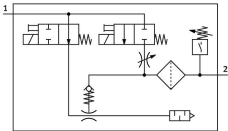


# Vacuum generator

## OVEM-07-H-B-QO-OE-N-2N

Part number: 540009

FESTO



## Data sheet

| Feature                      | Value   |
|------------------------------|---|
| Nominal size, Laval nozzle   | 0.7 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<br>Additionally via operating buttons   |
| Integrated function          | Electric ejector pulse valve<br>Flow control<br>Electric on-off valve<br>Filter<br>Air saving function, electrical<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/C contact<br>N/O contact  |
| Switching function           | Window comparator<br>Threshold value comparator   |
| Valve function               | Open  |
| Reverse polarity protection  | For all electrical connections  |
| Standard switching input     | IEC 61131-2   |
| Display type                 | 4-place alphanumeric<br>Back-lit LCD  |
| Indicating range             | -0.999 bar...0 bar  |
| Displayable units            | bar   |
| Setting range hysteresis     | -0.9 bar...0 bar  |
| Setting options              | Via display and keys  |
| Switching position indicator | LCD   |

| Feature  | Value   |
|--|---|
| Switching status indication                        | Optical   |
| Setting range threshold value                      | -0.999 bar...0 bar  |
| Operating pressure                                 | 2 bar...8 bar   |
| Operating pressure for max. vacuum                 | 4.1 bar   |
| Max. vacuum  | 93 %  |
| Nominal operating pressure                         | 6 bar   |
| Max. suction flow rate against atmosphere          | 16 l/min  |
| Air supply time at nominal operating pressure      | 0.4 s   |
| Operational voltage range DC                       | 20.4 V...27.6 V   |
| Duty cycle   | 100%  |
| Inductive protective circuit                       | Adapted to MZ, MY, ME coils                                 |
| Max. output current                                | 100 mA  |
| Off-state current                                  | 0.1 mA  |
| Switching output                                   | 2xNPN   |
| Voltage drop                                       | 1.5 V   |
| Characteristic coil data                           | 24 V DC: low-current phase 0.3 W, high-current phase 2.55 W |
| Overload protection                                | Available   |
| 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 | 58 dB(A)  |
| Degree of protection                               | IP65  |
| Ambient temperature                                | 0 °C...50 °C  |
| Max. tightening torque                             | 0.8 Nm with female thread<br>2.5 Nm with through-hole       |
| Product weight                                     | 330 g   |
| Pressure measuring range                           | -1 bar...0 bar  |
| Accuracy in ± % FS                                 | 3 %FS   |
| Switching logic for inputs                         | NPN (negative 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                         |

| Feature                     | Value                              |
|-----------------------------|------------------------------------|
| Material adjusting screw    | Steel                              |
| Material silencer           | Wrought aluminium alloy<br>PU foam |
| Material screws             | Steel                              |
| Material screen             | PA                                 |
| Material connector housing  | Nickel-plated brass                |
| Material pins               | Steel                              |
| Material transmitter nozzle | Wrought aluminium alloy            |
| Material fitting            | Nickel-plated brass                |