

Vacuum generator OVEM-20-H-B-PO-CE-N-2P

Part number: 8023702

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|-------------------------------|--|
| Nominal width of Laval nozzle | 2 mm |
| Width dimension | 20 mm |
| Muffler construction type | Open |
| Mounting position | Any |
| Ejector characteristics | High vacuum Standard |
| Grade of filtration | 40 µm |
| Manual override | Non-detenting Also via control keys |
| Integrated function | Ejector pulse valve, electric Flow control valve Electric on-off valve Filter Electric air-saving function Check valve Muffler open Vacuum switch |
| Structural design | Modular |
| Short-circuit protection | Yes |
| Measured variable | Relative pressure |
| Measuring principle | Piezoresistive |
| Switching element function | NC contact N.O. contact |
| Switching function | Window comparator 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-digit, alphanumeric 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 |
| Switching status indication | Optical |
| Setting range threshold value | -0.999 bar ... 0 bar |
| Operating pressure | 2 bar ... 8 bar |

| Feature | Value |
|---|---|
| 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 |
| 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 | 2xPNP |
| Voltage drop | ≤1.5 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 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 | 74 dB(A) |
| Degree of protection | IP65 |
| Protection class | III |
| Ambient temperature | 0 °C ... 50 °C |
| Max. tightening torque | 0.8 Nm with internal thread 2.5 Nm with through-hole |
| Product weight | 410 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 | M12x1 Plug |
| Type of mounting | With through-hole With internal thread With accessories |
| Pneumatic connection 1 | G1/4 |
| 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 PA Sintered steel |
| Material of filter housing | PA-reinforced |

| Feature | Value |
|-------------------------------|------------------------------------|
| Housing material | Die-cast aluminum PA-reinforced |
| Hollow bolt material | Wrought aluminum alloy |
| Material of adjusting screw | Steel |
| Muffler material | Wrought aluminum alloy PU foam |
| Material of screws | Steel |
| Inspection window material | PA |
| Material of plug housing | Brass, nickel-plated |
| Material of pin contacts | Gold-plated brass |
| Material of pins | Steel |
| Material of jet nozzle | Wrought aluminum alloy |
| Material of keypad | TPE-U |
| Material of pneumatic fitting | Brass, nickel-plated |
| Bracket material | High-grade steel |