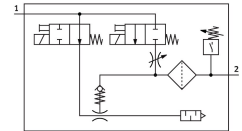


# Vacuum generator OVEM-10-H-B-Q0-OE-N-2P

Part number: 538827

**FESTO**



## Data sheet

| Feature                       | Value                                                                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal width of Laval nozzle | 0.95 mm                                                                                                                                                                |
| Width dimension               | 20 mm                                                                                                                                                                  |
| Muffler construction type     | Open                                                                                                                                                                   |
| Mounting position             | Any                                                                                                                                                                    |
| Ejector characteristics       | 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                                                                                                                                                                    |
| Measured variable             | Relative pressure                                                                                                                                                      |
| Measuring principle           | Piezoresistive                                                                                                                                                         |
| Switching element function    | NC contact<br>N.O. contact                                                                                                                                             |
| Switching function            | Window comparator<br>Threshold value comparator                                                                                                                        |
| Valve function                | Open                                                                                                                                                                   |
| Reverse polarity protection   | for all electrical connections                                                                                                                                         |
| Switching input to standard   | IEC 61131-2                                                                                                                                                            |
| Display type                  | 4-digit, alphanumeric<br>Backlit LCD                                                                                                                                   |
| Display range                 | -0.999 bar...0 bar                                                                                                                                                     |
| Displayable unit(s)           | bar                                                                                                                                                                    |
| Setting range hysteresis      | -0.9 bar...0 bar                                                                                                                                                       |
| Setting options               | Via display and keys                                                                                                                                                   |
| Switching position indication | 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            | 3.5 bar                                                       |
| Max. vacuum                                   | 93 %                                                          |
| Nominal operating pressure                    | 6 bar                                                         |
| Max. suction rate with respect to atmosphere  | 19.5 l/min                                                    |
| Air supply time at nominal operating pressure | 0.2 s                                                         |
| DC operating voltage range                    | 20.4 V...27.6 V                                               |
| Duty cycle                                    | 100%                                                          |
| Inductive protective circuit                  | Adapted to MZ, MY and ME coils                                |
| Max. output current                           | 100 mA                                                        |
| Residual current                              | 0.1 mA                                                        |
| Switching output                              | 2xPNP                                                         |
| Voltage drop                                  | 1.5 V                                                         |
| Coil characteristics                          | 24 V DC: low-current phase 0.3 W, high-current phase 2.55 W   |
| Overload protection                           | Available                                                     |
| Certification                                 | RCM compliance mark<br>c UL us - Listed (OL)                  |
| KC characters                                 | KC-EMV                                                        |
| CE marking (see declaration of conformity)    | As per EU EMC directive                                       |
| UKCA marking (see declaration of conformity)  | To UK instructions for EMC                                    |
| Operating medium                              | Compressed air as per ISO 8573-1:2010 [7:4:4]                 |
| Information on operating and pilot media      | Operation with oil lubrication not possible                   |
| Corrosion resistance class (CRC)              | 2 - Moderate corrosion stress                                 |
| LABS (PWIS) conformity                        | VDMA24364 Zone III                                            |
| Temperature of medium                         | 0 °C...50 °C                                                  |
| Relative air humidity                         | 5 - 85%                                                       |
| Noise level at nominal operating pressure     | 73 dB(A)                                                      |
| Degree of protection                          | IP65                                                          |
| Ambient temperature                           | 0 °C...50 °C                                                  |
| Max. tightening torque                        | 0.8 Nm with internal thread<br>2.5 Nm with through-hole       |
| Product weight                                | 330 g                                                         |
| Pressure measuring range                      | -1 bar...0 bar                                                |
| Accuracy in ± % FS                            | 3 %FS                                                         |
| Input switching logic                         | PNP (positive switching)                                      |
| Electrical connection                         | 5-pin<br>M12x1<br>Plug                                        |
| Type of mounting                              | With through-hole<br>With internal thread<br>With accessories |
| Pneumatic connection 1                        | QS-8                                                          |
| Pneumatic connection 3                        | Integrated muffler                                            |
| Vacuum connection                             | QS-8                                                          |
| Note on materials                             | RoHS compliant                                                |
| Seals material                                | NBR                                                           |
| Female nozzle material                        | POM                                                           |
| Compressed air filter material                | Fabric<br>PA<br>Sintered steel                                |
| Material of filter housing                    | PA-reinforced                                                 |
| Housing material                              | Die-cast aluminum<br>PA-reinforced                            |

| Feature                       | Value                             |
|-------------------------------|-----------------------------------|
| Material of adjusting screw   | Steel                             |
| Muffler material              | Wrought aluminum alloy<br>PU foam |
| Material of screws            | Steel                             |
| Inspection window material    | PA                                |
| Material of plug housing      | Brass, nickel-plated              |
| Material of pins              | Steel                             |
| Material of jet nozzle        | Wrought aluminum alloy            |
| Material of pneumatic fitting | Brass, nickel-plated              |