

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

Part number: 8070096

FESTO



Data sheet

 General operating condition

Feature	Value
Nominal size, Laval nozzle	2 mm
Grid dimension	36 mm
Silencer design	Open
Mounting position	Any
Ejector characteristic	High vacuum Standard
Grade of filtration	40 µm
Manual override	Non-detenting Additionally via operating buttons
Integrated function	Ejector pulse valve, electric Flow control On/off valve, electric Filter Air-saving function, electric Check valve Open silencer Vacuum switch
Design	Modular
Short circuit current rating	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
Standard switching input	IEC 61131-2
Display type	4-place alphanumeric Back-lit LCD
Indicating range	-0.999 bar ... 0 bar
Displayable units	bar
Setting range hysteresis	-0.9 bar ... 0 bar
Setting options	IO-Link® Via display and buttons
Switching position indicator	LCD
Switching status indication	Optical
Setting range threshold value	-0.999 bar ... 0 bar

Feature	Value
Operating pressure	2 bar ... 8 bar
Operating pressure for max. vacuum	4 bar
Max. vacuum	93 %
Nominal operating pressure	6 bar
Max. suction flow rate against atmosphere	98 l/min
Air supply time at nominal operating pressure	0.2 s
Operational voltage range DC	20.4 V ... 27.6 V
Duty cycle	100%
Insulation voltage	50 V
No-load supply current	<70 mA
Max. output current	100 mA
Off-state current	0.1 mA
Switching output	2xPNP
Voltage drop	≤1.8 V
Characteristic coil data	24 V DC: low-current phase 0.3 W, high-current phase 2.55 W
Immunity to surge	0.8 kV
Overload protection	Available
Pollution degree	3
Approval	RCM c UL us - Listed (Oil)
KC mark	KC-EMV
CE mark (see declaration of conformity)	To EU EMC Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation not possible
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Media temperature	0 °C ... 50 °C
Relative air humidity	5 - 85%
Sound pressure 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 female thread 2.5 Nm with through-hole
Product weight	825 g
Pressure measuring range	-1 bar ... 0 bar
Accuracy in ± % FS	3 %FS
Reproducibility of switching values 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 kBaud)
IO-Link, Port class	A
IO-Link, Process data length OUT	1 bytes
IO-Link, Process data content OUT	1 bit (ejector pulse ON/OFF) 1 bit (vacuum ON/OFF)
IO-Link, Process data length IN	2 bytes
IO-Link, Process data content IN	14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring)

Feature	Value
IO-Link, Min. cycle time	3.5 ms
IO-Link, Data storage required	500 Byte
IO-Link, Device ID	0x00003E
Electrical connection	M12x1 Plug
Protection against tampering	Electronic interlock
Type of mounting	With through-hole With female thread With accessories
Pneumatic connection, port 1	QS-10
Pneumatic connection, port 3	Silencer
Vacuum connection	QS-12
Note on materials	RoHS compliant
Material seals	HNBR NBR
Material receiver nozzle	POM
Material filter	Fabric Process automation Sintered steel
Material filter housing	Reinforced PA
Material housing	Wrought aluminium alloy Reinforced PA
Material adjusting screw	Steel
Material silencer	Wrought aluminium alloy POM Polyurethane foam
Material screws	Steel
Material screen	Process automation
Material connector housing	Brass, nickel-plated
Material electrical contact	Gold-plated brass
Material pins	Steel
Material transmitter nozzle	Wrought aluminium alloy
Material keypad	TPE-U
Material fitting	Brass, nickel-plated