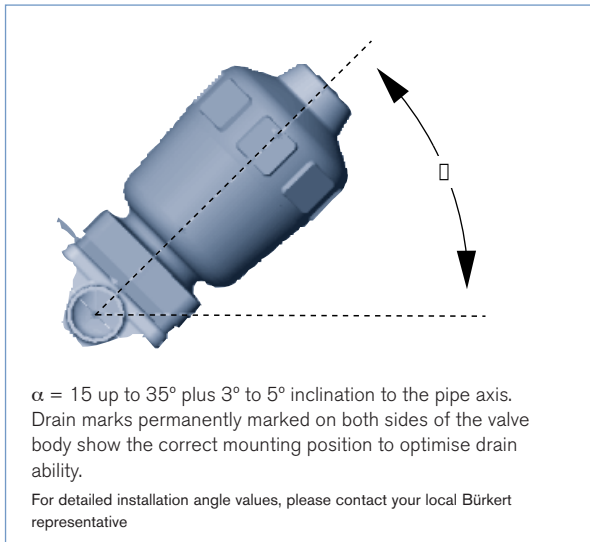
1) Measured at +20°C, 1 bar pressure at valve inlet and free outlet.

Pressure values (bar): Gauge pressures with respect to the prevailing atmospheric pressure.

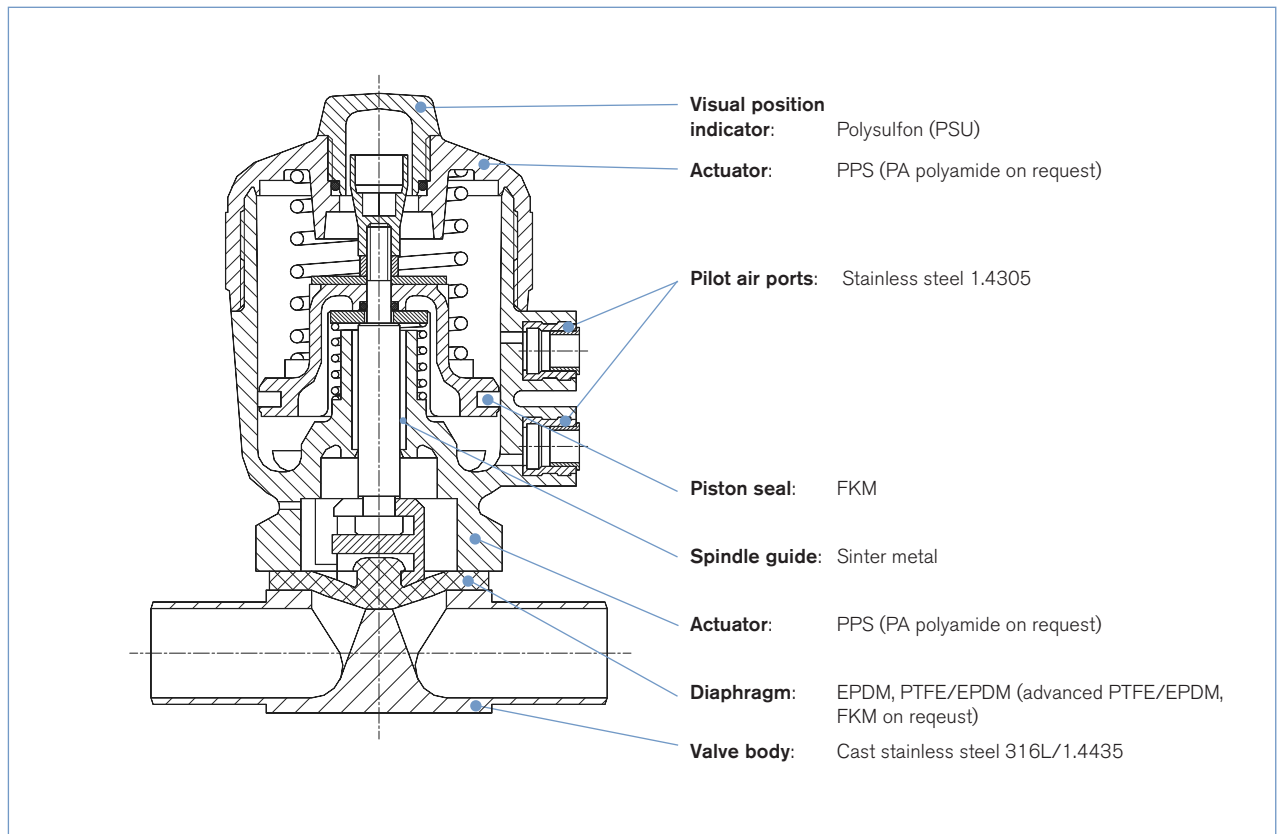
Remark:

For low operating pressures we recommend reduced spring versions.

Installation for self-draining operation



Materials



Approvals

Suitable for foodstuffs / sterile applications



- The composition of the EPDM and PTFE/EPDM diaphragms corresponds to the *Code of Federal Regulations*, published by the *FDA* (Food and Drug Administration, USA).

- The EPDM diaphragms correspond to the *KTW-Recommendation* (Plastics in the Drinking Water Sector). A Manufacturer's Declaration will be supplied on request.


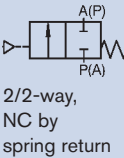


- The diaphragm valves are 3-A approved (3-A Sanitary Standards Symbol Administrative Council)

- The EPDM und PTFE/EPDM diaphragms are approved acc. USP Class VI

Ordering chart for valves (other versions on request)

Body with weld end

|  | Port connection | | External Ø [mm] | Kv-value water [m³/h] | Actuator size Ø [mm] | Pilot pressure [bar] | Max. operating pressure [bar] | Item no. mech. polished, Ra ≤ 0.8 µm | Item no. electro polished, Ra ≤ 0.6 µm | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------|-----------------|-----------------------|----------------------|----------------------|-------------------------------|--------------------------------------|----------------------------------------|--|
| | [mm] | [inch] | | | | | | | | |
| Control function A  2/2-way, NC by spring return | Acc. EN ISO 1127/ ISO 4200 | | | | | | | | | |
| | Diaphragm material EPDM | | | | | | | | | |
| | 8 | 1/4" | 13.5 | 1.0 | 40 | 5.0-7 | 10 | 441 215 | 441 216 | |
| | 10 | 3/8" | 17.2 | 1.0 | 40 | 5.0-7 | 10 | 441 239 | 441 240 | |
| | 15 | 1/2" | 21.3 | 4.0 | 50 | 5.0-7 | 8.5 | 441 282 | 441 283 | |
| | 20 | 3/4" | 26.9 | 7.0 | 63 | 5.5-7 | 10 | 441 321 | 441 322 | |
| | 25 | 1" | 33.7 | 12.0 | 80 | 5.5-7 | 10 | 441 364 | 441 365 | |
| | 32 | 1 1/4" | 42.4 | 30.0 | 100 | 5.5-7 | 6.5 | 551 966 | 553 353 | |
| | 40 | 1 1/2" | 48.3 | 30.0 | 100 | 5.5-7 | 6.5 | 441 422 | 441 423 | |
| | 50 | 2" | 60.3 | 51.5 | 125 | 5.5-7 | 8 | 441 477 | 441 478 | |
| | Diaphragm material PTFE/EPDM | | | | | | | | | |
| | 8 | 1/4" | 13.5 | 1.0 | 40 | 5.0-7 | 10 | 441 952 | 441 953 | |
| | 10 | 3/8" | 17.2 | 1.0 | 40 | 5.0-7 | 10 | 441 963 | 441 964 | |
| | 15 | 1/2" | 21.3 | 4.5 | 63 | 5.0-7 | 10 | 441 967 | 441 968 | |
| | 20 | 3/4" | 26.9 | 7.5 | 80 | 5.0-7 | 10 | 441 971 | 441 972 | |
| | 25 | 1" | 33.7 | 12.0 | 80 | 5.5-7 | 7.5 | 441 975 | 441 976 | |
| | 32 | 1 1/4" | 42.4 | 30.5 | 125 | 5.5-7 | 10 | 550 766 | 554 965 | |
| | 40 | 1 1/2" | 48.3 | 30.5 | 125 | 5.5-7 | 10 | 441 979 | 441 980 | |
| | 50 | 2" | 60.3 | 51.5 | 125 | 5.5-7 | 7 | 441 983 | 441 984 | |
| | Acc. SMS 3008 | | | | | | | | | |
| | Diaphragm material EPDM | | | | | | | | | |
| | 25 | 1" | 25.0 | 12.0 | 80 | 5.5-7 | 10 | 441 368 | 441 369 | |
| | 40 | 1 1/2" | 38.0 | 30.0 | 100 | 5.5-7 | 6.5 | 441 426 | 441 427 | |
| | 50 | 2" | 51.0 | 51.5 | 125 | 5.5-7 | 8 | 441 481 | 441 482 | |
| | Diaphragm material PTFE/EPDM | | | | | | | | | |
| | 25 | 1" | 25.0 | 12.0 | 80 | 5.5-7 | 7.5 | 442 061 | 442 062 | |
| | 40 | 1 1/2" | 38.0 | 30.5 | 125 | 5.5-7 | 10 | 442 065 | 442 066 | |
| | 50 | 2" | 51.0 | 51.5 | 125 | 5.5-7 | 7 | 442 069 | 442 070 | |


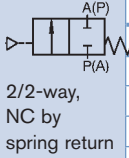
Port connection size equals the orifice diaphragm size except for port connection 32 mm. At port connection 32 mm the orifice diaphragm size equals 40 mm.

i Further versions on request

> Additional
Versions with reduced spring force

Ordering chart for valves (other versions on request)

Body with weld end, *cont.*


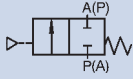
|  | Port connection | | External Ø [mm] | Kv-value water [m³/h] | Actuator size Ø [mm] | Pilot pressure [bar] | Max. operating pressure [bar] | Item no. mech. polished, Ra ≤ 0.8 µm | Item no. electro polished, Ra ≤ 0.6 µm |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------|-----------------|-----------------------|----------------------|----------------------|-------------------------------|--------------------------------------|----------------------------------------|
| | [mm] | [inch] | | | | | | | |
| Control function A  2/2-way, NC by spring return | Acc. DIN 11850 | | | | | | | | |
| | Diaphragm material EPDM | | | | | | | | |
| | Series 0 | | | | | | | | |
| | 4 | - | 6.0 | 0.8 | 40 | 5.0-7 | 10 | 443 769 | 443 770 |
| | 6 | - | 8.0 | 0.8 | 40 | 5.0-7 | 10 | 443 773 | 443 774 |
| | Series 2 | | | | | | | | |
| | 10 | 3/8" | 13.0 | 1.0 | 40 | 5.0-7 | 10 | 441 231 | 441 232 |
| | 15 | 1/2" | 19.0 | 4.0 | 50 | 5.0-7 | 8.5 | 441 274 | 441 275 |
| | 20 | 3/4" | 23.0 | 7.0 | 63 | 5.5-7 | 10 | 441 313 | 441 314 |
| | 25 | 1" | 29.0 | 12.0 | 80 | 5.5-7 | 10 | 441 356 | 441 357 |
| | 40 | 1 1/2" | 41.0 | 30.0 | 100 | 5.5-7 | 6.5 | 441 414 | 441 415 |
| | 50 | 2" | 53.0 | 51.5 | 125 | 5.5-7 | 8 | 441 469 | 441 470 |
| | Diaphragm material PTFE/EPDM | | | | | | | | |
| | Series 0 | | | | | | | | |
| | 4 | - | 6.0 | 0.8 | 40 | 5.0-7 | 10 | 443 777 | 443 778 |
| | 6 | - | 8.0 | 0.8 | 40 | 5.0-7 | 10 | 443 781 | 443 782 |
| | Series 2 | | | | | | | | |
| | 10 | 3/8" | 13.0 | 1.0 | 40 | 5.0-7 | 10 | 441 778 | 441 779 |
| | 15 | 1/2" | 19.0 | 4.5 | 63 | 5.0-7 | 10 | 441 794 | 441 795 |
| | 20 | 3/4" | 23.0 | 7.5 | 80 | 5.0-7 | 10 | 441 866 | 441 867 |
| 25 | 1" | 29.0 | 12.0 | 80 | 5.5-7 | 7.5 | 441 885 | 441 886 | |
| 40 | 1 1/2" | 41.0 | 30.5 | 125 | 5.5-7 | 10 | 441 901 | 441 902 | |
| 50 | 2" | 53.0 | 51.5 | 125 | 5.5-7 | 7 | 441 956 | 441 957 | |

i Further versions on request

> Additional
 Versions with reduced spring force

Ordering chart for valves (other versions on request)

Body with clamp connection

|  | Port connection | | External Ø [mm] | Kv-value water [m³/h] | Actuator size Ø [mm] | Pilot pressure [bar] | Max. operating pressure [bar] | Item no. mech. polished, Ra ≤ 0.8 µm | Item no. electro polished, Ra ≤ 0.6 µm | |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------|-----------------|-----------------------|----------------------|----------------------|-------------------------------|--------------------------------------|----------------------------------------|--|
| | [mm] | [inch] | | | | | | | | |
| Control function A  2/2-way, NC by spring return | Acc. ISO 2852 – SMS 3017 | | | | | | | | | |
| | Diaphragm material EPDM | | | | | | | | | |
| | 25 | 1" | 50.5 | 12.0 | 80 | 5.5-7 | 10 | 441 384 | 441 385 | |
| | 40 | 1 1/2" | 50.5 | 30.0 | 100 | 5.5-7 | 6.5 | 441 442 | 441 443 | |
| | 50 | 2" | 64.0 | 51.5 | 125 | 5.5-7 | 8 | 441 497 | 441 498 | |
| | Diaphragm material PTFE/EPDM | | | | | | | | | |
| | 25 | 1" | 50.5 | 12.0 | 80 | 5.5-7 | 7.5 | 442 076 | 442 077 | |
| | 40 | 1 1/2" | 50.5 | 30.5 | 125 | 5.5-7 | 10 | 442 080 | 442 081 | |
| | 50 | 2" | 64.0 | 51.5 | 125 | 5.5-7 | 7 | 442 084 | 442 085 | |
| | Acc. DIN 32676 | | | | | | | | | |
| | Diaphragm material EPDM | | | | | | | | | |
| | 15 | 1/2" | 34.0 | 4.0 | 50 | 5.0-7 | 8.5 | 441 294 | 441 295 | |
| | 20 | 3/4" | 34.0 | 7.0 | 63 | 5.5-7 | 10 | 441 333 | 441 334 | |
| | 25 | 1" | 50.5 | 12.0 | 80 | 5.5-7 | 10 | 441 380 | 441 381 | |
| | 40 | 1 1/2" | 50.5 | 30.0 | 100 | 5.5-7 | 6.5 | 441 438 | 441 439 | |
| | 50 | 2" | 64.0 | 51.5 | 125 | 5.5-7 | 8 | 441 493 | 441 494 | |
| | Diaphragm material PTFE/EPDM | | | | | | | | | |
| | 15 | 1/2" | 34.0 | 4.5 | 63 | 5.0-7 | 10 | 442 041 | 442 042 | |
| | 20 | 3/4" | 34.0 | 7.5 | 80 | 5.0-7 | 10 | 442 045 | 442 046 | |
| | 25 | 1" | 50.5 | 12.0 | 80 | 5.5-7 | 7.5 | 442 049 | 442 050 | |
| | 40 | 1 1/2" | 50.5 | 30.5 | 125 | 5.5-7 | 10 | 442 053 | 442 054 | |
| | 50 | 2" | 64.0 | 51.5 | 125 | 5.5-7 | 7 | 442 057 | 442 058 | |
| | Acc. BS 4825 | | | | | | | | | |
| | Diaphragm material EPDM | | | | | | | | | |
| | 8 | 1/4" | 25.0 | 1.0 | 40 | 5.0-7 | 10 | 441 247 | 441 248 | |
| | 10 | 3/8" | 25.0 | 1.0 | 40 | 5.0-7 | 10 | 441 255 | 441 256 | |
| | 15 | 1/2" | 25.0 | 4.0 | 50 | 5.0-7 | 8.5 | 441 337 | 441 338 | |
| | 25 | 1" | 50.5 | 12.0 | 80 | 5.5-7 | 10 | 441 388 | 441 389 | |
| 40 | 1 1/2" | 50.5 | 30.0 | 100 | 5.5-7 | 6.5 | 441 446 | 441 447 | | |
| 50 | 2" | 64.0 | 51.5 | 125 | 5.5-7 | 8.0 | 441 501 | 441 502 | | |
| Diaphragm material PTFE/EPDM | | | | | | | | | | |
| 8 | 3/8" | 25.0 | 1.0 | 40 | 5.0-7 | 10 | 441 987 | 441 988 | | |
| 10 | 1/2" | 25.0 | 1.0 | 40 | 5.0-7 | 10 | 441 991 | 441 992 | | |
| 15 | 3/4" | 25.0 | 4.5 | 63 | 5.0-7 | 10 | 441 995 | 441 996 | | |
| 25 | 1" | 50.5 | 12.0 | 80 | 5.5-7 | 7.5 | 441 999 | 442 000 | | |
| 40 | 1 1/2" | 50.5 | 30.5 | 125 | 5.5-7 | 10 | 442 003 | 442 004 | | |
| 50 | 2" | 64.0 | 51.5 | 125 | 5.5-7 | 7.0 | 442 007 | 442 008 | | |

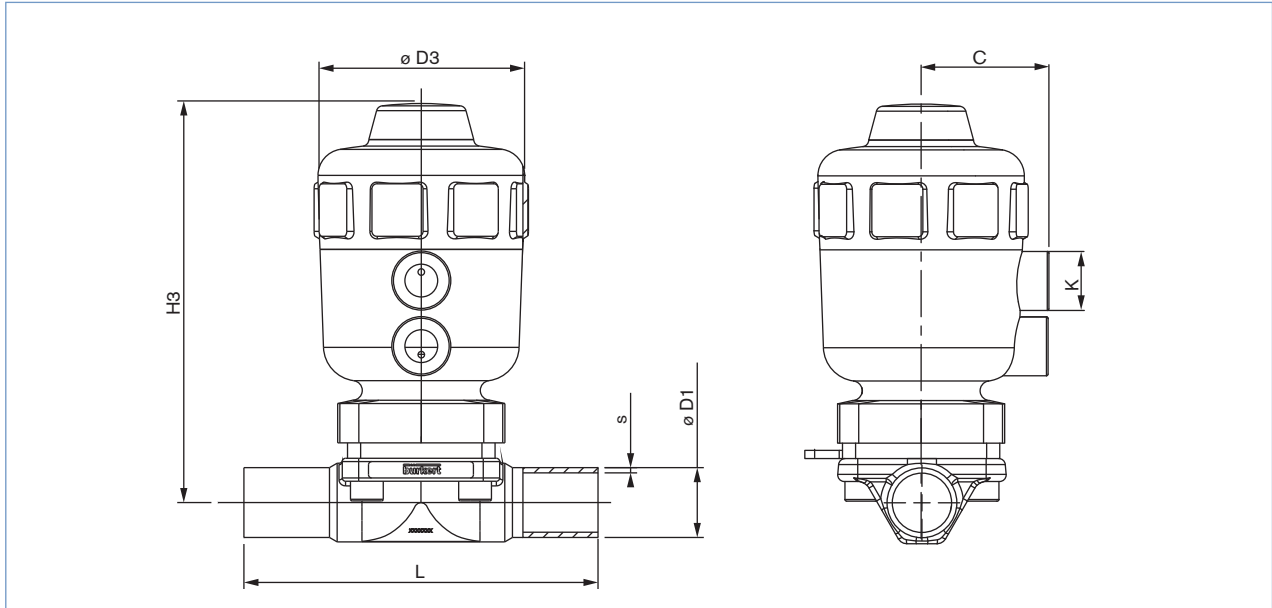
DTS 1000010978 EN Version: R Status: RL (released | freigegeben | validé) printed: 17.01.2011

i Further versions on request

> Additional
Versions with reduced spring force

Dimensions [mm]

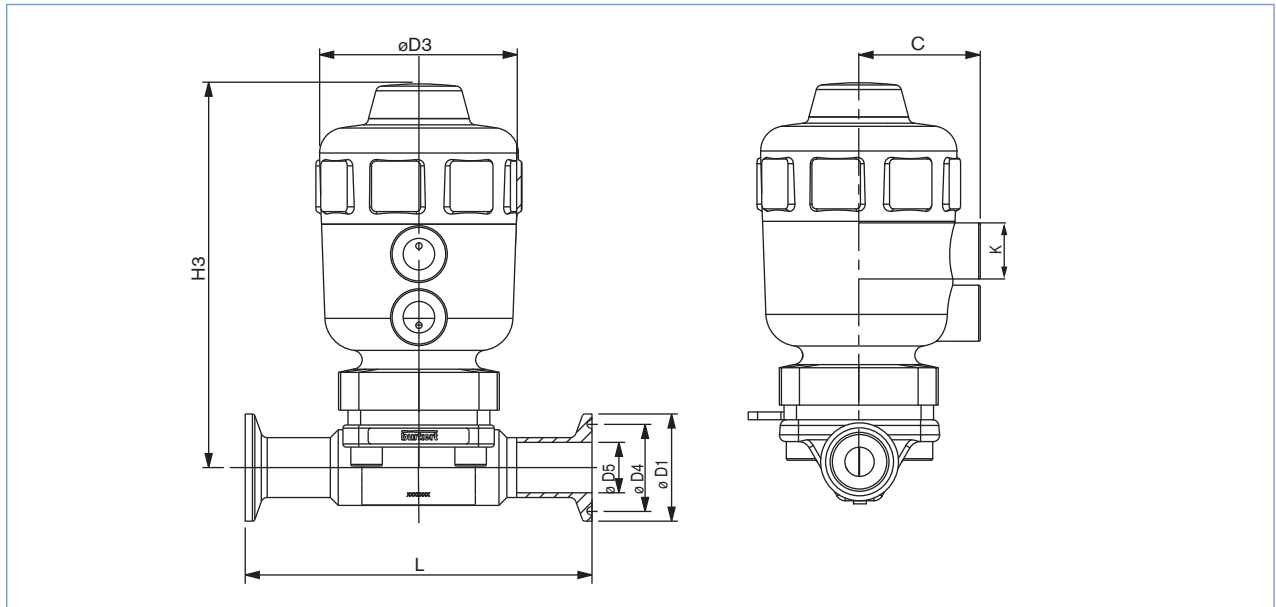
Body with weld end



| Port connection | | Actuator size Ø | C | K | L | H3 | ØD3 | EN ISO 1127/ISO 4200 | | SMS 3008 | |
|-----------------------------------------------|--------|--------------------|----|-------|-------|-------|-------|-----------------------------|-----|-----------------|-----|
| [mm] | [inch] | | | | | | | ØD1 | s | ØD1 | s |
| Acc. EN ISO 1127/ISO 4200 and SMS 3008 | | | | | | | | EN ISO 1127/ISO 4200 | | SMS 3008 | |
| 8 | 1/4" | 40 | 34 | G 1/8 | 90.0 | 85.0 | 53.0 | 13.5 | 1.6 | - | - |
| 10 | 3/8" | 40 | 34 | G 1/8 | 90.0 | 85.0 | 53.0 | 17.2 | 1.6 | - | - |
| 15 | 1/2" | 50 | 39 | G 1/8 | 110.0 | 121.0 | 64.0 | 21.3 | 1.6 | - | - |
| | | 63 | 52 | G 1/4 | 110.0 | 138.0 | 80.0 | 21.3 | 1.6 | - | - |
| 20 | 3/4" | 63 | 52 | G 1/4 | 119.0 | 148.0 | 80.0 | 26.9 | 1.6 | - | - |
| | | 80 | 60 | G 1/4 | 119.0 | 174.0 | 101.0 | 26.9 | 1.6 | - | - |
| 25 | 1" | 63 | 52 | G 1/4 | 129.0 | 157.0 | 80.0 | 33.7 | 2.0 | 25.0 | 1.2 |
| | | 80 | 60 | G 1/4 | 129.0 | 177.0 | 101.0 | 33.7 | 2.0 | 25.0 | 1.2 |
| 32 | 1 1/4" | 100 | 73 | G 1/4 | 161.0 | 233.0 | 127.0 | 42.4 | 2.0 | - | - |
| | | 125 | 86 | G 1/4 | 161.0 | 272.0 | 153.0 | 42.4 | 2.0 | - | - |
| 40 | 1 1/2" | 100 | 73 | G 1/4 | 161.0 | 233.0 | 127.0 | 48.3 | 2.0 | 38.0 | 1.2 |
| | | 125 | 86 | G 1/4 | 161.0 | 272.0 | 153.0 | 48.3 | 2.0 | 38.0 | 1.2 |
| 50 | 2" | 100 | 73 | G 1/4 | 192.0 | 244.0 | 127.0 | 60.3 | 2.0 | 51.0 | 1.2 |
| | | 125 | 86 | G 1/4 | 192.0 | 278.0 | 153.0 | 60.3 | 2.0 | 51.0 | 1.2 |
| Acc. to DIN 11850 | | | | | | | | DIN 11850 | | | |
| Series 0 | | | | | | | | | | | |
| 4 | - | 40 | 34 | G 1/8 | 90.0 | 85.0 | 53.0 | 6.0 | 1.0 | | |
| 6 | - | 40 | 34 | G 1/8 | 90.0 | 85.0 | 53.0 | 8.0 | 1.0 | | |
| Series 2 | | | | | | | | | | | |
| 10 | 3/8" | 40 | 34 | G 1/8 | 90.0 | 85.0 | 53.0 | 13.0 | 1.5 | | |
| 15 | 1/2" | 50 | 39 | G 1/8 | 110.0 | 121.0 | 64.0 | 19.0 | 1.5 | | |
| | | 63 | 52 | G 1/4 | 110.0 | 138.0 | 80.0 | 19.0 | 1.5 | | |
| 20 | 3/4" | 63 | 52 | G 1/4 | 119.0 | 148.0 | 80.0 | 23.0 | 1.5 | | |
| | | 80 | 60 | G 1/4 | 119.0 | 174.0 | 101.0 | 23.0 | 1.5 | | |
| 25 | 1" | 63 | 52 | G 1/4 | 129.0 | 157.0 | 80.0 | 29.0 | 1.5 | | |
| | | 80 | 60 | G 1/4 | 129.0 | 177.0 | 101.0 | 29.0 | 1.5 | | |
| 40 | 1 1/2" | 100 | 73 | G 1/4 | 161.0 | 233.0 | 127.0 | 41.0 | 1.5 | | |
| | | 125 | 86 | G 1/4 | 161.0 | 272.0 | 153.0 | 41.0 | 1.5 | | |
| 50 | 2" | 100 | 73 | G 1/4 | 192.0 | 244.0 | 127.0 | 53.0 | 1.5 | | |
| | | 125 | 86 | G 1/4 | 192.0 | 278.0 | 153.0 | 53.0 | 1.5 | | |

Dimensions [mm]

Body with clamp connection



| Port connection | | Actuator size Ø | C | K | L | H3 | ØD3 | ØD1 | ØD4 | ØD5 | ØD5 | |
|--------------------------------------------|--------|--------------------|----|-------|-------|-------|-------|------|-------|------|-----------------|------------------|
| [mm] | [inch] | | | | | | | | | | | |
| Acc. ISO 2852/SMS 3017 and SMS 3008 | | | | | | | | | | | ISO 2852 | DIN 32676 |
| 15 | 1/2" | 50 | 39 | G 1/8 | 110.0 | 121.0 | 64.0 | 34.0 | 27.5 | - | 16.0 | |
| | | 63 | 52 | G 1/4 | 110.0 | 138.0 | 80.0 | 34.0 | 27.5 | - | 16.0 | |
| 20 | 3/4" | 63 | 52 | G 1/4 | 119.0 | 148.0 | 80.0 | 34.0 | 27.5 | - | 20.0 | |
| | | 80 | 60 | G 1/4 | 119.0 | 174.0 | 101.0 | 34.0 | 27.5 | - | 20.0 | |
| 25 | 1" | 63 | 52 | G 1/4 | 129.0 | 157.0 | 80.0 | 50.5 | 43.5 | 22.6 | 26.0 | |
| | | 80 | 60 | G 1/4 | 129.0 | 177.0 | 101.0 | 50.5 | 43.5 | 22.6 | 26.0 | |
| 40 | 1 1/2" | 100 | 73 | G 1/4 | 161.0 | 233.0 | 127.0 | 50.5 | 43.5 | 35.6 | 38.0 | |
| | | 125 | 86 | G 1/4 | 161.0 | 272.0 | 153.0 | 50.5 | 43.5 | 35.6 | 38.0 | |
| 50 | 2" | 100 | 73 | G 1/4 | 192.0 | 244.0 | 127.0 | 64.0 | 56.5 | 48.6 | 50.0 | |
| | | 125 | 86 | G 1/4 | 192.0 | 278.0 | 153.0 | 64.0 | 56.5 | 48.6 | 50.0 | |
| Acc. BS 4825 | | | | | | | | | | | BS 4825 | |
| 8 | 3/8" | 40 | 34 | G 1/8 | 89.0 | 85.0 | 53.0 | 25.0 | 20.22 | 7.1 | | |
| 10 | 1/2" | 40 | 34 | G 1/8 | 89.0 | 85.0 | 53.0 | 25.0 | 20.22 | 10.3 | | |
| 15 | 3/4" | 50 | 39 | G 1/8 | 102.0 | 121.0 | 64.0 | 25.0 | 20.22 | 16.7 | | |
| | | 63 | 52 | G 1/4 | 102.0 | 138.0 | 80.0 | 25.0 | 20.22 | 16.7 | | |
| 25 | 1" | 63 | 52 | G 1/4 | 114.0 | 157.0 | 80.0 | 50.5 | 43.5 | 22.2 | | |
| | | 80 | 60 | G 1/4 | 114.0 | 177.0 | 101.0 | 50.5 | 43.5 | 22.2 | | |
| 40 | 1 1/2" | 100 | 73 | G 1/4 | 140.0 | 233.0 | 127.0 | 50.5 | 43.5 | 34.9 | | |
| | | 125 | 86 | G 1/4 | 140.0 | 272.0 | 153.0 | 50.5 | 43.5 | 34.9 | | |
| 50 | 2" | 100 | 73 | G 1/4 | 159.0 | 244.0 | 127.0 | 64.0 | 56.5 | 47.6 | | |
| | | 125 | 86 | G 1/4 | 159.0 | 278.0 | 153.0 | 64.0 | 56.5 | 47.6 | | |

Ordering information for valve system On/Off Classic Type 8801-DB/8803-DB

A valve system On/Off Classic Type 8801-DB/8803-DB consists of a diaphragm valve Type 2031 and a valve actuation system control head Type 8691, a pneumatic control unit Type 8690 or an electrical position feedback Type 1062 (see separate datasheets).

For the configuration of further valve systems please use the "Request for quotation" on p. 13 [go to page](#)

You order two components and receive a complete assembled and certified valve.

Ordering the valve system On/Off Classic Type 8801-DB/8803-DB

Diaphragm valve Type 2031
with required port connection



Control units



Diaphragm valve with
desired control unit



Valve system
On/Off Classic
Type 8801-DB-H
2031 + 8691



Valve system
On/Off Classic
Type 8801-DB-K
2031 + 8690



Valve system
On/Off Classic
Type 8803-DB
2031 + 1062

When you click on the orange box "More info." below, you will come to our website for the resp. product where you can download the datasheet.

Control head Type 8691



More info.

The new generation of integrated control heads for combination with actuators from the process valve series Type 20xx/21xx is specially designed for the requirements of hygienic process environments. The intelligent control head, Type 8691, detects the valve position by means of a contact-free analog position sensor circumventing excessive wear of mechanical parts. Single or double-acting actuators are controlled via the integral pilot valve. Communication interfaces AS-Interface and DeviceNet are available as options.

Main customer benefits:

- Automatic setting of the control head at the push of a button
- Even under dirty or dark environments, a clearly visible status display due to powerful LEDs
- Monitoring and diagnosis: Process valve systems with field bus interface used in modern plant processes
- Integrated pilot valve with manual actuation
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaptations allowing additional actuators of the process valve series, Type 20xx or actuators from other manufacturers to be used

Pneumatic control unit
Type 8690



More info.

The new generation of integrated controllers for combination with actuators from the process valve series Type 20xx/21xx is specially designed for the requirements of hygienic process environments. The pneumatic control unit Type 8690 combines electrical position feedback and pneumatic control for single or double-acting actuators, and is also optionally available as an intrinsically safe model to ATEX.

Main customer benefits:

- Integrated pilot valve with manual actuation
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaptations allowing additional actuators of the process valve series, Type 20xx or actuators from other manufacturers to be used

Electrical position feedback
Type 1062



More info.

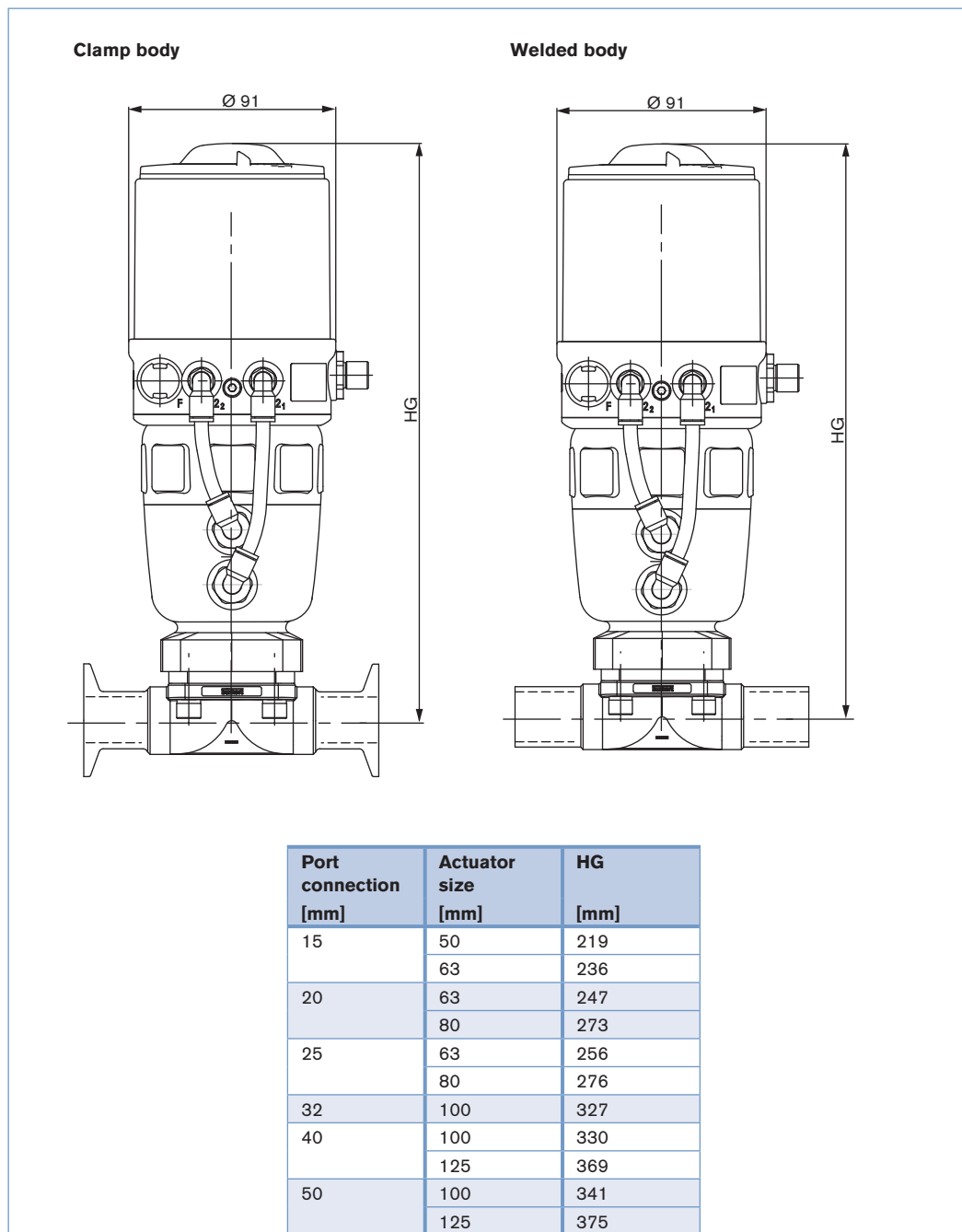
Positions are electrically signaled according to switch type:

- open,
- closed or
- open and closed.

LEDs provide optical position indication (except for Namur Ex-version). Mechanical or inductive switches are housed in a compact splash-proof enclosure. The position indicator can be rotated 360° and is easily fitted to the valve. Trip cams do not require adjustment. The unit only needs to be screwed on and connected to be ready for operation.

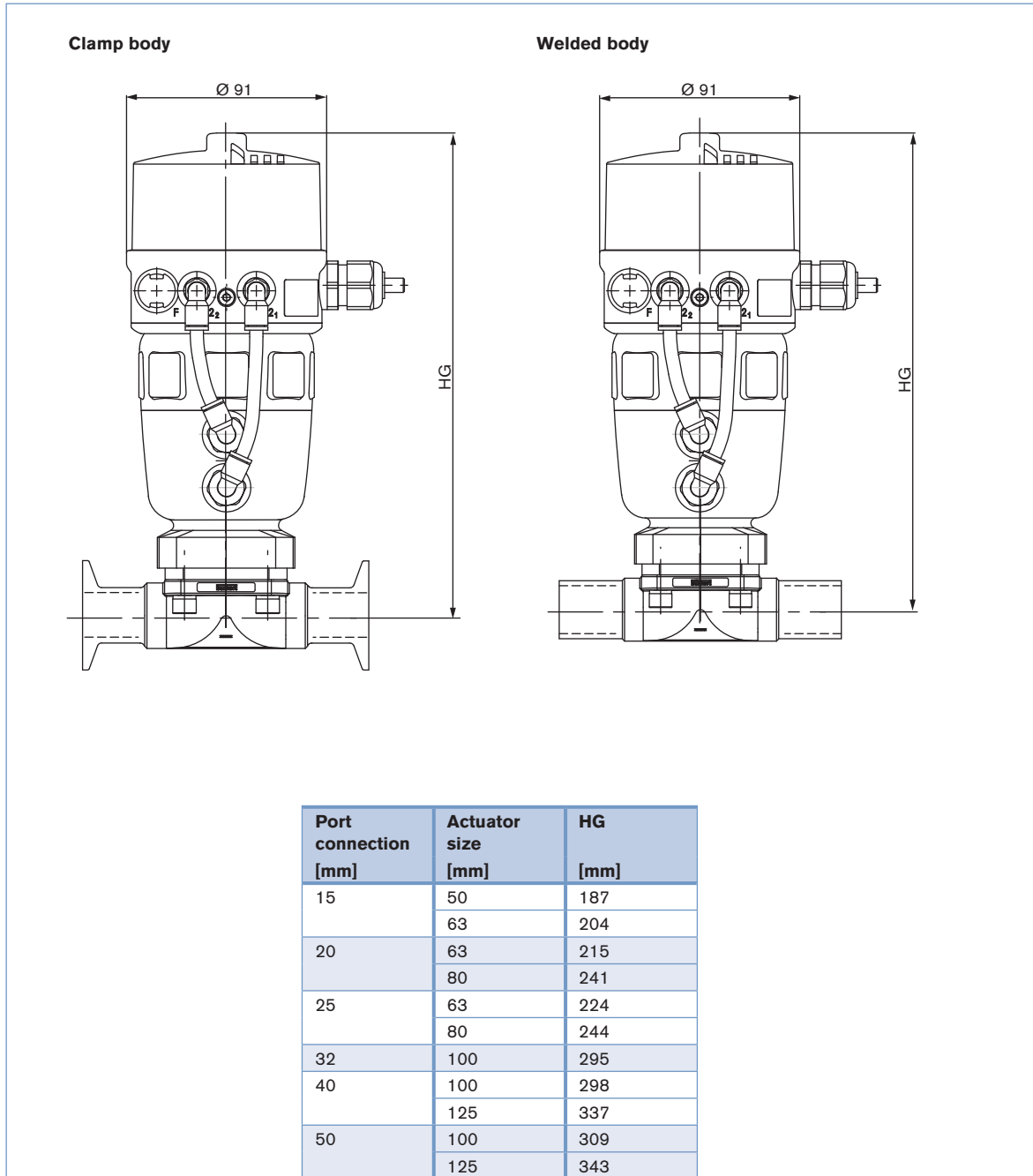
Dimensions for valve system On/Off Classic Type 8801-DB-H [mm]

Dimensions valve system On/Off Classic Type 8801-DB-H with control head Type 8691 [mm]



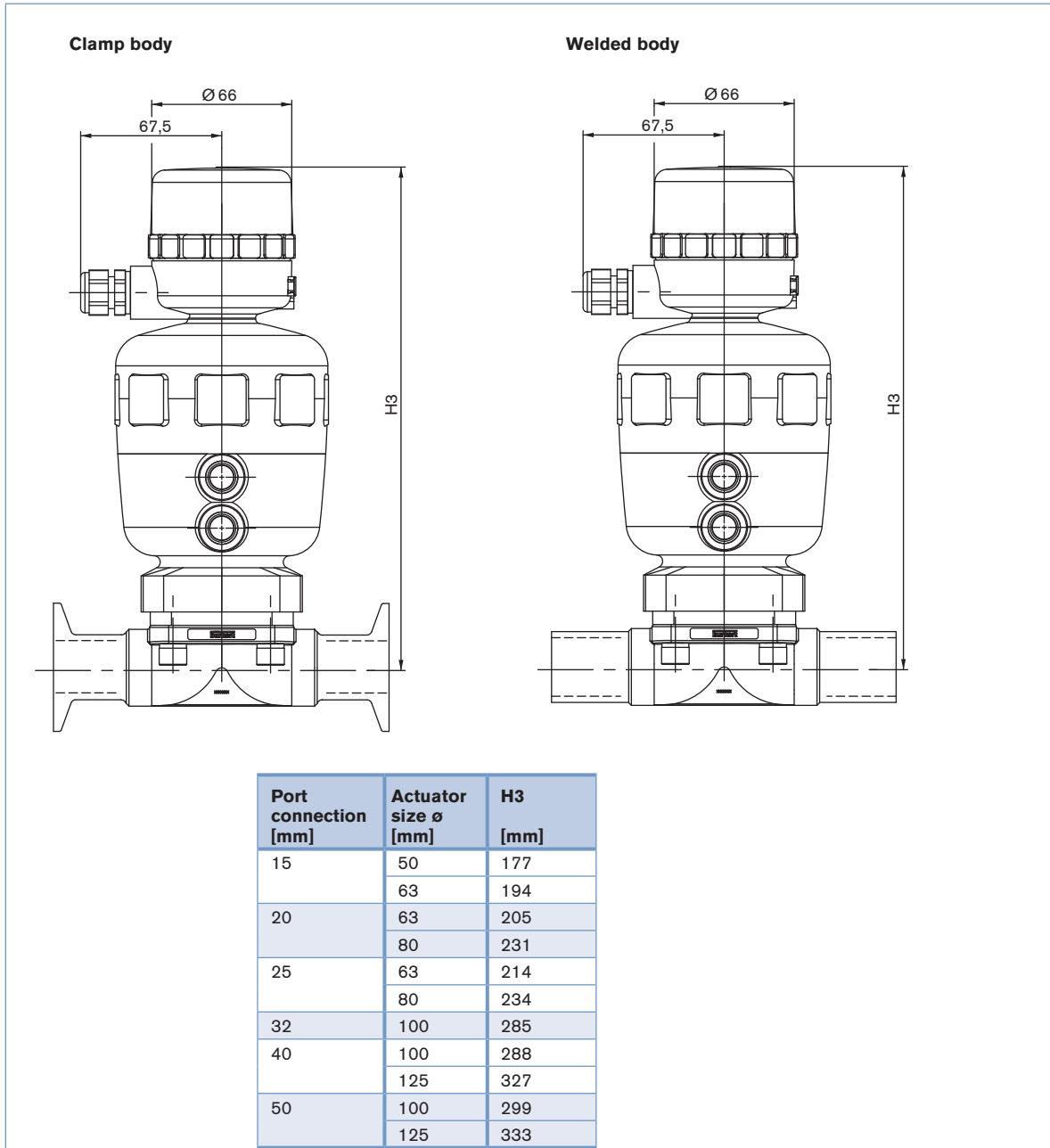
Dimensions for valve system On/Off Classic Type 8801-DB-K [mm]

Dimensions valve system On/Off Classic Type 8801-DB-K with pneumatic control unit Type 8690 [mm]



Dimensions for valve system On/Off Classic Type 8803-DB [mm]

Dimensions valve system On/Off Classic Type 8803-DB with electrical position feedback Type 1062 [mm]



Note
You can fill out the fields directly in the PDF file before printing out the form.

Valve system On/Off Classic Type 8801-DB/8803-DB – request for quotation

Please fill out and send to your nearest Bürkert facility* with your inquiry or order

| | |
|---------------|----------------|
| Company | Contact person |
| Customer no. | Department |
| Address | Tel./Fax |
| Postcode/town | E-Mail |

= mandatory fields to fill out Quantity Required delivery date

Operating data

Pipeline DN PN

Pipe material

Process medium

Type of medium Liquid Steam Gas
standard unit

Flow rate (Q, Q_N, W) ¹⁾ standard unit

Temperature at valve inlet

Absolute pressure at valve inlet

Steam sterilisation temperature

¹⁾ standard unit: Liquid Q = m³/h; Steam W = kg/h; Gas Q_N = Nm³/h

Valve features

Specification key

automatically transferred from last page

[go to page](#)

Surface finish (if not standard)

internal μm external μm

Pilot pressure

min. max.

Control unit features

Click on the orange box "More info." below... you will come to our website for the resp. product where you can download the datasheet.

| Control head | Pneumatic control unit | Electrical position feedback |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Type 8691 More info. | <input type="checkbox"/> Type 8690 More info. | <input type="checkbox"/> Type 1062 More info. |
| Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting Pilot air ports <input type="checkbox"/> Push-in connector external ø 6 mm or 1/4" <input type="checkbox"/> Thread G 1/8" Communication <input type="checkbox"/> ASI <input type="checkbox"/> Multipol M12 <input type="checkbox"/> Flat cable clip, 1 m cable <input type="checkbox"/> DeviceNet Please specify item no. if known: <input type="text"/> | Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting <input type="checkbox"/> Without pilot valve Position feedback <input type="checkbox"/> 1x inductive <input type="checkbox"/> 2x inductive <input type="checkbox"/> 1x inductive (NAMUR) <input type="checkbox"/> 2x inductive (NAMUR) <input type="checkbox"/> 1x mechanical <input type="checkbox"/> 2x mechanical Supply voltage <input type="checkbox"/> 24 V / DC (ATEX Zone 2/22) <input type="checkbox"/> Ex ia IIC T6 (ATEX Zone 1) Pilot air ports <input type="checkbox"/> Push-in connector <input type="checkbox"/> Thread G 1/8" external ø 6 mm or 1/4" Please specify item no. if known: <input type="text"/> | Limit switches <input type="checkbox"/> mechanical <input type="checkbox"/> Voltage 12-48 V <input type="checkbox"/> Voltage 110-250 V <input type="checkbox"/> inductive <input type="checkbox"/> NAMUR EExi Status <input type="checkbox"/> closed <input type="checkbox"/> open <input type="checkbox"/> open/closed Please specify item no. if known: <input type="text"/> |

continued on next page →

* To find your nearest Bürkert facility, click on the orange box → www.burkert.com

Valve system On/Off Classic Type 8801-DB/8803-DB – request for quotation, *cont.*

| Control unit features | |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Pilot valve | Stroke limitation |
| <input type="checkbox"/> Pilot valve | <input type="checkbox"/> Stroke limitation |
| Power supply <input type="text"/> | <input type="checkbox"/> Min./max. stroke limitation , with visual position indicator |
| | <input type="checkbox"/> Max. stroke limitation , without visual position indicator |
| Please specify item no. if known: <input type="text"/> | Please specify item no. if known: <input type="text"/> |

| Certifications |
|----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Attestation of compliance with the order EN-ISO 10204 2.1 |
| <input type="checkbox"/> Test report EN-ISO 10204 2.2 |
| <input type="checkbox"/> Certification of Conformity for Raw Material EN-ISO 10204 3.1 |
| <input type="checkbox"/> EN161 (European Gas Device guideline) |
| <input type="checkbox"/> FDA - USP certificate |

| Comment / sketch |
|------------------|
| |
| |
| |
| |
| |
| |

DTS 1000010978 EN Version: R Status: RL (released | freigegeben | validé) printed: 17.01.2011

Valve features, specification key

Example

A 15 AB VG SA42 D D NO16

Specification key

Please make a choice

CONTROL FUNCTION

| | |
|---|----------------------------------|
| A | normally closed by spring action |
| B | normally open by spring action |
| I | double acting |

SIZE [mm]

| |
|----|
| 04 |
| 06 |
| 08 |
| 10 |
| 15 |
| 20 |
| 25 |
| 32 |
| 40 |
| 50 |

SEAL MATERIAL

| | |
|----|----------------------------------|
| AB | EPDM in food quality |
| EA | PTFE/EPDM |
| FF | FKM |
| EU | advanced PTFE/EPDM in two pieces |
| ET | advanced PTFE (bonded on EPDM) |

BODY MATERIAL

| | | |
|----------|----|----------------------------------|
| Standard | VG | Cast stainless steel 316L/1.4435 |
|----------|----|----------------------------------|

VARIABLE CODES

Surface finish, internal

| | |
|------|-------------------------------|
| NO06 | Mechanical polished Ra=0.8 µm |
| NO16 | Electro polished Ra=0.6 µm |

ACTUATOR SIZE ¹⁾

| | |
|---|----------|
| C | ø 40 mm |
| D | ø 50 mm |
| E | ø 63 mm |
| F | ø 80 mm |
| G | ø 100 mm |
| H | ø 125 mm |

¹⁾ for technical spec. see table, page 2

ACTUATOR MATERIAL

| | | |
|---|-----|----------|
| C | PA | |
| D | PPS | Standard |



PORT CONNECTION

Welded

| Port conn. [mm] | EN ISO 1127/ISO 4200 | SMS 3008 | DIN 11850 | | | | BS 4825 | ASME BPE | JIS Sanitary | JIS Utility |
|-----------------|----------------------|---------------|-------------|-------------|-------------|-------------|----------------|-----------------|----------------|-------------|
| | | | Serie 0 | Serie 1 | Serie 2 | Serie 3 | | | | |
| 4 | | | SC40=6x1.0 | | | | | | | |
| 6 | | | SC41=8x1.0 | | | | | | | |
| 8 | SA40=13.5x1.6 | | SC42=10x1.0 | | | | SODB=6.35x1.2 | SA90=6.35x0.89 | SA70=13.8x1.65 | |
| 10 | SA41=17.2x1.6 | | | SF40=12x1.0 | SD40=13x1.5 | SE40=14x2.0 | SODC=9.53x1.2 | SA91=9.53x0.89 | SA71=17.3x1.65 | |
| 15 | SA42=21.3x1.6 | | SC43=18x1.5 | SF41=18x1.0 | SD42=19x1.5 | SE42=20x2.0 | SODD=12.7x1.2 | SA92=12.7x1.65 | SA72=21.7x2.1 | |
| 20 | SA43=26.9x1.6 | | SC44=22x1.5 | SF42=22x1.0 | SD43=23x1.5 | SE43=24x2.0 | SODE=19.05x1.2 | SA93=19.05x1.65 | SA76=27.2x2.1 | |
| 25 | SA44=33.7x2.0 | SA60=25.0x1.2 | SC45=28x1.5 | SF43=28x1.0 | SD44=29x1.5 | SE44=30x2.0 | SODF=25.4x1.65 | SODF=25.4x1.65 | SA73=25.4x1.2 | |
| 32 | SA45=42.4x2.0 | | SC46=34x1.5 | SF44=34x1.0 | SD45=35x1.5 | SE45=36x2.0 | | | | |
| 40 | SA46=48.3x2.0 | SA62=38.0x1.2 | SC47=40x1.5 | SF45=40x1.0 | SD46=41x1.5 | SE46=42x2.0 | SODH=38.1x1.65 | SODH=38.1x1.65 | SA74=38.1x1.2 | |
| 50 | SA47=60.3x2.0 | SA63=51.0x1.2 | SC48=52x1.5 | SF46=52x1.0 | SD47=53x1.5 | SE47=54x2.0 | SODI=50.8x1.65 | SODI=50.8x1.65 | SA75=50.8x1.5 | |

Clamp

| Port conn. [mm] | ISO 2852 SMS 3017 | BS4825 | DIN 32676 |
|-----------------|-------------------------------------|----------------------------------|-------------------------------|
| 8 | TC51=Clamp 34 - for tube ISO 4200 | TG41=Clamp 25 - Rohr 9.53x1.2 | |
| 10 | TC41=Clamp 34 - for tube ISO 4200 | TH42=Clamp 25 - Rohr 12.7x1.2 | TD41=Clamp 34 - Tube 13x1.5 |
| 15 | TC42=Clamp 34 - for tube ISO 4200 | TH43=Clamp 25 - Rohr 19.05x1.2 | TD42=Clamp 34 - Tube 19x1.5 |
| 20 | TC43=Clamp 50.5 - for tube ISO 4200 | | TD43=Clamp 34 - Tube 23x1.5 |
| 25 | TC44=Clamp 50.5 - for tube ISO 4200 | TG44=Clamp 50.5 - Rohr 25.4x1.65 | TD44=Clamp 50.5 - Tube 29x1.5 |
| 40 | TC46=Clamp 64 - for tube ISO 4200 | TG45=Clamp 50.5 - Rohr 38.1x1.65 | TD46=Clamp 50.5 - Tube 41x1.5 |
| 50 | TC47=Clamp 77.5 - for tube ISO 4200 | TG46=Clamp 64 - Rohr 50.8x1.65 | TD47=Clamp 64 - Tube 53x1.5 |

In case of special application conditions, please consult for advice.

Subject to alterations
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