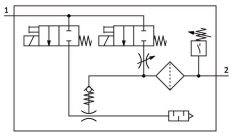
Vacuum generator
OVEM-05-H-B-QO-CE-N-1P

Part number: 540021





Data sheet

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 Standard
Grade of filtration	40 µm
Manual override	Non-detenting
Integrated function	Ejector pulse valve, electric Flow control valve Electric on-off valve Filter Check valve 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
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	5.1 bar
Max. vacuum	93 %
Nominal operating pressure	6 bar

Feature	Value
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	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
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	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 2.5 Nm with through-hole
Product weight	315 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-6
Pneumatic connection 3	Integrated muffler
Vacuum connection	QS-6
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
Housing material	Die-cast aluminum PA-reinforced

Feature	Value
Material of adjusting screw	Steel
Muffler material	Wrought aluminum alloy PU foam
Material of screws	Steel
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	PA-reinforced
Material of pneumatic fitting	Brass, nickel-plated