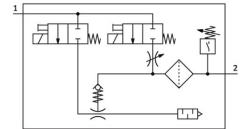



# Vacuum generator OVEM-14-H-B-QO-CE-N-1P

Part number: 540024

**FESTO**



 General operating condition

## Data sheet

| Feature                                       | Value  |
|---|--|
| Nominal size, Laval nozzle                    | 1.4 mm   |
| Grid dimension                                | 20 mm  |
| Silencer design                               | Open   |
| Mounting position                             | optional   |
| Ejector characteristic                        | High vacuum<br>Standard  |
| Grade of filtration                           | 40 µm  |
| Manual override                               | Non-detenting  |
| Integrated function                           | Electric ejector pulse valve<br>Flow control<br>Electric on-off valve<br>Filter<br>Check valve<br>Open silencer<br>Vacuum switch |
| Design  | Modular  |
| Short circuit current rating                  | yes  |
| Measured variable                             | Relative pressure  |
| Measuring principle                           | Piezoresistive   |
| Switching element function                    | N/O contact  |
| Switching function                            | Threshold value comparator<br>Threshold value with fixed hysteresis  |
| Symbol  | 00992094   |
| Valve function                                | Closed   |
| Reverse polarity protection                   | For all electrical connections   |
| Standard switching input                      | IEC 61131-2  |
| Display type                                  | LED  |
| Setting options                               | Teach-in   |
| Switching position indicator                  | LED  |
| Switching status indication                   | Optical  |
| Setting range threshold value                 | -1 bar ... 0 bar   |
| Operating pressure                            | 2 bar ... 8 bar  |
| Operating pressure for max. vacuum            | 3.6 bar  |
| Max. vacuum                                   | 93 %   |
| Nominal operating pressure                    | 6 bar  |
| Max. suction flow rate against atmosphere     | 50.5 l/min   |
| Air supply time at nominal operating pressure | 0.2 s  |
| Operational voltage range DC                  | 20.4 V ... 27.6 V  |

| Feature  | Value   |
|--|---|
| Duty cycle   | 100%  |
| Inductive protective circuit                       | Adapted to MZ, MY, ME coils                                 |
| Insulation voltage                                 | 50 V  |
| No-load supply current                             | <80 mA  |
| Max. output current                                | 100 mA  |
| Off-state current                                  | 0.1 mA  |
| Switching output                                   | PNP   |
| Voltage drop                                       | ≤1.5 V  |
| Characteristic coil data                           | 24 V DC: low-current phase 0.3 W, high-current phase 2.55 W |
| Immunity to surge                                  | 0.8 kV  |
| Overload protection                                | Available   |
| Pollution degree                                   | 3   |
| Approval   | RCM trademark<br>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                                  |
| 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                     | 2 - Moderate corrosion stress                               |
| LABS (PWIS) conformity                             | VDMA24364 zone III  |
| Media temperature                                  | 0 °C ... 50 °C  |
| Relative air humidity                              | 5 - 85 %  |
| Sound pressure level at nominal operating pressure | 77 dB(A)  |
| Degree of protection                               | IP65  |
| Protection class                                   | III   |
| Ambient temperature                                | 0 °C ... 50 °C  |
| Max. tightening torque                             | 0.8 Nm with female thread<br>2.5 Nm with through-hole       |
| Product weight                                     | 371 g   |
| Pressure measuring range                           | -1 bar ... 0 bar  |
| Accuracy in ± % FS                                 | 0.5 %FS   |
| Hysteresis   | 0.02 bar  |
| Reproducibility of switching values FS             | 0.6 %   |
| Switching logic for inputs                         | PNP (positive switching)                                    |
| Electrical connection                              | 5-pin<br>M12x1<br>Plugs                                     |
| Type of mounting                                   | With through-hole<br>Via female thread<br>With accessories  |
| Pneumatic connection, port 1                       | QS-8  |
| Pneumatic connection, port 3                       | Integrated silencer   |
| Vacuum connection                                  | QS-8  |
| Note on materials                                  | RoHS-compliant  |
| Material seals                                     | NBR   |
| Material receiver nozzle                           | POM   |
| Material filter                                    | Fabric<br>PA<br>Sintered steel                              |
| Material filter housing                            | PA-reinforced   |
| Material housing                                   | Die-cast aluminium<br>PA-reinforced                         |
| Material adjusting screw                           | Steel   |
| Material silencer                                  | Wrought aluminium alloy<br>PU foam                          |

| Feature                     | Value                   |
|-----------------------------|-------------------------|
| Material screws             | Steel                   |
| Material connector housing  | Nickel-plated brass     |
| Material electrical contact | Gold-plated brass       |
| Material pins               | Steel                   |
| Material transmitter nozzle | Wrought aluminium alloy |
| Material keypad             | PA-reinforced           |
| Material fitting            | Nickel-plated brass     |