Vacuum generator OVEM-14-H-B-QO-CE-N-1P Part number: 540024



Data sheet

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General operating condition

Feature	Value	
Nominal width of Laval nozzle	1.4 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	
Integrated function	Ejector pulse valve, electric Flow control Shut off valve, electric Compressed air filter Non-return valve Pneumatic muffler open Vacuum switch	
Structural design	Modular	
Short-circuit protection	yes	
Measured variable	Relative pressure	
Measuring principle	Piezoresistive	
Switching element function	N/O contact	
Switching function	Threshold value comparator Threshold value with fixed hysteresis	
Symbol	00992094	
Valve function	Closed	
Reverse polarity protection	for all electrical connections	
Switching input to standard	IEC 61131-2	
Display type	LED	
Setting options	Teach-in	
Switching position indication	LED	
Switching status indication	Optical	
Setting range threshold value	-1 bar 0 bar	
Operating pressure	2 bar 8 bar	
Operating pressure for max. vacuum	3.6 bar	
Max. vacuum	93 %	
Nominal operating pressure	6 bar	
Max. suction rate with respect to atmosphere	50.5 l/min	
Air supply time at nominal operating pressure	0.2 s	
DC operating voltage range	20.4 V 27.6 V	

Feature	Value
Duty cycle	100%
Inductive protective circuit	Adapted to MZ, MY and ME coils
Insulation voltage	50 V
Idle current	<80 mA
Max. output current	100 mA
Residual current	0.1 mA
Switching output	PNP
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	КС ЕМС
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	77 dB(A)
Degree of protection	IP65
Protection class	
Ambient temperature	0 °C 50 °C
Max. tightening torque	0.8 Nm with internal thread 2.5 Nm with through-hole
Product weight	371 g
Pressure measuring range	-1 bar 0 bar
Accuracy in ± % FS	0.5 %FS
Hysteresis	0.02 bar
Reproducibility, switching value FS	0.6 %
Input switching logic	PNP (positive switching)
Electrical connection	5-pin M12x1 Plug
Type of mounting	With through-hole With internal thread With accessories
Pneumatic connection 1	QS-8
Pneumatic connection 3	Pneumatic muffler integrated
Vacuum connection	QS-8
Note on materials	RoHS-compliant
Seals material	NBR
Female nozzle material	РОМ
Compressed air filter material	Fabric PA Sintered steel
Material of filter housing	PA-reinforced
Housing material	Die-cast aluminum PA-reinforced
Material of adjusting screw	Steel
Muffler material	Wrought aluminum alloy PU foam

Feature	Value
Material of screws	Steel
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	PA-reinforced
Material of pneumatic fitting	Brass, nickel-plated