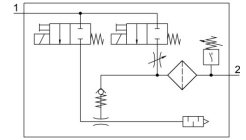


Vacuum generator OVEM-20-H-C-QO-CE-N-LK

Part number: 8070096

FESTO



Data sheet

Feature	Value
Nominal width of Laval nozzle	2 mm
Width dimension	36 mm
Type code	OVEM
Muffler construction type	Open
Mounting position	Any
Ejector characteristics	High vacuum Standard
Grade of filtration	40 µm
Manual override	Non-detenting Additionally via operating buttons
Integrated function	Ejector pulse valve, electric Flow control Shut off valve, electric Compressed air filter Air saving function, electrical 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/C 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-character alphanumeric Back-lit LCD
Display range	-0.999 bar ... 0 bar
Displayable unit(s)	bar
Setting range hysteresis	-0.9 bar ... 0 bar
Setting options	IO-Link® Via display and pushbuttons
Switching position indication	LCD
Switching status indication	Optical

Feature	Value
Setting range threshold value	-0.999 bar ... 0 bar
Operating pressure	2 bar ... 8 bar
Operating pressure for max. vacuum	4 bar
Max. vacuum	93 %
Nominal operating pressure	6 bar
Max. suction rate with respect to atmosphere	98 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%
Insulation voltage	50 V
Idle current	<70 mA
Max. output current	100 mA
Residual current	0.1 mA
Switching output	2xPNP
Voltage drop	≤1.8 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
KC characters	KC EMC
CE marking (see declaration of conformity)	As per EU EMC directive
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
Temperature of medium	0 °C ... 50 °C
Relative air humidity	5 - 85 %
Noise level at nominal operating pressure	62 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	825 g
Pressure measuring range	-1 bar ... 0 bar
Accuracy in ± % FS	3 %FS
Reproducibility, switching value FS	0.6 %
Protocol	IO-Link®
IO-Link®, protocol version	Device V 1.1
IO-Link®, profile	Smart sensor profile
IO-Link®, function classes	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link®, communication mode	COM2 (38,4 kBd)
IO-Link®, port class	A
IO-Link®, process data width OUT	1 Byte
IO-Link®, process data content OUT	1 bit (ejector pulse ON/OFF) 1 bit (vacuum ON/OFF)
IO-Link®, process data width IN	2 Byte
IO-Link®, process data content IN	14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring)
IO-Link®, minimum cycle time	3.5 ms
IO-Link®, data memory required	500 byte

Feature	Value
IO-Link®, device ID	0x00003E
Electrical connection	5-pin M12x1 Plug
Protection against tampering	Electronic interlock
Type of mounting	With through-hole With internal thread With accessories
Pneumatic connection 1	QS-1/4
Pneumatic connection 3	Pneumatic muffler
Vacuum connection	QS-12
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Seals material	HNBR NBR
Female nozzle material	POM
Compressed air filter material	Fabric PA Sintered steel
Material of filter housing	PA-reinforced
Housing material	Wrought aluminum alloy PA-reinforced
Material of adjusting screw	Steel
Muffler material	Wrought aluminum alloy POM 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