



Piloted pressure regulators (RP - RMP - RPP)



- ▶ Piston piloted pressure regulator
- ▶ Available with pressure gauge or digital pressure switch integrated
- ▶ Atex certification (II 2GD or II 3GD)
- ▶ Inlet pressures up to 20 bar



Note

Always regulate the rising pressure.

Technical characteristics

Size	Size 4
Body and connections type	Aluminium body, integrated aluminium connections
IN / OUT connections	G1" - 1" NPT
Assembly configuration	Stand alone Panel mounted
Assembly positions	Indifferent
Pressure range	0,5 ... 10 bar
Regulation	Pneumatic piloting
Pressure measurement	G1/8" - 1/8" NPT pressure gauge connection port (only for versions with IN / OUT NPT connections) Integrated pressure gauge (optional) Digital pressure switch (optional)
Max. fittings torque IN / OUT connections	G1" metal: 35 Nm
Max. fitting torque pressure gauge connection port	G1/8"metal: 15 Nm

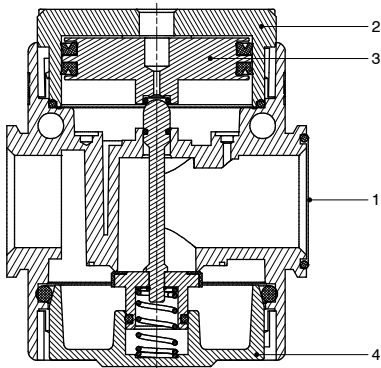
Operational characteristics

Size	Size 4
Maximum working pressure	20 bar
Minimum working pressure	0,5 bar
Pilot pressure range	0,5 ... 10 bar
Working temperature	-30 °C ... +80 °C
Working temperature with digital pressure switch	0 °C ... +50 °C



Weights	Size	Size 1	Size 2	Size 3	Size 4
Pneumatic pilot aluminum body version		/	/	/	1190 g

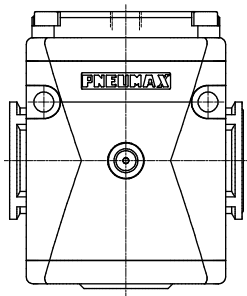
Materials
Exploded sectioned



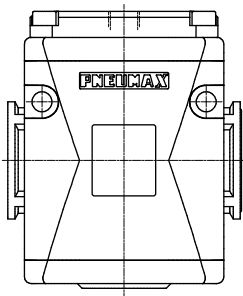
Piloted pressure regulator		
1	Body	Die-cast aluminium
2	Piloting operator	Aluminium
3	Piston	Aluminium
4	Rear end cap	Die-cast aluminium

Design

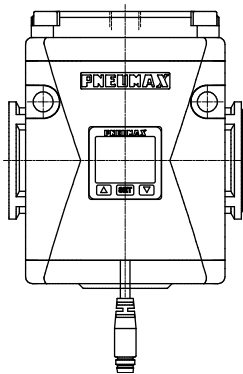
G1/8" pressure gauge
connection port version



Integrated pressure
gauge version



Integrated digital
pressure
switch version



Order codes

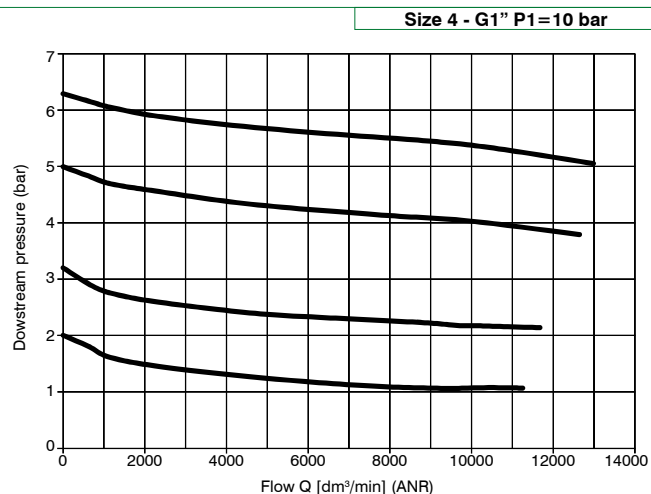
	P	17	4B	R	M		P
Version							
P : Aluminium body							
Size and connections							
4B : Size 4 - G1"							
4C : Size 4 - 1" NPT							
Pressure measurement options							
: G1/8" - 1/8" NPT thread							
M : Integrated pressure gauge							
W : Integrated pressure gauge Right - Left							
P : Digital pressure switch							
Z : Digital pressure switch Right - Left							
Digital pressure switch options							
A : Cable 150 mm + M8 PNP							
B : Cable 150 mm + M8 NPN							
C : Cable 2 m PNP							
D : Cable 2 m NPN							

Example : P174BRMP : Size 4 piloted pressure regulator G1", integrated pressure gauge

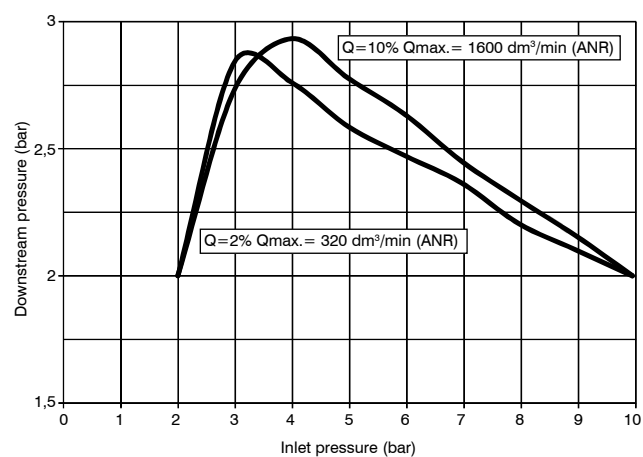
Characteristic curves

AIR TREATMENT

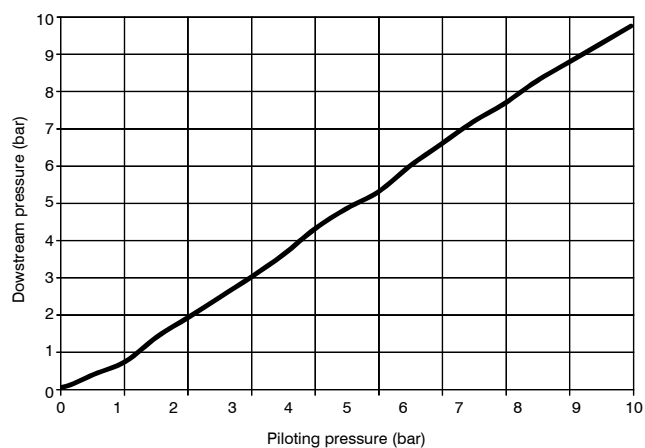
Flow rate curves



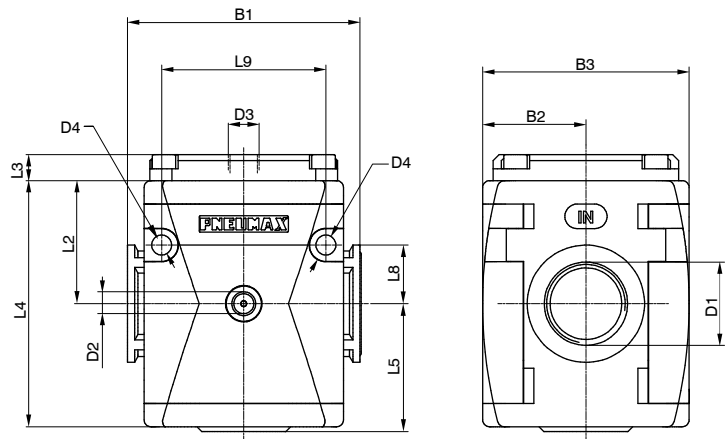
Adjustment characteristic



Flow rate curves



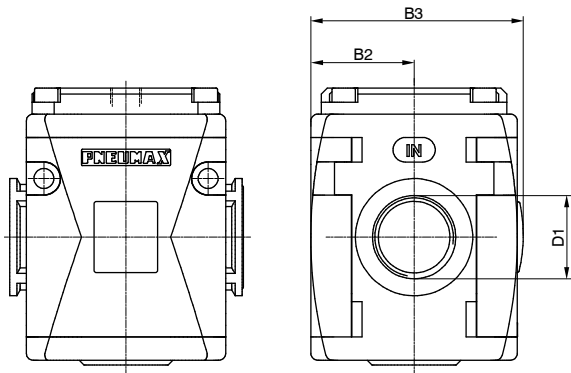
Dimensions



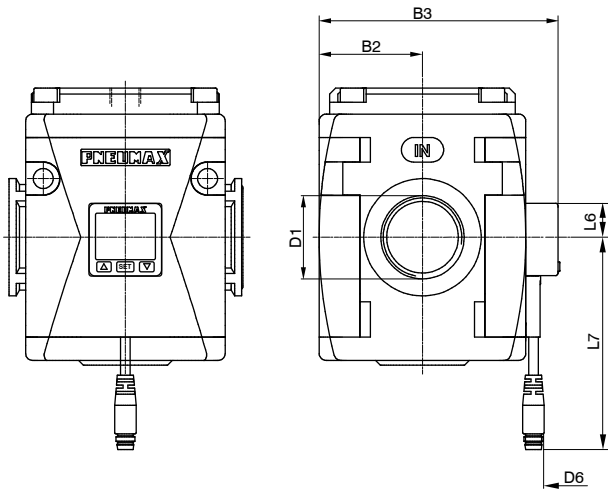
Model	B1	B2	B3	D1	D2	D3	D4	L2	L3	L4	L5	L8	L9
#174..	99	44	88	G1" 1" NPT	G1/8" 1/8" NPT	G1/4"	8,5	52,5	11	105	54,5	25	70

Variable dimensions

Integrated pressure gauge version



Integrated digital pressure switch version



Model	B2	B3		D1	D6 - Type of digital pressure switch		L6	L7 - Type of digital pressure switch	
		With pressure gauge	With digital pressure switch		A - B	C - D		A - B	C - D
#174..	44	90,5	101,5	G1" 1" NPT	M8 - 3 PIN	3 x 0,129 mm, Ø 4 mm	15	150	2000

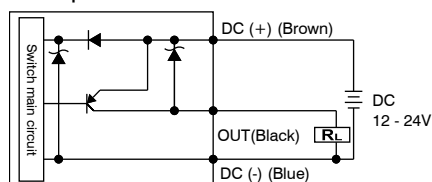
Digital pressure switch



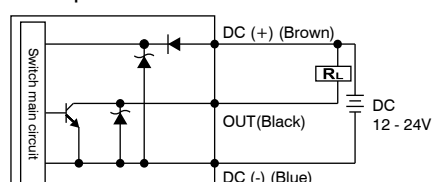
- ▶ 3 color digital LCD display, easy readout
- ▶ 4 units of measurement for pressure indication
- ▶ Optional PNP or NPN digital output
- ▶ N.O. and N.C. output contact selection directly on the digital pressure switch
- ▶ Available with M8-3PIN connector or 3 wire cable length 2 m
- ▶ Available only in combination with a regulator

Output circuit wiring diagrams

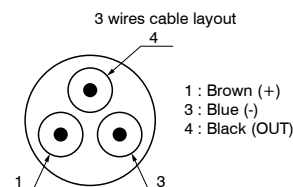
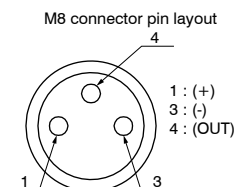
PNP output



NPN output



Digital pressure switch lay out



Cable ordering code

MCH1 : cable 3 wires l=2,5m with M8 connector

MCH2 : cable 3 wires l=5m with M8 connector

MCH3 : cable 3 wires l=10m with M8 connector

Connector



Technical characteristics	
Pressure range and display	0 ... 10 bar
Max. inlet pressure	15 bar
Fluid	40 µm filtered and dehumidified air
Display unit of measurement	MPa - kgf/cm² - bar - psi
Supply voltage	12 ... 24 VDC
Current consumption	≤40 mA (without load)
Digital output type	PNP - NPN
Type of contact output	Normally Open - Normally Closed
Max. load current	125 mA
Digital output activation mode	single threshold with fixed hysteresis - window with fixed hysteresis - window without hysteresis
Digital output activation time	0.05s - 0.25s - 0.5s - 1s - 2s - 3s (selections for chattering-proof options)
Display characteristics	Double 3 1/2 digit display Digital output status indication Three-pushbuttons touchpad
Indicator accuracy	≤±2% full scale value ± 1 digit
IP Rating	IP40
Working temperature	0 °C ... 50 °C
Cable section	3 x 0,129 mm², Ø 4 mm, PVC