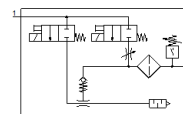


# vacuum generator OVEM-20-H-B-QO-CE-N-1P

Part number: 8023699

FESTO

Supply/vacuum port with QS fittings, exhaust port with open silencer.



## Data sheet

| Feature                                       | Value  |
|---|--|
| Nominal size, Laval nozzle                    | 2 mm   |
| Grid dimension                                | 20 mm  |
| Design, silencer                              | open   |
| Assembly position                             | Any  |
| Ejector characteristic                        | High vacuum<br>Standard  |
| Grade of filtration                           | 40 µm  |
| Manual override                               | Pushing  |
| Integrated function                           | Ejector pulse valve, electrical<br>Flow control valve<br>Electrical on-off valve<br>Filter<br>Non-return valve<br>Open silencer<br>Vacuum switch |
| Design structure                              | modular  |
| Short circuit strength                        | Yes  |
| Measured variable                             | Relative pressure  |
| Measuring principle                           | Piezoresistive   |
| Switching element function                    | Normally open contact  |
| Switching function                            | Threshold value comparator<br>Threshold value with fixed hysteresis  |
| Valve function                                | closed   |
| Polarity protected                            | for all electrical connections   |
| Standard switching input                      | IEC 61131-2  |
| Type of display                               | LED  |
| Setting options                               | Teach-In   |
| Switching position indicator                  | LED  |
| Operating status display                      | Optical  |
| Threshold setting range                       | -1 ... 0 bar   |
| Operating pressure                            | 2 ... 8 bar  |
| Operating pressure for max. vacuum            | 5.3 bar  |
| Max. vacuum                                   | 93 %   |
| Nominal operating pressure                    | 6 bar  |
| Max. suction rate with respect to atmosphere  | 86.5 l/min   |
| Air supply time at nominal operating pressure | 0.2 s  |
| Operating voltage range DC                    | 20.4 ... 27.6 V  |
| Duty cycle                                    | 100 %  |
| Inductive protective circuit                  | Adapted to MZ-, MY-, ME coils  |
| Insulation voltage                            | 50 V   |
| Idle current                                  | < 80 mA  |
| Max. output current                           | 100 mA   |
| Residual current                              | 0.1 mA   |
| Switch output                                 | PNP  |

| Feature                                   | Value  |
|---|--|
| Voltage drop                              | ≤ 1.5 V  |
| Characteristic coil data                  | 24 V DC: low-current phase 0.3 W, high-current phase 2.55 W            |
| Surge strength                            | 0.8 kV   |
| Overload withstand capability             | Available  |
| Degree of contamination                   | 3  |
| Authorisation                             | RCM Mark<br>c UL us - Listed (OL)                                      |
| KC mark                                   | KC-EMV   |
| CE mark (see declaration of conformity)   | to EU directive for EMC  |
| Operating medium                          | Compressed air in accordance with ISO8573-1:2010 [7:4:4]               |
| Note on operating and pilot medium        | Lubricated operation not possible                                      |
| Corrosion resistance classification CRC   | 2 - Moderate corrosion stress  |
| Medium temperature                        | 0 ... 50 °C  |
| Relative air humidity                     | 5 - 85 %   |
| Noise level at nominal operating pressure | 74 dB(A)   |
| Protection class                          | IP65   |
| Safety class                              | III  |
| Ambient temperature                       | 0 ... 50 °C  |
| Max. tightening torque                    | 0.8 Nm with female thread<br>2.5 Nm with clearance hole                |
| Product weight                            | 390 g  |
| Pressure measuring range                  | -1 ... 0 bar   |
| Accuracy, FS                              | 0.5 %FS  |
| Hysteresis                                | 0.02 bar   |
| Switching point reproducibility, FS       | 0.6 %  |
| Input circuit logic                       | PNP (positive-switching)   |
| Electrical connection                     | 5-pin<br>M12x1<br>Plug   |
| Mounting type                             | with through hole<br>with internal (female) thread<br>with accessories |
| Pneumatic connection, port 1              | QS-8   |
| Pneumatic connection, port 3              | Integrated silencer  |
| Vacuum connection                         | QS-8   |
| Materials note                            | Contains PWIS substances<br>Conforms to RoHS                           |
| Material seals                            | NBR  |
| Material receiver nozzle                  | POM  |
| Material filter                           | Mesh<br>PA<br>Sintered steel   |
| Material filter housing                   | PA-reinforced  |
| Material housing                          | Aluminium die cast<br>PA-reinforced                                    |
| Material hollow bolt                      | Wrought Aluminium alloy  |
| Material adjusting screw                  | Steel  |
| Material silencer                         | Wrought Aluminium alloy<br>PU foam                                     |
| Material screws                           | Steel  |
| Material connector housing                | Nickel-plated brass  |
| Material electrical contact               | Brass, gold-plated   |
| Material pins                             | Steel  |
| Material transmitter nozzle               | Wrought Aluminium alloy  |
| Material keypad                           | PA-reinforced  |
| Material fitting                          | Nickel-plated brass  |
| Material bracket                          | Stainless steel  |