

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/vibration and is without constant bleed in a steady state. lubricated or unlubricated and 50 µm filtered compressed air or non-corrosive gases

Media

Supply voltage

Electrical connector

Failsafe

Fail freeze

Power consumption

Linearity / Hysteresis

Mounting position

Adjustment

Temperature range

Material

24 V DC ± 10 V, residual ripple < 10%

coupling socket, 4-pin according to DIN 43651, size 15 x 15 mm, connector turnable in 90° steps

If supply voltage or signal fails, outlet pressure will fall to zero bar (third valve).

If supply voltage fails, outlet pressure will be frozen.

3.6 W

< 1% FS

any

Zero point: ca. ± 20% FS

Media: 0 °C to 60 °C / 32 °F to 140 °F

Body: aluminium and plastic

Inner valve: stainless steel and plastic

Current consumption max. 150 mA

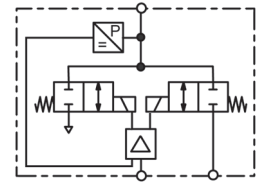
Repeatability < 0.5% FS

Protection class IP 65

Range: + 5% FS, -10% FS

Ambient: 0 °C to 50 °C / 32 °F to 122 °F

Elastomer: NBR/Buna-N and FKM



G¹/₈ to G¹/₂, accurate to 1% without constant bleed

Dimensions			Nominal size	K _v value	Flow rate	Supply max.	Connection thread	Pressure range	Order number
A	B	C							

Proportional pressure regulator

0 ... 10 V input signal, supply 24 V DC, fail freeze

PC

A	B	C	Nominal size	K _v value	Flow rate	Supply max.	Connection thread	Pressure range	Order number
42	88	36	0.5	0.006	7	3	Ø 4 mm, stainless steel	0 ... 1	PCA0-01
								0 ... 2	PCA0-02
								0 ... 5	PCA0-05
								0 ... 6	PCA0-06
								0 ... 10	PCA0-10
42	135	36	4.0	0.24	450	3	G ¹ / ₈	0 ... 2	PCB0-02
								0 ... 5	PCB0-05
								0 ... 6	PCB0-06
								0 ... 10	PCB0-10
60	162	46	7.0	0.68	1000	3	G ¹ / ₄	0 ... 2	PCC0-02
								0 ... 5	PCC0-05
								0 ... 6	PCC0-06
								0 ... 10	PCC0-10
70	212	55	12.0	1.52	3500	3	G ¹ / ₂	0 ... 2	PCD0-02
								0 ... 5	PCD0-05
								0 ... 6	PCD0-06
								0 ... 10	PCD0-10



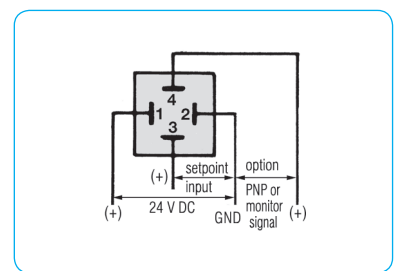
PCA



PCB



PCC



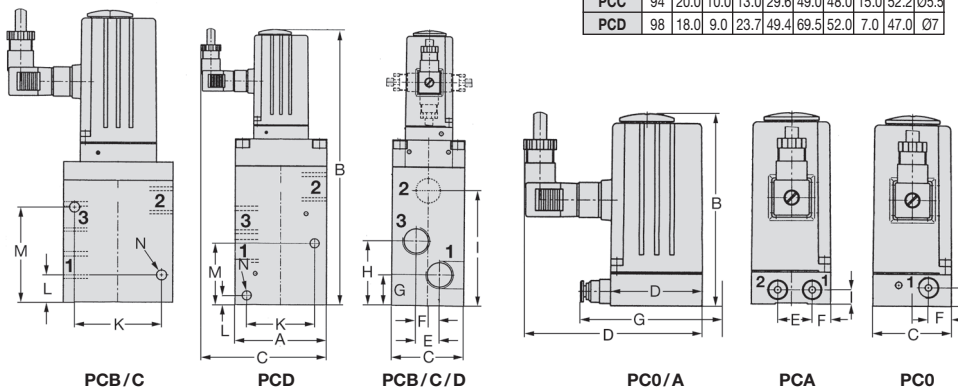
connection diagram

Special options, add the appropriate letter or number

G ¹ / ₈ in base	supply on the side	for PCA	PC0 . . .
4 ... 20 mA	input signal		PC . 2 . .
0 ... 20 mA	input signal		PC . 1 . .
monitor signal	0 ... 10 V, no pressure switch possible		PC 1
PNP pressure switch	no monitor signal possible		PC 2
failsafe, exhausting	if supply voltage fails	for PCA	PCA 3
tapped exhaust	connection thread G ¹ / ₄	for PCB/C/D	PC X12
mounting clips	for DIN rail	for PCA/B	PC C

- 1: supply port
- 2: outlet port
- 3: exhaust

valve	D	E	F	G	H	I	K	L	M	N
PC0	83	-	10.5	-	-	8.5	-	-	-	-
PCA	83	15.7	8.5	-	-	6.5	27.4	4.3	37.7	M3
PCB	83	10.4	5.2	8.3	19.5	27.0	25.0	21.0	21.0	M4
PCC	94	20.0	10.0	13.0	29.6	49.0	48.0	15.0	52.2	Ø5.5
PCD	98	18.0	9.0	23.7	49.4	69.5	52.0	7.0	47.0	Ø7



PCB/C

PCD

PCB/C/D

PC0/A

PCA

PC0

*1 at 6 bar supply pressure and 5 bar outlet pressure

