# Proportional-pressure regulator
# VPPE-3-1-1/4-10-420-E1T-F1A

Part number: 8202576



## Data sheet

| Feature | Value |
|---|---|
| Nominal size, supply | 5 mm |
| Nominal size, exhaust | 2.5 mm |
| Type of actuation | Electrical |
| Sealing principle | Soft |
| Mounting position | Any<br>Preferably upright |
| Design | Piloted diaphragm regulator |
| Short circuit current rating | For all electrical connections |
| Safety instructions | Safety position VPPE: if the power supply cable is interrupted, output pressure is maintained unregulated. |
| Reverse polarity protection | For all electrical connections |
| Type of reset | Mechanical spring |
| Type of piloting | Piloted |
| Valve function | 3-way proportional pressure regulator |
| Display type | LED indicator<br>3 digits |
| Pressure regulation range | 0.01 MPa...1 MPa<br>0.1 bar...10 bar |
| Inlet pressure 1 | 6 bar...11 bar<br>0.6 MPa...1.1 MPa |
| Max. pressure hysteresis | 0.005 MPa<br>0.05 bar<br>0.725 psi |
| Standard nominal flow rate (standardised to DIN 1343) | 2300 l/min |
| Operational voltage range DC | 21.6 V...26.4 V |
| Max. current consumption | 160 mA |
| Duty cycle | 100% |
| Max. electrical power consumption | 4.2 W |
| Residual ripple | 10% |
| Switching output | PNP |
| Signal range analogue output | 4 - 20 mA |
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| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4]<br>Inert gas |

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|---|---|
| Note on operating and pilot medium | Lubricated operation not possible |
| Approval | RCM<br>c UL us - Listed (Oil) |
| KC mark | KC-EMV |
| CE mark (see declaration of conformity) | To EU EMC Directive<br>In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| Certificate issuing authority | UL E322346 |
| Corrosion resistance class CRC | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Suitability for the production of Li-ion batteries | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Media temperature | 10 °C...50 °C |
| Degree of protection | IP65 |
| Ambient temperature | 0 °C...60 °C |
| Product weight | 390 g |
| Linearity | 1 %FS |
| Hysteresis | 1 %FS |
| Reproducibility | 0.5 %FS |
| Total accuracy | 1.25 %FS |
| Temperature cooefficient | 0.04 %/K |
| Electrical connection | 5-pin<br>M12<br>Plug |
| Type of mounting | With through-hole |
| Pneumatic connection, port 1 | G1/4 |
| Pneumatic connection, port 2 | G1/4 |
| Pneumatic connection, port 3 | G1/8 |
| Note on materials | RoHS compliant |
| Material housing | Aluminium, powder-coated |