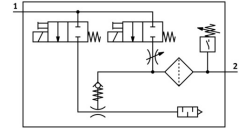



# Vacuum generator OVEM-05-H-B-QO-CE-N-1PD

Part number: 8037697

FESTO



## Data sheet

 General operating condition

| Feature                            | Value  |
|------------------------------------|--|
| Nominal width of Laval nozzle      | 0.45 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  |
| Integrated function                | Ejector pulse valve, electric<br>Flow control<br>Shut off valve, electric<br>Compressed air filter<br>Air saving function, electrical<br>Non-return valve<br>Pneumatic muffler open<br>Vacuum switch |
| Structural design                  | Modular  |
| Short-circuit protection           | 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  |
| Symbol                             | 00992094   |
| Valve function                     | Closed   |
| Reverse polarity protection        | for all electrical connections   |
| Switching input to standard        | IEC 61131-2  |
| Display type                       | 4-character alphanumeric<br>Back-lit 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 pushbuttons  |
| Switching position indication      | LCD  |
| Switching status indication        | Optical  |
| Setting range threshold value      | -0.999 bar ... 0 bar   |
| Operating pressure                 | 2 bar ... 8 bar  |
| Operating pressure for max. vacuum | 5.1 bar  |

| Feature                                       | Value   |
|---|---|
| Max. vacuum                                   | 93 %  |
| Nominal operating pressure                    | 6 bar   |
| Max. suction rate with respect to atmosphere  | 6 l/min   |
| Air supply time at nominal operating pressure | 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                                |
| Insulation voltage                            | 50 V  |
| Idle current                                  | <70 mA  |
| Max. output current                           | 100 mA  |
| Residual current                              | 0.1 mA  |
| Switching output                              | PNP   |
| Voltage drop                                  | ≤2 V  |
| Coil characteristics                          | 24 V DC: low-current phase 0.3 W, high-current phase 2.55 W   |
| Surge resistance                              | 0.8 kV  |
| Overload protection                           | Available   |
| Contamination level                           | 3   |
| Certification                                 | RCM compliance mark<br>c UL us - Listed (OL)                  |
| KC characters                                 | KC EMC  |
| 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     | 51 dB(A)  |
| Degree of protection                          | IP65  |
| Protection class                              | III   |
| Ambient temperature                           | 0 °C ... 50 °C  |
| Max. tightening torque                        | 0.8 Nm with internal thread<br>2.5 Nm with through-hole       |
| Product weight                                | 325 g   |
| Pressure measuring range                      | -1 bar ... 0 bar  |
| Accuracy in ± % FS                            | 3 %FS   |
| Reproducibility, switching value FS           | 0.6 %   |
| Input switching logic                         | PNP (positive switching)                                      |
| Electrical connection                         | 5-pin<br>M12x1<br>Plug  |
| Protection against tampering                  | PIN code  |
| Type of mounting                              | With through-hole<br>With internal thread<br>With accessories |
| Pneumatic connection 1                        | QS-6  |
| Pneumatic connection 3                        | Pneumatic muffler integrated                                  |
| Vacuum connection                             | QS-6  |
| Note on materials                             | RoHS-compliant  |
| Seals material                                | NBR   |
| Female nozzle material                        | POM   |
| Compressed air filter material                | Fabric<br>PA<br>Sintered steel                                |

| <b>Feature</b>                | <b>Value</b>                       |
|-------------------------------|------------------------------------|
| Material of filter housing    | PA-reinforced                      |
| Housing material              | Die-cast aluminum<br>PA-reinforced |
| 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 pin contacts      | Brass, gold-plated                 |
| Material of pins              | Steel                              |
| Material of jet nozzle        | Wrought aluminum alloy             |
| Material of keypad            | TPE-U                              |
| Material of pneumatic fitting | Brass, nickel-plated               |