

# On-Off Pneumatically Operated 2/2-way ELEMENT Angle Valve

## G 1/2" - 2"

- Perfect for clean applications
- Wide range of accessories
- Compressed air recycling control function with ELEMENT Control Tops
- Long life
- Silencer included



2100 ELEMENT angle seat valves are designed for unmatched life cycle performance. Shown on this page in a normally closed configuration, with underseat flow for liquids, these valves exhibit live loaded packing with all of the advantages of the ELEMENT platform: Intelligent, Integrated and Beautiful.

### Technical Data

<b>Pressure range</b>	See Ordering Chart
<b>Viscosity</b>	max. 600 mm <sup>2</sup> /s
<b>Temperature media</b>	-10 °C to +185 °C
<b>Ambient temperature</b>	0 °C to +55 °C (with integrated control) 0 °C to +60 °C (connector hose air supply) 0 °C to +100 °C (threaded piping)
<b>Body material</b>	316L stainless steel
<b>Seal material</b>	PTFE
<b>Actuator material</b>	Actuator PPS Cover stainless steel 1.4561 (316Ti)
<b>Control medium</b>	Instrument air at 6 bar
<b>Flow direction</b>	Flow under seat
<b>Port connection</b>	G-thread, weld end, clamp
<b>Spindle packing</b>	PTFE seal with spring compensation
<b>Safe position</b>	Normally closed, normally open

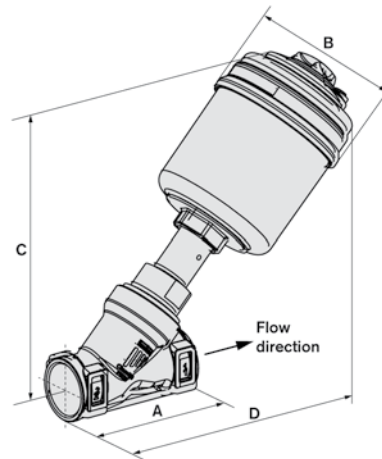
### Options

- Double acting
- Solenoid pilot valves
- Vacuum version
- Feedback switches

### Envelope Dimensions [mm] (see datasheet for details)

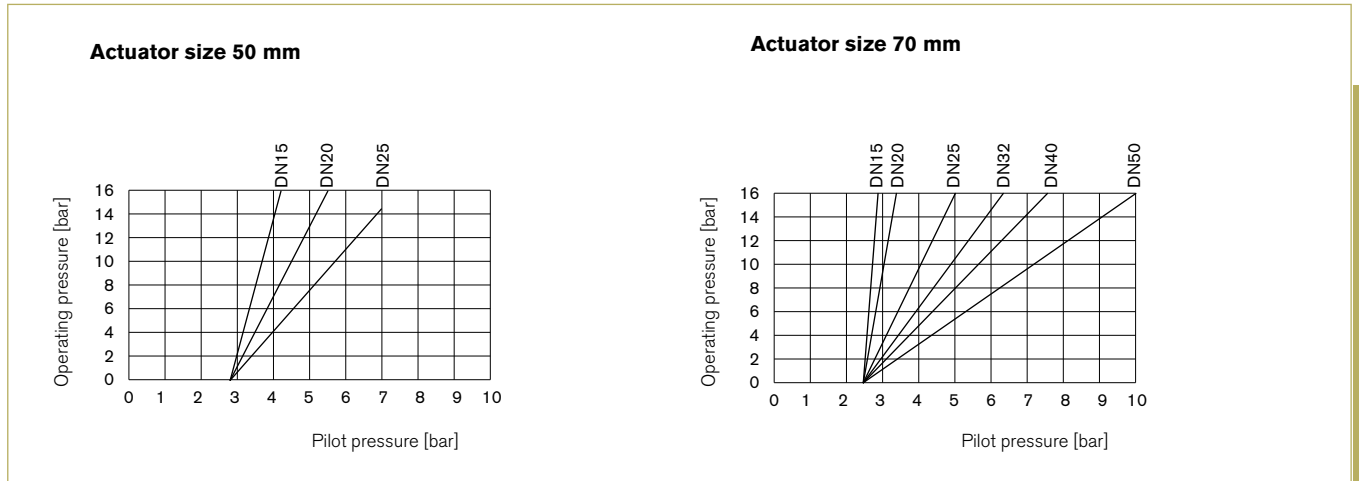
Dimensions shown for threaded version for others please see datasheet

Pilot air ports for 6/4 mm tubing

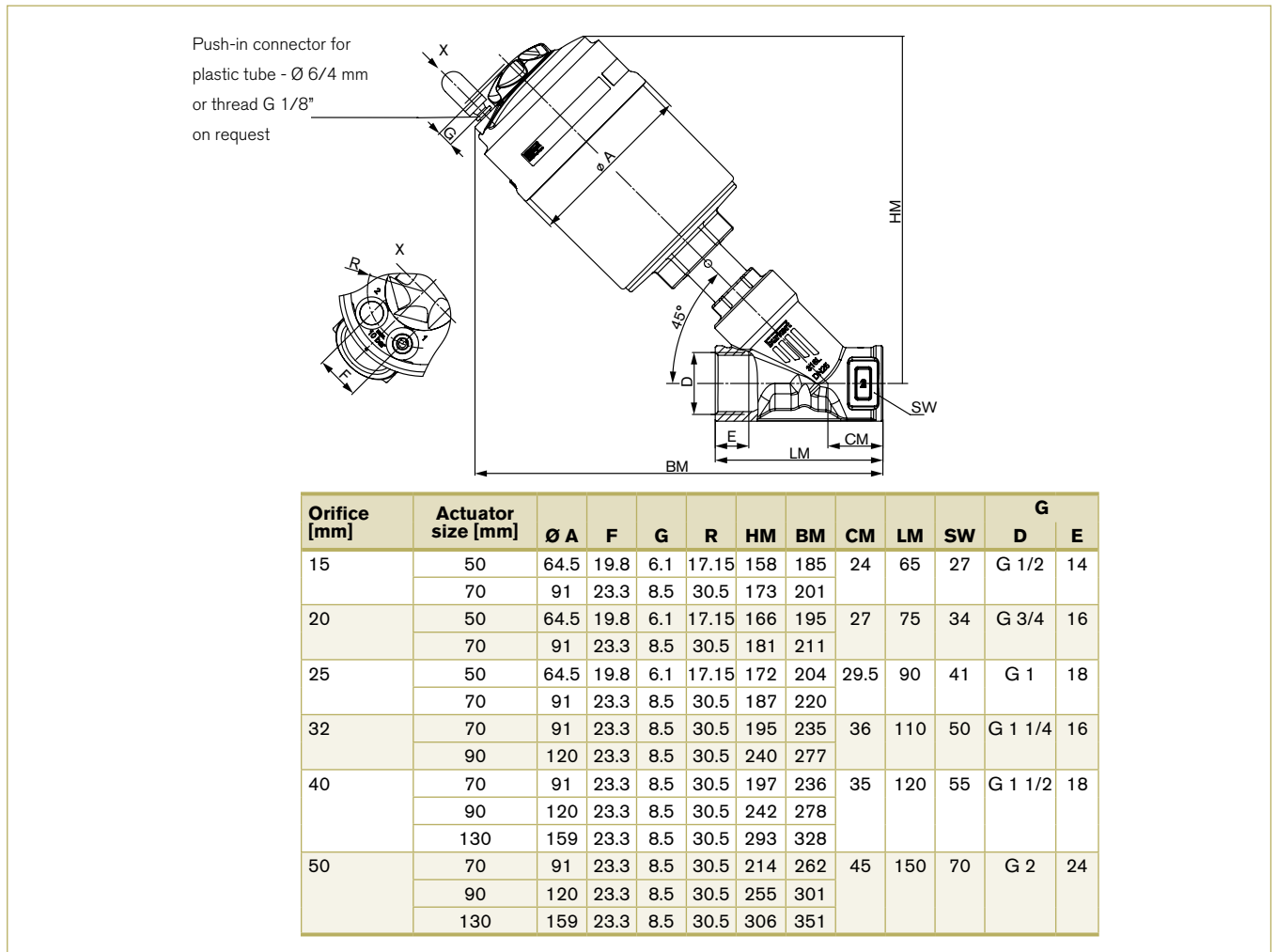


Port connection	Actuator [mm]	A	B	C	D
G 1/2"	50	65	64.5	158	185
G 1/2"	70	65	91	173	201
G 3/4"	50	75	64.5	166	195
G 3/4"	70	75	91	181	211
G 1"	50	90	64.5	172	204
G 1"	70	90	91	187	220
G 1 1/4"	70	110	91	195	235
G 1 1/4"	90	110	120	240	277
G 1 1/2"	70	120	91	197	236
G 1 1/2"	90	120	120	242	278
G 2"	70	150	91	214	262
G 2"	90	150	120	255	301
G 2"	130	150	159	306	351

Pilot pressure diagram, normally open



Dimensions angle seat valve Type 2100 [mm]



## Ordering Chart

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Port connection [inch]	Orifice Ø [mm]	Kv value [m <sup>3</sup> /h]	Actuator size [mm]	Minimum pilot pressure [bar]	Max. operating pressure [bar]	Item no.
<b>Angle seat valve G Thread</b>						
<b>Normally closed</b>						
G 1/2	15	5	50	5.2 - 10	25	213 619
		5	70	5.0 - 10	25	213 620
G 3/4	20	10	50	5.2 - 10	16	227 616
		11	70	5.0 - 10	20	213 621
G 1	25	15	50	5.2 - 10	9	227 617
		18	70	5.0 - 10	16	213 622
G 1 1/4	32	27	70	5.0 - 10	8.5	213 623
		28	90	5.0 - 10	16	213 624
G 1 1/2	40	38	70	5.0 - 10	6	213 625
		40	90	5.0 - 10	16	213 627
G 2	50	55	90	5.0 - 10	10	175 108
		62	130	5.0 - 7	16	188 610
<b>Normally open</b>						
G 1/2	15	5	50	see diagram	16	213 637
		5	70		16	213 638
G 3/4	20	10	50		16	213 639
		11	70		16	213 640
G 1	25	18	70		16	213 641
G 1 1/4	32	27	70		16	213 642
G 1 1/2	40	38	70		16	213 643
G 2	50	52	70		16	175 123

## Ordering Chart

Orifice [mm]	Actuator size Ø [mm]	Kv value [m³/h]	Port clamp external Ø [mm]	Minimum pilot pressure [mm]	Max. operating pressure [bar]	Item no.
<b>Clamp acc. to ISO 2852</b>						
<b>Normally closed</b>						
15	50	5	34	5.2 - 10	25	187 097
	70	5	34	5.0 - 10	25	188 783
20	50	10	50.5	5.2 - 10	16	209 437
	70	11	50.5	5.0 - 10	20	188 784
25	50	15	50	5.2 - 10	9	227 613
	70	18	50.5	5.0 - 10	16	188 785
32	70	27	50.5	5.0 - 10	8.5	188 786
	90	28	50.5	5.0 - 10	16	188 787
40	70	38	64	5.0 - 10	6	188 788
	90	40	64	5.0 - 10	16	188 789
50	90	55	77.5	5.0 - 10	10	188 790
	130	62	77.5	5.0 - 7	16	188 791
<b>Normally open</b>						
15	50	5	34	see diagram	16	187 101
	70	5	34		16	188 800
20	50	10	50.5		16	187 102
	70	11	50.5		16	188 801
25	70	18	50.5		16	188 802
32	70	27	50.5		16	188 803
40	70	38	64		16	188 804
50	70	52	77.5		16	188 805

## Ordering Chart

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Clamp acc. to ASME BPE						
Normally closed						
15	50	5	25	5.0	25	187 103
	70	5	25	5.0	25	188 806
20	50	10	25	5.0	16	227 614
	70	11	25	5.0	20	188 807
25	50	15	50.5	5.0	9	227 615
	70	18	50.5	5.0	16	188 808
40	70	38	50.5	5.0	6	188 809
	90	40	50.5	5.0	16	188 810
50	90	55	64	5.0	10	188 811
	130	62	64	5.0	16	188 812
Normally open						
15	50	5	25	see diagram	16	187 107
	70	5	25		16	188 820
20	50	10	25		16	187 108
	70	11	50.5		16	188 821
25	70	18	50.5		16	188 822
40	70	38	50.5		16	188 823
50	70	52	64		16	188 824

Orifice [mm]	Actuator size Ø [mm]	Kv value [m³/h]	Port connection tube Ø [mm]	Minimum pilot pressure [mm]	Max. operating pressure [bar]	Item no.
Weld end acc. To EN ISO 1227						
Normally closed						
15	50	5	21.3 x 1.6	5.2 - 10	25	187 065
	70	5	21.3 x 1.6	5.0 - 10	25	188 680
20	50	10	26.9 x 1.6	5.2 - 10	16	210 399
	70	11	26.9 x 1.6	5.0 - 10	20	188 681
25	50	15	33.7 x 2	5.2 - 10	9	235 519
	70	18	33.7 x 2	5.0 - 10	16	188 682
32	70	27	42.4 x 2	5.0 - 10	8.5	188 683
	90	28	42.4 x 2	5.0 - 10	16	188 684
40	70	38	48.3 x 2	5.0 - 10	6	188 685
	90	40	48.3 x 2	5.0 - 10	16	188 686
50	90	55	60.3 x 2.6	5.0 - 10	10	188 687
	130	62	60.3 x 2.6	5.0 - 7	16	188 688

## Ordering Chart

Orifice [mm]	Actuator size Ø [mm]	Kv value [m³/h]	Port connection tube Ø [mm]	Minimum pilot pressure [mm]	Max. operating pressure [bar]	Item no.
<b>Normally open</b>						
15	50	5	21.3 x 1.6	see diagram	16	187 069
	70	5	21.3 x 1.6		16	188 697
20	50	10	26.9 x 1.6		16	187 070
	70	11	26.9 x 1.6		16	188 698
25	70	18	33.7 x 2		16	188 699
32	70	27	42.4 x 2		16	188 700
40	70	38	48.3 x 2		16	188 701
50	70	52	60.3 x 2.6		16	188 702
<b>Weld end acc. to DIN 11850 S2</b>						
<b>Normally closed</b>						
15	50	5	19 x 1.5	5.2 - 10	25	187 071
	70	5	19 x 1.5	5.0 - 10	25	188 703
20	50	10	23 x 1.5	5.2 - 10	16	227 605
	70	11	23 x 1.5	5.0 - 10	20	188 704
25	50	15	29 x 1.5	5.2 - 10	9	221 922
	70	18	29 x 1.5	5.0 - 10	16	188 705
32	70	27	35 x 1.5	5.0 - 10	8.5	188 706
	90	28	35 x 1.5	5.0 - 10	16	188 707
40	70	38	41 x 1.5	5.0 - 10	6	188 708
	90	40	41 x 1.5	5.0 - 10	16	188 709
50	90	55	53 x 1.5	5.0 - 10	10	188 710
	130	62	53 x 1.5	5.0 - 7	16	188 711
<b>Normally open</b>						
15	50	5	19 x 1.5	see diagram	16	187 075
	70	5	19 x 1.5		16	188 720
20	50	10	23 x 1.5		16	187 076
	70	11	23 x 1.5		16	188 721
25	70	18	29 x 1.5		16	188 722
32	70	27	35 x 1.5		16	188 723
40	70	38	41 x 1.5		16	188 724
50	70	52	53 x 1.5		16	188 725

## Ordering Chart

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Orifice [mm]	Actuator size Ø [mm]	Kv value [m³/h]	Port connection tube Ø [mm]	Minimum pilot pressure [mm]	Max. operating pressure [bar]	Item no.
<b>Weld end acc. To ASME BPE</b>						
<b>Normally closed</b>						
15	50	5	12.7 x 1.65	5.2 - 10	25	187 077
	70	5	12.7 x 1.65	5.0 - 10	25	188 726
20	50	10	19.05 x 1.65	5.2 - 10	16	227 607
	70	11	19.05 x 1.65	5.0 - 10	20	188 727
25	50	15	25.4 x 1.65	5.2 - 10	9	227 608
	70	18	25.4 x 1.65	5.0 - 10	16	188 728
40	70	38	38.1 x 1.65	5.0 - 10	6	188 729
	90	40	38.1 x 1.65	5.0 - 10	16	188 730
50	90	55	50.8 x 1.65	5.0 - 10	10	188 731
	130	62	50.8 x 1.65	5.0 - 7	16	188 732
<b>Normally open</b>						
15	50	5	12.7 x 1.65	see diagram	16	187 082
	70	5	12.7 x 1.65		16	188 740
20	50	10	19.05 x 1.65	see diagram	16	187 083
	70	11	19.05 x 1.65		16	188 741
25	70	18	25.4 x 1.65	see diagram	16	188 742
40	70	38	38.1 x 1.65		16	188 743
50	70	52	50.8 x 1.65	see diagram	16	188 744
<b>Weld end acc. to SMS 3008</b>						
<b>Normally closed</b>						
15	50	5	12 x 1.0	5.2 - 10	25	187 084
	70	5	12 x 1.0	5.0 - 10	25	188 745
20	50	10	18 x 1.0	5.2 - 10	16	227 609
	70	11	18 x 1.0	5.0 - 10	20	188 746
25	50	15	25 x 1.2	5.2 - 10	9	227 610
	70	18	25 x 1.2	5.0 - 10	16	188 747
40	70	38	38 x 1.2	5.0 - 10	6	188 748
	90	40	38 x 1.2	5.0 - 10	16	188 749
50	90	55	51 x 1.2	5.0 - 10	10	188 750
	130	62	51 x 1.2	5.0 - 7	16	188 751

## Ordering Chart

Orifice [mm]	Actuator size Ø [mm]	Kv value [m³/h]	Port connection tube Ø [mm]	Minimum pilot pressure [mm]	Max. operating pressure [bar]	Item no.
<b>Normally open</b>						
15	50	5	12 x 1.0	see digramm	16	187 089
	70	5	12 x 1.0		16	188 759
20	50	10	18 x 1.0		16	187 090
	70	11	18 x 1.0		16	188 760
25	70	18	25 x 1.2		16	188 761
40	70	38	38 x 1.2		16	188 762
50	70	52	51 x 1.2		16	188 763
<b>Weld end acc. to BS 4825</b>						
<b>Normally closed</b>						
15	50	5	12.7 x 1.2	5.2 - 10	25	187 091
	70	5	12.7 x 1.2	5.0 - 10	25	188 764
20	70	11	19.05 x 1.65	5.0 - 10	20	188 765
25	70	18	25.4 x 1.65	5.0 - 10	16	188 766
40	70	38	38.1 x 1.65	5.0 - 10	6	188 767
	90	40	38.1 x 1.65	5.0 - 10	16	188 768
50	90	55	50.8 x 1.65	5.0 - 10	10	188 769
	130	62	50.8 x 1.65	5.0 - 7	16	188 770
<b>Normally open</b>						
15	50	5	12.7 x 1.2	see diagram	16	187 095
	70	5	12.7 x 1.2		16	188 778
20	50	10	19.05 x 1.65		16	187 096
	70	11	19.05 x 1.65		16	188 779
25	70	18	25.4 x 1.65		16	188 780
40	70	38	38.1 x 1.65		16	188 781
50	70	52	50.8 x 1.65		16	188 782