

# Proportional-pressure regulator VPPE-3-1-1/8-10-420-E1

FESTO

Part number: 557776



General operating condition

## Data sheet

| Feature   | Value  |
|---|--|
| Nominal size, supply                                  | 5 mm   |
| Nominal size, exhaust                                 | 2.5 mm   |
| Type of actuation                                     | Electric   |
| Sealing principle                                     | Soft   |
| Mounting position                                     | optional<br>Preferably vertical  |
| 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. |
| Symbol  | 00995303   |
| Reverse polarity protection                           | For all electrical connections   |
| Type of reset   | Mechanical spring  |
| Type of piloting                                      | Pilot actuated   |
| Valve function  | 3-way proportional pressure regulator  |
| Display type  | LED indicator<br>3-digit   |
| Pressure regulation range                             | 0.01 MPa ... 1 MPa   |
| Pressure regulation range                             | 0.1 bar ... 10 bar   |
| Inlet pressure 1                                      | 6 bar ... 11 bar   |
| Inlet pressure 1                                      | 0.6 MPa ... 1.1 MPa  |
| Max. pressure hysteresis                              | 0.005 MPa  |
| Max. pressure hysteresis                              | 0.05 bar   |
| Max. pressure hysteresis                              | 0.725 psi  |
| Standard nominal flow rate (standardised to DIN 1343) | 1250 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 gases   |
| Note on operating and pilot medium                    | Lubricated operation not possible  |

| Feature                                      | Value   |
|--|---|
| Approval                                     | RCM trademark<br>c UL us listed (OL)                        |
| 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 RoHS instructions                                     |
| Certificate issuing authority                | UL E322346  |
| Corrosion resistance class CRC               | 2 - Moderate corrosion stress                               |
| LABS (PWIS) conformity                       | VDMA24364-B2-L  |
| Media temperature                            | 10 °C ... 50 °C   |
| Degree of protection                         | IP65  |
| Ambient temperature                          | 0 °C ... 60 °C  |
| Product weight                               | 390 g   |
| Linearity                                    | 1 %FS   |
| Hysteresis                                   | 0.5 %FS   |
| Reproducibility                              | 0.5 %FS   |
| Total accuracy                               | 1.25%FS   |
| Temperature coefficient                      | 0.04 %/K  |
| Electrical connection                        | M12<br>Plugs  |
| Type of mounting                             | With through-hole   |
| Pneumatic connection, port 1                 | G1/8  |
| Pneumatic connection, port 2                 | G1/8  |
| Pneumatic connection, port 3                 | G1/8  |
| Note on materials                            | RoHS-compliant  |
| Material housing                             | Anodised wrought aluminium alloy                            |