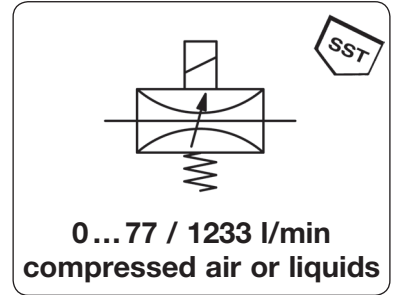


# Proportional Flow Valve with Y-Type Valve

PVE

<b>Description</b>	Compact positioner with analogue control. Compressed air for remote control necessary. The stroke is made proportional to the flow through the parabolic contour of the piston. The valve shuts tight and is of anti-water hammer design.		
<b>Media Control</b>	compressed air, vacuum up to 10 <sup>-2</sup> mbar or liquids up to viscosity of max. 600 cST (mm <sup>2</sup> /s) pneumatic: lubricated and unlubricated and 50 µm filtered compressed air, 4...8 bar, port G½ electrical: 0-10 V, optionally 4-20 mA, supply 24 V DC ± 10%, power consumption 150 mA/3.6 W analog position feedback signal 0-10 V / 4-20 mA (after automatic balance)		
<b>Control element</b>	2-port/2-way valve, NC (normally closed) as standard, optionally NO (normally open) as option 3-port/2-way valve for mixing different media, with standard piston cable gland, optionally M12		
<b>Electrical connection</b>	any	<b>Protection Class</b>	IP 66
<b>Mounting position</b>		<b>Repeatability</b>	< 1.0% FS
<b>Linearity / Hysteresis</b>	< 2% FS		
<b>Failsafe</b>	valve closes (NC) in the event of voltage failure, optionally outlet fail freeze feature		
<b>Temperature range</b>	Ambiance: 0 °C to 50 °C / 32 °F to 122 °F Medium: -10 °C to 180 °C / 14 °F to 356 °F		
<b>Material</b>	Control valve body: bronze, optionally SST 316L Proportional valve body: aluminium, PA and FV	Cone seal:	PTFE



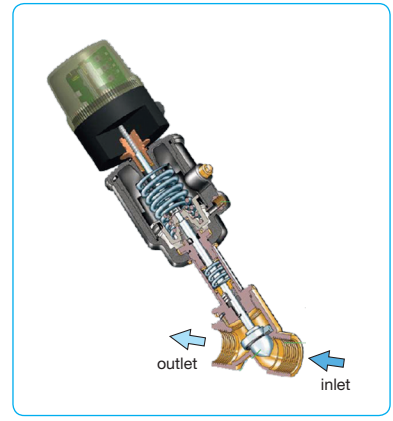
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Dimensions			Nominal size	K <sub>v</sub> value	P <sub>1</sub> max.	Flow rate	Connection thread	Order number
A	B	Ø*1	DN	(m <sup>3</sup> /h)	bar	l/min	G	

Proportional flow valve								2-port/2-way valve NC, bronze, pilot pressure 4...8 bar, for air or water, 0-10 V, 24 V DC, failsafe	PVE
65	155	50	15	4.6	16	0... 77	G½	PVE1-04B	
75	185	63	20	7.1	16	0... 118	G¾	PVE1-06C	
90	209	90	25	15	16	0... 250	G1	PVE1-08D	
110	246	90	32	21	12	0... 350	G1¼	PVE1-10D	
110	298	125	32	22	16	0... 367	G1¼	PVE1-10E	
120	245	63	40	29	4	0... 483	G1½	PVE1-12C	
120	262	90	40	29	8	0... 483	G1½	PVE1-12D	
120	314	125	40	44	16	0... 733	G1½	PVE1-12E	
150	259	63	50	40	2	0... 667	G2	PVE1-16C	
150	276	90	50	40	6	0... 667	G2	PVE1-16D	
150	328	125	50	66	10	0... 1100	G2	PVE1-16E	
190	300	90	65	68	2	0... 1133	G2½	PVE1-20D	
190	352	125	65	74	6	0... 1233	G2½	PVE1-20E	



Special options, add the appropriate letter	
<b>NO, normally open</b>	open in basic position
<b>3-port/2-way valve fail freeze</b>	for mixing different media, bronze version only if supply voltage fails, outlet pressure will be frozen
<b>SST body</b>	stainless steel 316L, material no. 1.4401
<b>4-20 mA for oxygen *2</b>	input signal specially cleaned, with oxygen grease, for G½ to G2
<b>cascade control</b>	double loop, 0-10 V double loop, 4-20 mA double loop, frequency input
<b>electr. connection M12</b>	with coupling socket



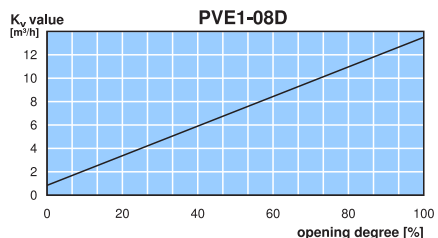
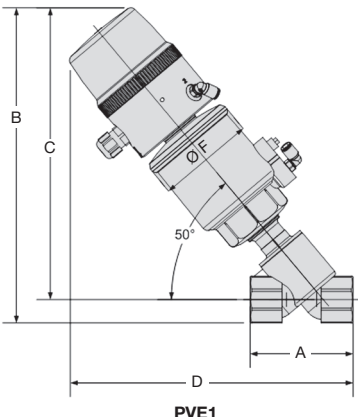
PVE with regulator control	
1	24 V DC supply voltage
2	GND (earth) supply
3	+ setpoint (0-10 V / 4-20 mA)
4	GND (earth) setpoint
5	
6	position feedback
7	+24 V DC ON/OFF output signal

PVE with cascade control	
1	24 V DC supply voltage
2	GND (earth) supply
3	+ setpoint (0-10 V / 4-20 mA)
4	GND (earth) setpoint
5	external signal input
6	
7	+24 V DC ON/OFF output signal

connection diagram



Ø head*1	thread	C	D	ØF
50 mm	½	213	212	69
	¾	242	245	85
	1½	287	294	85
63 mm	2	296	319	85
	1	261	267	118
	1¼	293	306	118
90 mm	1½	304	313	118
	2	313	337	118
	2½	329	369	118
	1¼	445	354	156
125 mm	1½	356	361	156
	2	365	385	156
	2½	380	417	156



\*1 Ø of pilot head  
\*2 max. 15 bar operating pressure and 60 °C / 140 °F media temperature