

General line Flowrox™ pinch valves Series PVG and PVEG

Flowrox general line pinch valves are robust and cost-effective valves with simple, single sided closing mechanism. The PVG valves have a strong cast. The PVEG valves have a corrosion resistant and light-weight plastic body.

These valves are ideal for low cycle applications involving abrasion, corrosion and aggressive slurries. Through the reliability and structure, they offer substantial savings based on improved performance, long service lifetime and low total cost of ownership.



Benefits

- Long service intervals
- Only one wearing part
- Excellent for dry powders
- Simple sleeve replacement

Features

- Full bore, no flow restrictions
- Only sleeve is in contact with medium, only one wearing part
- Self cleaning, no jamming
- Several options for sleeve materials, process fit
- Simplified construction, low initial cost

Sizes

DN 50–250/2" - 10"

Working pressure

Up to 10 bar / 150 psi

Pressure classes

- PN 4, PN 6 and PN 10
- 60 psi, 90 psi and 150 psi

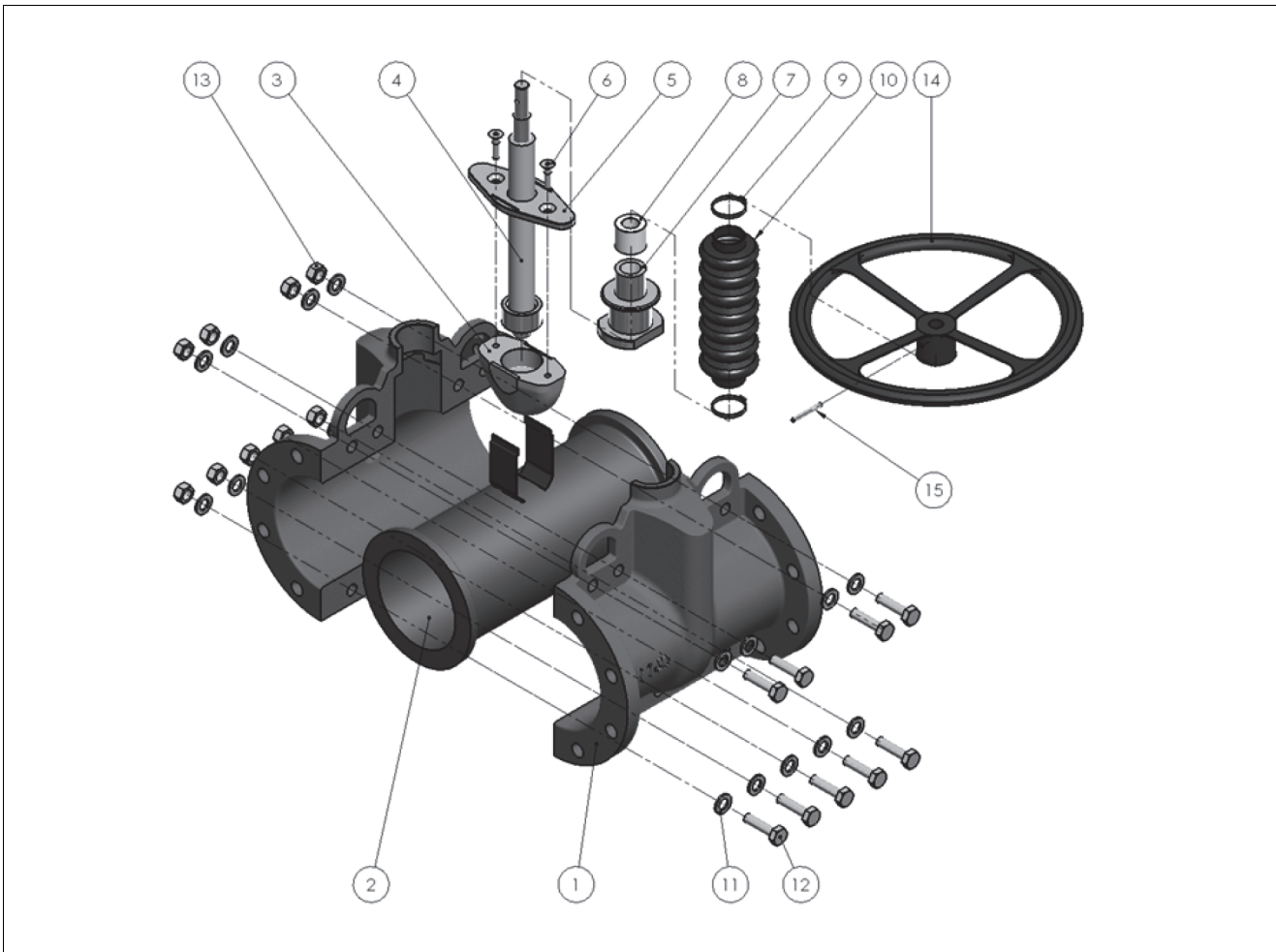
Materials

- Cast iron
- Polyamide

Flange drillings

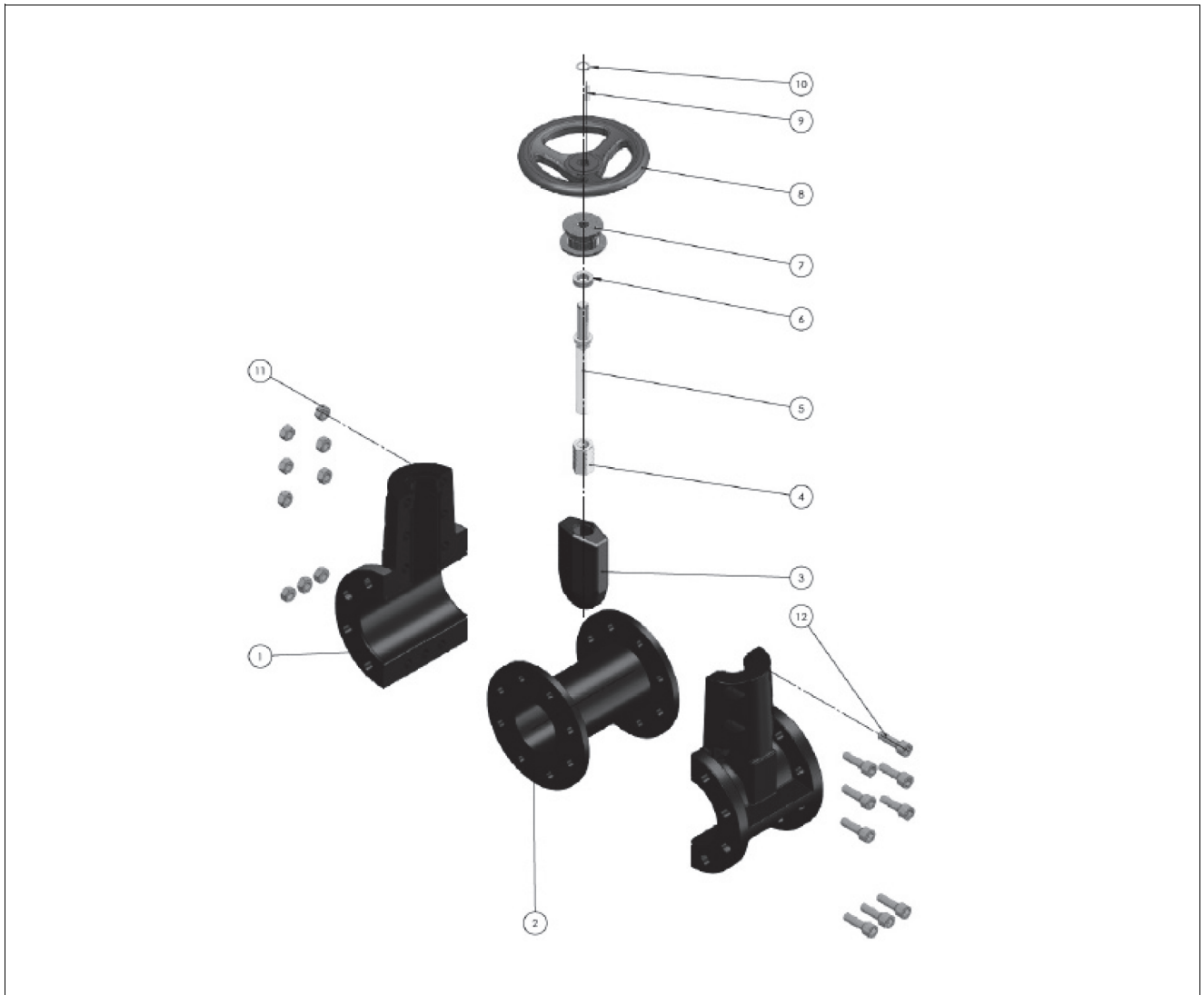
- DIN PN 10
- ASME B16.5 Class 150

Exploded view and parts list, type PVG



Part	Description
1	Valve body
2	Sleeve
3	Pusher
4	Stem
5	Pusher plate
6	Hex socket screw
7	Thread bushing
8	Bellows bushing
9	Cable tie
10	Bellows
11	Washer
12	Hex screw
13	Nut
14	Hand wheel
15	Slotted spring pin

Exploded view and parts list, type PVEG



Part	Description
1	Body
2	Sleeve
3	Pusher
4	Nut bushing
5	Stem
6	Thrust bearing
7	Support bushing
8	Hand wheel
9	Key
10	Retaining ring
11	Hex nut
12	Hex socket screw

Technical specifications

Type:

General line PVG and PVEG type pinch valves.

Sizes:

DN 50 - 250 / NPS 2" - 10"

Temperature range:

0 °C...+70 °C / 32 °E...+158 °F PVEG

0 °C...+110 °C / 32 °E...+230 °F PVG

Pressures classes:

Series	Valve size, DN/inch	Pressure class, bar/psi		
		M	A	E
PVG	50/2	10/150	6/90	10/150
	80/3	10/150	6/90	10/150
	100/4	10/150	6/90	10/150
	150/6	10/150	6/90	10/150
	200/8	6/90	4/60	6/90
	250/10	6/90	4/60	6/90
PVEG	50/2	10/150	6/90	-
	80/3	10/150	6/90	-
	100/4	10/150	6/90	-
	150/6	10/150	6/90	-

Suitable to be fitted between flanges acc. to:

- DIN PN 10
- ASME B16.5 Class 150

Actuators:

- Manual
- Pneumatic
- Electric

Construction materials:

Body material: Cast Iron
Polyamide
Sleeve material: SBRT = styrene butadiene rubber
EPDM = ethylene propylene diene monomer

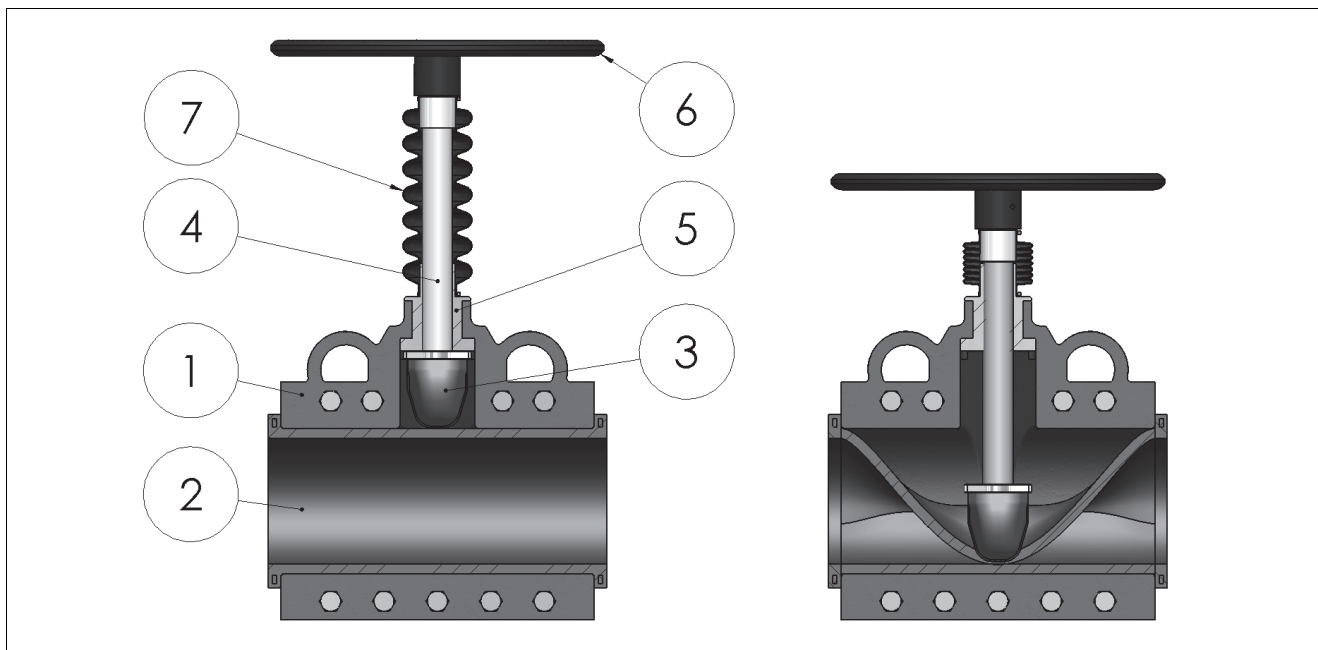


Figure 1

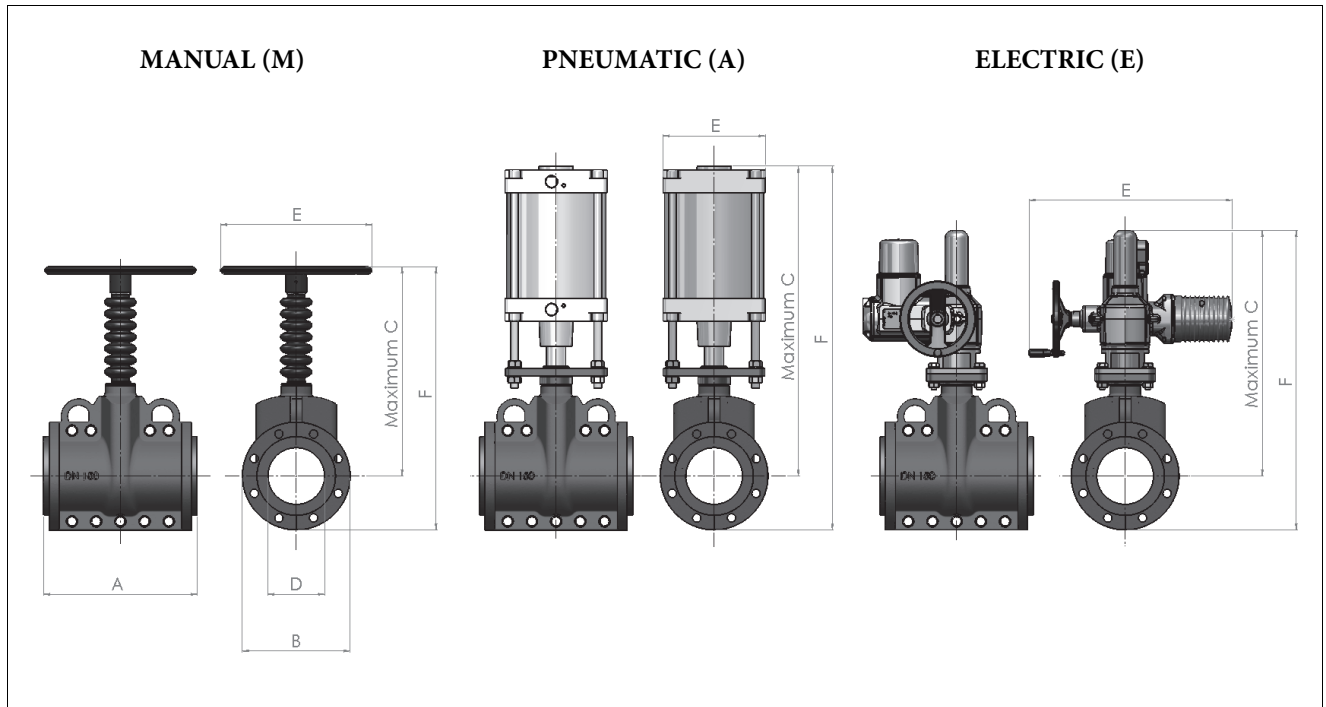
Part	Description
1	Body
2	Sleeve
3	Pusher
4	Stem
5	Threaded bushing
6	Hand Wheel
7	Bellows

Flowrox PVG valve is built with a cast body and a rubber sleeve as a standard structure. Removable sleeve means no metal parts are in contact with the process medium.

In the open position the valve provides full bore through which the medium can travel. There are some structural differences between valve sizes, but the main components are shown in Figure 1.

When closing the valve, the upper side of the sleeve is pushed progressively toward the other side until it reaches the fully closed position. When the valve is fully closed, the sleeve is squeezed between the pusher on actuator and valve body, effectively sealing and completely containing the line pressure.

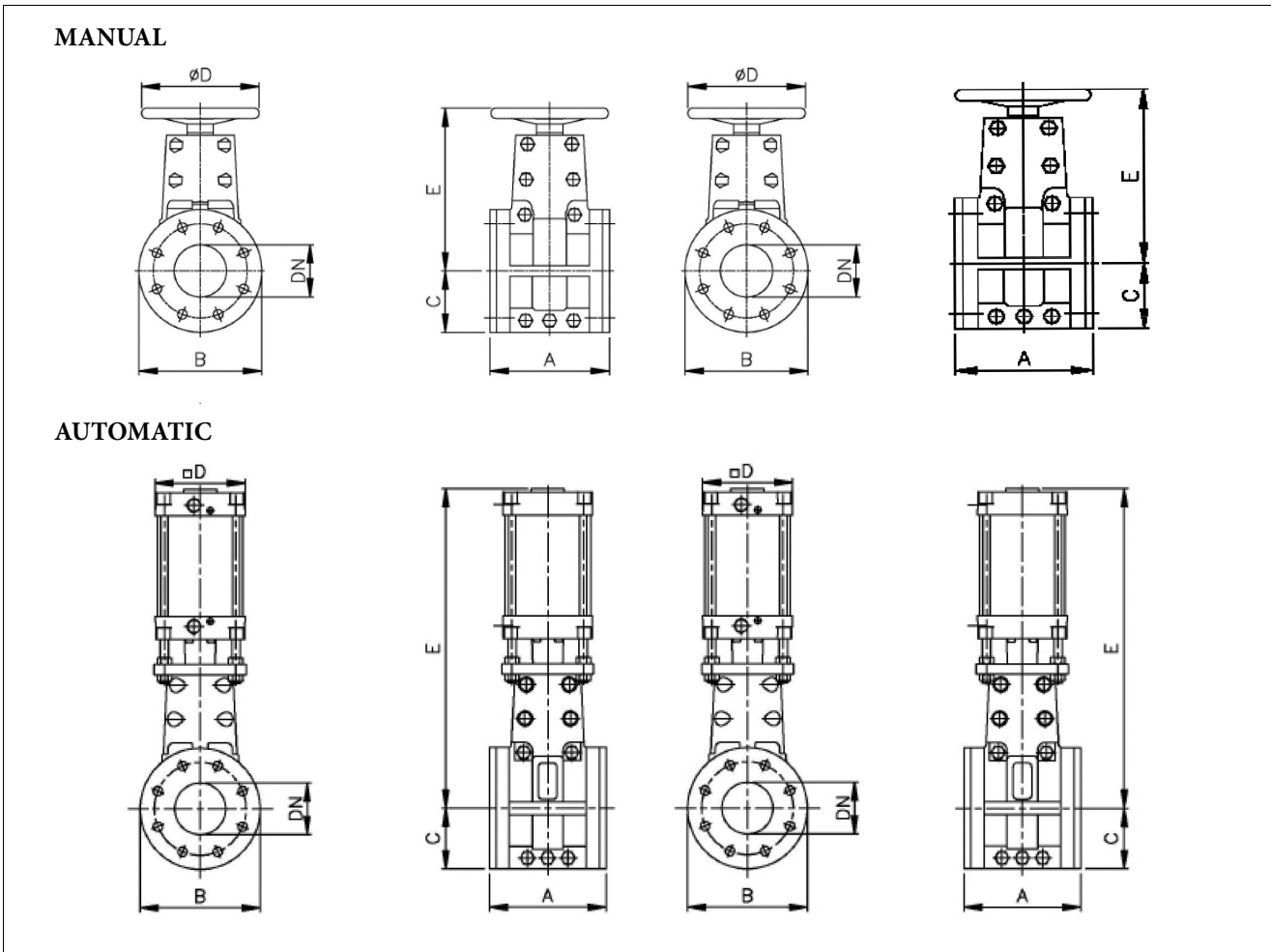
Dimensions, PVG valves



Valve size (DN)	A	B	C			D	E			F			Weight (kg)			Max pressure (bar)		
			M	A	E		M	A	E	M	A	E	M	A	E	M	A	E
50	190	165	280	398	474	50	150	110	515	363	481	556	14	18	45	10	6	10
80	254	200	344	482	505	80	200	135	515	444	582	605	21	30	53	10	6	10
100	305	228	394	568	526	100	250	176	515	508	682	640	30	43	60	10	6	10
150	406	285	553	774	650	150	400	270	536	696	917	792	49	60	98	10	6	10
200	521	343	645	871	697	200	600	270	536	817	1043	868	96	141	144	6	4	6
250	635	406	785	1412	749	250	600	270	536	988	1615	952	140	215	188	6	4	6

Valve size (inch)	A	B	C			D	E			F			Weight (lbs)			Max pressure (PSI)		
			M	A	E		M	A	E	M	A	E	M	A	E	M	A	E
2	7.5	6.5	11.0	15.7	18.7	2.0	5.9	4.3	20.3	14.3	18.9	21.9	31	40	99	150	90	150
3	10	7.9	13.5	19.0	19.9	3.1	7.9	5.3	20.3	17.5	22.9	23.8	46	66	117	150	90	150
4	12	9.0	15.5	22.4	20.7	3.9	9.8	6.9	20.3	20.2	26.9	25.2	66	95	132	150	90	150
6	16	11.2	21.7	30.5	25.6	5.9	15.7	10.6	21.1	27.4	36.1	31.2	108	108	216	150	90	150
8	20.5	13.5	25.4	34.3	27.4	7.9	23.6	10.6	21.1	32.2	41.1	34.2	212	311	317	90	60	90
10	25	16.0	30.9	55.6	29.5	9.8	23.6	10.6	21.1	38.9	63.6	37.5	309	474	414	90	60	90

Dimensions, PVEG valves



Valve size (PVEG) M&A	A	B	C	D		E		Weight (kg)		Max pressure (Bar)	
				M	A	M	A	M	A	M	A
50	178	165	82,5	175	116	230	435	6	11	10	6
80	203	209	104,5	200	136	290	545	8	18	10	6
100	229	235	117,5	225	176	320	630	11	25	10	6
150	406	280	140	400	270	450	840	29	74	10	6

Valve size (PVEG) M&A	A	B	C	D		E		Weight (lbs)		Max pressure (PSI)	
				M	A	M	A	M	A	M	A
2	7	6.5	3.2	6.9	4.6	9.0	17.1	14	25	150	90
3	8	8.2	4.1	7.9	5.4	11.4	21.5	18	40	150	90
4	9	9.3	4.6	8.9	6.9	12.6	24.8	25	55	150	90
6	16	11	5.5	15.7	10.6	17.7	33.0	64	163	150	90

How to order

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
PVEG	100	A	6	-	2/6	5	JISZ1	,	SBRT

1.	TYPE
PVG	Flowrox Pinch valve General line metal body
PVEG	Flowrox Pinch valve General line Plastic body

2.	SIZE DN
	50-250

3.	ACTUATOR
M	Manual
A	Pneumatic
E	Electric (PVG only)

4.	PRESSURE CLASS (PN)
4	4 bar / 60 psi
6	6 bar / 90 psi
10	10 bar / 150 psi

6.	FLANGE DRILLING
2/6	PVG (DN 100-250) PVEG (DN 50, 100, 150) DIN PN10 & ANSI 150 are combined.
2	DIN PN10
6	ASME B16.5 Class 150
9	Other

7.	BODY MATERIAL
0	Cast iron (PVG only)
5	Plastic Polyamide (PVEG only)

10.	SLEEVE MATERIAL
SBRT	Styrene Butadiene rubber
EPDM	Ethylene propylene diene monomer

8.	AUXILIARIES			
	DESCRIPTION	EXTRA INFO	APPLICABLE ACTUATOR	
F	Filter Regulator + gauge	Filter Regulator + GaugeFlowrox selected model.	PNEUMATIC	*
J1	Junction box small (Flowrox Standard)	Junction box small, for limit switches or solenoid valve, IP66, plastic, 2 pcs M12x1.5 and 1 pc M20x1.5, pre-wired.	PNEUMATIC	*
J2	Junction box large (Flowrox Standard)	Junction box large, for limit switches and solenoid valve, IP66, plastic, 4 pcs M12x1.5 and 1 pc M20x1.5, pre-wired.	PNEUMATIC	*
J4	Junction Box (Non-Standard)	Junction box out of Flowrox standard scope specification clarified on the proposal and under valve serial number.	PNEUMATIC	
S	Magnetic limit switches (Flowrox Standard)	Magnetic limit switches, attached to aluminium pneumatic cylinder actuators. Cylinder fitted with magnetic piston.	PNEUMATIC	*
S5	Magnetic limit switches (NON-Standard)	Magnetic limit switches, attached to aluminium pneumatic cylinder actuators. Cylinder fitted with magnetic piston.	PNEUMATIC	
Z1	Solenoid valve, 24VDC, Monostable (Flowrox Standard)	Solenoid valve 24 VDC - with Nickel-plated brass fittings and plastic tubing. Flowrox selected model, monostable (Single coil).	PNEUMATIC	*
Z1B	Solenoid valve, 24VDC, Bistable (Flowrox Standard)	Solenoid valve 24 VDC - with Nickel-plated brass fittings and plastic tubing. Flowrox selected model, Bistable (Double coil).	PNEUMATIC	*
Z2	Solenoid valve, 230V, 50/60Hz, Monostable (Flowrox Standard)	Solenoid valve 230V - 50/60Hz - with Nickel-plated brass fittings and plastic tubing. Flowrox selected model, monostable (Single coil).	PNEUMATIC	*
Z2B	Solenoid valve, 230V, 50/60Hz, Bistable (Flowrox Standard)	Solenoid valve 230V - 50/60Hz - with Nickel-plated brass fittings and plastic tubing. Flowrox selected model, Bistable (Double coil).	PNEUMATIC	*
Z3	Solenoid valve, 110V, 50/60Hz, Monostable (Flowrox Standard)	Solenoid valve 110V-50/60Hz - with Nickel-plated brass fittings and plastic tubing. Flowrox selected model, monostable (Single coil).	PNEUMATIC	*
Z3B	Solenoid valve, 110V, 50/60Hz, Bistable (Flowrox Standard)	Solenoid valve 110V-50/60Hz - with Nickel-plated brass fittings and plastic tubing. Flowrox selected model, Bistable (Double coil).	PNEUMATIC	*
Z5	Solenoid valve, 24VDC, Monostable (Non-Standard)	24 VDC monostable (Single coil) solenoid valve out of Flowrox standard scope specification clarified on the proposal and under valve serial number.	PNEUMATIC	
Z5B	Solenoid valve, 24VDC, Bistable (Non-Standard)	24 VDC Bistable (Double coil) solenoid valve out of Flowrox standard scope. To be specified on the proposal and under valve serial number.	PNEUMATIC	
Z6	Solenoid valve, 230V, 50/60Hz, Monostable (Non-Standard)	230V 50/60Hz monostable (Single coil) solenoid valve out of Flowrox standard scope. To be specified on the proposal and under valve serial number.	PNEUMATIC	
Z6B	Solenoid valve, 230V, 50/60Hz, Bistable (Non-Standard)	230V 50/60Hz Bistable (Double coil) solenoid valve out of Flowrox standard scope. To be specified on the proposal and under valve serial number.	PNEUMATIC	
Z7	Solenoid valve, 110V, 50/60Hz, Monostable (Non-Standard)	110V 50/60Hz monostable (Single coil) solenoid valve out of Flowrox standard scope. To be specified on the proposal and under valve serial number.	PNEUMATIC	
Z7B	Solenoid valve, 110V, 50/60Hz, Bistable (Non-Standard)	110V 50/60Hz Bistable (Double coil) solenoid valve out of Flowrox standard scope. To be specified on the proposal and under valve serial number.	PNEUMATIC	
X	Must be specified	Additional auxiliary equipment not listed.	PNEUMATIC	

* Flowrox standard options

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