Proportional Pressure Regulator on PCB, Accurate to 0.2%

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. Media dry, lubricated or unlubricated and 5 um filtered compressed air or non-corrosive gases Fail freeze

constant outlet pressure at voltage drop

ratio of internal to external relationship is 10% to 90% 0...10 V, impedance $4.7 \text{ k}\Omega$,

Accuracy Connection

thread

G

G1/8

number of valves added to order number

15....24 V DC, residual ripple < 10%, with reverse voltage protection 0...10 V / 4.7 k Ω , 4...20 mA / 100 Ω , jumper selectable comm jumper selectable command

0...10 V at max. 10 mA terminal strip for 2.5 mm²

Electrical ports 3.6 W regulating, 0.5 W non-regulating Power consumption < 0.15% FS Linearity / Hysteresis

Flow

rate

I/min*1

Second loop

Supply voltage Impedance

Monitor signal

Temperature influence

Temperature range

Dimensions

В

mm

C

mm

Material

Α

mm

56

78

54

1.36 °C to 50 °C / 32 °F to 122 °F
 0 °C to 70 °C / 32 °F to 158 °F
 Ports:

Transducer: aluminium and silicon

Supply

pressure

max. mbar/bar*2

2 bar

2 bar

for 2 to 7 valves

Air consumption Repeatability Adjustment Mounting position

Elastomer: Valves:

Pressure

range

mbar/bar

0... -1 bar

bar

-1... +1

anv. vibration-resistant

< 0.02 FS

nickel-plated brass

Order

number

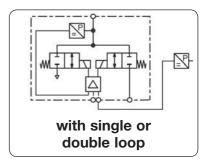
PM1DE-V0

PM1DE-V1

SBM-

zero point and span

without constant bleed



Pro	p. pı	ressu	ire regu	lator		V input and monit C, fail freeze, single			PM
56	78	54	35	20 r 200 r 1000 r		5 0.8 0.2	G1//8	0 10 mbar 0100 mbar 0600 mbar	PM1DE-B1 PM1DE-C1 PM1DE-C6
56	78	54	35	2 2 3 9 9 15 24	bar bar bar bar bar bar	0.2	G%	0 1 bar 0 2 bar 0 4 bar 0 6 bar 0 10 bar 0 16 bar 0 20 bar	PM1DE-01 PM1DE-02 PM1DE-04 PM1DE-06 PM1DE-10 PM1DE-16 PM1DE-20

DIN rail mounting

DURAY

PM.P panel mounting

Special options, add the appropriate letter

PM**2** . . - . . second loop feedback 0 ... 10 V double loop 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**. - . .

0.2

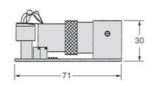


PM.M mounting on manifold block

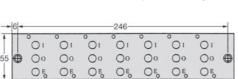
Accessories, enclosed

manifold block

B PM . D for DIN rail



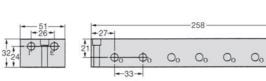
PM . D for panel mounting





PM . M for manifold block

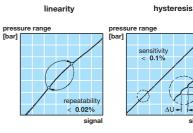




manifold block for 2 to 7 valves



PM . P for panel mounting



signal

repeatability

sensitivity

signal



at regulated flow rate of 3 l/min

*1 at 7 bar supply pressure and open outlet,

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 $^{^{\}star2}$ higher supply pressures on request