

Pressure sensor SDE3-...

Part number: 539679

FESTO



Data sheet

Feature	Value
Certification	RCM compliance mark c UL us - recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC acc. to UK EX instructions To UK RoHS instructions
Explosion prevention and protection	Zone 2 (ATEX) Zone 22 (ATEX)
ATEX category gas	II 3G
Type of ignition protection for gas	Ex ec IIC T6 Gc X
ATEX category for dust	II 3D
Type of (ignition) protection for dust	Ex tc IIIC T80°C Dc X
Explosive ambient temperature	0°C ≤ Ta ≤ +50°C
Note on materials	RoHS compliant
Measured variable	1x relative pressure/1x differential pressure 2 x relative pressure Differential pressure Relative pressure
Method of measurement	Piezoresistive pressure sensor with display
Pressure measuring range initial value	-0.1 MPa -1 bar -14.5 psi
Pressure measuring range end value	1 MPa 10 bar 145 psi
Overload pressure	0.6 MPa...2 MPa 6 bar...20 bar 87 psi...290 psi
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Lubricated operation possible
Temperature of medium	0 °C...50 °C
Ambient temperature	0 °C...50 °C
Accuracy in ± % FS	2 %FS...3 %FS
Repetition accuracy in ± %FS	0.3 %FS

Feature	Value
Temperature co-efficient in $\pm$ %FS/K	0.05 %FS/K
Switching output	2xNPN 2xPNP
Switching function	Freely programmable
Switching element function	Switchable
Reproducibility of switching value	0.3 %
On time	3 ms
Switch-off time	3 ms
Max. output current	100 mA
Voltage drop	1.5 V
Display range start value	0 %FS
Display range end value	100 %FS
Short-circuit protection	Yes
Overload protection	Available
DC operating voltage range	15 V...30 V
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Cable Cable with plug Plug
Electrical connection 1, connection technology	M12x1 A-coded as per EN 61076-2-101 M8x1 A-coded as per EN 61076-2-104
Electrical connection 1, number of pins/wires	4 ...5
Electrical connection 1, type of mounting	Snap-locking Screw-type lock Rotatable not rotatable Compatible with snap-locking Compatible with rotatable screw-type lock
Cable length	0.3 m...2.5 m
Type of mounting	Front panel mounting With through-hole With DIN rail With wall/surface bracket
Mounting position	Any
Pneumatic connection	QS-4 QS-5/32
Product weight	37 g...61 g
Housing material	PA-reinforced
Materials in contact with the media	FPM Brass, nickel-plated NBR PA-reinforced
Display type	Illuminated LCD
Displayable unit(s)	bar In H ₂ O In Hg KPa psi
Switching status indication	LCD yellow
Setting options	Teach-in
Protection against tampering	PIN code
Setting range threshold value	0 %...100 %
Setting range hysteresis	0 %...90 %
Degree of protection	IP65
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom suitability, measured according to ISO 14644-14	Class 4 according to ISO 14644-1