

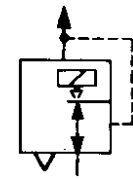
Proportional Pressure Regulator with Piezo Element and Feedback PT700

Description

The proportional valve transmits a DC current or voltage signal into a linear proportional pneumatic outlet signal. With rapid response controls using low-powered piezo microelectronics, flapper nozzle and solid state control circuit. The proportional valve has internal electronic with an electrical feedback sensor and is housed in NEMA4X (IP65) enclosure with six outlet ranges, jumper selectable. Input and outlet ports on both ends of the body simplify pneumatic piping.

Media
Compressed air or neutral gases, filtered to 5 µm any, insensitive to vibration
Mounting position
0.2 to 7 l/min /0.25 scfm, depending on setpoint
Air consumption
7 to 30 V DC, 3-wire voltage input, < 3 mA
Supply voltage
< 0.25% FS normally < 0.15% FS
Linearity
< 0.1 % FS ext. range < 0.25% FS
Hysteresis
< 0.1 % FS
Reproducibility
zero and range, located on the front
Adjustment
-20 °C to 70 °C / -4 °F to 160 °F operating
Temperature
Body and housing: chrome-plated aluminium
Materials
Elastomer: NBR (Buna N)

Failsafe
exhaust, if signal fails
Protection
IP65
4 to 20 mA
333kΩ, 2-wire, > 7.2 V DC at 20 mA
0 to 10 V
100 kΩ, 3-wire, 7 to 30 V DC, <3 mA
Dead band
< 0.02% FS 0.25% accurate
Vibration sens.
< 1% FS at 15 to 500 Hz/10g
Temperat. sens.
< 0.5%+0.06%/°C FS
Connector
square as per DIN 43650
Temperature
-40 °C to 80 °C / -40 °F to 180 °F storage
Nozzle: nickel-plated brass and sapphire
Inner valve: stainless steel, brass, zinc-plated steel



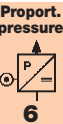
0.25% accuracy
piezo-controlled

Dimensions			Input signal	K _v -value	Flow rate	Supply pressure	Pressure range	Order number
H	W	D						
mm	mm	mm	V/mA	(m ³ /h)	l/min*	max. bar	bar	

Proportional pressure regulator						ports 1/4" NPT, 0.25% accuracy with air consumption		PT700
95	38	107	0...10 V	0.12	250	8	0.2...1	PT780-B100
95	38	107	supply voltage			8	0.4...2	PT780-B200
133	38	107	24VDC			10	0...2	PT780-0200
133	38	107				10	0...4	PT780-0400
133	38	107				10	0...8	PT780-0800
95	38	107	4...20 mA	0.12	250	8	0.2...1	PT782-B10
95	38	107	supply voltage			8	0.4...2	PT782-B200
133	38	107	not required			10	0...2	PT782-0200
133	38	107				10	0...4	PT782-0400
133	38	107				10	0...8	PT782-0800



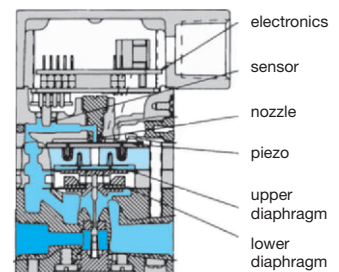
PT780



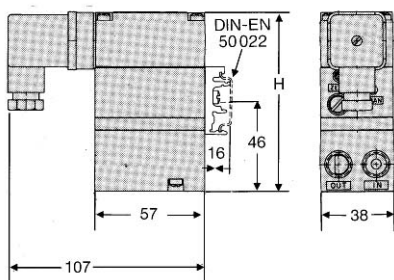
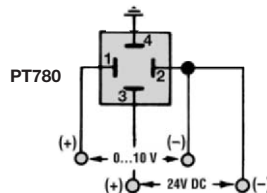
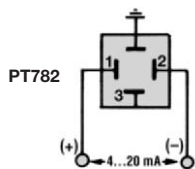
Special options add the appropriate letter

Special option	Description	Letter	Accessories
explosion proof	Atex according to CENELEC EN 50 039, max. 2 bar	E	PT782 - ... E
intrinsically safe	Atex according to CENELEC EN 50 039	I	PT78 - ... I
reverse action	selectable with jumper	F	PT78 - ... F
tapped exhaust		A	PT78 - ... A
mounting bracket	SA-PT1 for panel mounting	X	PT78 - ... X
mounting bracket	SA-PT2 for DIN rail	Y	PT78 - ... Y
mounting bracket	SA-PT3 for Atex	Z	PT782 - ... Z

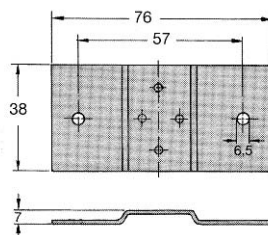
Accessories



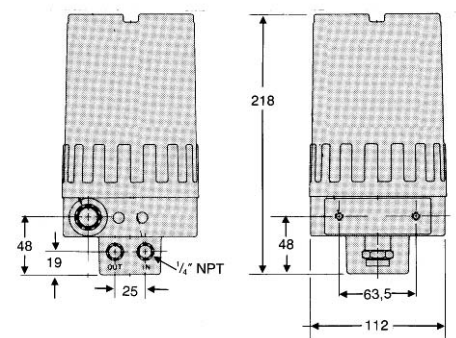
cross-section



PT78



SA-PT1



PT782, Atex

* at 7 bar supply pressure and 1.4 bar outlet pressure

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



Order example:
PT780-0800