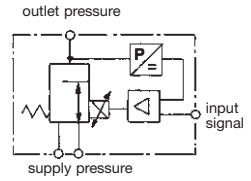


### Description

Piezo-operated proportional pressure valve based on the principle of a piezo element which bends when voltage is applied. At the end of the piezo element is a flapper valve, which operates against a precision nozzle to create back pressure on the control diaphragm of a booster relay. A pressure transducer provides feedback of the outlet pressure compared with the setpoint value with correction by the electronic control system if necessary. No warm-up, even if pressure is not present. Weight: only 150 g

### Technical features

|                         |                                      |                    |                       |
|-------------------------|--------------------------------------|--------------------|-----------------------|
| ● Highly dynamic        | 7 ms, max. 43 Hz                     | ● Sensitivity      | 0.1% FS               |
| ● Low power consumption | 250 mW                               | ● Reproducibility  | 0.1% FS               |
| ● Hysteresis            | 0.2 FS e.g. 0.5% FS                  | ● Flow rate        | 300 l/min*            |
| ● Linearity             | 0.5 FS e.g. 1.0% FS                  | ● Protection class | IP52 as per DIN 45322 |
| ● No overpressure       | adjustable closed loop amplification | ● 2-wire system    | for 4 ... 20 mA       |



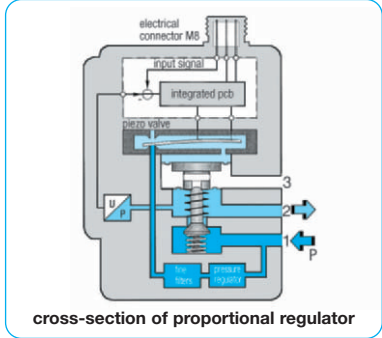
**0 ... 200 mbar / 8 bar**  
**7 ms, 250 mW, 300 l/min**

| Dimensions |    |    | Supply voltage | Supply pressure | Supply signal | Pressure range | Order Number |
|------------|----|----|----------------|-----------------|---------------|----------------|--------------|
| H          | B  | T  | V DC           | max. bar        | mA/V          | bar            |              |
| mm         | mm | mm |                |                 |               |                |              |

| Proportional valve | with connector and 2 m cable, air consumption G <sub>1/8</sub> , supply max. 10 bar, v: 300l/min* |     |           | PRE          |                |
|--------------------|---|-----|-----------|--------------|----------------|
| 73 36 60           | not required  | 2.5 | 4...20 mA | 0...200 mbar | <b>PRE-IA2</b> |
|                    |   | 6   | 4...20 mA | 0... 2 bar   | <b>PRE-I02</b> |
|                    |   | 10  | 4...20 mA | 0... 6 bar   | <b>PRE-I06</b> |
|                    |   | 10  | 4...20 mA | 0... 8 bar   | <b>PRE-I08</b> |
| 73 36 60           | 24 V DC   | 2.5 | 0...10 V  | 0...200 mbar | <b>PRE-UA2</b> |
|                    |   | 6   | 0...10 V  | 0... 2 bar   | <b>PRE-U02</b> |
|                    |   | 10  | 0...10 V  | 0... 6 bar   | <b>PRE-U06</b> |
|                    |   | 10  | 0... 8 V  | 0... 8 bar   | <b>PRE-U08</b> |



PRE-08



cross-section of proportional regulator

### Special options add the appropriate letter

|                              |  |             |                             |                         |
|------------------------------|--|-------------|-----------------------------|-------------------------|
| <b>monitor signal flange</b> | 1.25 ... 6.25 V, H = 103, without manifold | <b>R</b>    | connector 15 mm, only PRE-U | <b>PRE - U . . R</b>    |
| <b>angle connector</b>       | PRK-E                                      | <b>G</b>    | without connector or manif. | <b>PRE - . . . G</b>    |
| <b>DIN rail clip</b>         | SA-PT2                                     | <b>C5</b>   | with 5 m cable              | <b>PRE - . . . C5</b>   |
| <b>manifold</b>              | for 2, 4 or 6 valves                       | <b>X</b>    | G <sub>1/8</sub> ports      | <b>PRE - . . . X</b>    |
|                              |  | <b>PS11</b> |                             | <b>PRE - . . . PS11</b> |

### Accessories

### General technical features

|                          |  |   |
|--------------------------|--|---|
| <b>construction</b>      | piezo-operated proportional regulator with electrical feedback |   |
| <b>dynamics</b>          | 7 ms response time, max. 43 Hz,                                | i.e. 43 pressure changes per second     |
| <b>mounting position</b> | any  | <b>protection class:</b> IP 52          |
| <b>materials</b>         | Housing: aluminium   | <b>temperature range:</b> 0 °C to 50 °C |
|                          | Inner valve: brass, plastic, NBR, silicon, aluminium           |   |

### Pneumatic features

|                        |  |  |
|------------------------|--|--|
| <b>media</b>           | dry compressed air filtered to 5 µm or non-corrosive gases   |  |
| <b>supply pressure</b> | maximal 10 bar   | minimal 1.5 bar                                      |
| <b>flow rate</b>       | 200 l/min nominal, 300 l/min max. flow at P <sub>1</sub> : 10 bar P <sub>2</sub> : 6 bar Δp: 1 bar |  |
| <b>air consumption</b> | 0.4 l/min at 200 mbar range  | 0.5 l/min at 2 bar range 0.6 l/min at 6/10 bar range |
| <b>nominal width</b>   | 2 mm orifice   |  |

### Electrical features

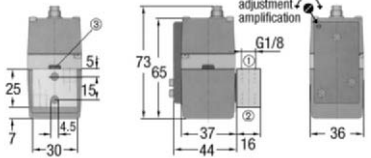
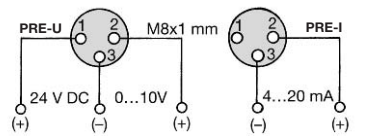
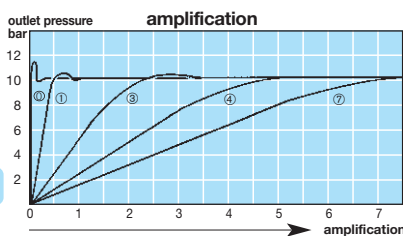
|                          |   |                                   |
|--------------------------|---|-----------------------------------|
| <b>electrical supply</b> | 24 V DC, only required for 0-10 V signal                            | power consumption 250 mW          |
| <b>failsafe</b>          | if signal or electrical supply fails, outlet pressure falls to zero |                                   |
| <b>input resistance</b>  | 60 kΩ at 0 -10 V range  | 550 Ω at 4 - 20 mA range          |
| <b>connector</b>         | PRE: round connector M8x1, 3-pin                                    | PRE-. . R: square connector 15 mm |

### Accuracy

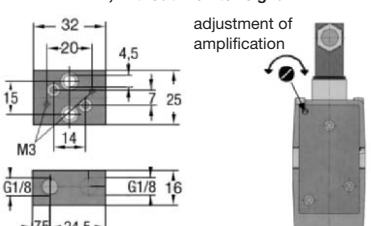
|                        |                           |                              |
|------------------------|---------------------------|------------------------------|
| <b>linearity</b>       | 0.5% FS at 2-8 bar range, | 1 % FS at 0- 200 mbar range  |
| <b>hysteresis</b>      | 0.2% FS at 2-8 bar range, | 0.5% FS at 0- 200 mbar range |
| <b>reproducibility</b> | 0.1% FS at 2-8 bar range, | 0.5% FS at 0- 200 mbar range |
| <b>sensitivity</b>     | 0.1% FS at 2-8 bar range, | 0.5% FS at 0- 200 mbar range |

\* at 10 bar supply and 7 bar outlet pressure and open outlet, at 1 bar Δp, v = 200 l/min

|                              |                  |                     |                  |   |
|------------------------------|------------------|---------------------|------------------|---|
| <b>For your information:</b> | 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  |   |



PRE, without monitor signal



PRE with monitor signal

**Order example: PRE - I08**