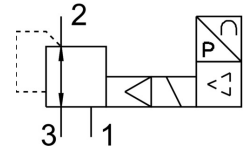


# Proportional pressure control valve VPPE-3-1-1/8-2-420-E1

Part number: 557774

**FESTO**



## Data sheet

| Feature                           | Value                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------|
| KC characters                     | KC EMC                                                                                                    |
| Nominal width pressurization      | 5 mm                                                                                                      |
| Overall accuracy                  | 1.5 %FS                                                                                                   |
| Linearity                         | 1 %FS                                                                                                     |
| Reproducibility                   | 0.5 %FS                                                                                                   |
| Hysteresis                        | 1 %FS                                                                                                     |
| Inlet pressure 1 MPa              | 0.3 MPa ... 0.4 MPa                                                                                       |
| Pressure regulation range MPa     | 0.002 MPa ... 0.2 MPa                                                                                     |
| Max. pressure hysteresis          | 0.002 MPa                                                                                                 |
| Exhaust nominal width             | 2.5 mm                                                                                                    |
| Type code                         | VPPE                                                                                                      |
| Actuation type                    | Electrical                                                                                                |
| Sealing principle                 | Soft                                                                                                      |
| Mounting position                 | Any<br>Preferably upright                                                                                 |
| Design                            | Pilot-controlled diaphragm regulator                                                                      |
| Short-circuit protection          | For all electrical connections                                                                            |
| Safety instructions               | VPPE safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. |
| Symbol                            | 00995303                                                                                                  |
| Reverse polarity protection       | for all electrical connections                                                                            |
| Reset method                      | Mechanical spring                                                                                         |
| Type of control                   | Pilot-controlled                                                                                          |
| Valve function                    | 3-way proportional pressure control valve                                                                 |
| Display type                      | LED display<br>3-digit                                                                                    |
| Pressure regulation range         | 0.02 bar ... 2 bar                                                                                        |
| Inlet pressure 1                  | 3 bar ... 4 bar                                                                                           |
| Max. pressure hysteresis          | 0.02 bar                                                                                                  |
| Standard nominal flow rate        | 310 l/min                                                                                                 |
| DC operating voltage range        | 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                                                                                                       |

| Feature                                    | Value                                                      |
|--------------------------------------------|------------------------------------------------------------|
| Analog output signal range                 | 4 - 20 mA                                                  |
| Analog input signal range                  | 4 - 20 mA                                                  |
| Operating medium                           | Compressed air as per ISO 8573-1:2010 [7:4:4]<br>Inert gas |
| Information on operating and pilot media   | Operation with oil lubrication not possible                |
| CE marking (see declaration of conformity) | As per EU EMC directive                                    |
| Corrosion resistance class (CRC)           | 2 - Moderate corrosion stress                              |
| Temperature of medium                      | 10 °C ... 50 °C                                            |
| Degree of protection                       | IP65                                                       |
| Ambient temperature                        | 0 °C ... 60 °C                                             |
| Certification                              | RCM compliance mark<br>c UL us - Listed (OL)               |
| Product weight                             | 390 g                                                      |
| Temperature coefficient                    | 0.04 %/K                                                   |
| Electrical connection                      | 5-pin<br>M12<br>Plug                                       |
| Type of mounting                           | With through-hole                                          |
| Pneumatic connection 1                     | G1/8                                                       |
| Pneumatic connection 2                     | G1/8                                                       |
| Pneumatic connection 3                     | G1/8                                                       |
| Note on materials                          | Free of copper and PTFE<br>RoHS-compliant                  |
| Housing material                           | Wrought aluminum alloy<br>Anodized                         |