

Proportional Pressure Regulator with two controlled Solenoids

PC

Description Proportional valve with closed loop from an internal pressure transducer. Outlet pressure is proportional to an electrical input signal. Pressure control by two solenoid valves. The valve can be field calibrated, mounted in any position, is immune to shock and vibration and is without constant bleed in a steady state.

Media Compressed air or non-corrosive gases, filtered to 50 µm, free of condensation.

Fail safe If supply voltage or signal fails, outlet pressure will fall to zero bar (3rd valve).

Fail freeze If supply voltage fails, outlet pressure will be frozen

Connector 4-pin square connector DIN 43 651, 15 x 15 mm, 4-way

Mounting position any

Electr. consumption 3.6 W

Supply voltage 24 V DC ± 10%

Linearity / hysteresis < 1% FS

Temperature range 0 °C to 60 °C / 32 °F to 140 °F

Materials Housing: aluminium and plastic
Inner parts: stainless steel and plastic

Protection class: IP 65 environment protection

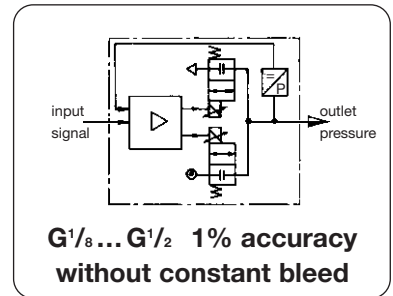
Power consumpt.: max. 150 mA

Repeatability: < 0.5% FS

Adjusting zero: ± 20% FS

Adjusting range: + 5% - 10% FS (option)

Elastomer: NBR (Buna N) and FPM (Viton)



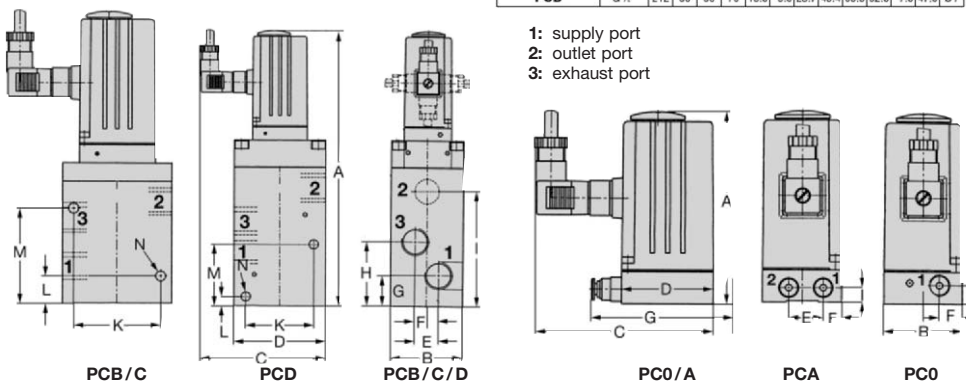
Dimensions			Nominal size	K _v -value	Flow rate	Supply pressure	Connection thread	Pressure range	Order number
H	W	D	DN	(m ³ /h)	l/min*	max. bar	G	bar	

Proportional pressure regulator							0 ... 10 V, 24 V DC, outlet pressure freezes if supply voltage fails	PC		
88	36	83	0.5	0.006	7	3	Ø4SS	0 ... 1	PCA0-01	
								0 ... 2	PCA0-02	
								0 ... 5	PCA0-05	
								0 ... 6	PCA0-06	
								0 ... 10	PCA0-10	
135	36	83	4.0	0.24	290	3	G ¹ / ₈	0 ... 2	PCB0-02	
								0 ... 5	PCB0-05	
								0 ... 6	PCB0-06	
								0 ... 10	PCB0-10	
162	46	94	7.0	0.68	800	3	G ¹ / ₄	0 ... 2	PCC0-02	
								0 ... 5	PCC0-05	
								0 ... 6	PCC0-06	
								0 ... 10	PCC0-10	
212	55	98	12.0	1.52	1800	3	G ¹ / ₂	0 ... 2	PCD0-02	
								0 ... 5	PCD0-05	
								0 ... 6	PCD0-06	
								0 ... 10	PCD0-10	



Special options	add or change the appropriate letter or number	Accessories
G ¹ / ₈ male connection	in base, supply at the side, only on PCA	0 PC0 . . .
4 ... 20 mA	input signal	2 PC . 2 . . .
0 ... 20 mA	input signal	1 PC . 1 . . .
monitor signal	0 - 10V, no pressure switch possible	1 PC 1
PNP pressure switch	no monitor signal possible	2 PC 2
failsafe	exhausting if supply voltage fails, only PCA	3 PCA 3
tapped exhaust	G ¹ / ₄ , not PCA	E PC E
DIN rail clip	for DIN rail mounting, PCA and PCB	C PC C

proport. valve	thread	A	B	C	D	E	F	G	H	I	K	L	M	N
PC0	G ¹ / ₈	88	36	83	42	-	10.5	-	-	8.5	-	-	-	-
PCA	SS04	88	36	83	42	15.7	8.5	-	-	6.5	27.4	4.3	37.7	M3
PCB	G ¹ / ₈	135	36	83	42	10.4	5.2	8.3	19.5	27.0	25.0	21.0	21.0	M4
PCC	G ¹ / ₄	162	46	94	80	20.0	10.0	13.0	29.6	49.0	48.0	15.0	52.2	Ø5.5
PCD	G ¹ / ₂	212	55	98	70	18.0	9.0	23.7	49.4	69.5	52.0	7.0	47.0	Ø7



* at 7 bar supply pressure and 6 bar outlet pressure. Exhaust forward flow equal.

For your information:	1 bar: 14.8 psi	1 l/min: 0.035 scfm	1 mm: 0.039 inch	Pressure gauge:
	1 psi: 0.069 bar	1 scfm: 28.3 l/min	1 inch: 25.4 mm	Please consult chapter "Gauges"

Order example:
PCA-10

