

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

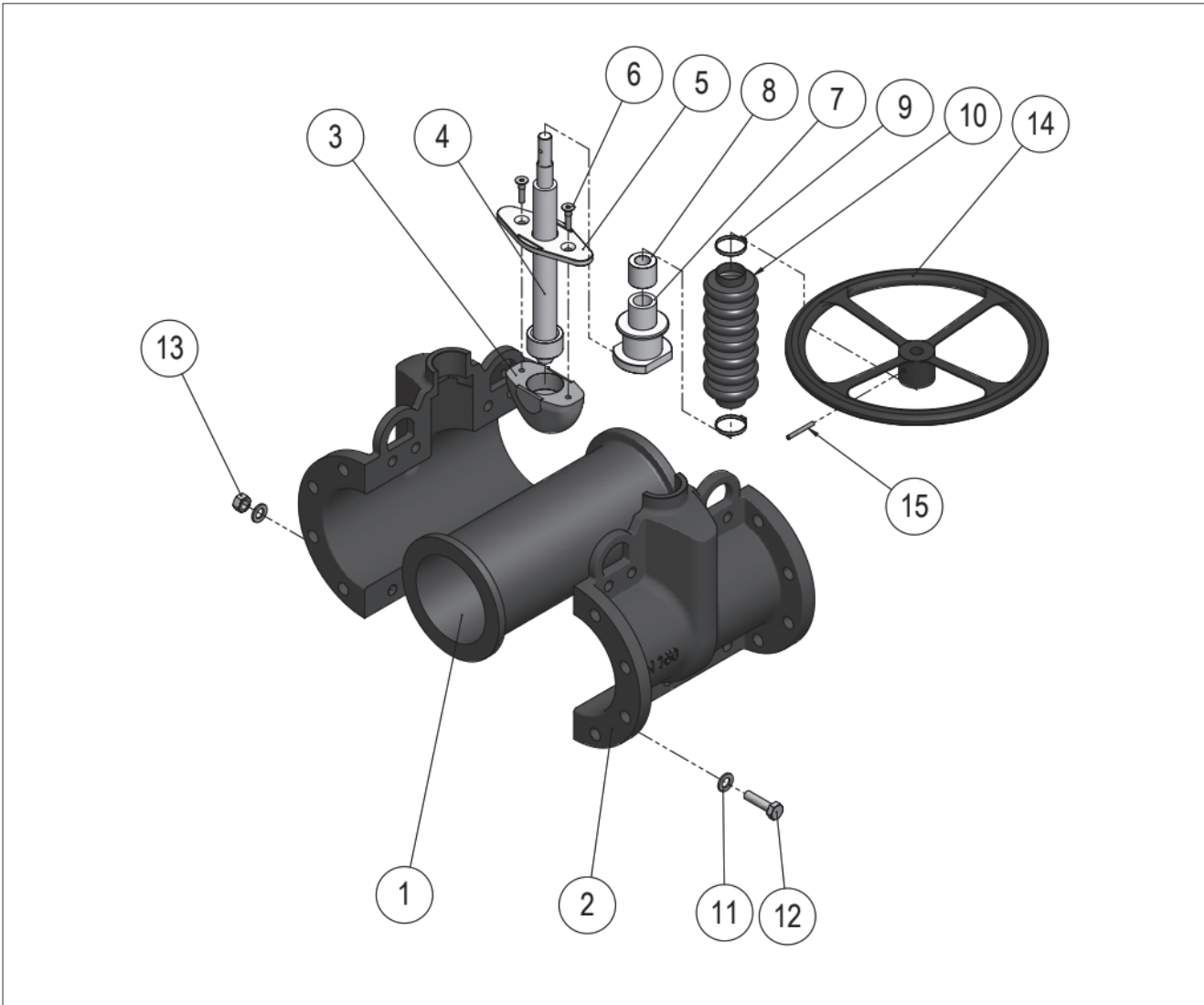
Materials

- Cast iron
- Polyamide

Flange drillings

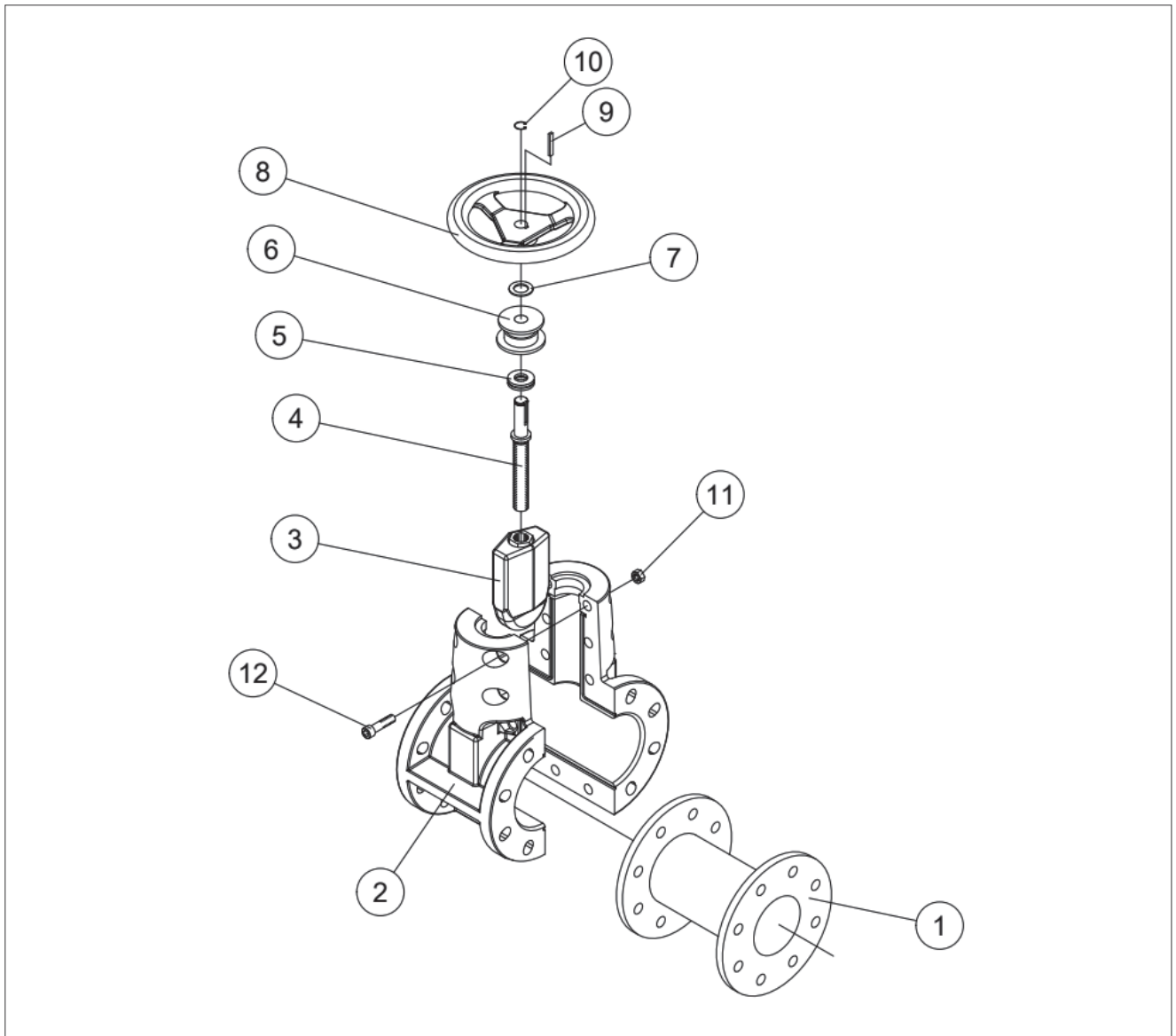
- DIN PN 10
- ASME B16.5 Class 150

Exploded view and parts list, type PVG



Part	Description
1	Sleeve
2	Valve body
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	Sleeve
2	Body
3	Pusher
4	Stem
5	Bearing
6	Bushing
7	Slide ring
8	Handwheel
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 °F...+158 °F PVEG

0 °C...+110 °C / 32 °F...+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

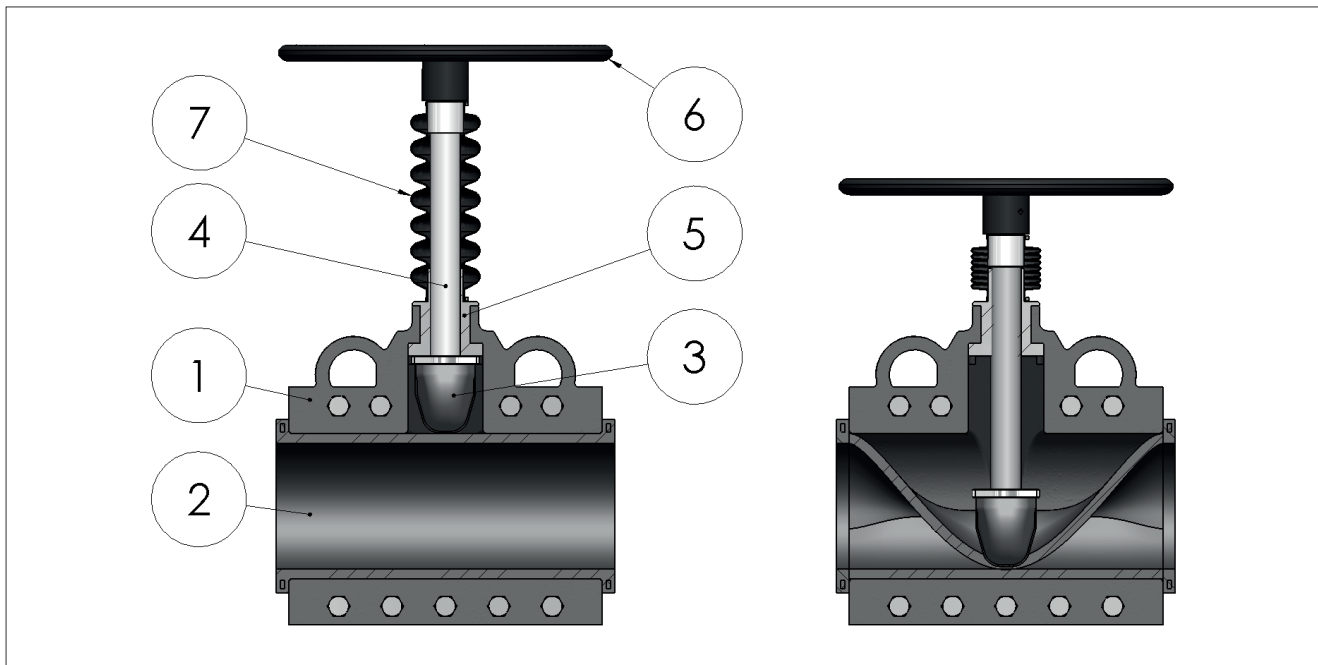


Figure 1

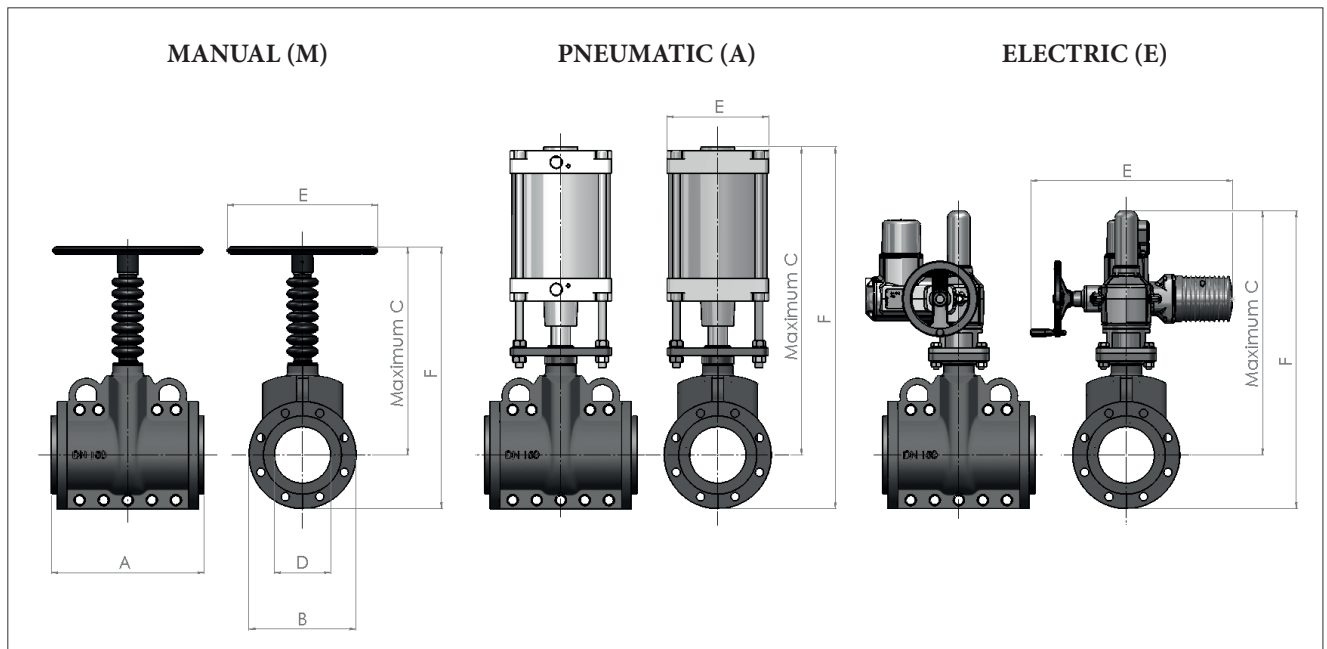
Part	Description
1	Body
2	Sleeve
3	Pusher
4	Stem
5	Threaded bushing
6	Hand Wheel
7	Bellows

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.

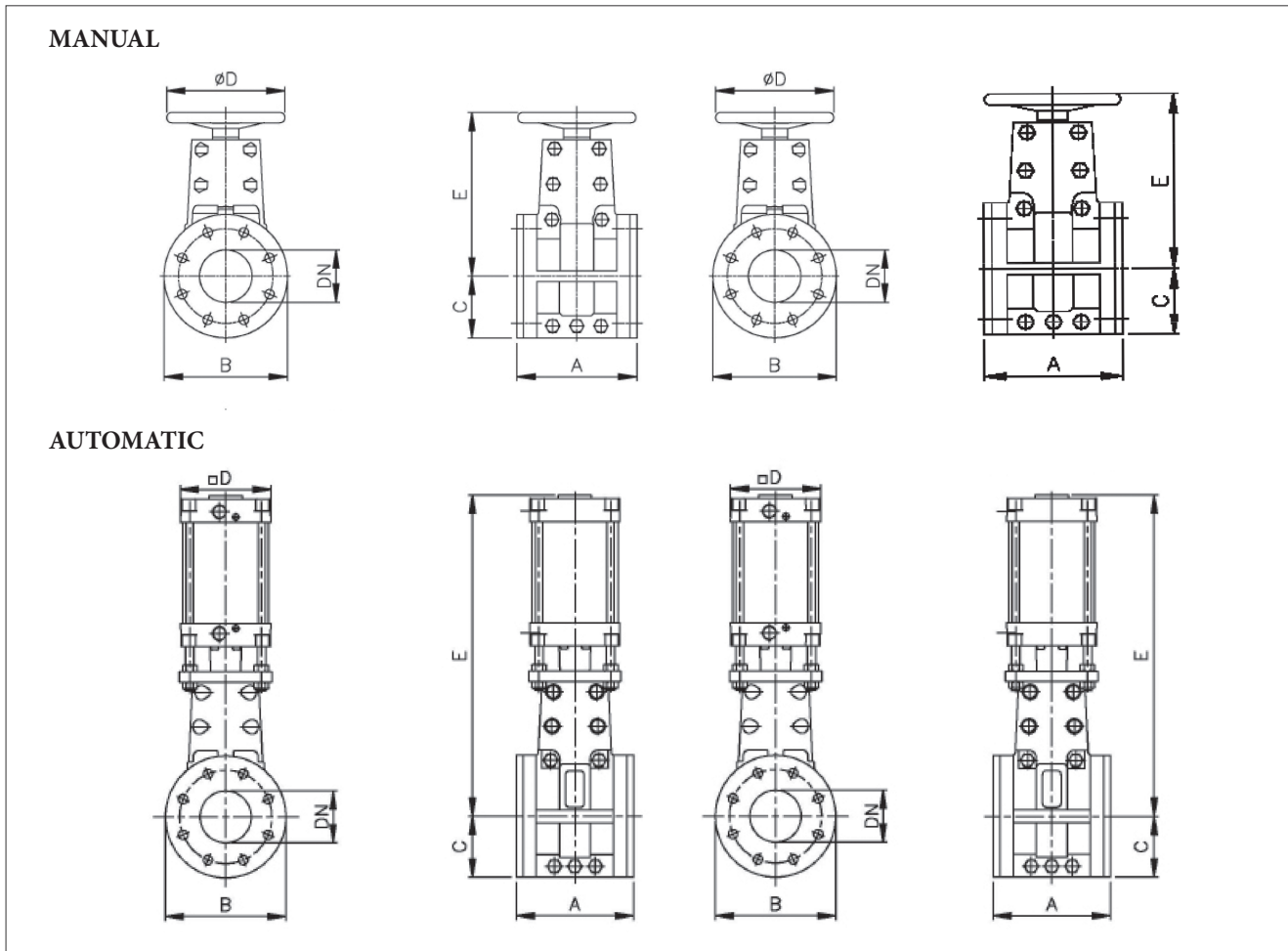
Dimensions, PVG valves



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			
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			
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

Type code

General line pinch valves

1.	2.	3.	4.	5.
PVG	0100	J	B010	A

PVG0100JB010A

1. Sign	VALVE SERIES
PVEG	General Pinch valve plastic body
PVG	General Pinch valve Cast iron body

3. Sign	FLANGE DRILLING
C	ASME B16.5 Class 150
J	PN 10 EN 1092

2. Sign	BODY SIZE	
0050	DN 50	2"
0080	DN80	3"
0100	DN100	4"
0150	DN150	6"
0200	DN200	8"
0250	DN250	10"

4. Sign	PRESSURE RATING
B006	6 BAR
B010	10 BAR

5. Sign	SLEEVE MATERIAL
A	SBRT Styrene Butadiene, Flowrox™ Blend
B	EPDM Ethylene Propylene

Flowrox™ valves manual actuator type code

1.	2.	3.	4.	5.	6.	7.	8.	9.
FXMH	9	1	PV6	/	0100	S	250	N

FXMH91PV6/0100S250N

1. Sign	ACTUATOR SERIES
FXMH	Flowrox Manual actuator with direct handwheel
FXMC	Manual with chainwheel

2. Sign	HOUSING MATERIAL/ATTACHMENT FRAME
2	AISI 316
3	Aluminum, Painted (ONLY PV & PVE DN40-150)
4	Mild steel, painted
9	Not applicable (For PVEG, PVG series only)

3. Sign	STEM MATERIAL
1	Mild steel
2	AISI 316
3	AISI 304
Y	Other

4. Sign	MOUNTING FACE
PV1	PV
PV2	PVE
PV3	PVE/S
PV4	PVS
PV5	PVEG
PV6	PVG
SK1	SKF/SKW (DN50-250)

6. Sign	VALVE SIZE
0025	0025, 0032, 0040, 0050, 0065, 0080, 0100, 0125, 0150, 0250, 0300, 0350, 0400, 0450, 0500, 0600

7. Sign	BUSHINGS
A	Stainless steel (AISI 316)
B	Brass (PVEG-series)
C	Carbon Steel (PVG-series)
E	PE-1000-AST – 50 °C to 80 °C (For Ex-areas)
H	High temperature (PA6G 30F) – 30 °C to 120 °C
N	Not applicable
S	PE-1000 – 50 °C to 80 °C
Y	Other

8. Sign	HANDWHEEL SIZE
150	Direct handwheel Diameter 150 mm.
175	Direct handwheel Diameter 175 mm.
200	Direct handwheel Diameter 200 mm.
220	For chainwheel 220 outer diameter.
225	Direct handwheel Diameter 225 mm.
250	Direct handwheel Diameter 250 mm.
320	Direct handwheel Diameter 320 mm.
390	For chainwheel D393-394 outer diameter.
400	Direct handwheel Diameter 400 mm.
600	Direct handwheel Diameter 600 mm.
660	For chainwheel D660 outer diameter.
800	Direct handwheel Diameter 800 mm.
YYY	Other

9. Sign	BOLT MATERIAL
A	FEZN (Standard)
C	Stainless steel, A4
N	Not applicable (For PVEG, PVG series only)

10. Sign	SPECIAL FEATURES
-	Blank
Y	Other

Flowrox™ valves pneumatic actuator type code

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
FXA	C	2	A	S200	A	0150			/	S	1	PV1	/	M	C

FXAC2AS200A0150/S1PV1/MC

1. Sign	ACTUATOR SERIES
FXA	Flowrox Pneumatic actuator

8. Sign	SEPARATOR
/	Used only for REDUCED BORE pinch valves.

2. Sign	APPLICATION
C	For Control duty
S	Shut-Off, for On/Off duty

9. Sign	REDUCED STROKE
0080	0025, 0032, 0040, 0050, 0065, 0080, 0100, 0125, 0150, 0250, 0300, 0350, 0400, 0450, 0500, 0600, 0700, 0750, 0800, 0900, 1000, 1100, 1200, 1300, 1350, 1400, 1500
-	Blank

3. Sign	CYLINDER ACTION
1	Single acting, Spring to close
2	Double acting
3	Single acting, Spring to open

10. Sign	SEPARATOR
/	

4. Sign	MODEL (Selected by Valmet Flow Control.)
A	Model A
F	Model F
Y	Other model

11. Sign	SEAL OPTION
S	Standard temperature (NBR) -20...+80 °C
H	High temperature -20...+120 °C
C	Cold temperature -40...+60 °C
A	Arctic temperature -50...+60 °C

5. Sign	CYLINDER SIZE
S080	ø80 mm
S100	ø100 mm
S125	ø125 mm
S160	ø160 mm
S200	ø200 mm
S250	ø250 mm
T250	øT250 mm (Tandem)
S320	ø320 mm
T320	øT320 mm (Tandem)
S400	ø400 mm
S500	ø500 mm
S508	ø508 mm
S600	ø600 mm
S609	ø609 mm
S700	ø700 mm

12. Sign	CYLINDER MATERIAL
1	Standard (Aluminum barrel/ Steel Chrome coated piston rod)
2	Aluminum barrel (painted) + AISI 316 piston rod
3	AISI 316 (No painting)
4	Fibreglass barrel & Aluminum flanges
Y	Other

6. Sign	DESIGN
A	Standard
B	Double piston rod for Manual override.
F	Integrated positioner (FESTO DFPI-...-C1V-NB3)

13. Sign	MOUNTING FACE
PV1	PV AND PVE
PV3	PVE/S
PV4	PVS
PV5	PVEG
PV6	PVG
SK1	SKF & SKW
SK2	SKH

7. Sign	STROKE
0100	0025, 0032, 0040, 0050, 0065, 0080, 0100, 0125, 0150, 0250, 0300, 0350, 0400, 0450, 0500, 0600, 0700, 0750, 0800, 0900, 1000, 1100, 1200, 1300, 1350, 1400, 1500

14. Sign	SEPARATOR
/	

15. Sign	MAGNETIC PISTON FEATURE
M	Magnetic piston (YES)
N	No

16. Sign	INTEGRATED AIR TANK
N	None

Valmet Flow Control Oy

Marssitie 1, 53600 Lappeenranta, Finland.

Tel. +358 10 417 5000.

www.valmet.com/flowcontrol

Subject to change without prior notice.

Neles, Neles Easyflow, Jamesbury, Stonel, Valvcon and Flowrox, and certain other trademarks, are either registered trademarks or trademarks of Valmet Oyj or its subsidiaries in the United States and/or in other countries.

