

# Vacuum generator OVEM

Part number: 539074

**FESTO**



## Data sheet

| Feature                                      | Value                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal width of Laval nozzle                | 0.45 mm...3 mm                                                                                                                                                         |
| Width dimension                              | 20 mm...36 mm                                                                                                                                                          |
| Mounting position                            | Any                                                                                                                                                                    |
| Ejector characteristics                      | High suction flow<br>High vacuum<br>Standard                                                                                                                           |
| Grade of filtration                          | 40 µm                                                                                                                                                                  |
| Manual override                              | Non-detenting<br>Also via control keys                                                                                                                                 |
| Integrated function                          | Ejector pulse valve, electric<br>Flow control valve<br>Electric on-off valve<br>Filter<br>Electric air-saving function<br>Check valve<br>Muffler open<br>Vacuum switch |
| Structural design                            | Modular                                                                                                                                                                |
| Short-circuit protection                     | Yes                                                                                                                                                                    |
| Valve function                               | Closed<br>Open                                                                                                                                                         |
| Reverse polarity protection                  | for all electrical connections                                                                                                                                         |
| Display type                                 | 4-digit, alphanumeric<br>Backlit LCD<br>LED                                                                                                                            |
| Switching position indication                | LCD<br>LED                                                                                                                                                             |
| Operating pressure                           | 2 bar...8 bar                                                                                                                                                          |
| Operating pressure for max. vacuum           | 3.5 bar...5.3 bar                                                                                                                                                      |
| Max. vacuum                                  | 93 %                                                                                                                                                                   |
| Max. suction rate with respect to atmosphere | 6 l/min...348 l/min                                                                                                                                                    |
| DC operating voltage range                   | 20.4 V...27.6 V                                                                                                                                                        |
| Duty cycle                                   | 100%                                                                                                                                                                   |
| Coil characteristics                         | 24 V DC: low-current phase 0.3 W, high-current phase 2.55 W                                                                                                            |
| Overload protection                          | Available                                                                                                                                                              |

| Feature                                    | Value                                                                                                      |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Certification                              | RCM compliance mark<br>c UL us - Listed (OL)                                                               |
| CE marking (see declaration of conformity) | As per EU EMC directive                                                                                    |
| Operating medium                           | Compressed air as per ISO 8573-1:2010 [7:4:4]                                                              |
| Corrosion resistance class (CRC)           | 2 - Moderate corrosion stress                                                                              |
| LABS (PWIS) conformity                     | VDMA24364-B2-L<br>VDMA24364 Zone III                                                                       |
| Temperature of medium                      | 0 °C...50 °C                                                                                               |
| Relative air humidity                      | 5 - 85%                                                                                                    |
| Noise level at nominal operating pressure  | 45 dB(A)...77 dB(A)                                                                                        |
| Degree of protection                       | IP65                                                                                                       |
| Ambient temperature                        | 0 °C...50 °C                                                                                               |
| Product weight                             | 285 g...885 g                                                                                              |
| Pressure measuring range                   | -1 bar...0 bar                                                                                             |
| IO-Link®, profile                          | Smart sensor profile                                                                                       |
| IO-Link®, function classes                 | Binary data channel (BDC)<br>Process data variable (PDV)<br>Identification<br>Diagnostics<br>Teach channel |
| IO-Link®, process data content OUT         | 1 bit (ejector pulse ON/OFF)<br>1 bit (vacuum ON/OFF)                                                      |
| IO-Link®, process data content IN          | 14 bit PDV (pressure measurement)<br>2 bit BDC (pressure monitoring)                                       |
| IO-Link®, data memory required             | 0.5 KB                                                                                                     |
| Electrical connection                      | 5-pin<br>M12x1<br>Plug                                                                                     |
| Type of mounting                           | With through-hole<br>With internal thread<br>With accessories                                              |
| Pneumatic connection 1                     | G1/8<br>G1/4<br>1/8 NPT<br>1/4 NPT<br>QS-6<br>QS-8<br>QS-1/4<br>QS-5/16                                    |
| Pneumatic connection 3                     | G1/8<br>G3/8<br>1/8 NPT<br>1/4 NPT<br>QS-8<br>QS-12<br>QS-16<br>QS-5/16<br>Muffler<br>Integrated muffler   |
| Vacuum connection                          | G1/8<br>G1/4<br>1/8 NPT<br>1/4 NPT<br>1/2 NPT<br>QS-6<br>QS-8<br>QS-12<br>QS-16<br>QS-1/4<br>QS-5/16       |
| Note on materials                          | RoHS compliant                                                                                             |
| Female nozzle material                     | POM                                                                                                        |
| Muffler material                           | Wrought aluminum alloy<br>POM                                                                              |

| Feature | Value   |
|---------|---------|
|         | PU foam |