Proportional-pressure regulator MPPES-3-1/2-PU-PO-420

## Data sheet

| Feature | Value |
| :---: | :---: |
| Nominal size, supply | 11 mm |
| Nominal size, exhaust | 12 mm |
| Type of actuation | Electric |
| Sealing principle | Soft |
| Mounting position | optional |
| Design | Piloted piston regulator |
| Short circuit current rating | For all electrical connections |
| Safety instructions | Safety position MPPES: if the power supply cable is interrupted, the output pressure drops to 0 bar. |
| Reverse polarity protection | For all electrical connections |
| Valve function | 3-way proportional-pressure regulator, closed |
| Operating pressure | $\begin{aligned} & \text { 1.2 MPa } \\ & 12 \mathrm{bar} \\ & \hline \end{aligned}$ |
| Pressure regulation range | $\begin{aligned} & 0 \mathrm{MPa} . . .1 \mathrm{MPa} \\ & 0 \mathrm{bar} . . .10 \mathrm{bar} \end{aligned}$ |
| Inlet pressure 1 | $\begin{aligned} & 11 \text { bar... } 12 \text { bar } \\ & \text { 1.1 MPa...1.2 } \mathrm{MPa} \end{aligned}$ |
| Max. pressure hysteresis | $\begin{aligned} & 0.005 \mathrm{MPa} \\ & 0.05 \mathrm{bar} \\ & \hline \end{aligned}$ |
| Switching time off | 1000 ms |
| Switching time on | 230 ms |
| Operational voltage range DC | $18 \mathrm{~V} . . .30 \mathrm{~V}$ |
| Nominal operating voltage DC | 24 V |
| Residual ripple | 10 \% |
| SETPOINT/ACTUAL values | Current type 4-20 mA |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases |
| Note on operating and pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) |
| Approval | RCM trademark |
| KC mark | KC-EMV |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with EU RoHS Directive |


| Feature | Value |
| :--- | :--- |
| CE marking (see declaration of conformity) | To UK instructions for EMC <br> To UK RoHS instructions |
| Corrosion resistance class CRC | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Media temperature | $0^{\circ} \mathrm{C} . .60^{\circ} \mathrm{C}$ |
| Degree of protection | IP65 |
| Ambient temperature | $0^{\circ} \mathrm{C} . . .50^{\circ} \mathrm{C}$ |
| Product weight | 2670 g |
| Electrical connection | $8-$-pin <br> M16x0.75 <br> Plugs <br> To DIN 45326 <br> Round design |
| Type of mounting | With through-hole |
| Pneumatic connection, port 1 | G1/2 |
| Pneumatic connection, port 2 | G1/2 |
| Pneumatic connection, port 3 | G1/2 |
| Note on materials | RoHS-compliant |
| Material housing | Wrought aluminium alloy |
| Material membrane | NBR |

