## Vacuum generator

OVEM-07-H-B-QO-CE-N-LK
Part number: 8037694
Supply/vacuum port with QS fittings, exhaust port with open silencer.


Data sheet

| Feature | Value |
| :---: | :---: |
| Nominal size, Laval nozzle | 0.7 mm |
| Grid dimension | 20 mm |
| Design, silencer | open |
| Assembly position | Any |
| Ejector characteristic | High vacuum Standard |
| Grade of filtration | $40 \mu \mathrm{~m}$ |
| Manual override | Pushing <br> Additionally via operating buttons |
| Integrated function | Ejector pulse valve, electrical <br> Flow control valve <br> Electrical on-off valve <br> Filter <br> Air saving function, electrical <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 closed contact Normally open contact |
| Switching function | Window comparator Threshold value comparator |
| Valve function | closed |
| Polarity protected | for all electrical connections |
| Standard switching input | IEC 61131-2 |
| Type of display | 4-place alphanumeric Backlit LCD |
| Indicating range [bar] | -0.999 ... 0 bar |
| Unit(s) that can be displayed | bar |
| Hysteresis adjustment range [bar] | -0.9 ... 0 bar |
| Setting options | IO-Link <br> Via display and buttons |
| Switching position indicator | LCD |
| Operating status display | Optical |
| Threshold setting range | -0.999 ... 0 bar |
| Working pressure | 2 ... 8 bar |
| Working pressure for max. vacuum | 4.1 bar |
| Max. vacuum | 93 \% |
| Nominal working pressure | 6 bar |
| Max. suction rate with respect to atmosphere | 16 //min |
| Air supply time at nominal working pressure | 0.4 S |


| Feature | Value |
| :---: | :---: |
| Operating voltage range DC | 20.4 ... 27.6 V |
| Duty cycle | 100 \% |
| Insulation voltage | 50 V |
| Max. output current | 100 mA |
| Residual current | 0.1 mA |
| Switch output | 2xPNP |
| Voltage drop | < $=1.8 \mathrm{~V}$ |
| 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 |
| Authorization | RCM Mark <br> c UL us - Listed (OL) |
| KC mark | KC-EMV |
| CE symbol (see declaration of conformity) | according to EU-EMV guideline |
| UKCA marking (see declaration of conformity) | To UK instructions 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 |
| PWIS conformity | VDMA24364 zone III |
| Medium temperature | $0 \ldots 50^{\circ} \mathrm{C}$ |
| Relative air humidity | 5-85\% |
| Noise level at nominal operating pressure | $58 \mathrm{~dB}(\mathrm{~A})$ |
| Protection class | IP65 |
| Safety class | III |
| Ambient temperature | $0 \ldots 50^{\circ} \mathrm{C}$ |
| Max. tightening torque | 0.8 Nm with female thread <br> 2.5 Nm with clearance hole |
| Product weight | 330 g |
| Pressure measuring range | -1 ... 0 bar |
| Accuracy, FS | 3 \%FS |
| Switching point reproducibility, FS | 0.6 \% |
| Protocol | IO-Link |
| IO-Link, protocol | Device V 1.1 |
| IO-Link, profile | Smart sensor profile |
| IO-Link, function classes | Binary Data Channels (BDC) <br> Process Data Variable (PDV) <br> Identification <br> diagnosis <br> Teach channel |
| IO-Link, communication mode | COM2 (38,4 kBaud) |
| IO-Link, port type | A |
| IO-Link, process data width OUT | 1 Byte |
| IO-Link, process data content OUT | 1 bit (ejector pulse IN/OUT) <br> 1 bit (vacuum ON/OFF) |
| IO-Link, process data width IN | 2 Byte |
| IO-Link, process data content IN | 14 bit PDV (pressure reading) 2 bit BDC (pressure monitoring) |
| IO-Link, minimum cycle time | 3,5 ms |
| IO-Link, data memory required | 0.5 Kilobyte |
| IO-Link, device ID | 0x00003E |
| Electrical connection | 5-pin <br> M12x1 <br> Plug |
| Protection against manipulation | Electronic locking |
| Mounting type | with through hole with internal (female) thread with accessories |
| Pneumatic connection, port 1 | QS-8 |
| Pneumatic connection, port 3 | QS-8 |
| Vacuum connection | QS-8 |


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| :--- | :--- |
| Materials note | Conforms to RoHS |
| Material seals | NBR |
| Material receiver nozzle | POM |
| Material filter | Mesh <br> PA <br> Sintered steel |
| Material housing | Aluminum die cast <br> PA-reinforced |
| Material adjusting screw | Steel |
| Material silencer | Wrought Aluminum alloy <br> PU foam |
| Material screws | Steel |
| Material screen | PA |
| Material connector housing | Nickel-plated brass |
| Material electrical contact | Brass, gold-plated |
| Material pins | Steel |
| Material transmitter nozzle | Wrought Aluminum alloy |
| Material keypad | TPE-U |
| Material fitting | Nickel-plated brass |

