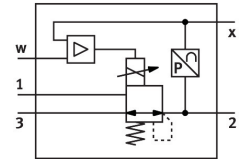


# Proportional-pressure regulator VPPL-3L-3-G14-0L40H-A4-A-S1-7

Part number: 1635983

**FESTO**



 General operating condition

## Data sheet

| Feature                                               | Value                                                                                               |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Nominal size, supply                                  | 3 mm                                                                                                |
| Nominal size, exhaust                                 | 3 mm                                                                                                |
| Type of actuation                                     | Electric                                                                                            |
| Sealing principle                                     | Soft                                                                                                |
| Mounting position                                     | optional<br>Preferably vertical                                                                     |
| Design                                                | Directly actuated piston regulator                                                                  |
| Short circuit current rating                          | no                                                                                                  |
| Max. cable length                                     | 30 m                                                                                                |
| Safety instructions                                   | Safety position VPPL: if the power supply cable is interrupted, the output pressure drops to 0 bar. |
| Symbol                                                | 00991479                                                                                            |
| Reverse polarity protection                           | For all electrical connections                                                                      |
| Type of reset                                         | Mechanical spring                                                                                   |
| Type of piloting                                      | Direct                                                                                              |
| Valve function                                        | 3-way proportional-pressure regulator, closed                                                       |
| Display type                                          | LED indicator                                                                                       |
| Operating pressure                                    | ≤5 MPa                                                                                              |
| Operating pressure                                    | ≤50 bar                                                                                             |
| Pressure regulation range                             | 0.04 MPa ... 4 MPa                                                                                  |
| Pressure regulation range                             | 0.4 bar ... 40 bar                                                                                  |
| Inlet pressure 1                                      | 0 bar ... 50 bar                                                                                    |
| Inlet pressure 1                                      | 0 MPa ... 5 MPa                                                                                     |
| Max. pressure hysteresis                              | 0.04 MPa                                                                                            |
| Max. pressure hysteresis                              | 0.4 bar                                                                                             |
| Max. pressure hysteresis                              | 5.8 psi                                                                                             |
| b value                                               | 0.25                                                                                                |
| C value                                               | 0.8 l/sbar                                                                                          |
| Standard nominal flow rate (standardised to DIN 1343) | 245 l/min                                                                                           |
| Standard nominal flow rate 2-3                        | 282 l/min                                                                                           |
| Switching time off                                    | 654 ms                                                                                              |
| Switching time on                                     | 428 ms                                                                                              |
| Operational voltage range DC                          | 21.6 V ... 27.6 V                                                                                   |
| Duty cycle                                            | 100%                                                                                                |
| Max. electrical power consumption                     | 26.7 W                                                                                              |

| Feature                                      | Value                                                    |
|----------------------------------------------|----------------------------------------------------------|
| Residual ripple                              | 10 %                                                     |
| Signal range analogue output                 | 4 - 20 mA                                                |
| Signal range analogue input                  | 4 - 20 mA                                                |
| SETPOINT/ACTUAL values                       | Current type 4-20 mA                                     |
| 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                        |
| Approval                                     | c UL us listed (OL)                                      |
| KC mark                                      | KC-EMV                                                   |
| CE mark (see declaration of conformity)      | To EU EMC Directive                                      |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC                               |
| Corrosion resistance class CRC               | 2 - Moderate corrosion stress                            |
| LABS (PWIS) conformity                       | VDMA24364 zone III                                       |
| Media temperature                            | 5 °C ... 50 °C                                           |
| Degree of protection                         | IP65                                                     |
| Ambient temperature                          | 5 °C ... 50 °C                                           |
| Storage temperature                          | -10 °C ... 60 °C                                         |
| Product weight                               | 1100 g                                                   |
| Linearity error in ± %FS                     | 1 %FS                                                    |
| Total accuracy                               | 1.5%FS                                                   |
| Temperature coefficient                      | 0.04 %/K                                                 |
| Repetition accuracy in ± %FS                 | 1 %FS                                                    |
| Electrical connection diagnostics interface  | Socket, M12, 5-pin, A-coded                              |
| Electrical connection, IN                    | Plug connector, M12, 5-pin, A-coded                      |
| Electrical connection, OUT                   | Plug connector, M12, 5-pin, A-coded                      |
| Type of mounting                             | With through-hole                                        |
| Pneumatic connection, port 1                 | G1/4                                                     |
| Pneumatic connection, port 2                 | G1/4                                                     |
| Pneumatic connection, port 3                 | G1/4                                                     |
| Note on materials                            | RoHS-compliant                                           |
| Material housing                             | Anodised wrought aluminium alloy                         |