

# Vacuum generator VN-05-L-T4-PQ2-VQ2-O1-P

Part number: 536798

FESTO



General operating condition

## Data sheet

| Feature                                       | Value   |
|---|---|
| Nominal size, Laval nozzle                    | 0.45 mm   |
| Grid dimension                                | 16 mm   |
| Silencer design                               | Open  |
| Mounting position                             | Any   |
| Ejector characteristic                        | High suction rate<br>Standard                                       |
| Integrated function                           | Pressure sensor<br>Open silencer                                    |
| Design  | T-shape   |
| Short circuit current rating                  | Pulsed  |
| Measured variable                             | Relative pressure   |
| Measuring principle                           | Piezoresistive  |
| Measurement method                            | relatively  |
| Switching element function                    | N/O contact   |
| Switching function                            | Threshold value comparator<br>Threshold value with fixed hysteresis |
| Symbol  | 00991917  |
| Reverse polarity protection                   | For all electrical connections                                      |
| Display type                                  | LED   |
| Setting range threshold value                 | -0.1 MPa ... 0 MPa  |
| Setting options                               | Teach-in  |
| Switching status indication                   | LED   |
| Setting range threshold value                 | -1 bar ... 0 bar  |
| Setting range threshold value                 | -14.5 psi ... 0 psi   |
| Operating pressure for max. suction flow rate | 0.5 MPa   |
| Operating pressure for max. suction flow rate | 5 bar   |
| Operating pressure for max. suction flow rate | 72.5 psi  |
| Operating pressure                            | 0.1 MPa ... 0.8 MPa   |
| Operating pressure                            | 1 bar ... 8 bar   |
| Operating pressure                            | 14.5 psi ... 116 psi  |
| Nominal operating pressure                    | 0.6 MPa   |
| Nominal operating pressure                    | 6 bar   |
| Nominal operating pressure                    | 87 psi  |
| Max. suction flow rate against atmosphere     | 13.6 l/min  |
| Switch-off time                               | ≤4 ms   |
| Switch-on time                                | ≤4 ms   |

| Feature  | Value                                     |
|--|---|
| Operational voltage range DC                       | 15 V ... 30 V                             |
| Inductive protective circuit                       | Adapted to MZ, MY, ME coils               |
| Max. output current                                | 100 mA                                    |
| Off-state current                                  | ≤0.3 mA                                   |
| Residual ripple                                    | 10%                                       |
| Switching output                                   | PNP                                       |
| Voltage drop                                       | ≤1.5 V                                    |
| Overload protection                                | Available                                 |
| Approval   | RCM                                       |
| 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                |
| Operating medium                                   | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Note on operating and pilot medium                 | Lubricated operation not possible         |
| Corrosion resistance class CRC                     | 1 - Low corrosion stress                  |
| LABS (PWIS) conformity                             | VDMA24364-B1/B2-L                         |
| Media temperature                                  | 0 °C ... 60 °C                            |
| Recommended cleaning/purification                  | Soapy water                               |
| Sound pressure level at nominal operating pressure | 54 dB(A)                                  |
| Degree of protection                               | IP40                                      |
| Ambient temperature                                | 0 °C ... 50 °C                            |
| Max. tightening torque                             | 0.6 Nm                                    |
| Pressure measuring range                           | -0.1 MPa ... 0 MPa                        |
| Pressure measuring range                           | -1 bar ... 0 bar                          |
| Pressure measuring range                           | -14.5 psi ... 0 psi                       |
| Product weight                                     | 33 g                                      |
| Accuracy in ± % FS                                 | 1.5 %FS                                   |
| Hysteresis in ± %FS                                | 2 %FS                                     |
| Long-term drift                                    | ±0.5 % FS max.                            |
| Temperature coefficient of switching point         | 0.05 %/K                                  |
| Electrical connection                              | M8  |
| Type of mounting                                   | With through-hole                         |
| Pneumatic connection, port 1                       | QS-6                                      |
| Pneumatic connection, port 3                       | Open silencer                             |
| Vacuum connection                                  | QS-6                                      |
| Material seals                                     | NBR                                       |
| Material receiver nozzle                           | POM                                       |
| Material housing                                   | Reinforced POM                            |
| Material fibre-optic                               | Makrolon®                                 |
| Material silencer                                  | Packaging unit                            |
| Material connector housing                         | Chrome-plated and nickel-plated           |
| Material transmitter nozzle                        | Wrought aluminium alloy                   |
| Material keypad                                    | POM                                       |
| Material fitting                                   | Brass<br>nickel-plated                    |