

Pneumatically Operated Valve

Type 385 DN 15 - 100 (1/2" - 4")

Type 385 pneumatically operated valve with robust plastic actuator normally closed (NC), normally open (NO) or double acting (DA). This compact design and light weight valve has a smooth contour finish on the plastic cover to eliminate accumulation of dirt and is corrosion resistant. The actuator is designed as a maintenance free diaphragm actuator. Various accessories are available for adjustments, control and regulation which can be assembled in the factory or on the job site afterwards.

Features

- Process media can be neutral and aggressive liquid and gaseous, dependent upon material selection of body and diaphragm
- Flow can be in either direction
- Insensitive to dirty or contaminated media
- Excellent flow characteristics
- Bubble tight sealing
- Installation can be in any position
- Eliminates water hammer
- Compact construction
- Maintenance free non corrosive actuator

Technical specifications	
Design	Diaphragm Valve
Size range	DN 15 - 100
Diaphragm size see page 11	MA 25 - 100
Body material	Investment cast 1.4435/316L Investment cast 1.4435/316L-PFA-Lined S.G. iron EN-GJS-400-18-LT (GGG40.3)-PP-Lined S.G. iron EN-GJS-400-18-LT (GGG40.3)-PFA-Lined Cast iron EN-GJL-250 (GG 25) Cast iron EN-GJL-250 (GG 25)-Hard-Rubber-Lined
End connection standards see page 8-9	Threaded socket: DIN ISO 228 Flange: EN 1092 PN10/16, ANSI Class 125/150
Diaphragm material	EPDM, PTFE, NBR, FPM
Max. working pressure	10 bar (150 PSI), DN 15 - 50 7 bar (100 PSI), DN 65 - 100
Temperature range	-10 °C to +80 °C, depending on diaphragm and body material
Control functions	Single acting (NC or NO) and double-acting (DA) pneumatic diaphragm actuator

Note: Possible actuator and valve body combinations see page 7.
Ordering key see page 60.

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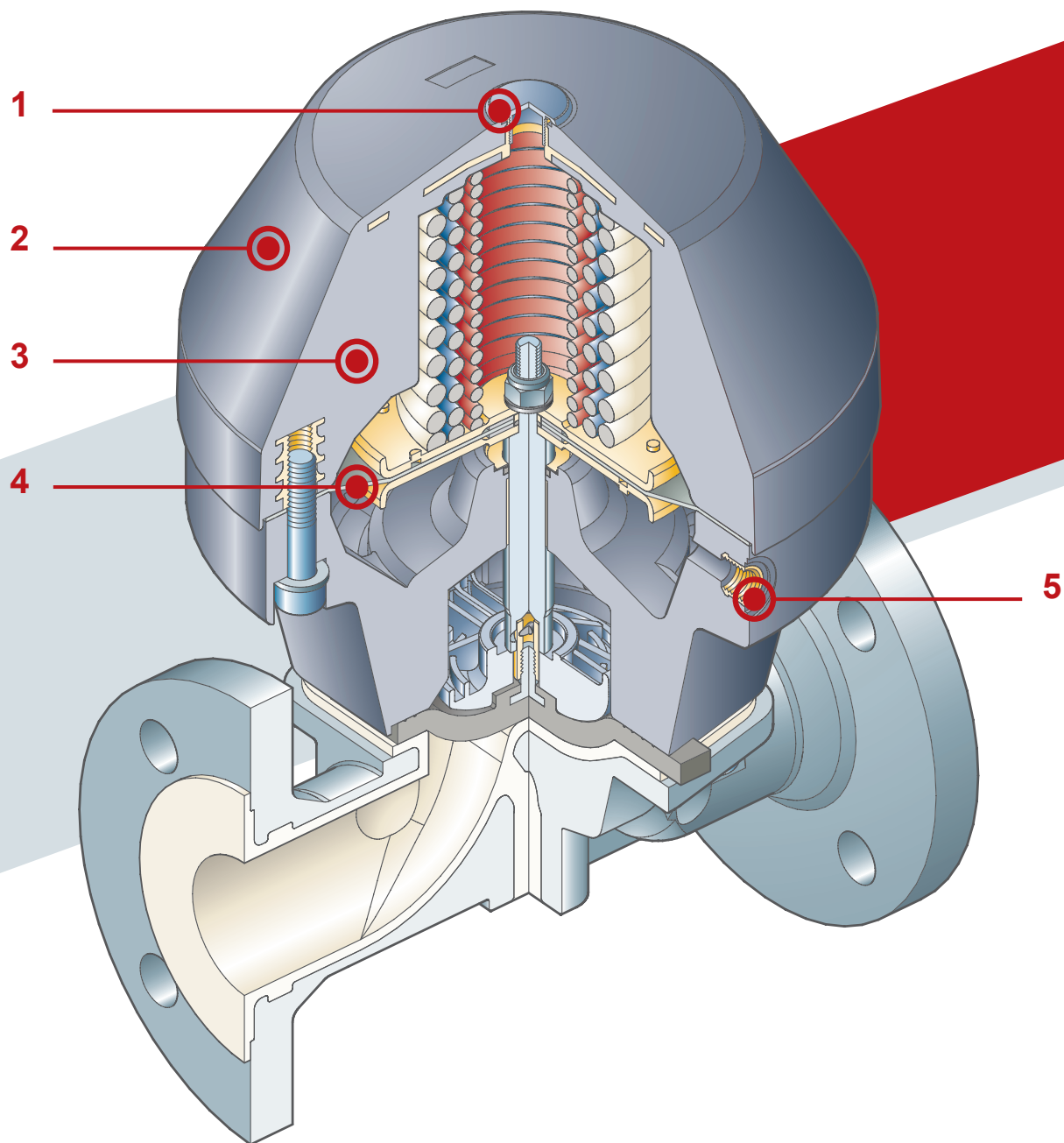
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The **diaphragm actuator** in PP-GR is characterized by its robust and compact design, making 385 the ideal choice for demanding and chemically aggressive applications.

Technical specifications - pneumatic actuator	
Design	Diaphragm Actuator
Actuator material	PP-GR
Max. control air pressure	NC: 6 bar (87 PSI) NO/DA: 5 bar (72 PSI)
Control media	Dry or lubricated filtered compressed air. If using other fluids, contact the SED service center
Filling volume	NC: 0,16 NL, DN 15 - 25 0,36 NL, DN 32 - 40 1,15 NL, DN 50 2,1 NL, DN 65 - 80 2,5 NL , DN100 NO/DA: 0,06 NL, DN 15 - 25 0,11 NL, DN 32 - 40 0,32 NL, DN 50 2,2 NL, DN 65 - 80 2,5 NL , DN100
Control media temperature	Max. 40 °C
Ambient temperature	-20 °C to +50 °C
Accessories	See page 54

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1 Connection thread for assembly of valve control equipment

2 Robust diaphragm actuator with high chemical resistance. Available for control function Normally closed, Normally open and Double acting.

3 Robust plastic housing

4 Strong control diaphragm supported by two metal plates which ensures a long life

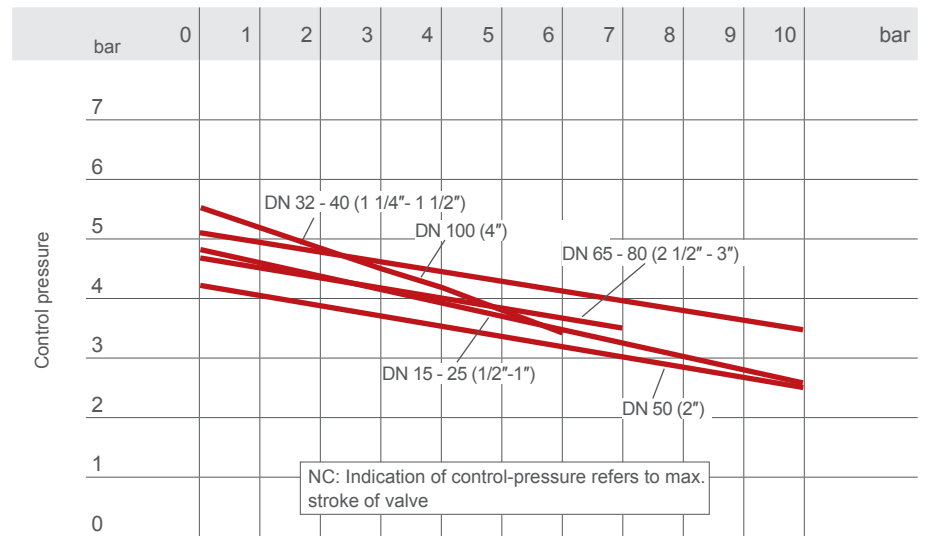
5 Control air connector G1/4" for control function "Normally closed"

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Type 385 - Technical Data

Control pressure according to Working pressure Type 385 NC

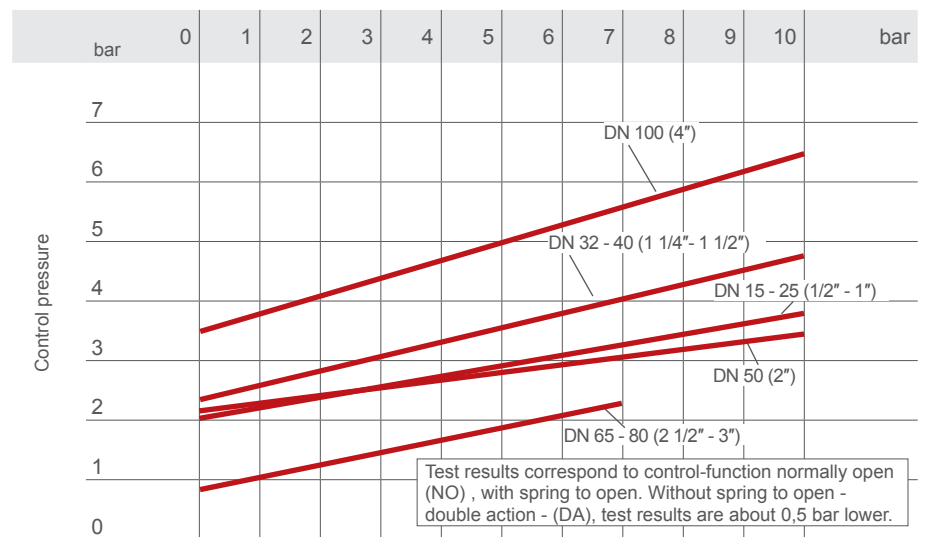
Minimum control pressure according to working pressure with EPDM, FPM diaphragm



Working pressure (uni-directional media only)

Control pressure according to Working pressure Type 385 NO-DA

Minimum control pressure according to working pressure with EPDM, FPM diaphragm



Working pressure (uni-directional media only)

K_v 100 flow coefficient

The K_v 100 flow coefficient is the Q flow rate of cubic meter per hour of water at a temperature of 20°C that will generate $\Delta p = 1$ bar pressure drop at a certain valve position.

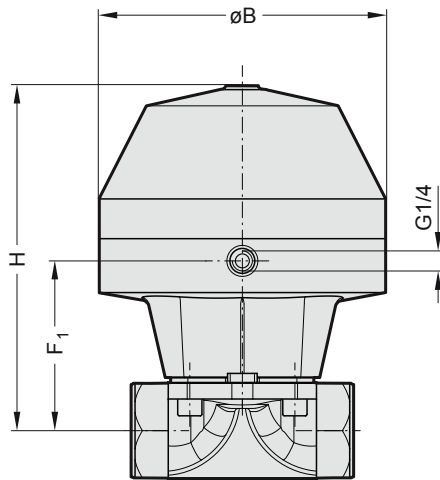
The K_v 100 values shown in the table are calculated with the valve completely open.

DN	MA	Unlined		Hard rubber lined		Plastic lined	
		K_v m ³ /h	Cv gpm	K_v m ³ /h	Cv gpm	K_v m ³ /h	Cv gpm
15	25	7	8	-	-	5	6
20	25	12	14	10	12	9	11
25	25	14	16	14	16	13	15
32	40	-	-	29	34	23	27
40	40	40	47	32	37	26	30
50	50	78	91	51	60	50	59
65	80	88	103	75	88	72	84
80	80	154	180	113	132	110	129
100	100	217	254	190	222	175	205

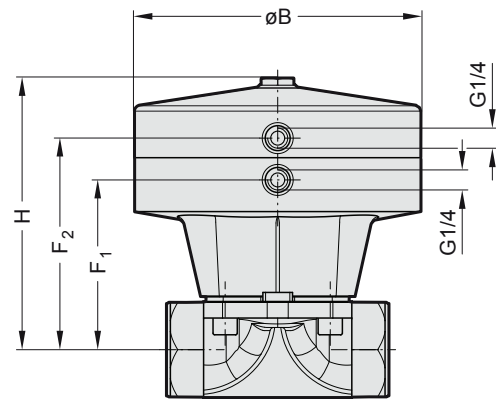
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Threaded Socket



NC



NO / DA

Dimensions (mm)

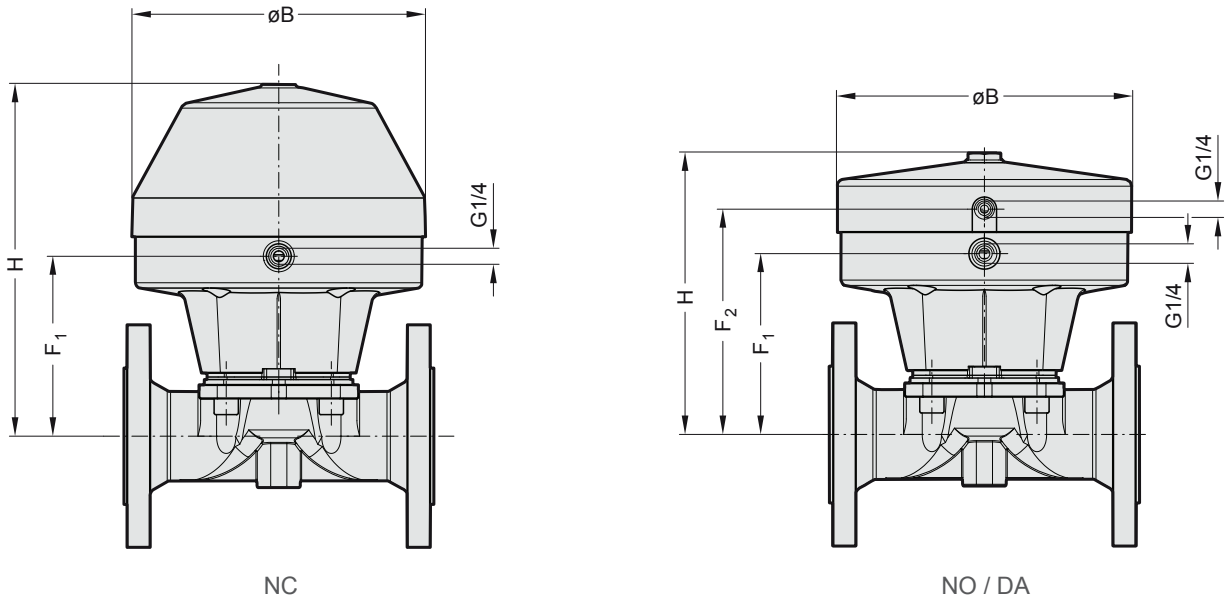
DN	MA	ØB	Threaded Socket Version						
			NC			NO/DA			
			F ₁	H	Weight kg	F ₁	F ₂	H	Weight kg
15	25	130	57	151	2,2	86	117	119	1,7
20	25	130	60	154	2,4	89	120	122	1,8
25	25	130	64	154	2,6	89	120	123	2,1
32	40	161	14	204	4,6	130	161	163	3,9
40	40	161	101	206	6,0	127	158	164	4,3
50	50	218	123	259	10,0	155	186	199	7,0

Note: Valve body face to face (FTF) and flange dimensions see page 8.

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Flanged



Dimensions (mm)

DN	MA	ØB	Flanged Version						
			NC			NO/DA			
			F ₁	H	Weight kg	F ₁	F ₂	H	Weight kg
15	25	130	66	160	3,6	95	126	128	3,1
20	25	130	66	160	4,4	95	126	128	3,9
25	25	130	70	160	4,9	95	126	129	4,4
32	40	161	108	208	9,0	134	165	167	8,0
40	40	161	108	213	9,0	134	165	171	9,0
50	50	218	127	263	15,0	159	190	203	13,0
65	80	265	182	330	25,0	225	266	291	22,0
80	80	265	182	330	26,0	225	266	291	23,0

Note: Valve body face to face (FTF) and flange dimensions see page 8.

Dimensions DN100 see page 46.