

Pneumatically Operated Valve

Type 495 DN 15 - 50 (1/2" - 2")

Type 495 pneumatically operated valve with 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 or 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
- Maintenance free plastic diaphragm actuator non corrosive
- Actuators for different orientated air control connection

Technical specifications

Design	Diaphragm Valve
Size range	DN 15 - 50
Diaphragm size <i>see page 11</i>	MA 25 - 50
Body material	Investment cast 1.4435/316L-PFA-Lined
End connection standards <i>see page 8-9</i>	Flange: EN 1092 PN10/16, ANSI Class 125/150
Diaphragm material	EPDM, PTFE, NBR, FPM
Max. working pressure	10 bar (150 PSI)
Temperature range	-10 °C to +150 °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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The robust design of the **diaphragm actuator** is ideal for application where chemical resistance and mechanical properties are required.

Technical specifications - pneumatic actuator	
Design	Diaphragm Actuator
Actuator material	Robust plastic housing PP-GR with stainless steel distance piece
Max. control air pressure	NC: 7 bar (100 PSI) NO/DA: 5 bar (72 PSI)
Power supply	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 NO/DA: 0,06 NL, DN 15 - 25 0,11 NL, DN 32 - 40 0,32 NL, DN 50
Control fluid temperature	Max. 40 °C
Ambient temperature	-20 °C to +50 °C
Accessories	See page 54

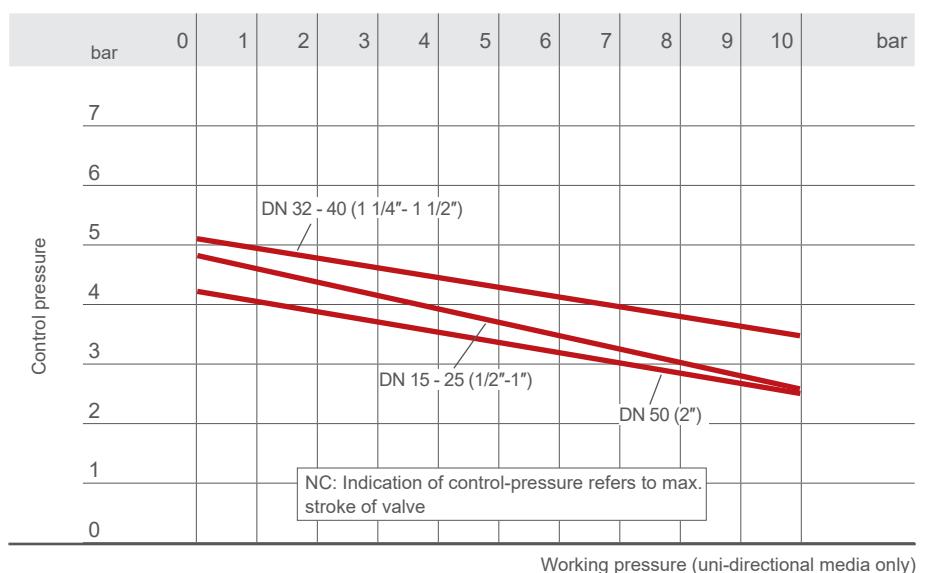
Pneumatically Operated Valve

Type 495 - Technical Data

Control pressure according to Working pressure

Type 495 NC

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

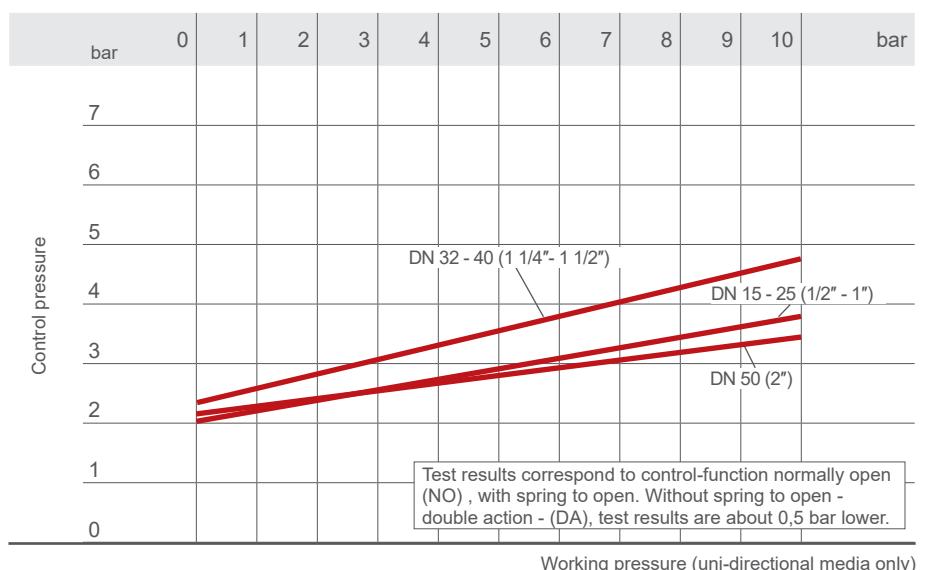


Control pressure according to Working pressure

Type 495 NO-DA

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

Higher control pressure than required may affect the lifetime of the working diaphragm.



K_v100 flow coefficient

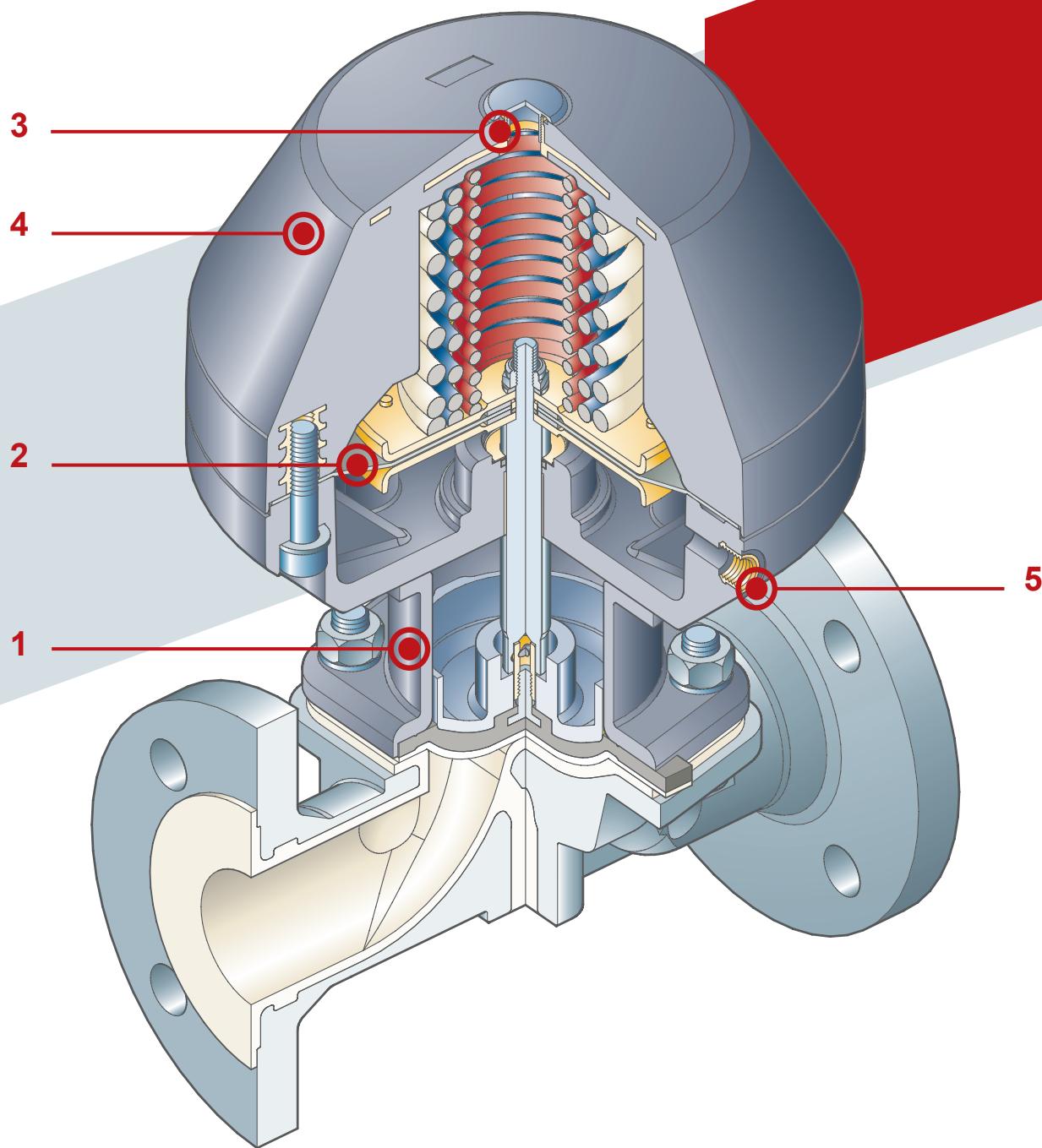
The K_v100 flow coefficient is the Q flow rate of cubic meter per hour of water at a temperature of 20°C that will generate $\Delta p = 1$ bar pressure drop at a certain valve position.

The K_v100 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	C _v gpm	K _v m ³ /h	C _v gpm	K _v m ³ /h	C _v 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

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1 Cast iron **distance piece** for high temperature applications

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

3 Connection thread for assembly of **valve control equipment**

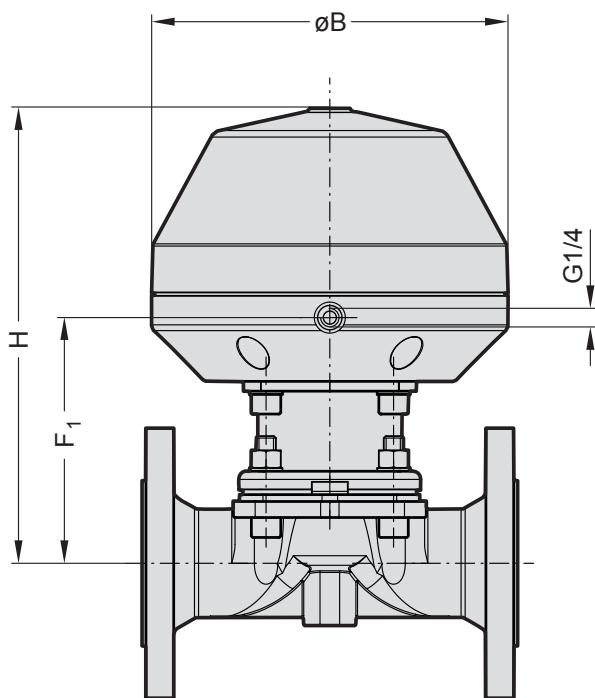
4 Robust **diaphragm actuator** with high chemical resistance. Available for control function Normally closed, Normally open and Double acting.

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

Pneumatically Operated Valve

Type 495 - Dimensions

Flanged



Dimensions (mm)

DN	MA	ØB	F ₁	Flanged Version	
				H	Weight kg
15	25	130	66	160	3,6
20	25	130	66	160	3,7
25	25	130	70	160	4,9
32	40	161	108	208	10,0
40	40	161	108	213	10,0
50	50	218	127	263	15,0

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