



# DN 15-100

- High cycle life
- Flow optimised body in stainless steel 316L
- Deliverable with flow direction below or above seat

2/2-way-Globe Valve with stainless steel design for media up to +185°C,

- Clean design for optimal use in hygienic environment
- Suitable for steam up to 10 bar(g)





Type 8690 Pneum. control unit

with feedback

Type 8691 Control head

In line with Bürkert's philosophy for modular valves and sensors the construction of the 2101 globe valve fulfils tough criteria for process environments. Unrivalled cycle life and sealing integrity is guaranteed by the proven

self adjusting spindle packing with V-seals.

The design enables the easy integration of automation modules whether they are electrical/ optical position feedback, pneumatic control units, an integrated fieldbus interface.

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

Optionally, an explosion-proof version is also available



Type 8695 Control head



Type 8619 MultiCELL Transmitter/Controller



Type 8222 Conductivity transmitter

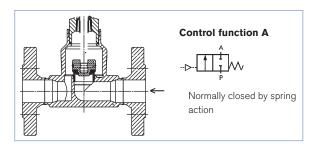
| Technical data      |   |
|---------------------|---|
| Orifice             | DN15 to DN100   |
| Port connections    |   |
| Flange acc. to      | DIN EN 1092-1, ANSI B16.5, JIS 10K                            |
| Welded and threaded | on request  |
| Body material       | Cast stainless steel 316L                                     |
| Nominal pressure    | PN25 (Body)   |
| Actuator material   |   |
| Actuator / Cover    | PPS / Stainless steel 1.4561 (316Ti)                          |
| Sealing material    | PTFE  |
| Medium              | Water, alcohol, oils, fuels, hydraulic fluids, salt solution, |
|                     | alkali solutions, organic solvents, steam                     |
|                     | optional fuel gas (EC Gas Appliances Directive 2009/142/EG)   |
| Viscosity           | max. 600 mm <sup>2</sup> /s                                   |
| Spindle packing     | PTFE V-rings with spring compensation                         |
| Medium temperature  | -10 to +185°C   |
| Ambient temperature | 0 to +55°C (integrated control head)                          |
|                     | 0 to +60°C (push-in air ports)                                |
| Control medium      | Neutral gases, air  |
| Max. pilot pressure | max. 10 bar; actuator size 130 mm, 7 bar                      |
| Pilot air ports     | Push-in connector for external ø 6 mm or 1/4" tube,           |
|                     | thread G1/8 (on request)                                      |
| Installation        | As required, preferably with actuator in upright position     |

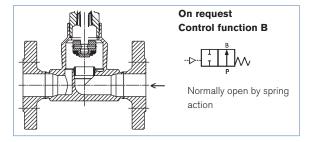
#### Content





# Technical data globe valve Type 2101 flow direction below the seat (for gases and liquids)





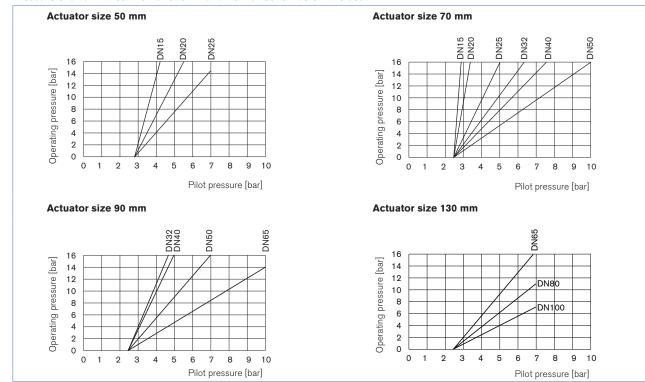
| Orifice | Actuator size | Kv value water | Minimum pilot pressure | Operating p | ressure up to +185°C  |
|---------|---------------|----------------|------------------------|-------------|-----------------------|
| [mm]    | [mm]          | (m³/h)         | CFA [bar]              | CFA [bar]   | On request :CFB [bar] |
| 15      | 50            | 4.7            | 4.8                    | 25          | 16                    |
|         | 70            | 4.7            | 4.8                    | 25          | 16                    |
| 20      | 50            | 8.1            | 4.8                    | 16          | 16                    |
|         | 70            | 8.1            | 4.8                    | 20          | 16                    |
| 25      | 50            | 13             | 4.8                    | 9           | 14.5                  |
|         | 70            | 13             | 4.8                    | 16          | 16                    |
| 32      | 70            | 19.5           | 4.8                    | 8.5         | 16                    |
|         | 90            | 19.5           | 5.0                    | 16          | 16                    |
| 40      | 70            | 31             | 4.8                    | 6           | 16                    |
|         | 90            | 31             | 5.0                    | 16          | 16                    |
| 50      | 70            | 45             | -                      | _           | 16                    |
|         | 90            | 45             | 5.0                    | 10          | 16                    |
|         | 130           | 45             | 5.0                    | 16          | -                     |
| 65      | 90            | 73             | 5.0                    | 5           | 14                    |
|         | 130           | 73             | 5.6                    | 16 (15*)    | 16 (15*)              |
| 80      | 130           | 110            | 5.6                    | 10          | 11                    |
| 100     | 130           | 165            | 5.6                    | 6           | 7                     |

Flow rate: Kv value water [m³/h]: Measured at +20°C, 1 bar pressure at valve inlet and free outlet.

Pressure valves [bar]: Overpressure to the atmospheric pressure

#### On request control function B

#### Pressure charts with control function B and flow direction below the seat



<sup>\*</sup> acc. to the Pressure Equipment Directive 97/23 / EC for compressible fluids in Group 1 (hazardous gases and vapors in accordance with Article 3, Section 1.3, letter a, first dash)



#### Ordering chart Type 2101, flow direction below the seat (for gases and liquids)

Flange connection acc. to DIN EN 1092-1, flow direction below the seat

| Control             | Orifice<br>(mm) | Actuator<br>size ø [mm] | Minimum<br>pilot pres-<br>sure [bar] | Operating<br>pressure<br>up to<br>+185°C<br>[bar] | Item no. | Item no.<br>certified<br>Atex II 2GD<br>Mechanical |
|---------------------|-----------------|-------------------------|--------------------------------------|---|----------|--|
| A 2/2-way valve. NC | 15              | 50                      | 5.2                                  | 25  | 203 076  | 260 092  |
| A                   | 20              | 50                      | 5.2                                  | 16  | 203 077  | 260 093  |
| <u>-</u> ΔΔ.        |                 | 70                      | 4.8                                  | 20  | 203 078  | 260 094  |
| >  <u> </u>         | 25              | 50                      | 5.2                                  | 9   | 203 079  | 260 095  |
| '                   |                 | 70                      | 4.8                                  | 16  | 189 700  | 260 096  |
|                     | 32              | 70                      | 4.8                                  | 8.5   | 203 080  | 260 099  |
|                     |                 | 90                      | 5.0                                  | 16  | 203 081  | 260 100  |
|                     | 40              | 70                      | 4.8                                  | 6   | 203 082  | 260 101  |
|                     |                 | 90                      | 5.0                                  | 16  | 203 083  | 260 103  |
|                     | 50              | 90                      | 5.0                                  | 10  | 203 084  | 260 104  |
|                     |                 | 130                     | 5.0                                  | 16  | 218 418  | 260 106  |
|                     | 65              | 90                      | 5.0                                  | 5   | 239 524  | 260 107  |
|                     |                 | 130                     | 5.6                                  | 16 (15*)  | 219 533  | 260 109  |
|                     | 80              | 130                     | 5.6                                  | 10  | 239 528  | 260 110  |
|                     | 100             | 130                     | 5.6                                  | 6   | 239 531  | 260 144  |

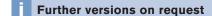
#### Flange connection acc. to ANSI B16.5, flow direction below the seat

|                     |                 | , now an ection         |                                      | •   |          |
|---------------------|-----------------|-------------------------|--------------------------------------|---|----------|
| Control             | Orifice<br>(mm) | Actuator<br>size ø [mm] | Minimum<br>pilot pres-<br>sure [bar] | Operating<br>pressure<br>up to<br>+185°C<br>[bar] | ltem no. |
| A 2/2-way valve. NC | 15              | 50                      | 5.2                                  | 25  | 203 095  |
| A_                  | 20              | 50                      | 5.2                                  | 16  | 203 086  |
| <u></u> ΛΛ.         |                 | 70                      | 4.8                                  | 20  | 203 097  |
|                     | 25              | 50                      | 5.2                                  | 9   | 203 098  |
| '                   |                 | 70                      | 4.8                                  | 16  | 203 099  |
|                     | 40              | 70                      | 4.8                                  | 6   | 203 100  |
|                     |                 | 90                      | 5.0                                  | 16  | 203 101  |
|                     | 50              | 90                      | 5.0                                  | 10  | 203 102  |
|                     |                 | 130                     | 5.0                                  | 16  | 218 419  |
|                     | 65              | 90                      | 5.0                                  | 5   | 239 525  |
|                     |                 | 130                     | 5.6                                  | 16 (15*)  | 239 527  |
|                     | 80              | 130                     | 5.6                                  | 10  | 239 529  |
|                     | 100             | 130                     | 5.6                                  | 6   | 239 532  |

#### Flange connection acc. to JIS 10K, flow direction below the seat

| Control             | Orifice<br>(mm) | Actuator<br>size ø [mm] | Minimum<br>pilot pres-<br>sure [bar] | Operating<br>pressure<br>up to<br>+185°C<br>[bar] | Item no. |
|---------------------|-----------------|-------------------------|--------------------------------------|---|----------|
| A 2/2-way valve. NC | 15              | 50                      | 5.2                                  | 25  | 203 111  |
| A_                  | 20              | 50                      | 5.2                                  | 16  | 203 112  |
|                     |                 | 70                      | 4.8                                  | 20  | 203 113  |
|                     | 25              | 50                      | 5.2                                  | 9   | 203 114  |
| •                   |                 | 70                      | 4.8                                  | 16  | 203 115  |
|                     | 40              | 70                      | 4.8                                  | 6   | 203 118  |
|                     |                 | 90                      | 5.0                                  | 16  | 203 121  |
|                     | 50              | 90                      | 5.0                                  | 10  | 203 122  |
|                     |                 | 130                     | 5.0                                  | 16  | 218 471  |
|                     | 65              | 90                      | 5.0                                  | 5   | 239 526  |
|                     |                 | 130                     | 5.6                                  | 16 (15*)  | 219 537  |
|                     | 80              | 130                     | 5.6                                  | 10  | 239 530  |
|                     | 100             | 130                     | 5.6                                  | 6   | 239 533  |

<sup>\*</sup> acc. to the Pressure Equipment Directive 97/23 / EC for compressible fluids in Group 1 (hazardous gases and vapors in accordance with Article 3, Section 1.3, letter a, first dash)

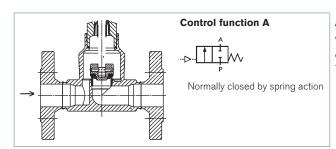


Control function
B (normally open) and I (double-acting)





# Technical data globe valve Type 2101 flow direction above the seat (for gases and steam)



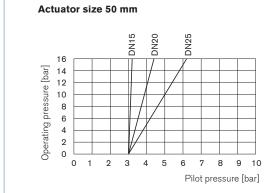
#### Attention!

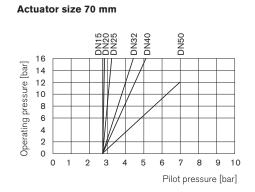
Valves with flow above the seat are only conditionally usable for liquid medium. There is a danger of waterhammer!

| Orifice | Actuator size | Kv value water | Operating pressure up to +185°C |
|---------|---------------|----------------|---------------------------------|
| [mm]    | [mm]          | (m³/h)         | CFA [bar]                       |
| 15      | 50            | 4.7            | 16                              |
|         | 70            | 4.7            | 16                              |
| 20      | 50            | 8.1            | 16                              |
|         | 70            | 8.1            | 16                              |
| 25      | 50            | 13             | 16                              |
|         | 70            | 13             | 16                              |
| 32      | 70            | 19.5           | 16                              |
| 40      | 70            | 31             | 16                              |
|         | 90            | 31             | 16                              |
| 50      | 70            | 45             | 12                              |
|         | 90            | 45             | 16                              |

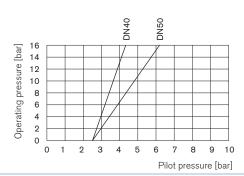
Flow rate: Kv value water  $[m^3/h]$ : Measured at  $+20^{\circ}$ C, 1 bar pressure at valve inlet and free outlet. Pressure valves [bar]: Overpressure to the atmospheric pressure

#### Pressure charts with control function A and flow direction above the seat





#### Actuator size 90 mm





# Ordering chart Type 2101 flow direction above the seat (for gases and steam)

Flange connection acc. to DIN EN 1092-1, flow direction below the seat

| Control func-       | Orifice (mm) | Actuator size<br>ø [mm] | Minimum pilot<br>pressure [bar] | Operating<br>pressure up to<br>+185°C [bar] | Item no. | Item no. certi-<br>fied Atex II<br>2GD Mechani-<br>cal |
|---------------------|--------------|-------------------------|---------------------------------|---|----------|--|
| A 2/2-way valve. NC | 15           | 50                      | see chart on                    | 16  | 203 086  | 260 145  |
|                     | 20           | 50                      | p. 4                            | 16  | 203 087  | 260 146  |
| A                   | 25           | 50                      |                                 | 16  | 203 088  | 260 151  |
|                     | 32           | 70                      |                                 | 16  | 203 091  | 260 153  |
| P                   | 40           | 70                      |                                 | 16  | 203 092  | 260 154  |
|                     | 50           | 70                      |                                 | 12  | 204 973  | 260 157  |
|                     |              | 90                      |                                 | 16  | 203 094  | 260 158  |

#### Flange connection acc. to ANSI B16.5, flow direction below the seat

| Control func-<br>tion | Orifice (mm) | Actuator size<br>ø [mm] | Minimum pilot<br>pressure [bar] | Operating<br>pressure up to<br>+185°C [bar] | Item no. |
|-----------------------|--------------|-------------------------|---------------------------------|---|----------|
| A 2/2-way valve. NC   | 15           | 50                      | see chart on                    | 16  | 203 103  |
|                       | 20           | 50                      | p. 4                            | 16  | 203 104  |
| A                     | 25           | 50                      |                                 | 16  | 203 105  |
|                       | 40           | 70                      |                                 | 16  | 203 107  |
| P                     | 50           | 70                      |                                 | 12  | 204 974  |
|                       |              | 90                      |                                 | 16  | 203 109  |

Flange connection acc. to JIS 10K, flow direction below the seat

| Control func-<br>tion | Orifice (mm) | Actuator size<br>ø [mm] | Minimum pilot<br>pressure [bar] | Operating<br>pressure up to<br>+185°C [bar] | Item no. |
|-----------------------|--------------|-------------------------|---------------------------------|---|----------|
| A 2/2-way valve. NC   | 15           | 50                      | see chart on                    | 16  | 203 123  |
|                       | 20           | 50                      | p. 4                            | 16  | 203 124  |
| A_                    | 25           | 50                      |                                 | 16  | 203 125  |
| >  1 T                | 40           | 70                      |                                 | 16  | 203 127  |
| P                     | 50           | 70                      |                                 | 12  | 204 975  |
|                       |              | 90                      |                                 | 16  | 203 129  |

Further versions on request

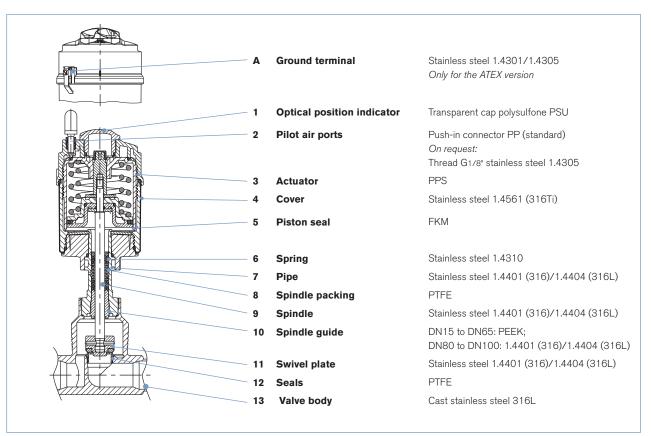
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**Control function** B (normally open) and I (double-acting)

Port connection Welded and threaded ports



# Materials globe valve Type 2101

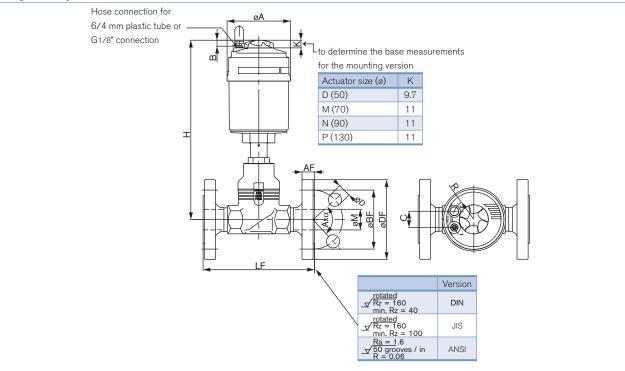


Lubricants for spindle packing and actuator are classified according NSF H1



# Dimensions globe valve Type 2101 [mm]

# Flanged body



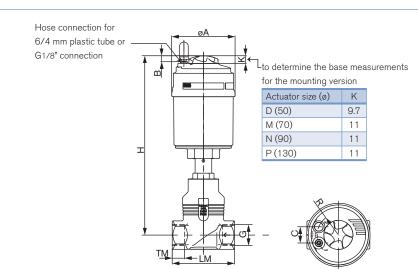
| Orifice | Actuator | ΔII be | II bodies |      |      |     |                     | ge ac | c. to [ | DIN FI | N 109 | 2-1. FTI  | F acc. | Fland | e acc | . to II | S 10k | C FTF : | acc. to |      |
|---------|----------|--------|-----------|------|------|-----|---------------------|-------|---------|--------|-------|---|--------|-------|-------|---------|-------|---------|---------|------|
| • miles | size     | A D.   | Ju.00     |      |      |     | to EN558-1 Series 1 |       |         |        |       | Flange acc. to JIS 10K, FTF acc. to EN558-2 Series 20 |        |       |       |         |       |         |         |      |
|         |          | øΑ     | В         | С    | R    | Н   | øDF                 | LF    | øBF     | AF     | øD    | Αχα   | øΜ     | øDF   | LF    | øBF     | AF    | øD      | Αχα     | øΜ   |
| 15      | 50       | 64.5   | 6         | 19.8 | 19.8 | 236 | 90                  | 130   | 60      | 16     | 14    | 4x90°   | 13.6   |       | L     | _       | _     | _       | _       |      |
| 10      | 70       | 91     | 8.5       | 23.3 | 30.5 | 250 | 30                  | 100   | 00      | 10     | 1-7   | 4,30  | 10.0   |       |       |         |       |         |         |      |
| 15      | 50       | 64.5   | 6         | 19.8 | 19.8 | 236 | 95                  | 130   | 65      | 16     | 14    | 4x90°   | 18.1   | 95    | 108   | 70      | 12    | 15      | 4x90°   | 18.1 |
| 10      | 70       | 91     | 8.5       | 23.3 | 30.5 | 250 | 95                  | 130   | 05      | 10     | 14    | 4190  | 10.1   | 95    | 100   | 70      | 12    | 15      | 4190    | 10.1 |
| 20      | 50       | 64.5   | 6         | 19.8 | 19.8 | 242 | 105                 | 150   | 75      | 18     | 14    | 4x90°   | 23.7   | 100   | 117   | 75      | 14    | 15      | 4x90°   | 23.7 |
| 20      | 70       | 91     | 8.5       | 23.3 | 30.5 | 256 | 105                 | 150   | 75      | 10     | 14    | 4190  | 23.7   | 100   | 117   | 75      | 14    | 15      | 4x90    | 23.7 |
| 25      | 50       | 64.5   | 6         | 19.8 | 19.8 | 245 | 115                 | 160   | 85      | 18     | 14    | 4x90°   | 29.7   | 125   | 127   | 90      | 14    | 19      | 4x90°   | 29.7 |
| 25      | 70       | 91     | 8.5       | 23.3 | 30.5 | 259 | 115                 | 160   | 00 03   | 10     | 14    | 4190  | 29.7   | 125   | 127   | 90      |       | 19      | 4190    | 29.7 |
| 32      | 70       | 91     | 8.5       | 23.3 | 30.5 | 280 | 140                 | 180   | 100     | 18     | 18    | 4x90°   | 38.4   | 135   | 140   | 100     | 16    | 19      | 4x90°   | 38.4 |
| 32      | 90       | 120    | 8.5       | 23.3 | 30.5 | 340 | 140                 | 160   | 100     | 10     | 10    | 4190  | 30.4   | 135   | 140   | 100     | 10    | 19      | 4x90    | 30.4 |
|         | 70       | 91     | 8.5       | 23.3 | 30.5 | 285 |                     |       |         |        |       |   |        |       |       |         |       |         |         |      |
| 40      | 90       | 120    | 8.5       | 23.3 | 30.5 | 345 | 150                 | 200   | 110     | 18     | 18    | 4x90°   | 44.3   | 140   | 165   | 105     | 16    | 19      | 4x90°   | 44.3 |
|         | 130      | 159    | 8.5       | 23.3 | 30.5 | 397 |                     |       |         |        |       |   |        |       |       |         |       |         |         |      |
|         | 70       | 91     | 8.5       | 23.3 | 30.5 | 295 |                     |       |         |        |       |   |        |       |       |         |       |         |         |      |
| 50      | 90       | 120    | 8.5       | 23.3 | 30.5 | 351 | 165                 | 230   | 125     | 20     | 18    | 4x90°   | 56.3   | 155   | 203   | 120     | 16    | 19      | 4x90°   | 56.3 |
|         | 130      | 159    | 8.5       | 23.3 | 30.5 | 403 |                     |       |         |        |       |   |        |       |       |         |       |         |         |      |
| C.E.    | 90       | 120    | 8.5       | 23.3 | 30.5 | 379 | 105                 | 000   | 1.45    | 00     | 10    | 0459  | 00     | 105   | 010   | 1.10    | 10    | 10      | 4000    | 70   |
| 65      | 130      | 159    | 8.5       | 23.3 | 30.5 | 432 | 185                 | 290   | 145     | 22     | 18    | 8x45°   | 66     | 175   | 216   | 140     | 18    | 19      | 4x90°   | 72   |
| 80      | 130      | 159    | 8.5       | 23.3 | 30.5 | 465 | 200                 | 310   | 160     | 24     | 18    | 8x45°   | 81     | 185   | 241   | 150     | 18    | 19      | 4x90°   | 84   |
| 100     | 130      | 159    | 8.5       | 23.3 | 30.5 | 475 | 235                 | 350   | 190     | 24     | 22    | 8x45°   | 100    | 210   | 292   | 175     | 18    | 19      | 8x45°   | 109  |

| Orifice | Actuator size | All bo |     |      |      |     |     |     | Flange acc. to ANSI B16.5, FTF acc. to EN558-2 Series 37 |      |      |        |      |  |  |
|---------|---------------|--------|-----|------|------|-----|-----|-----|--|------|------|--------|------|--|--|
| [inch]  | [mm]          | øΑ     | В   | С    | R    | Н   | øDF | LF  | øBF  | AF   | øD   | Αχα    | øΜ   |  |  |
| 1/2"    | 50            | 64.5   | 6   | 19.8 | 19.8 | 236 | 89  | 184 | 60 E   | 110  | 157  | 4,,000 | 157  |  |  |
| 1/2     | 70            | 91     | 8.5 | 23.3 | 30.5 | 250 | 69  | 104 | 60.5   | 11.2 | 15.7 | 4x90°  | 15.7 |  |  |
| 3/4"    | 50            | 64.5   | 6   | 19.8 | 19.8 | 242 | 99  | 184 | 69.9   | 12.7 | 157  | 4x90°  | 20.8 |  |  |
| 3/4     | 70            | 91     | 8.5 | 23.3 | 30.5 | 256 | 99  | 104 | 09.9   | 12.7 | 15.7 | 4190   | 20.6 |  |  |
| 1"      | 50            | 64.5   | 6   | 19.8 | 19.8 | 245 | 108 | 184 | 79.2   | 1/10 | 15.7 | 4x90°  | 26.7 |  |  |
| 1       | 70            | 91     | 8.5 | 23.3 | 30.5 | 259 | 100 | 104 | 19.2   | 14.2 | 13.7 | 4190   | 20.7 |  |  |
|         | 70            | 91     | 8.5 | 23.3 | 30.5 | 285 |     |     |  |      |      |        |      |  |  |
| 1 1/2"  | 90            | 120    | 8.5 | 23.3 | 30.5 | 345 | 127 | 222 | 98.6   | 17.5 | 15.7 | 4x90°  | 40.9 |  |  |
|         | 130           | 159    | 8.5 | 23.3 | 30.5 | 397 |     |     |  |      |      |        |      |  |  |
|         | 70            | 91     | 8.5 | 23.3 | 30.5 | 295 |     |     |  |      |      |        |      |  |  |
| 2"      | 90            | 120    | 8.5 | 23.3 | 30.5 | 351 | 152 | 254 | 120.7  | 19.1 | 19.1 | 4x90°  | 52.6 |  |  |
|         | 130           | 159    | 8.5 | 23.3 | 30.5 | 403 |     |     |  |      |      |        |      |  |  |
| 2 1/2"  | 90            | 120    | 8.5 | 23.3 | 30.5 | 379 | 178 | 276 | 139.7  | 22.3 | 10.1 | 4x90°  | 63   |  |  |
| 2 1/2   | 130           | 159    | 8.5 | 23.3 | 30.5 | 432 | 170 | 2/0 | 139.7  | 22.3 | 19.1 | 4190   | 03   |  |  |
| 3"      | 130           | 159    | 8.5 | 23.3 | 30.5 | 465 | 190 | 298 | 152.4  | 23.9 | 19.1 | 4x90°  | 78   |  |  |
| 4"      | 130           | 159    | 8.5 | 23.3 | 30.5 | 475 | 229 | 352 | 190.5  | 23.9 | 19.1 | 8x45°  | 102  |  |  |



# Dimensions globe valve Type 2101 [mm], continued

# Threaded body

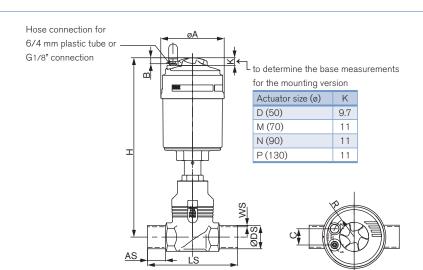


| Orifice | Actuator size | All bo | odies |      |      |     |     | G        |    | NPT         |      | Rc       |      |
|---------|---------------|--------|-------|------|------|-----|-----|----------|----|-------------|------|----------|------|
|         | 5.20          | øΑ     | В     | С    | R    | Н   | LM  | G        | тм | G           | TM   | G        | TM   |
| 15      | 50            | 64.5   | 6     | 19.8 | 19.8 | 236 | 65  | G 3/8"   | 12 | NPT 3/8"    | 10.3 | Rc 3/8"  | 101  |
| 15      | 70            | 91     | 8.5   | 23.3 | 30.5 | 250 | 65  | G 3/8    | 12 | INF I 3/8   | 10.3 | RC 3/8   | 10.1 |
| 15      | 50            | 64.5   | 6     | 19.8 | 19.8 | 236 | 65  | G 1/2"   | 14 | NPT 1/2"    | 13.7 | Rc 1/2"  | 13.2 |
| 15      | 70            | 91     | 8.5   | 23.3 | 30.5 | 250 | 05  | G 1/2    | 14 | INF I 1/2   | 13.7 | RC 1/2   | 13.2 |
| 00      | 50            | 64.5   | 6     | 19.8 | 19.8 | 242 | 75  | G 3/4"   | 16 | NPT 3/4"    | 14   | Rc 3/4"  | 115  |
| 20      | 70            | 91     | 8.5   | 23.3 | 30.5 | 256 | 75  | G 3/4    | 10 | INP I 3/4   | 14   | RC 3/4   | 14.5 |
| 25      | 50            | 64.5   | 6     | 19.8 | 19.8 | 245 | 90  | G 1"     | 18 | NPT 1"      | 16.8 | Do 1"    | 16.0 |
| 25      | 70            | 91     | 8.5   | 23.3 | 30.5 | 259 | 90  | GI       | 10 | INI I I     | 10.0 | Rc 1"    | 16.8 |
| 32      | 70            | 91     | 8.5   | 23.3 | 30.5 | 280 | 110 | G 11/4"  | 20 | NPT 11/4"   | 170  | Rc 11/4" | 19.1 |
| 32      | 90            | 120    | 8.5   | 23.3 | 30.5 | 340 | 110 | G 11/4   | 20 | INFT 11/4   | 17.3 | RC 11/4  | 19.1 |
|         | 70            | 91     | 8.5   | 23.3 | 30.5 | 285 |     |          |    |             |      |          |      |
| 40      | 90            | 120    | 8.5   | 23.3 | 30.5 | 345 | 120 | G 11/2"  | 22 | NPT 11/2"   | 17.3 | Rc 11/2" | 19.1 |
|         | 130           | 159    | 8.5   | 23.3 | 30.5 | 397 |     |          |    |             |      |          |      |
|         | 70            | 91     | 8.5   | 23.3 | 30.5 | 295 |     |          |    |             |      |          |      |
| 50      | 90            | 120    | 8.5   | 23.3 | 30.5 | 351 | 150 | G 2"     | 24 | NPT 2"      | 17.6 | Rc 2"    | 23.4 |
|         | 130           | 159    | 8.5   | 23.3 | 30.5 | 403 |     |          |    |             |      |          |      |
| CE.     | 90            | 120    | 8.5   | 23.3 | 30.5 | 379 | 105 | C 04 (0" | 06 | NIDT O4 (o" | 00.7 | Do 04/0" | 06.7 |
| 65      | 130           | 159    | 8.5   | 23.3 | 30.5 | 432 | 185 | G 21/2"  | 26 | NPT 21/2"   | 23.7 | Rc 21/2" | 26.7 |



# Dimensions globe valve Type 2101 [mm], continued

# Weld end body



| Orifice  | Actuator size | All bodies |     |      |      |     |    |     |      | 0 4200 DIN 11<br>R2 |      | 1850 |
|----------|---------------|------------|-----|------|------|-----|----|-----|------|---------------------|------|------|
|          |               | øΑ         | В   | С    | R    | Н   | AS | LS  | ø DS | WS                  | ø DS | WS   |
| 15       | 50            | 64.5       | 6   | 19.8 | 19.8 | 236 | 20 | 90  | 17.2 | 1.6                 | 13   | 1.5  |
|          | 70            | 91         | 8.5 | 23.3 | 30.5 | 250 |    |     |      |                     | 13   | 1.5  |
| 15       | 50            | 64.5       | 6   | 19.8 | 19.8 | 236 | 20 | 90  | 21.3 | 1.6                 | 19   | 1.5  |
|          | 70            | 91         | 8.5 | 23.3 | 30.5 | 250 |    |     |      |                     |      |      |
| 20 50 70 | 50            | 64.5       | 6   | 19.8 | 19.8 | 242 | 20 | 10  | 26.9 | 1.6                 | 23   | 1.5  |
|          | 70            | 91         | 8.5 | 23.3 | 30.5 | 256 |    |     |      |                     |      |      |
| 25       | 50            | 64.5       | 6   | 19.8 | 19.8 | 245 | 26 | 130 | 33.7 | 2.0                 | 29   | 1.5  |
|          | 70            | 91         | 8.5 | 23.3 | 30.5 | 259 |    |     |      |                     | 25   | 1.5  |
| 32       | 70            | 91         | 8.5 | 23.3 | 30.5 | 280 | 26 | 140 | 42.4 | 2.0                 | 35   | 1.5  |
| 52       | 90            | 120        | 8.5 | 23.3 | 30.5 | 340 | 20 |     |      |                     |      |      |
| 40       | 70            | 91         | 8.5 | 23.3 | 30.5 | 285 | 26 | 150 | 48.3 | 2.0                 | 41   | 1.5  |
|          | 90            | 120        | 8.5 | 23.3 | 30.5 | 345 |    |     |      |                     |      |      |
|          | 130           | 159        | 8.5 | 23.3 | 30.5 | 397 |    |     |      |                     |      |      |
| 50       | 70            | 91         | 8.5 | 23.3 | 30.5 | 295 | 26 | 175 | 60.3 | 2.0                 | 53   | 1.5  |
|          | 90            | 120        | 8.5 | 23.3 | 30.5 | 351 |    |     |      |                     |      |      |
|          | 130           | 159        | 8.5 | 23.3 | 30.5 | 403 |    |     |      |                     |      |      |
| 65       | 90            | 120        | 8.5 | 23.3 | 30.5 | 379 | 26 | 210 | 76.1 | 2.3                 | 70   | 2.0  |
|          | 130           | 159        | 8.5 | 23.3 | 30.5 | 432 |    |     |      |                     | 70   | 2.0  |

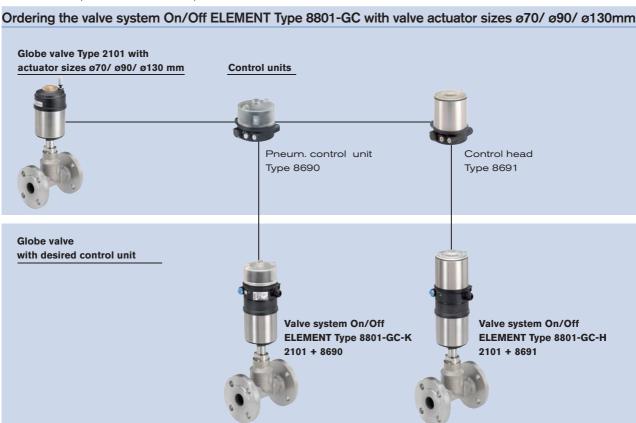
| Orifice | Actuator size | All bodies |     |      |      |     |    |     |       | BS 4825<br>Part1 |       | ASME<br>BPE |  |
|---------|---------------|------------|-----|------|------|-----|----|-----|-------|------------------|-------|-------------|--|
| [inch]  | [mm]          | øΑ         | В   | С    | R    | Н   | AS | LS  | ø DS  | WS               | ø DS  | WS          |  |
| 1/2"    | 50            | 64.5       | 6   | 19.8 | 19.8 | 236 | 20 | 90  | 12.7  | 1.2              | 12.7  | 1.65        |  |
|         | 70            | 91         | 8.5 | 23.3 | 30.5 | 250 |    |     |       |                  |       |             |  |
| 3/4"    | 50            | 64.5       | 6   | 19.8 | 19.8 | 242 | 20 | 90  | 19.05 | 1.2              | 19.05 | 1.65        |  |
| 3/4     | 70            | 91         | 8.5 | 23.3 | 30.5 | 256 |    |     |       |                  |       |             |  |
| 1"      | 50            | 64.5       | 6   | 19.8 | 19.8 | 245 | 20 | 100 | 25.4  | 1.6              | 25.4  | 1.6         |  |
|         | 70            | 91         | 8.5 | 23.3 | 30.5 | 259 |    |     |       |                  | 25.4  | 1.0         |  |
| 1 1/2"  | 70            | 91         | 8.5 | 23.3 | 30.5 | 285 | 26 | 140 | 38.1  | 1.6              | 38.1  | 1.6         |  |
|         | 90            | 120        | 8.5 | 23.3 | 30.5 | 345 |    |     |       |                  |       |             |  |
|         | 130           | 159        | 8.5 | 23.3 | 30.5 | 397 |    |     |       |                  |       |             |  |
| 2"      | 70            | 91         | 8.5 | 23.3 | 30.5 | 295 | 26 | 150 | 50.8  | 1.6              | 50.8  | 1.6         |  |
|         | 90            | 120        | 8.5 | 23.3 | 30.5 | 351 |    |     |       |                  |       |             |  |
|         | 130           | 159        | 8.5 | 23.3 | 30.5 | 403 |    |     |       |                  |       |             |  |
| 2 1/2"  | 90            | 120        | 8.5 | 23.3 | 30.5 | 379 | 26 | 175 | 63.5  | 1.6              | 63.5  | 1.6         |  |
|         | 130           | 159        | 8.5 | 23.3 | 30.5 | 432 |    |     |       |                  |       |             |  |



#### Ordering information for valve system On/Off ELEMENT Type 8801-GC

A valve system On/Off ELEMENT Type 8801-GC consists of an Globe valve Type 2101 and a pneumatic control unit Type 8690, control head Type 8691 (for valve actuator sizes ø70/ø90 /ø130mm) or control head Type 8695 (for valve actuator size ø50 mm) (see separate data sheets). For the configuration of further valve systems please use the "Request for quotation" on p. 15 go to page)

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



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

#### Pneumatic control unit Type 8690







The new generation of integrated controllers for combination with actuators from the process valve series Type 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:

- Compact design of the valve system with integrated controller meets the demands for plant washdown environments through the selection of materials, external seals and integrated control air supply to the actuator.
- 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

#### Control head Type 8691







The new generation of integrated control heads for combination with actuators from the process valve series Type 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 senor 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:

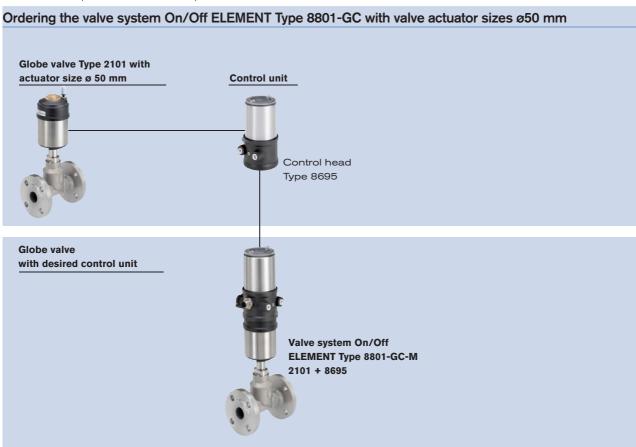
- Compact, hygienic design of the valve system with integrated controller meets the demands of plant washdown environments through the selection of materials, external seals and integrated control air supply to the actuator.
- Automatic setting of the control head at the push of a button
- Even under 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



#### Ordering information for valve system On/Off ELEMENT Type 8801-GC, continued

A valve system On/Off ELEMENT Type 8801-GC consists of an Globe valve Type 2101 and a pneumatic control unit Type 8690, control head Type 8691 (for valve actuator sizes ø70/ø90/ø130mm) or control head Type 8695 (for valve actuator size ø50 mm) (see separate data sheets). For the configuration of further valve systems please use the "Request for quotation" on p. 15 (90 to page)

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



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

#### **Control head Type 8695**







The new generation of integrated control heads for combination with small actuators from the process valve series Type 21xx is specially designed for the requirements of hygienic process environments. The intelligent control head, Type 8695, detects the valve position by means of a contact-free analog position sensor circumventing excessive wear of mechanical parts. Single and double-acting actuators are controlled via the integral pilot valve. An

AS-Interface communication interface is available as an option.

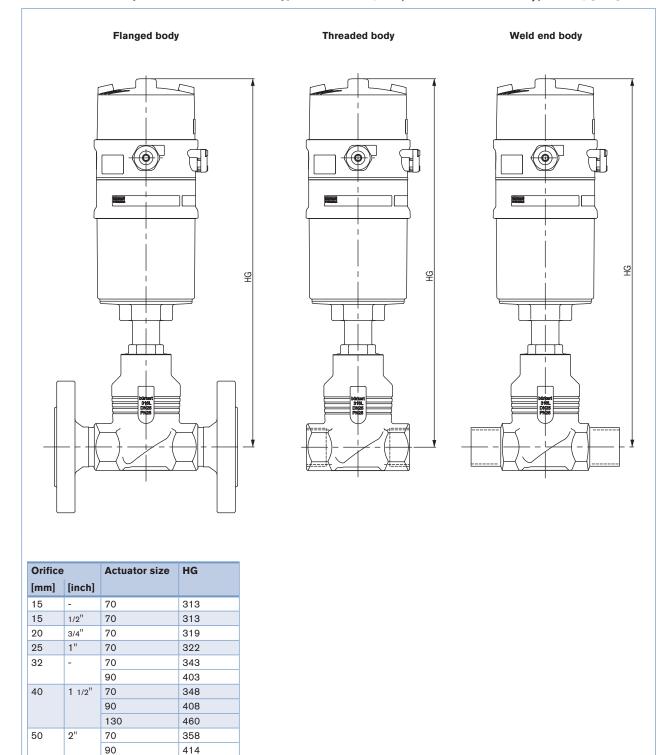
#### Main customer benefits:

- Compact, hygienic design of the valve system with integrated controller meets the demands of plant washdown environments through the selection of materials, external seals and integrated control air supply to the actuator
- Automatic setting of the control head at the push of a button
- · Visual status display on the control head
- · Monitoring and diagnosis: Process valve systems with fieldbus interface used in modern plant processes
- · Integrated pilot valve
- Simple and reliable actuator adaption



# Dimensions for valve system On/Off ELEMENT Type 8801-GC [mm]

Dimensions valve system On/Off ELEMENT Type 8801-GC-K (with pneumatic control unit Type 8690) [mm]



Further dimensions see p. 7, 8 and 9

2 1/2"

3"

4"

65

130

130

130

130

90

466

442

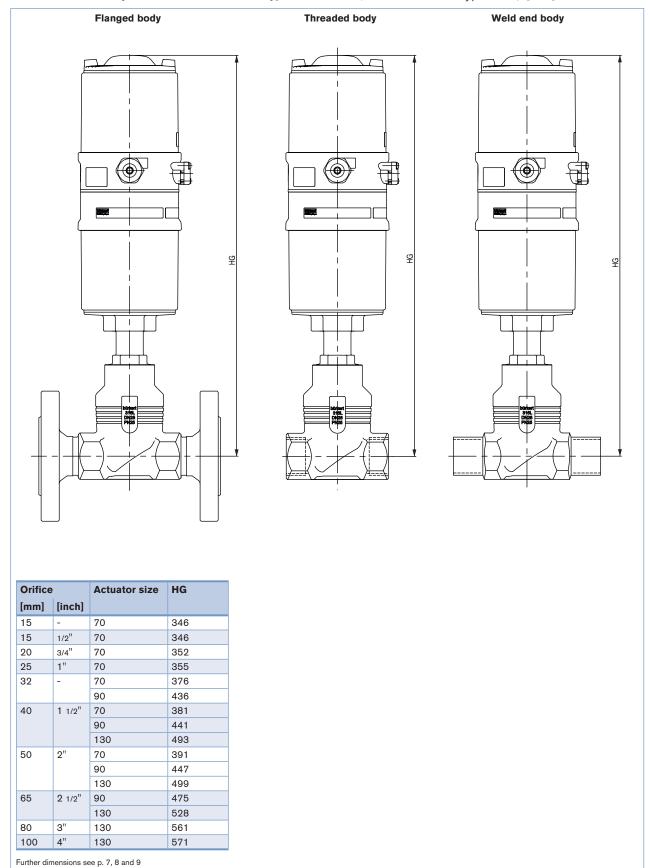
495

528

# burkert

# Dimensions for valve system On/Off ELEMENT Type 8801-GC [mm], continued

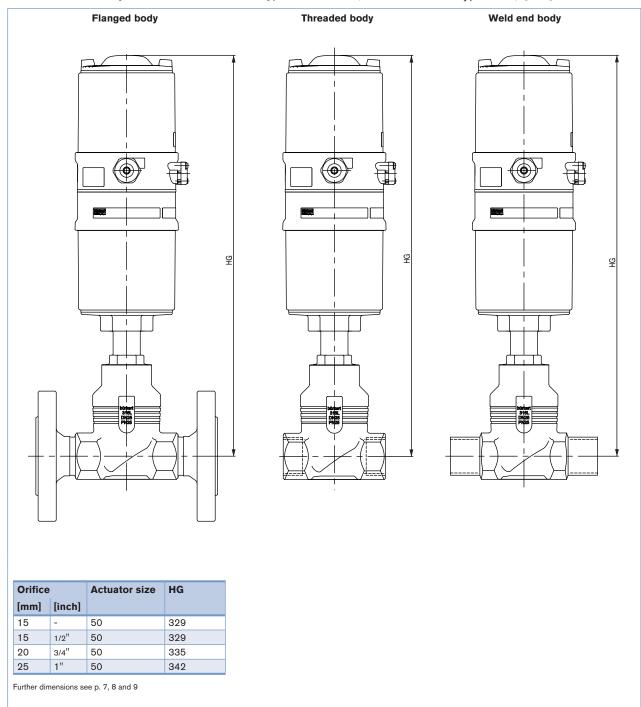
Dimensions valve system On/Off ELEMENT Type 8801-YE-H (with control head Type 8691) [mm]



# burkert

# Dimensions for valve system On/Off ELEMENT Type 8801-GC [mm], continued

Dimensions valve system On/Off ELEMENT Type 8801-YE-M (with control head Type 8695) [mm]





Note

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

# Valve system On/Off ELEMENT Type 8801-GC - 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                | 1                          | Required delivery date                   |  |  |  |  |  |
| Operating data   |                         |                            |  |  |  |  |  |  |
| Pipe line  | N                       | PN                         |  |  |  |  |  |  |
| Pipe material  |                         |                            |  |  |  |  |  |  |
| Process medium   |                         |                            |  |  |  |  |  |  |
| Type of media  | Liquid                  | Steam                      | Gas                                      |  |  |  |  |  |
| Valve features   |                         |                            |  |  |  |  |  |  |
| Seal material  | PTFE                    | NBR                        | Other                                    |  |  |  |  |  |
| Nominal pressure PN  | J                       |                            |  |  |  |  |  |  |
| Orifice DN   | J                       |                            |  |  |  |  |  |  |
| Type of connection   | Flanged                 | Threaded                   | Welded Clamp                             |  |  |  |  |  |
| Standard connection  | ISO                     | DIN                        | Other                                    |  |  |  |  |  |
| Control function   | NC 1)                   | NO 1)                      | Double-acting                            |  |  |  |  |  |
| Pilot pressure   |                         | min.                       | max.                                     |  |  |  |  |  |
| Atex II 2GD Mechanical   |                         |                            |  |  |  |  |  |  |
| Please specify item no. (if known):                            | 1) NC: normally closed  | ppen by spring action      |  |  |  |  |  |  |
|  |                         |                            |  |  |  |  |  |  |
| Control unit features  |                         |                            |  |  |  |  |  |  |
| Click on the orange box "More info." below you will come to or |                         | <u> </u>                   |  |  |  |  |  |  |
| For actuator sizes e   |                         |                            | For actuator sizes ø50 mm                |  |  |  |  |  |
| Pneumatic Control Unit Type 8690 Info.                         | Control Head            |                            | Control Head Type 8695 Info.             |  |  |  |  |  |
| Pneumatic function   | Pneumatic function      |                            | Pneumatic function                       |  |  |  |  |  |
| Single-acting Double-acting                                    | Single-acting           | Double-acting              | Single-acting Double-acting              |  |  |  |  |  |
| Without pilot valve  | Pilot air ports         |                            | Pilot air ports                          |  |  |  |  |  |
| Position feedback  | Push-in connecte        | or external ø 6 mm or 1/4" | Push-in connector external ø 6 mm or 1/4 |  |  |  |  |  |
| 1x inductive 2x inductive                                      | Thread G 1/8"           |                            | Thread G 1/8"                            |  |  |  |  |  |
| 1x inductive (NAMUR) 2x inductive (NAMUR)                      | Communication           |                            | Communication                            |  |  |  |  |  |
| 1x mechanical 2x mechanical                                    | ASI                     |                            | ASI                                      |  |  |  |  |  |
| Supply voltage   | Multipol M1             | 2                          |  |  |  |  |  |  |
| 24V DC (ATEX Zone 2/22)  | Flat cable c            | lip, 1 m cable             |  |  |  |  |  |  |
| Ex ia IIC T6 (ATEX Zone 1)                                     | DeviceNet               |                            |  |  |  |  |  |  |
| Pilot air ports  |                         |                            |  |  |  |  |  |  |
| Push-in connector external ø 6 mm or 1/4"                      |                         |                            |  |  |  |  |  |  |
| Thread G 1/8"  |                         |                            |  |  |  |  |  |  |
| Please specify item no. (if known):                            | Please specify iten     | n no. (if known):          | Please specify item no. (if known):      |  |  |  |  |  |
|  |                         |                            |  |  |  |  |  |  |
| Comment  |                         |                            |  |  |  |  |  |  |
|  |                         |                            |  |  |  |  |  |  |
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