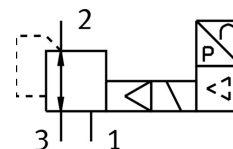


# Proportional-pressure regulator VPPE-3-1-1/8-10-010-E1T

Part number: 557778

**FESTO**



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         | 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       | 0 - 10 V                                                                                                   |
| Signal range analogue input        | 0 - 10 V                                                                                                   |
| 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 |
| CE 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                                              |
| 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 cooefficient                   | 0.04 %/K                                                    |
| Electrical connection                      | 5-pin<br>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                            |