



# 2/2-way Angle-Seat Valve with stainless steel design for media up to +180°C, DN 13-50

- High flow rates
- High cycle life
- Flow optimised body in stainless steel
- Deliverable with flow direction below or above seat
- Clean design for optimal use in hygienic environment

Type 2100 can be combined with...





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 2100 angle-seat valve fulfils tough criteria for process environments. Unrivalled cycle life and sealing integrity is guaranteed by the proven self adjusting packing gland.

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

The fully integrated system has a compact and smooth design, integrated pneumatic lines, IP65/67/NEMA4X protection class and superior chemical resistance.







Type 8695

Control head

Type 6645	1yp 0222
Automation system FreeLINE	Conductivity transmitter

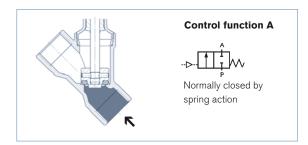
Technical data	
Orifice	DN 13 to 50
Port connections	
Threaded port acc. to	G 1/2 to G 2, NPT 1/2 to NPT 2, Rc 1/2 to Rc 2
Welded acc. to	EN ISO 1127, DIN 11850 S2, ASME BPE, SMS 3008,
	BS 4825
Clamp acc. to	ISO 2852, ASME BPE
Body material	
Threaded port body	Casted stainless steel 316L
Welded body	
-EN ISO 1127/ISO 4200 and	
DIN 11850 Serie 2	Stainless steel 1.4581 (316L on request)
-ASME BPE, SMS 3008,	
BS 4825 Part 1	Stainless steel 316L
Clamp body	Stainless steel 316L
Actuator material	
Actuator	PPS
Cover	Stainless steel 1.4561 (316Ti)
Sealing material	PTFE
Media	Water, alcohol, oils, fuels, hydraulic fluids, salt solution,
	alkali solutions, organic solvents, steam
Viscosity	max. 600 mm <sup>2</sup> /s
Packing gland	PTFE V-rings with spring compensation
Media temperature	-10 to +180 °C
Ambient temperature	0 to +60 °C
Control medium	Neutral gases, air
Max. pilot pressure	max. 10 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

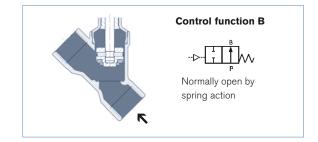
### Content





# Technical data angle seat valve Type 2100 flow direction below the seat (for gases and liquids)



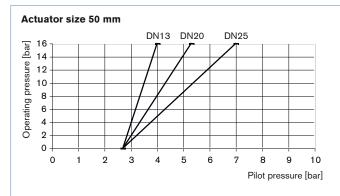


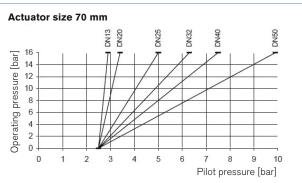
Orifice	Actuator size	Kv value water Minimum pilot pressure Operating pressure up to		ire up to +180°	
[mm]	[mm]	(m³/h)	SFA [bar]	SFA [bar]	SFB [bar]
13	50	4.2	5.0	25	16
	70	4.2	5.0	25	16
20	70	10	5.0	20	16
25	70	20	5.0	16	16
32	70	28	5.0	8.5	16
	90	30	5.0	16	16
40	70	38	5.0	6	16
	90	40	5.0	16	16
50	70	52	-	_	16
	90	53	5.0	10	16

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

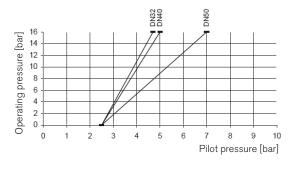
Pressure valves [bar]: Overpressure to the atmospheric pressure

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





# Actuator size 90 mm





# G threaded port, flow direction below the seat

Control	Orifice [mm]	Actuator size ø [mm]	Port connection threaded port	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	13	50	G 1/2	5.0	25	187 040
NC A		70	G 1/2	5.0	25	175 099
TATÎ	20	70	G 3/4	5.0	20	175 101
⊳- <del>-</del>	25	70	G 1	5.0	16	175 102
F	32	70	G 1 1/4	5.0	8.5	175 104
		90	G 1 1/4	5.0	16	175 105
	40	70	G 1 1/2	5.0	6	175 106
		90	G 1 1/2	5.0	16	175 107
	50	90	G 2	5.0	10	175 108
<b>B</b> 2/2-way valve,	13	50	G 1/2	see chart on p. 2	16	187 045
NO		70	G 1/2		16	175 117
B B	20	50	G 3/4		16	187 046
⊳		70	G 3/4		16	175 119
P	25	70	G 1		16	175 120
	32	70	G 1 1/4		16	175 121
	40	70	G 1 1/2		16	175 122
	50	70	G 2		16	175 123

# NPT threaded port, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port connection threaded port	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	13	50	NPT 1/2	5.0	25	187 053
NC		70	NPT 1/2	5.0	25	188 634
A	20	70	NPT 3/4	5.0	20	188 635
⊳ <u>                                  </u>	25	70	NPT 1	5.0	16	188 636
P	32	70	NPT 1 1/4	5.0	8.5	188 637
	32	90	NPT 1 1/4	5.0	16	188 638
	40	70	NPT 1 1/2	5.0	6	188 639
	40	90	NPT 1 1/2	5.0	16	188 640
	50	90	NPT 2	5.0	10	188 641
<b>B</b> 2/2-way valve,	13	50	NPT 1/2	see chart on p. 2	16	187 057
NO		70	NPT 1/2		16	188 651
В	20	50	NPT 3/4		16	187 058
⊳- <u> </u>  - - - - - - - - - - - - - - - - -	20	70	NPT 3/4		16	188 652
P	25	70	NPT 1		16	188 653
	32	70	NPT 1 1/4		16	188 654
	40	70	NPT 1 1/2		16	188 655
	50	70	NPT 2		16	188 656







RC threaded port, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port connection threaded port	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	13	50	RC 1/2	5.0	25	187 059
NC	13	70	RC 1/2	5.0	25	188 657
A A	20	70	RC 3/4	5.0	20	188 658
⊳- <u>                                   </u>	25	70	RC 1	5.0	16	188 659
P	32	70	RC 1 1/4	5.0	8.5	188 660
	32	90	RC 1 1/4	5.0	16	188 661
	40	70	RC 1 1/2	5.0	6	188 662
	40	90	RC 1 1/2	5.0	16	188 663
	50	90	RC 2	5.0	10	188 664
<b>B</b> 2/2-way valve,	13	50	RC 1/2	see chart on p. 2	16	187 063
NO	13	70	RC 1/2		16	188 674
	20	50	RC 3/4		16	187 064
⊳[ <u>т</u>	20	70	RC 3/4		16	188 675
,	25	70	RC 1		16	188 676
	32	70	RC 1 1/4		16	188 677
	40	70	RC 1 1/2		16	188 678
	50	70	RC 2		16	188 679

Further versions on request





Weld end acc. to EN ISO 1127, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	21.3 x 1.6	5.0	25	187 065
NC	15	70	21.3 x 1.6	5.0	25	188 680
	20	70	26.9 x 1.6	5.0	20	188 681
⊳∐ <u>I</u> _//\\	25	70	33.7 x 2	5.0	16	188 682
P	32	70	42.4 x 2	5.0	8.5	188 683
	32	90	42.4 x 2	5.0	16	188 684
	40	70	48.3 x 2	5.0	6	188 685
	40	90	48.3 x 2	5.0	16	188 686
	50	90	60.3 x 2.6	5.0	10	188 687
<b>B</b> 2/2-way valve,	15	50	21.3 x 1.6	see chart on p. 2	16	187 069
NO	15	70	21.3 x 1.6		16	188 697
B	20	50	26.9 x 1.6		16	187 070
⊳- <u> </u> - <u>-</u>    <u>-</u>   ///	20	70	26.9 x 1.6		16	188 698
Р	25	70	33.7 x 2		16	188 699
	32	70	42.4 x 2		16	188 700
	40	70	48.3 x 2		16	188 701
	50	70	60.3 x 2.6		16	188 702

Weld end acc. to DIN 11850 S2, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	19 x 1.5	5.0	25	187 071
NC A	15	70	19 x 1.5	5.0	25	188 703
TATÎ	20	70	23 x 1.5	5.0	20	188 704
⊳	25	70	29 x 1.5	5.0	16	188 705
_	32	70	35 x 1.5	5.0	8.5	188 706
	32	90	35 x 1.5	5.0	16	188 707
	40	70	41 x 1.5	5.0	6	188 708
	40	90	41 x 1.5	5.0	16	188 709
	50	90	53 x 1.5	5.0	10	188 710
<b>B</b> 2/2-way valve,	15	50	19 x 1.5	see chart on p. 2	16	187 075
NO	15	70	19 x 1.5		16	188 720
, TT Å	20	50	23 x 1.5		16	187 076
	20	70	23 x 1.5		16	188 721
	25	70	29 x 1.5		16	188 722
	32	70	35 x 1.5		16	188 723
	40	70	41 x 1.5		16	188 724
	50	70	53 x 1.5		16	188 725



磁 Material Body: Sta

Body: Stainless steel 316L

Control function I (double-acting)



Weld end acc. to ASME BPE, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	12.7 x 1.65	5.0	25	187 077
NC	15	70	12.7 x 1.65	5.0	25	188 726
A	20	70	19.05 x 1.65	5.0	20	188 727
	25	70	25.4 x 1.65	5.0	16	188 728
P	40	70	38.1 x 1.65	5.0	6	188 729
	40	90	38.1 x 1.65	5.0	16	188 730
	50	90	50.8 x 1.65	5.0	10	188 731
<b>B</b> 2/2-way valve,	15	50	12.7 x 1.65	see chart on p. 2	16	187 082
NO	15	70	12.7 x 1.65		16	188 740
В	20	50	19.05 x 1.65		16	187 083
⊳- <u> </u>  - - - - - - - - - - - - - - - - -	20	70	19.05 x 1.65		16	188 741
P	25	70	25.4 x 1.65		16	188 742
	40	70	38.1 x 1.65		16	188 743
	50	70	50.8 x 1.65		16	188 744

### Weld end acc. to SMS 3008, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	12 x 1.0	5.0	25	187 084
NC .	15	70	12 x 1.0	5.0	25	188 745
	20	70	18 x 1.0	5.0	20	188 746
⊳ <u>                                  </u>	25	70	25 x 1.2	5.0	16	188 747
P	40	70	38 x 1.2	5.0	6	188 748
	40	90	38 x 1.2	5.0	16	188 749
	50	90	51 x 1.2	5.0	10	188 750
<b>B</b> 2/2-way valve,	15	50	12 x 1.0	see chart on p. 2	16	187 089
NO	15	70	12 x 1.0		16	188 759
В	20	50	18 x 1.0		16	187 090
⊳-  <del>†</del>   <b>†</b>   <b>/</b>	20	70	18 x 1.0		16	188 760
P	25	70	25 x 1.2		16	188 761
	40	70	38 x 1.2		16	188 762
	50	70	51 x 1.2		16	188 763

# Weld end acc. to BS 4825, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	12.7 x 1.2	5.0	25	187 091
NC	15	70	12.7 x 1.2	5.0	25	188 764
A	20	70	19.05 x 1.65	5.0	20	188 765
	25	70	25.4 x 1.65	5.0	16	188 766
P	40	70	38.1 x 1.65	5.0	6	188 767
	40	90	38.1 x 1.65	5.0	16	188 768
	50	90	50.8 x 1.65	5.0	10	188 769
<b>B</b> 2/2-way valve,	15	50	12.7 x 1.2	see chart on p. 2	16	187 095
NO	15	70	12.7 x 1.2		16	188 778
В	20	50	19.05 x 1.65		16	187 096
	20	70	19.05 x 1.65		16	188 779
P	25	70	25.4 x 1.65		16	188 780
	40	70	38.1 x 1.65		16	188 781
	50	70	50.8 x 1.65		16	188 782



Clamp acc. to ISO 2852, flow direction below the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port connec- tion clamp external Ø (mm)	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	34.0	5.0	25	187 097
NC	15	70	34.0	5.0	25	188 783
TATÎ.	20	70	50.5	5.0	20	188 784
⊳- <del> </del>     <u>+</u>	25	70	50.5	5.0	16	188 785
P	32	70	50.5	5.0	8.5	188 786
	32	90	50.5	5.0	16	188 787
	40	70	64.0	5.0	6	188 788
	40	90	64.0	5.0	16	188 789
	50	90	77.5	5.0	10	188 790
<b>B</b> 2/2-way valve,	15	50	34.0	see chart on p. 2	16	187 101
NO	15	70	34.0		16	188 800
T A	20	50	50.5		16	187 102
"\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	20	70	50.5		16	188 801
	25	70	50.5		16	188 802
	32	70	50.5		16	188 803
	40	70	64.0		16	188 804
	50	70	77.5		16	188 805

# Clamp acc. to ASME BPE, flow direction below the seat

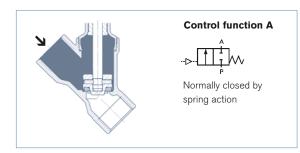
Control	Orifice (mm)	Actuator size ø [mm]	Port connec- tion clamp external Ø (mm)	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	25.0	5.0	25	187 103
NC A	15	70	25.0	5.0	25	188 806
	20	70	25.0	5.0	20	188 807
P P	25	70	50.5	5.0	16	188 808
	40	70	50.5	5.0	6	188 809
	40	90	50.5	5.0	16	188 810
	50	90	64.0	5.0	10	188 811
<b>B</b> 2/2-way valve,	15	50	25.0	see chart on p. 2	16	187 107
NO B	15	70	25.0		16	188 820
	20	50	25.0		16	187 108
P	20	70	50.5		16	188 821
	25	70	50.5		16	188 822
	40	70	50.5		16	188 823
	50	70	64.0		16	188 824

Further versions on request





# Technical data angle seat valve Type 2100 flow direction above the seat (for gases and steam)



### Attention!

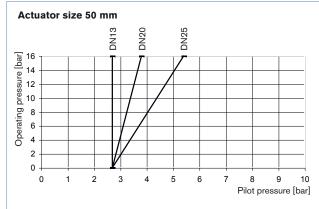
Valves with flow above the seat are only conditionally usable for liquid media. There is a danger of waterhammer!

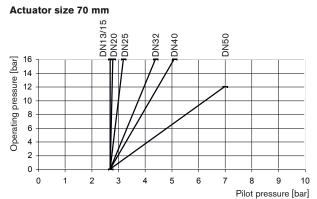
Orifice [mm]	Actuator size [mm]	Kv value water (m³/h)	Operating pressure up to +180° NC (A) [bar]
13	50	4.2	16
	70	4.2	16
20	50	10	16
	70	10	16
25	50	20	16
	70	20	16
32	70	28	16
40	70	38	16
	90	40	16
50	70	52	12
	90	53	16

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

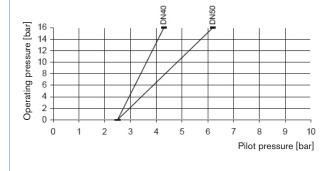
Pressure valves [bar]: Overpressure to the atmospheric pressure

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





# Actuator size 90 mm





# Ordering chart Type 2100 flow direction above the seat (for gases and steam)

# G threaded port, flow direction above the seat

Control function	Orifice (mm)	Actuator size ø [mm]	Port connection threaded port	Minimum pilot pressure [bar]	Operating pressure up to +180°C [bar]	Item no.
A 2/2-way valve,	13	50	G 1/2	see chart on p. 8	16	187 041
NC A		70	G 1/2		16	175 109
TAT 1	20	50	G 3/4		16	187 043
<b>}</b> - <b>∐</b>   <b>T</b>   <b>M</b>		70	G 3/4		16	175 110
	25	50	G 1		16	187 044
		70	G 1		16	175 111
	32	70	G 1 1/4		16	175 112
	40	70	G 1 1/2		16	175 113
		90	G 1 1/2		16	175 114
	50	70	G 2		12	175 115
		90	G 2		16	175 116

# NPT threaded port, flow direction above the seat

Control function	Orifice (mm)	Actuator size ø [mm]	Port connection threaded port	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	13	50	NPT 1/2	see chart on p. 8	16	187 054
NC A	20	50	NPT 3/4		16	187 055
⊳- <u>                                   </u>	25	50	NPT 1		16	187 056
P	32	70	NPT 1 1/4		16	188 646
	40	70	NPT 1 1/2		16	188 647
	50	70	NPT 2		12	188 649

# RC threaded port, flow direction above the seat

Control function	Orifice (mm)	Actuator size ø [mm]	Port connection threaded port	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	13	50	RC 1/2	see chart on p. 8	16	187 060
NC A	20	50	RC 3/4		16	187 061
D	25	50	RC 1		16	187 062
> <u>         </u> /VV	32	70	RC 1 1/4		16	188 669
	40	70	RC 1 1/2		16	188 670
	50	70	RC 2		12	188 672



# Weld end acc. to EN ISO 1127, flow direction above the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	21.3 x 1.6	see chart on p. 8	16	187 066
NC	20	50	26.9 x 1.6		16	187 067
A	25	50	33.7 x 2		16	187 068
	32	70	42.4 x 2	16	16	188 692
P 2	40	70	48.3 x 2		16	188 693
	50	70	60.3 x 2.6		12	188 695

# Weld end acc. to DIN 11850 S2, flow direction above the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	19 x 1.5	see chart on p. 8	16	187 072
NC	20	50	23 x 1.5		16	187 073
A	25	50	29 x 1.5		16	187 074
32 P 40	32	70	35 x 1.5	16	16	188 715
	40	70	41 x 1.5		16	188 716
	50	70	53 x 1.5		12	188 718

# Further versions on request

脚 Material Body: Stainless steel 316L

# Weld end acc. to ASME BPE, flow direction above the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	12.7 x 1.65	see chart on p. 8	16	187 078
NC A	20	50	19.05 x 1.65	16 16 16	187 079	
[A] ±]	25	50	25.4 x 1.65		16	187 080
⊳- <del>      İ</del>	40	70	38.1 x 1.65		16	188 736
<b>P</b>	50	70	50.8 x 1.65		12	188 738

# Weld end acc. to SMS 3008, flow direction above the seat

Control	Orifice (mm)	Actuator size ø [mm]	Port con- nection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	ltem no.
A 2/2-way valve,	15	50	12 x 1.0	see chart on p. 8	16	187 085
NC A	20	50	18 x 1.0	1	16	187 086
[ <del>                                     </del>	25	50	25 x 1.2		16	187 087
⊳- <del>                                      </del>	40	70	38 x 1.2		16	188 755
F	50	70	51 x 1.2		12	188 757



Weld end acc. to BS 4825, flow direction above the seat

Control function	Orifice (mm)	Actuator size ø [mm]	Port connection tube-Ø [mm]	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	12.7 x 1.2	see chart on p. 8	16	187 092
NC .	20	50	19.05 x 1.65		16	187 093
	25	50	25.4 x 1.65		16	187 094
	40	70	38.1 x 1.65		16	188 774
Р	50	70	50.8 x 1.65		12	188 776

### Clamp acc. to ISO 2852, flow direction above the seat

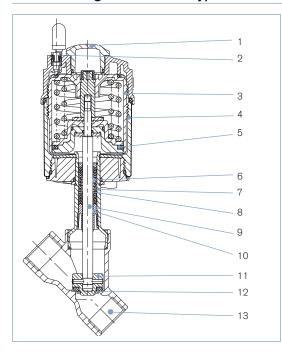
Control func- tion	Orifice (mm)	Actuator size ø [mm]	Port connection clamp external Ø (mm)	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	34.0	see chart on p. 8	16	187 098
NC	20	50	50.5		16	187 099
	25	50	50.5		16	187 100
⊳ <u>                                  </u>	32	70	50.5		16	188 795
	40	70	64.0		16	188 796
	50	70	77.5		12	188 798

# Clamp acc. to ASME BPE, flow direction above the seat

Control func- tion	Orifice (mm)	Actuator size ø [mm]	Port connection clamp exter- nal Ø (mm)	Minimum pilot pressure [bar]	Operating pressure up to +180 °C [bar]	Item no.
A 2/2-way valve,	15	50	25.0	see chart on p. 8	16	187 104
NC A	20	50	25.0		16	187 105
	25	50	50.5		16	187 106
	40	70	50.5		16	188 816
	50	70	64.0		12	188 818



# Materials angle seat valve Type 2100



Optical position indicator 2

Pilot air ports

Actuator

Cover 4 5 Piston seal

6 Spring Pipe

8 V-seals **Spindle** 9

10 Wiper

11 Swivel plate

12 Seals

Valve body Threaded body

> Welded body -EN ISO 1127/ISO 4200 and

DIN 11850 S 2

-ASME BPE, SMS 3008, BS 4825 Part 1

Clamp body

Transparent cap polysulfone PSU Push-in connector PP (standard)

On request:

Thread G<sub>1/8</sub>" stainless steel 1.4305

Stainless steel 1.4561 (316Ti)

FKM

Stainless steel 1.4310 Stainless steel 1.4401 (316)

(1.4404 (316L) on request)

PTFE

Stainless steel 1.4401 (316)

(1.4404 (316L) on request)

PEEK

Stainless steel 1.4401 (316)

(1.4404 (316L) on request)

PTFE

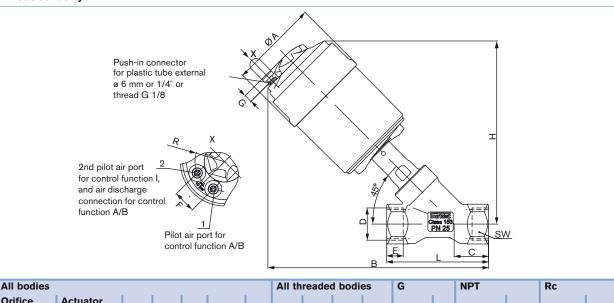
Casted stainless steel 316L

Stainless steel 1.4581 (316L on request)

Stainless steel 316L Stainless steel 316L

# Dimensions angle seat valve Type 2100 [mm]

### Threaded body

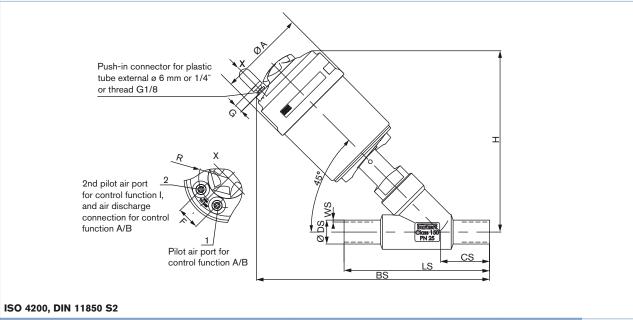


All bodies							All th	readed	d bodi	es	G		NPT		Rc	
Orifice [mm]	Actuator size [mm]	ØΑ	F	G	R	Н	В	С	L	SW	D	E	D	E	D	E
13	50	64.5	19.8	6.1	17.15	158	192	31	85	27	G 1/2	14	NPT 1/2	13.7	RC 1/2	13.2
	70	91	23.3	8.5	30.5	173	207	31	85	27	G 1/2	14	NPT 1/2	13.7	RC 1/2	13.2
20	50	64.5	19.8	6.1	17.15	166	203	35	95	32	G 3/4	16	NPT 3/4	14	RC 3/4	14.5
	70	91	23.3	8.5	30.5	181	219	35	95	32	G 3/4	16	NPT 3/4	14	RC 3/4	14.5
25	50	64.5	19.8	6.1	17.15	174	212	35.5	105	41	G 1	18	NPT 1	16.8	RC 1	16.8
	70	91	23.3	8.5	30.5	189	228	35.5	105	41	G 1	18	NPT 1	16.8	RC 1	16.8
32	70	91	23.3	8.5	30.5	195	240	41	120	50	G 1 1/4	20	NPT 1 1/4	17.3	RC 1 1/4	19.1
	90	120	23.3	8.5	30.5	238	280	41	120	50	G 1 1/4	20	NPT 1 1/4	17.3	RC 1 1/4	19.1
40	70	91	23.3	8.5	30.5	200	243	40	130	55	G 1 1/2	22	NPT 1 1/2	17.3	RC 1 1/2	19.1
	90	120	23.3	8.5	30.5	242	283	40	130	55	G 1 1/2	22	NPT 1 1/2	17.3	RC 1 1/2	19.1
50	70	91	23.3	8.5	30.5	216	264	45	150	65	G 2	24	NPT 2	17.6	RC 2	23.4
	90	120	23.3	8.5	30.5	256	302	45	150	65	G 2	24	NPT 2	17.6	RC 2	23.4



# Dimensions angle seat valve Type 2100 [mm], continued

# Welded body



All bodi	es						ISO 420	0 / DIN 1	1850 S2	ISO 4	4200	DIN 11	850 S2
Orifice [mm]	Actuator size [mm]	ØA	F	G	R	н	BS	cs	LS	ws	ø DS	ws	ø DS
15	50	64.5	19.8	6.1	17.15	158	195	34	100	1.6	21.3	1.5	19.0
	70	91	23.3	8.5	30.5	173	210	34	100	1.6	21.3	1.5	19.0
20	50	64.5	19.8	6.1	17.15	166	207	39	115	1.6	26.9	1.5	23.0
	70	91	23.3	8.5	30.5	181	223						
25	50	64.5	19.8	6.1	17.15	174	220	43	130	2	33.7	1.5	29.0
	70	91	23.3	8.5	30.5	189	236						
32	70	91	23.3	8.5	30.5	195	239	40	145	2	42.4	1.5	35.0
	90	120	23.3	8.5	30.5	238	279						
40	70	91	23.3	8.5	30.5	200	252	49	160	2	48.3	1.5	41.0
	90	120	23.3	8.5	30.5	242	292						
50	70	91	23.3	8.5	30.5	216	269	50	175	2.6	60.3	1.5	53.0
	90	120	23.3	8.5	30.5	256	307						

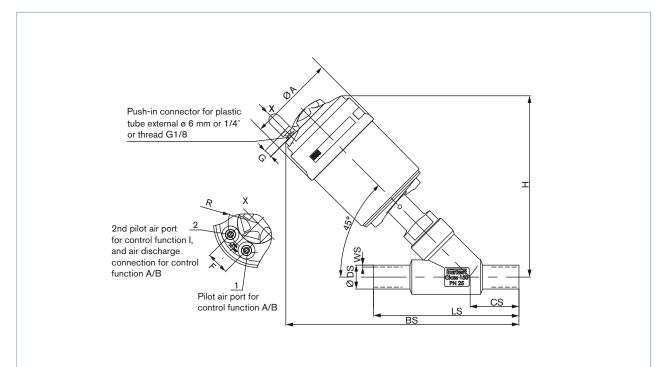
# ASME BPE, BS 4825

All bodi	es						ASME E	BPE / BS	4825	ASMI	E BPE	BS 48	25
Orifice [mm]	Actuator size [mm]	ØA	F	G	R	н	BS	cs	LS	ws	ø DS	ws	ø DS
15	50	64.5	19.8	6.1	17.15	158	195	34	100	1.65	12.7	1.2	12.7
	70	91	23.3	8.5	30.5	173	210						
20	50	64.5	19.8	6.1	17.15	166	207	39	115	1.65	19.05	1.2	19.05
	70	91	23.3	8.5	30.5	181	223						
25	50	64.5	19.8	6.1	17.15	174	220	43	130	1.65	25.4	1.65	25.4
	70	91	23.3	8.5	30.5	189	236						
40	70	91	23.3	8.5	30.5	200	252	49	160	1.65	38.1	1.65	38.1
	90	120	23.3	8.5	30.5	242	292						
50	70	91	23.3	8.5	30.5	216	269	50	175	1.65	50.8	1.65	50.8
	90	120	23.3	8.5	30.5	256	307						

# burkert

# Dimensions angle seat valve Type 2100 [mm], continued

# Welded body, continued



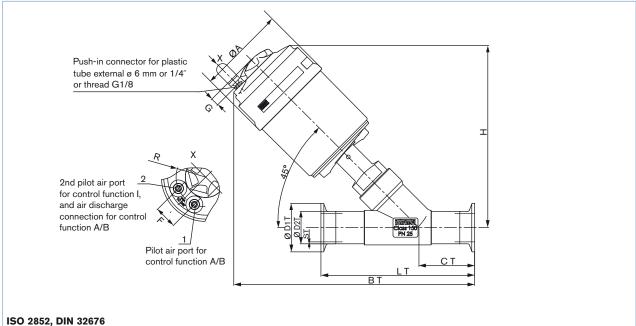
### SMS 3008

All bodi	es						SMS	3008			
Orifice [mm]	Actuator size [mm]	ØA	F	G	R	н	BS	cs	LS	ws	ø DS
15	50	64.5	19.8	6.1	17.15	158	207	46	135	1	12.0
	70	91	23.3	8.5	30.5	173	222				18.0
20	50	64.5	19.8	6.1	17.15	166	220	52	145	1	18.0
	70	91	23.3	8.5	30.5	181	236			1.2	25.0
25	50	64.5	19.8	6.1	17.15	174	228	51	152	1.2	25.0
	70	91	23.3	8.5	30.5	189	244				
32	50	91	23.3	8.5	30.5	195	239	40	145	1.2	38.0
	70	120	23.3	8.5	30.5	238	279				
40	70	91	23.3	8.5	30.5	200	263	60	182	1.2	38.0
	90	120	23.3	8.5	30.5	242	303				
50	70	91	23.3	8.5	30.5	216	283	64	210	1.2	51.0
	90	120	23.3	8.5	30.5	256	321				



# Dimensions angle seat valve Type 2100 [mm], continued

# Clamp body



All bod	ies						ISO 2852/	DIN 32676		ISO 28	52		DIN 326	76	
Orifice [mm]	Actuator size [mm]	Ø A	F	G	R	н	ВТ	СТ	LT	ø D1T	ø D2T	ST	ø D1T	ø D2T	ST
15	50	64.5	19.8	6.1	17.15	158	211	49.5	130	34	21.3	1.6	34	19	1.5
	70	91	23.3	8.5	30.5	173	226								
20	50	64.5	19.8	6.1	17.15	166	225	57	150	50.5	26.9	1.6	34	23	1.5
	70	91	23.3	8.5	30.5	181	241								
25	50	64.5	19.8	6.1	17.15	174	236	58.5	160	50.5	33.7	2	50.5	29	1.5
	70	91	23.3	8.5	30.5	189	252								
32	70	91	23.3	8.5	30.5	195	257	58	180	50.5	42.4	2	50.5	35	1.5
	90	120	23.3	8.5	30.5	238	297								
40	70	91	23.3	8.5	30.5	200	273	69.5	200	64	48.3	2	50.5	41	1.5
	90	120	23.3	8.5	30.5	242	313								
50	70	91	23.3	8.5	30.5	216	297	78	230	77.5	60.3	2.6	64	53	1.5
	90	120	23.3	8.5	30.5	256	335								

# BS 4825, ASME BPE

All bodie	es						BS 4825	/ ASME	BPE	BS 4825	<b>,</b>		ASME B	PE	
Orifice [mm]	Actuator size [mm]	Ø A	F	G	R	н	вт	СТ	LT	ø D1T	ø D2T	ST	ø D1T	ø D2T	ST
15	50	64.5	19.8	6.1	17.15	158	211	49.5	130	25.2	12.7	1.2	25	12.7	1.65
	70	91	23.3	8.5	30.5	173	226								
20	50	64.5	19.8	6.1	17.15	166	225	57	150	25.2	19.05	1.2	25	19.05	1.65
	70	91	23.3	8.5	30.5	181	241								
25	50	64.5	19.8	6.1	17.15	174	236	58.5	160	50.5	25.4	1.65	-	-	-
	70	91	23.3	8.5	30.5	189	252								
40	70	91	23.3	8.5	30.5	200	273	69.5	200	50.5	38.1	1.65	-	-	-
	90	120	23.3	8.5	30.5	242	313								
50	70	91	23.3	8.5	30.5	216	297	78	230	64	50.8	1.65	-	-	-
	90	120	23.3	8.5	30.5	256	335								



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

A valve system On/Off ELEMENT Type 8801-YE consists of an angle seat valve Type 2100 and a pneumatic control unit Type 8690, control head Type 8691 (for valve actuator sizes ø70/ø90mm) or control head Type 8695 (for valve actuator size ø50 mm) (see separate datasheets).

For the configuration of further valve systems please use the "Request for quotation" on p. 22 go to page

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

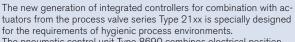


Click on the orange box "More info." below... you will come to our website for the resp. product where you can download the datasheet.

### Pneumatic control unit Type 8690







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 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:

- 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

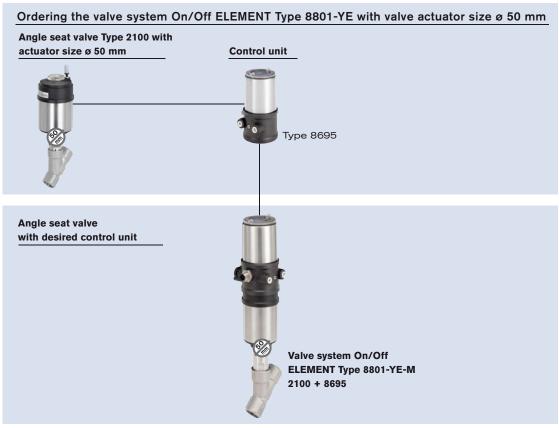


# Ordering information for valve system On/Off ELEMENT Type 8801-YE, continued

A valve system On/Off ELEMENT Type 8801-YE consists of an angle seat valve Type 2100 and a pneumatic control unit Type 8690, control head Type 8691 (for valve actuator sizes ø70/ø90mm) or control head Type 8695 (for valve actuator size ø50 mm) (see separate datasheets).

For the configuration of further valve systems please use the "Request for quotation" on p. 22 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 datasheet.

### **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.

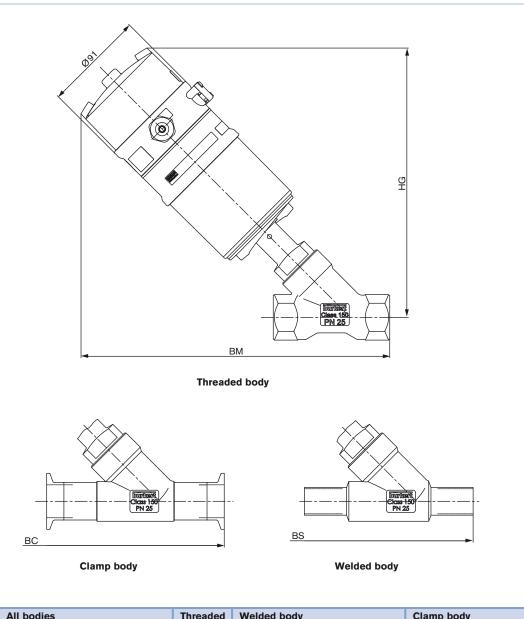
### Main customer benefits:

- 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-YE [mm]

Dimensions valve system On/Off ELEMENT Type 8801-YE with pneumatic control unit Type 8690 [mm]



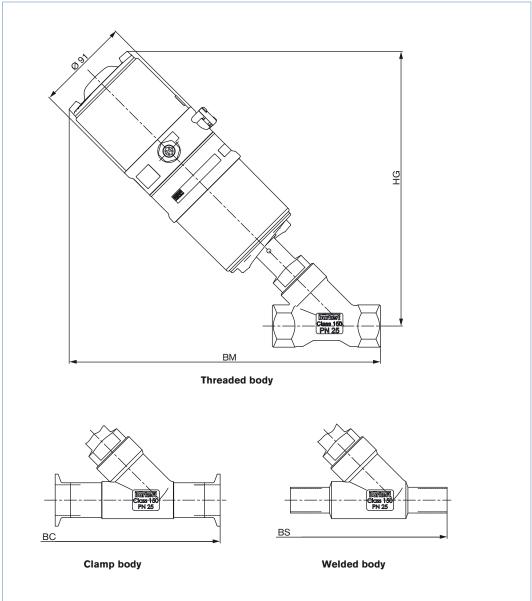
All bodies	fice Actuator		Threaded body	Welded body		Clamp body
Orifice				ISO 4200, DIN 11850 S2, ASME BPE	SMS 3008	ISO 2852, DIN 32676, BS 4825, ASME BPE
[mm]	[mm]	HG	ВМ	BS	BS	ВС
13	70	227	257	260	272	275.5
20	70	235	269	273	286	291
25	70	243	278	285.5	293.5	301
32	70	249	290	289	289	307
	90	290	330	329	329	347
40	70	254	293	302	313	322.5
	90	294	333	342	353	362.5
50	70	270	314	319	333	347
	90	308	352	357	371	385

Further dimensions see p. 12-15

# burkert

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

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



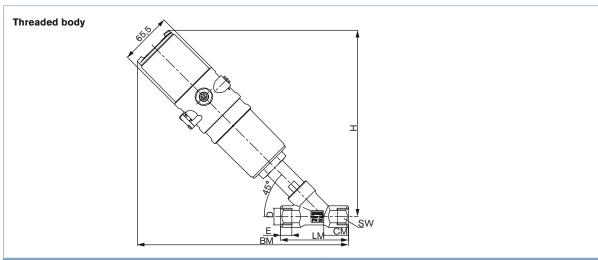
All bodies	fice Actuator size		Threaded body	Welded body		Clamp body
Orifice	111111111111111111111111111111111111111			ISO 4200, DIN 11850 S2, ASME BPE	SMS 3008	ISO 2852, DIN 32676, BS 4825, ASME BPE
[mm]	[mm]	HG	ВМ	BS	BS	ВС
13	70	251	281	284	296	299.5
20	70	259	293	297	310	315
25	70	267	302	309.5	317.5	325
32	70	273	314	313	313	331
	90	314	354	353	353	371
40	70	278	317	326	337	346.5
	90	318	357	366	377	386.5
50	70	294	338	343	357	371
	90	332	376	381	395	409

Further dimensions see p. 12-15

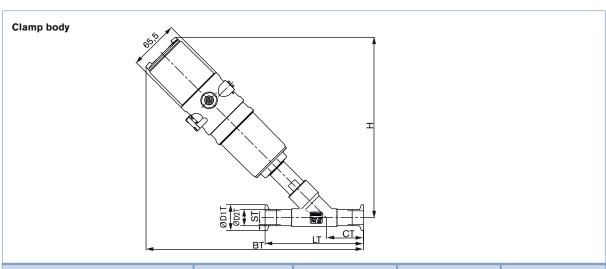


# Dimensions for valve system On/Off ELEMENT Type 8801-YE [mm], continued

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



All threaded b	odies						Port conr	ection	1			
							G		NPT		RC	
Orifice [mm]	Actuator size [mm]	н	вм	СМ	sw	LM	D	E	D	E	D	E
13	50	234	265	31	27	85	G 1/2	14	NPT 1/2	13.7	RC 1/2	13.2
			262	28	32		G 3/4	16	NPT 3/4	14	RC 3/4	14.5
20	50	242	276	35	32	95	G 3/4	16	NPT 3/4	14	RC 3/4	14.5
			272	31	41		G 1	18	NPT 1	16.8	RC 1	16.8
25	50	250	285	35.5	41	105	G 1	18	NPT 1	16.8	RC 1	16.8
			281	31.5	50		G 1 1/4	20	NPT 1 1/4	17.3	RC 1 1/4	19.1



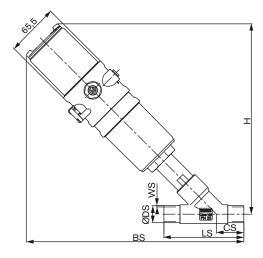
All cla	mp bodie	es.				ISO 28	52		DIN 32	676		BS 482	!5		ASME	BPE	
Orifice [mm]	Ac- tuator size [mm]	н	ВТ	СТ	LT	ØD1T	ØD2T	ST	ØD1T	ØD2T	ST	ØD1T	ØD2T	ST	ØD1T	ØD2T	ST
13	50	234	284	49.5	130	34	21.3	1.6	34	19	1.5	25.2	12.7	1.2	25	12.7	1.65
20	50	242	298	57	150	50.5	26.9	1.6	50.5	26.9	1.6	25.2	19.05	1.2	25	19.05	1.65
25	50	250	309	58.5	160	50.5	33.7	2	50.5	33.7	2	50.5	25.4	1.65	-	-	-



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

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

# Welded body



All weld	led bodies		ISO 4	200				DIN 1	1850 \$	52		
Orifice [mm]	Actuator size [mm]	н	BS	cs	LS	ø DS	ws	BS	cs	LS	ø DS	ws
15	50	234	268	34	100	13.5	1.6	268	34	100	19	1.5
						17.2						
						21.3						
20	50	242	280	39	115	26.9	1.6	280	39	115	23	1.5
25	50	250	293	43	130	33.7	2	293	43	130	29	1.5

All weld	led bodies		SMS	3008				ASMI	E BPE			
Orifice [mm]	Actuator size [mm]	н	BS	cs	LS	ø DS	ws	BS	cs	LS	ø DS	ws
15	50	234	280	46	135	12.0	1	268	34	100	12.7	1.65
20	50	242	293	52	145	18.0	1	280	39	115	19.05	1.65
25	50	250	301	51	152	25.0	1.2	293	43	130	25.4	1.65

All welded bodies			BS 4825				
Orifice [mm]	Actuator size [mm]	н	BS	cs	LS	ø DS	ws
15	50	234	268	34	100	12.7	1.2
20	50	242	280	39	115	19.05	1.2
25	50	250	293	43	130	25.4	1.65



Note

icase iiii out and send to your neal	est Bürkert facility* with your inquiry	or order t		
Company	Contact person	Contact person		
Customer no.	Department	Department		
Address	Tel./Fax			
Postcode/town	E-mail			
= mandatory fields to fill out	Quantity	Required delivery date		
Operating data				
Pipe line	DN PN			
Pipe material				
Process medium				
Type of media	Liquid Stea	am Gas		
Valve features				
Seal material	PTFE NBR Other			
Nominal pressure	PN .			
Orifice	DN			
Type of connection	Threaded Welded Clamp			
Standard connection				
	ISO DIN Other			
Body material selection with welded connection, acc. to EN ISO 1127/ISO 4200				
and DIN 11850	St. st. 1.4581 St. st. 316	5 L		
Control function	NC <sup>1)</sup> NO <sup>1)</sup> Double-ad	eting		
Pilot pressure	min.	max.		
Please specify item no. if known:				
	<sup>1)</sup> NC: normally closed by spring action; NO: normally of	open by spring action		
Control unit features				
For actuator sizes 70/90 mm	For actuator sizes 70/90 mm	For actuator size 50 mm		
Pneumatic Control Unit Type 8690  More info.	Control Head Type 8691 More info.	Control Head Type 8695 More info.		
Pneumatic function	Pneumatic function	Pneumatic function		
Single-acting Double-acting	Single-acting Double-acting	Single-acting Double-acting		
Without pilot valve	Dilat air narta	Dilat air narta		
Position feedback	Pilot air ports  Push-in connector external ø 6mm or 1/4"	Pilot air ports  Push-in connector external ø 6mm or		
1x inductive 2x inductive	Thread G 1/8"			
		Thread G 1/8"		
1x inductive (NAMUR) 2x inductive (NAMUR)	Communication	0		
1x inductive (NAMUR) 2x inductive (NAMUR)  1x mechanical 2x mechanical	Communication	Communication		
1x mechanical 2x mechanical	ASI	ASI		
	ASI Multipol M12			
1x mechanical 2x mechanical Supply voltage	ASI Multipol M12 Flat cable clip, 1 m cable			
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22)	ASI Multipol M12			
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22) Ex ia IIC T6 (ATEX Zone 1)	ASI Multipol M12 Flat cable clip, 1 m cable			
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22) Ex ia IIC T6 (ATEX Zone 1)  Pilot air ports Push-in connector Thread G 1/8" external ø 6mm or 1/4"	ASI Multipol M12 Flat cable clip, 1 m cable DeviceNet	ASI		
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22) Ex ia IIC T6 (ATEX Zone 1)  Pilot air ports Push-in connector Thread G 1/8"	ASI Multipol M12 Flat cable clip, 1 m cable			
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22) Ex ia IIC T6 (ATEX Zone 1)  Pilot air ports Push-in connector Thread G 1/8" external ø 6mm or 1/4"  Please specify item no. if known:	ASI Multipol M12 Flat cable clip, 1 m cable DeviceNet	ASI		
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22) Ex ia IIC T6 (ATEX Zone 1)  Pilot air ports Push-in connector Thread G 1/8" external ø 6mm or 1/4"  Please specify item no. if known:	ASI Multipol M12 Flat cable clip, 1 m cable DeviceNet	ASI		
1x mechanical 2x mechanical  Supply voltage 24 V / DC (ATEX Zone 2/22) Ex ia IIC T6 (ATEX Zone 1)  Pilot air ports Push-in connector Thread G 1/8" external ø 6mm or 1/4"	ASI Multipol M12 Flat cable clip, 1 m cable DeviceNet  Please specify item no. if known:	ASI		