

# PROPORTIONAL PRESSURE REGULATOR ON PCB, ACCURATE TO 0.2%

PM

**Description**

Proportional control valve with closed loop control technology for better control of pressurised gases. The instrument can be built as single closed loop or dual closed loop control valve. dry, lubricated or unlubricated and 5 µm filtered compressed air or non-corrosive gases constant outlet pressure at voltage drop

0 ... 10 V, impedance 4.7 kΩ, ratio of internal to external relationship is 10% to 90%

15 ... 24 V DC, residual ripple < 10%, with reverse voltage protection jumper selectable command

0 ... 10 V / 4.7 kΩ, 4 ... 20 mA / 100 Ω, 0 ... 10 V at max. 10 mA

terminal strip for 2.5 mm<sup>2</sup>

3.6 W regulating, 0.5 W non-regulating

< 0.15% FS

< 1% FS at 0 °C to 50 °C / 32 °F to 122 °F

0 °C to 70 °C / 32 °F to 158 °F

Ports: brass

Transducer: aluminium and silicon

**Air consumption** without constant bleed

**Repeatability** < 0.02 FS

**Adjustment** zero point and span any, vibration-resistant

**Mounting position** any, vibration-resistant

**Elastomer:** FKM

**Valves:** nickel-plated brass

**Media**

**Fail freeze**

**Second loop**

**Supply voltage**

**Impedance**

**Monitor signal**

**Electrical connection**

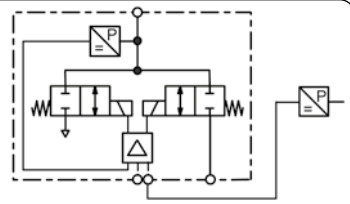
**Power consumption**

**Linearity / Hysteresis**

**Temperature influence**

**Temperature range**

**Material**



with single or double loop

Dimensions			Flow rate	Supply pressure	Accuracy	Connection thread	Pressure range	Order number
A	B	C	l/min*1	max. mbar/bar	%	G	mbar/bar	
mm	mm	mm						

Proportional press. regulator									0-10 V input and monitor signal, supply voltage 24 V DC, fail freeze, single loop for DIN rail	PM
56	78	54	35	10 mbar	0.2	G1/8	0 ... 5 mbar	PM1DE-A5		
				20 mbar			0 ... 10 mbar	PM1DE-B1		
				200 mbar			0 ... 100 mbar	PM1DE-C1		
				1 000 mbar			0 ... 600 mbar	PM1DE-C6		
56	78	54	35	2 bar	0.2	G1/8	0 ... 1 bar	PM1DE-01		
				3 bar			0 ... 2 bar	PM1DE-02		
				9 bar			0 ... 4 bar	PM1DE-04		
				9 bar			0 ... 6 bar	PM1DE-06		
				15 bar			0 ... 10 bar	PM1DE-10		
56	78	54	35	2 bar	0.2	G1/8	0 ... -1 bar	PM1DE-V0		
				2 bar			-1 ... +1 bar	PM1DE-V1		



PM . D  
DIN rail mounting



PM . P  
panel mounting



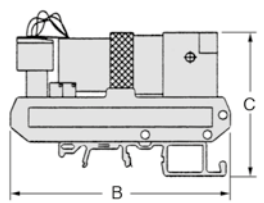
PM . M  
mounting on manifold block

**Special options,** add the appropriate letter

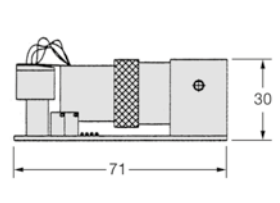
- double loop** second loop feedback 0 ...10 V PM2 . . . .
- 4-20 mA** supply signal, jumper selectable command PM . . . . I . . .
- flow 100 l/min** increased flow rate PM . . . . HF
- panel mounting** on plane level PM . P . . .
- mounting for manifolds** connections downwards PM . M . . .

**Accessories,** enclosed

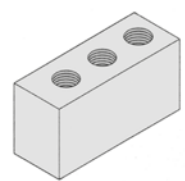
**manifold block** for 2 to 7 valves number of valves added to order number **SBM-**



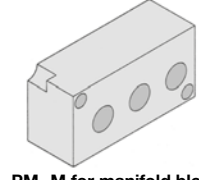
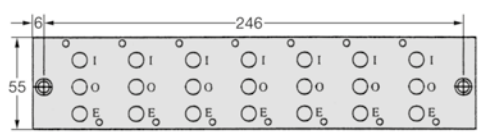
PM . D for DIN rail



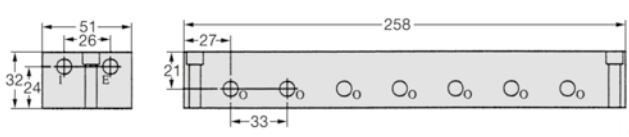
PM . P for panel mounting



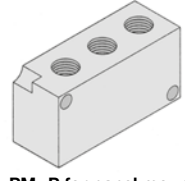
PM . D for DIN rail



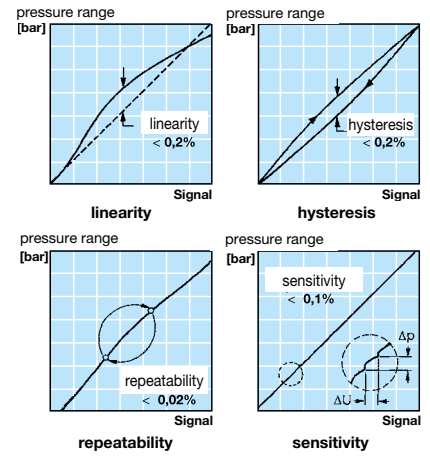
PM . M for manifold block



manifold block for 2 to 7 valves



PM . P for panel mounting



\*1 at 7 bar supply pressure and open outlet, at regulated flow rate of 3 l/min  
\*2 higher supply pressures on request

For further details about double loop see PQ2

PDF CAD  
www.aircom.net

Order example:  
PM1DE-A5

