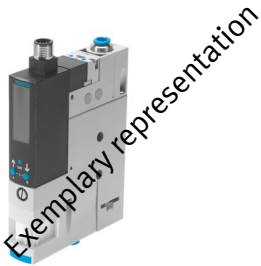


Vacuum generator OVEM

Part number: 539074

FESTO



 General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Nominal size, Laval nozzle	0.45 mm ... 3 mm
Grid dimension	20 mm ... 36 mm
Silencer design	Open
Mounting position	Any
Ejector characteristic	High suction rate 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 Threshold value with fixed hysteresis
Valve function	Closed Open
Reverse polarity protection	For all electrical connections
Standard switching input	IEC 61131-2
Display type	4-place alphanumeric Back-lit LCD LED
Indicating range	-0.999 bar ... 0 bar
Indicating range	-29.5 inHg ... 0 inHg
Displayable units	bar inH ₂ O inHg
Setting range hysteresis	-0.9 bar ... 0 bar

Feature	Value
Setting options	IO-Link® Teach-in Via display and buttons
Switching position indicator	LCD LED
Switching status indication	Optical
Setting range threshold value	-1 bar ... 0 bar
Operating pressure	2 bar ... 8 bar
Operating pressure for max. vacuum	3.5 bar ... 5.3 bar
Max. vacuum	93 %
Nominal operating pressure	6 bar
Max. suction flow rate against atmosphere	6 l/min ... 348 l/min
Air supply time at nominal operating pressure	0.2 s ... 4.8 s
Operational voltage range DC	20.4 V ... 27.6 V
Duty cycle	100%
Inductive protective circuit	Adapted to MZ, MY, ME coils
Insulation voltage	50 V
No-load supply current	<80 mA
Max. output current	100 mA
Off-state current	0.1 mA
Switching output	2xNPN 2xPNP NPN PNP
Voltage drop	≤2 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-B2-L VDMA24364 zone III
Media temperature	0 °C ... 50 °C
Relative air humidity	5 - 85%
Sound pressure level at nominal operating pressure	45 dB(A) ... 77 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	285 g ... 885 g
Pressure measuring range	-1 bar ... 0 bar
Accuracy in ± % FS	0.5 %FS ... 3 %FS
Hysteresis	0.02 bar
Reproducibility of switching values FS	0.6 %
Protocol	IO-Link®
IO-Link, Protocol version	Device V 1.1
IO-Link, Profile	Smart sensor profile

Feature	Value
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)
IO-Link, Min. cycle time	3.5 ms
IO-Link, Data storage required	500 Byte
IO-Link, Device ID	0x00003E
Switching logic for inputs	NPN (negative switching) PNP (positive switching)
Electrical connection	M12x1 Plug
Protection against tampering	PIN code Electronic interlock
Type of mounting	With through-hole With female thread With accessories
Pneumatic connection, port 1	QS-1/4 QS-5/16
Pneumatic connection, port 3	QS-16 QS-5/16 Silencer Integrated silencer
Vacuum connection	G1/8 G1/4 1/8 NPT 1/4 NPT 1/2 NPT QS-6 QS-8 QS-12 QS-16 QS-1/4 QS-5/16
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	Die-cast aluminium Wrought aluminium alloy Reinforced PA
Material hollow bolt	Wrought aluminium alloy
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

Feature	Value
Material pins	Steel
Material transmitter nozzle	Wrought aluminium alloy
Material keypad	Reinforced PA TPE-U
Material fitting	Anodised wrought aluminium alloy Brass, nickel-plated
Material bracket	Stainless steel