Vacuum generator OVEM-07-H-B-GO-CE-N-2N Part number: 540012



Data sheet

1		
	₩ ~ Y	

General operating condition

With dimension20 mmMuffer construction typeOpenMounting positionAnyEjector characteristicsHigh vacuumStandardStandardGrade of filtration40 µmManual overrideNon-detenting Additionally via operating buttonsIntegrated functionEjector pulse valve, electric Flow controlStructural designNon-detenting Additionally via operating buttonsStructural designModularShort -fricuit protectionyesMeasured variableRelative pressureMeasured variableRelative pressureSwitching functionVin contactSwitching functionWindow comparator Threshold value comparatorSymbol00992094Valve polarity protectionElectrical connectionsSwitching input to standardElectrical connectionsSwitching functionClosedReverse polarity protectionGrall electrical connectionsSymbol0.9990 par 0 barObjephayabu entif(s)barSwitching functionElectrical connectionsSyntheting functionLice fails 1-2Display type4-character alphanumeric Back-lit LCDDisplay type0.999 bar 0 barSetting position indicationOpticalSetting position indicationOpticalSetting position indicationOpticalSetting position indicationOptical	Feature	Value
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 of valve, electric Compressed air filter (Compressed air filter Preumatic muffler open Vacuum switch Structural design Modular Short-circuit protection yes Measured variable Relative pressure Measured variable No.detact N/C contact N/C contact N/C contact N/C contact N/C contact N/C contact Symbol CO992094 Valve function Electrical connections Switching input to standard EC 1313-2 Display to standard EC 1313-2 Display to standard EC 1313-2 Display runge -0.999 bar 0 bar Setting protection Bar Setting protection Far	Nominal width of Laval nozzle	0.7 mm
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 of valve, electric Compressed air filter Air saving function, electrical Non-return valve Pneumatic muffer open Vacuum switch Structural design Modular Shot clicuit protection yes Measured variable Relative pressure Measured variable No/ contact Witching function N/C contact N/C contact Switching function Vic contact N/O contact Switching function Closed Reverse polarity protection Grad Switching support standard IEC £1131-2 Display type 4-character alphanumeric Back-III LCD Display type 0-999 bar 0 bar Display ange polysteresis 0.9 bar 0 bar Setting range hysteresis 0.9 bar 0 bar	Width dimension	20 mm
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 Shut off valve, electric Compressed air filter Air saving function, electrical Non-return valve Structural design Modular Structural design Modular Shut-circuit protection yes Measured variable Relative pressure Measuring principle Piezoresistive Switching element function Window comparator Threshold value comparator Symbol 00992094 Valve function Closed Reverse polarity protection 6.99 bar 0 bar Display type 4-character alphanumeric Back-lit LCD Display type 4-character alphanumeric Back-lit LCD Displayable unit(s) bar Setting grange hysteresis -0.99 bar 0 bar Setting potion Via display and pushbuttons Switching input of status indication Optical	Muffler construction type	Open
StandardGrade of filtration40 µmManual overrideNon-detenting Additionally via operating buttonsIntegrated functionEjector pulse valve, electric Flow control Shut off valve, electric Compressed air filter Arswing function, electrical Non-return valve Penematic muffler open Vacuum switchStructural designModularStort-circuit protectionyesMeasured variableRelative pressureMeasured variablePiezoresistiveSwitching functionWindow comparator Threshold value comparatorSymbolO0992094Valve functionElectrical connectionsSwitching input to standardElec fall electrical connectionsSwitching input to standardElec fall electrical connectionsSwitching input to standardElec fall electrical connectionsSwitching input to standardElec fall -2Display range-0.999 bar 0 barDisplay range physteresis-0.99 bar 0 barSetting optionsVical Electrical connectionsStitching position indicationCloSwitching position indicationCDSwitching position indicationCDSwitching position indicationCDSwitching position indicationOpticalSwitching position indicationCDStiting range threshold value0.999 bar 0 bar	Mounting position	Any
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 Modular Short-circuit protection yes Measured variable Relative pressure Measuring principle Piezoresistive Switching element function N/C contact N/O contact Window comparator Threshold value comparator Symbol Symbol 00992094 Valve function IEC 61131-2 Display type 4-character alphanumeric Back-lit LCD bar Display type -0.999 bar 0 bar Setting range hysteresis -0.9 bar 0 bar Setting position indication LCD Switching position indication Closed	Ejector characteristics	5
Additionally via operating buttonsIntegrated functionEjector pulse valve, electric Flow control Shut off valve, electric Compressed air filter Compressed air filter Pneumatic muffler open Vacuum switchStructural designModularStructural designModularShort-circuit protectionyesMeasured variableRelative pressureMeasuring principlePiezoresistiveSwitching element functionWindow comparator Threshold value comparatorSymbolO0992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type0.999 bar 0 barDisplay type0.999 bar 0 barSetting prage hysteresis0.999 bar 0 barSetting position indicationVia display and pushbuttonsSwitching position indicationClosedSetting position indicationSind Silay and pushbuttonsSwitching position indicationClosedSetting position indicationSind Silay and pushbuttonsSwitching position indicationClosedSetting position indicationSind Silay and pushbuttonsSwitching position indicationSind Silay and pushbuttonsSwitching position indicationClosedSwitching status indicationOpicalSwitching position indicationSilay and pushbuttonsSwitching position indicationSilay and pushbuttonsSwitching position indicationSilay and pushbuttons	Grade of filtration	40 μm
Flow controlShut off valve, electricCompressed air filterAir saving function, electricalNon-return valvePneumatic muffler openVacuum switchStructural designModularShot-circuit protectionWesMeasured variableRelative pressureMeasuring principleSwitching element functionN/C contactN/C contactN/O contactN/O contactSwitching functionSwitching functionSwitching functionSwitching functionSymbolO0992094Valve comparatorThreshold value comparatorSymbolSwitching input to standardIEC 61131-2Display typeDisplay typeObjeapable unit(s)Setting rangeO-999 bar 0 barSetting position indicationLCDSwitching position indicationLCDSwitching position indicationLCDSwitching position indicationLCDSwitching position indicationLCDSwitching position indicationLCDSwitching position indicationStuting position indicationStuting range threshold valueOpticalSetting range threshold valueSetting range threshold valueSutching position indicationLCDSwitching position indicationStuting range threshold valueSetting range thr	Manual override	
Not-circuit protectionyesMeasured variableRelative pressureMeasuring principlePiezoresistiveSwitching element functionN/C contact N/O contactSwitching functionWindow comparator Threshold value comparatorSymbol00992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit ICDDisplayable unit(s)barSetting range hysteresis-0.99 bar 0 barSetting optionsVia display and pushbuttonsSwitching position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Integrated function	Flow control Shut off valve, electric Compressed air filter Air saving function, electrical Non-return valve Pneumatic muffler open
Measured variableRelative pressureMeasuring principlePiezoresistiveSwitching element functionN/C contact N/O contactSwitching functionWindow comparator Threshold value comparatorSymbol00992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barSetting range hysteresis-0.99 bar 0 barSetting optionsVia display and pushbuttonsSwitching status indicationCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Structural design	Modular
Measuring principlePiezoresistiveSwitching element functionN/C contact N/O contactSwitching functionWindow comparator Threshold value comparatorSymbol00992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barSetting range hysteresis-0.9 bar 0 barSetting optionsVia display and pushbuttonsSwitching status indicationLCDSwitching status indication0.999 bar 0 bar	Short-circuit protection	yes
Switching element functionN/C contact N/O contactSwitching functionWindow comparator Threshold value comparatorSymbol00992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplayable unit(s)barSetting range hysteresis-0.999 bar 0 barSetting optionsVia display and pushbuttonsSwitching status indicationLCDSwitching status indication0.999 bar 0 bar	Measured variable	Relative pressure
N/O contactSwitching functionWindow comparator Threshold value comparatorSymbol00992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barDisplayable unit(s)barSetting range hysteresis-0.9 bar 0 barSwitching position indicationLCDSwitching status indicationLCDSwitching status indication0.999 bar 0 barSetting range threshold value-0.999 bar 0 bar	Measuring principle	Piezoresistive
Threshold value comparatorSymbol00992094Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barDisplayable unit(s)barSetting range hysteresis-0.9 bar 0 barSetting position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Switching element function	,
Valve functionClosedReverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barDisplayable unit(s)barSetting range hysteresis-0.9 bar 0 barSetting position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Switching function	
Reverse polarity protectionfor all electrical connectionsSwitching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barDisplayaple unit(s)barSetting range hysteresis-0.9 bar 0 barSetting roution indicationVia display and pushbuttonsSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Symbol	00992094
Switching input to standardIEC 61131-2Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barDisplayable unit(s)barSetting range hysteresis-0.9 bar 0 barSetting optionsVia display and pushbuttonsSwitching position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Valve function	Closed
Display type4-character alphanumeric Back-lit LCDDisplay range-0.999 bar 0 barDisplayable unit(s)barSetting range hysteresis-0.9 bar 0 barSetting optionsVia display and pushbuttonsSwitching position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Reverse polarity protection	for all electrical connections
Back-lit LCDDisplay range-0.999 bar 0 barDisplayable unit(s)barSetting range hysteresis-0.9 bar 0 barSetting optionsVia display and pushbuttonsSwitching position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Switching input to standard	IEC 61131-2
Displayable unit(s) bar Setting range hysteresis -0.9 bar 0 bar Setting options Via display and pushbuttons Switching position indication LCD Switching status indication Optical Setting range threshold value -0.999 bar 0 bar	Display type	
Setting range hysteresis-0.9 bar 0 barSetting optionsVia display and pushbuttonsSwitching position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Display range	-0.999 bar 0 bar
Setting options Via display and pushbuttons Switching position indication LCD Switching status indication Optical Setting range threshold value -0.999 bar 0 bar	Displayable unit(s)	bar
Switching position indicationLCDSwitching status indicationOpticalSetting range threshold value-0.999 bar 0 bar	Setting range hysteresis	-0.9 bar 0 bar
Switching status indication Optical Setting range threshold value -0.999 bar 0 bar	Setting options	Via display and pushbuttons
Setting range threshold value -0.999 bar 0 bar	Switching position indication	LCD
	Switching status indication	Optical
Operating pressure 2 bar 8 bar	Setting range threshold value	-0.999 bar 0 bar
	Operating pressure	2 bar 8 bar

Feature	Value
Operating pressure for max. vacuum	4.1 bar
Max. vacuum	93 %
Nominal operating pressure	6 bar
Max. suction rate with respect to atmosphere	16 l/min
Air supply time at nominal operating pressure	0.4 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	<70 mA
Max. output current	100 mA
Residual current	0.1 mA
Switching output	2xNPN
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	58 dB(A)
Degree of protection	IP65
Protection class	111
Ambient temperature	0 °C 50 °C
Max. tightening torque	0.8 Nm with internal thread 2.5 Nm with through-hole
Product weight	335 g
Pressure measuring range	-1 bar 0 bar
Accuracy in ± % FS	3 %FS
Reproducibility, switching value FS	0.6 %
Input switching logic	NPN (negative switching)
Electrical connection	5-pin M12x1 Plug
Type of mounting	With through-hole With internal thread With accessories
Pneumatic connection 1	G1/4
Pneumatic connection 3	Pneumatic muffler integrated
Vacuum connection	G1/4
Note on materials	RoHS-compliant
Seals material	NBR
Female nozzle material	РОМ
Compressed air filter material	Fabric PA
	Sintered steel

Feature	Value
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
Material of screws	Steel
Inspection window material	РА
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	Wrought aluminum alloy, anodized