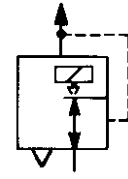


### Technical Features

- low-cost, compact and solid
- for compressed air and neutral gases
- vibration and shock insensitive
- low power consumption
- many customized designs
- **linearity:** < 1% FS
- **hysteresis:** < 1% FS
- **sensitivity:** 0.1%
- **reproducibility:** 2%
- **vibration:** 3% for 2g sine 15-150 Hz



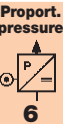
**G<sup>1</sup>/<sub>8</sub>, 0.5% accuracy**

Dimensions			Supply voltage	Supply pressure	Input signal	Pressure range	Order Number
H	W	D	VD C	max. bar	recomm. bar	mA / V	
mm	mm	mm					

Proportional pressure regulator				G <sup>1</sup> / <sub>8</sub> flow rate: 200 l/min air consumption: 3 l/min	P120			
74	34	40	not required	10	4	4...20 mA	0.2...1 bar	P120-E1A
			24 V DC		4		0.1...2 bar	P120-02A
			24 V DC		6		0.1...4 bar	P120-04A
			24 V DC		10		0.1...8 bar	P120-08A
74	34	40	not required	10	4	0...10 V	0.2...1 bar	P120-E1V
			24 V DC		4		0.1...2 bar	P120-02V
			24 V DC		6		0.1...4 bar	P120-04V
			24 V DC		10		0.1...8 bar	P120-08V



P120 - E1A



### Special options add the appropriate letter

<b>flange connection</b>	inlet and outlet ports in base	<b>F</b>	P120-...F
<b>clips for DIN rail</b>	for mounting on DIN rail	<b>C</b>	P120-...C
<b>0 ... 20 mA signal</b>		<b>A</b>	P120-...A
<b>reverse action</b>		<b>I</b>	P120-...I



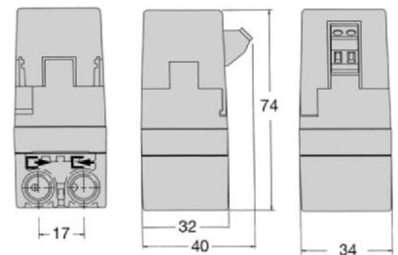
P120 special design

### General features

<b>construction</b>	Flapper-nozzle control principle. The electrical magnetic field changes the distance between the nozzle and the flapper, thereby producing a proportional change in pressure.		
<b>mounting position</b>	any, preferably vertical, to be specified by customer		
<b>vibration</b>	effect of vibration fluctuation < 2% of outlet pressure		
<b>materials</b>	Body: Zinc die-casting	<b>protection class</b>	IP30
	Elastomer: NBR	<b>temperature range</b>	0°C to 60°C / 140 °F

### Pneumatic features

<b>media</b>	compressed air or neutral gases, dry and oil-free, filtered to < 5µm		
<b>supply pressure</b>	1.5 to 10 bar, 1.5 bar above max. outlet pressure		
<b>flow capacity</b>	forward flow < 200 l/min	<b>air consumption</b>	6 bar = < 3 l/min typ.
	reverse flow < 180 l/min		



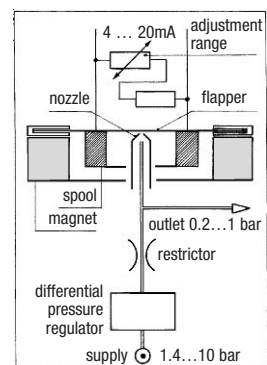
dimensions

### Electrical features

<b>electrical signal</b>	4...20 mA (230 Ω) or 0...10 V 24V DC necess. for 4/6/8 bar range	<b>EMV</b>	EN 50081-2 EN 50082-2
<b>failure mode</b>	failsafe in the event of signal or power loss	<b>insulation</b>	resistance > 100 MΩ at 850 V DC
<b>connection</b>	screw connection for flying leads		

### Accuracy and sensitivity

<b>linearity</b>	< 1% FS	<b>hysteresis</b>	< 1% FS
<b>response time</b>	< 500 ms from 10 to 90% pressure into 4.5 ml load	<b>temperat. effect</b>	7 mbar / °C between 0 °C to 60 °C
<b>supply sensitivity</b>	< 0.2% FS supply pressure fluct.	<b>vibrat. sensitivity</b>	outlet pressure change 3% FS at 2g and 15 to 150Hz
<b>adjusting</b>	zero from 0.6 bar to 4 bar, range ± 1 bar		



function drawing

<b>For your information:</b>	1 bar: 14.8 psi	1 l/min: 0.035 scfm	1 mm: 0.039 inch
	1 psi: 0.069 bar	1 scfm: 28.3 l/min	1 inch: 25.4 mm



**Order example:**  
P120 - E1A