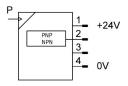
Pressure sensor SPAN-B-B11R-R18M-PN-L1+2.5S

FESTO

Part number: 8114768





Data sheet

C UL us listed (OL) CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROHS Directive CE marking (see declaration of conformity) To UK instructions for EMC To UK NoHS instructions Note on materials Relative pressure Measured variable Relative pressure Measurement method Plezoresistive pressure sensor Start value for pressure measuring range -0.1 MPa -1 bar -1 bar -1 4.5 psi End value for pressure measuring range 1 MPa 10 bar 15 bar Overload pressure 0 Service on operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Media temperature 0 °C50 °C Ambient temperature 0 °C50 °C Ambient temperature 0 °C50 °C Accuracy in ± % FS 1.5 %FS Repetition accuracy in ± % FS Temperature coefficient in ± % FS /K Switching output PNP/NPN, switchable Switching element function Max. output current So mA Short circuit current rating Ves	Feature	Value
In accordance with EU RoHS Directive CE marking (see declaration of conformity) To UK Instructions for EMC To UK ROHS instructions RoHS-compliant Measured variable Measured variable Measurement method Piezoresistive pressure sensor Start value for pressure measuring range -0.1 MPa -1 bar -14.5 psi End value for pressure measuring range 1 MPa 10 bar 145 psi Max. overload pressure 0 verload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Innert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0 °C50 °C Ambient temperature 0 °C50 °C Accuracy in ± % FS Repetition accuracy in ± % FS Temperature coefficient in ± % FS/K Switching output PNP/NPN, switchable Switching function Mindow comparator Threshold value comparator Threshold value comparator Threshold value comparator Switching element function Max. output current Max. output current rating Ves	Approval	
To UK ROHS instructions Note on materials Measured variable Measurement method Piezoresistive pressure sensor Start value for pressure measuring range -0.1 MPa -1 bar -14.5 psi End value for pressure measuring range 1 MPa 10 bar 145 psi End value for pressure measuring range 1 MPa 10 bar 145 psi Max. overload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0 °C50 °C Ambient temperature 0 °C50 °C Ambient temperature 0 °C50 °C Accuracy in ± % FS Repetition accuracy in ± %FS (0.1 %FS/K) Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function Mx. output current Max. output current Short circuit current rating	CE mark (see declaration of conformity)	
Measured variable Relative pressure Measurement method Piezoresistive pressure sensor Start value for pressure measuring range 0.1 MPa 1 1 bar 14.5 psi End value for pressure measuring range 1 MPa 1 0 bar 145 psi Max. overload pressure 15 bar Overload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0 °C50 °C Ambient temperature 0 °C50 °C Accuracy in ± % FS 1.5 %FS Repetition accuracy in ± %FS 0.3 %FS Temperature coefficient in ± %FS/K 0.1 %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	CE marking (see declaration of conformity)	
Measurement method Piezoresistive pressure sensor -0.1 MPa -1 bar -14.5 psi End value for pressure measuring range I MPa 10 bar 145 psi Max. overload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0°C50°C Ambient temperature 0°C50°C Accuracy in ± % FS Repetition accuracy in ± %FS Switching output PNP/NPN, switchable Switching function Max. output current Switching element function Max. output current Max. output current rating Piezoresistive pressure sensor -0.1 MPa -1 bar -1	Note on materials	RoHS-compliant
Start value for pressure measuring range -0.1 MPa -1 bar -14.5 psi End value for pressure measuring range I MPa 10 bar 145 psi Max. overload pressure 15 bar Overload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0°C50°C Ambient temperature 0°C50°C Accuracy in ± % FS Repetition accuracy in ± %FS Temperature coefficient in ± %FS/K Switching output Switching function Window comparator Threshold value comparator Switching lement function Mx. output current Mx. output current ating Ves	Measured variable	Relative pressure
End value for pressure measuring range End value for pressure measuring range In MPa 10 bar 145 psi Max. overload pressure In S MPa 15 bar	Measurement method	Piezoresistive pressure sensor
10 bar 145 psi Max. overload pressure 15 bar Overload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0°C50°C Ambient temperature 0°C50°C Accuracy in ± % FS 1.5 %FS Repetition accuracy in ± %FS Temperature coefficient in ± %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function M/C or N/O contact, switchable Max. output current Short circuit current rating yes	Start value for pressure measuring range	-1 bar
Overload pressure 1.5 MPa 15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0°C50°C Ambient temperature 0°C50°C Accuracy in ± % FS 1.5 % FS Repetition accuracy in ± % FS Note on operating and pilot medium Media temperature 0°C50°C Accuracy in ± % FS 0.3 % FS Temperature coefficient in ± % FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function M/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating	End value for pressure measuring range	10 bar
15 bar 217.5 psi Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature O°C50°C Ambient temperature O°C50°C Accuracy in ± % FS Repetition accuracy in ± %FS Temperature coefficient in ± %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function M/C or N/O contact, switchable Max. output current Max. output current rating yes	Max. overload pressure	15 bar
Inert gases Note on operating and pilot medium Lubricated operation possible Media temperature 0 °C50 °C Ambient temperature 0 °C50 °C Accuracy in ± % FS 1.5 % FS Repetition accuracy in ± % FS Temperature coefficient in ± % FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function M/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Overload pressure	15 bar
Media temperature 0 °C50 °C Ambient temperature 0 °C50 °C Accuracy in ± % FS 1.5 %FS Repetition accuracy in ± %FS 0.3 %FS Temperature coefficient in ± %FS/K 0.1 %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Operating medium	
Ambient temperature 0 °C50 °C Accuracy in ± % FS Repetition accuracy in ± % FS Repetition accuracy in ± % FS Temperature coefficient in ± % FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Note on operating and pilot medium	Lubricated operation possible
Accuracy in ± % FS Repetition accuracy in ± %FS O.3 %FS Temperature coefficient in ± %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Media temperature	0 °C50 °C
Repetition accuracy in ± %FS Temperature coefficient in ± %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Ambient temperature	0 °C50 °C
Temperature coefficient in ± %FS/K Switching output PNP/NPN, switchable Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Accuracy in ± % FS	1.5 %FS
Switching output Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Repetition accuracy in ± %FS	0.3 %FS
Switching function Window comparator Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Temperature coefficient in ± %FS/K	0.1 %FS/K
Threshold value comparator Switching element function N/C or N/O contact, switchable Max. output current 80 mA Short circuit current rating yes	Switching output	PNP/NPN, switchable
Max. output current 80 mA Short circuit current rating yes	Switching function	
Short circuit current rating yes	Switching element function	N/C or N/O contact, switchable
- <u>'</u>	Max. output current	80 mA
Operational voltage range DC 10.8 V30 V	Short circuit current rating	yes
	Operational voltage range DC	10.8 V30 V

Feature	Value
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Plugs
Electrical connection 1, connector system	Connection pattern L1J
Electrical connection 1, number of connections/cores	4
Type of mounting	Front panel mounting Via thread Via wall/surface bracket
Mounting position	optional
Pneumatic connection	Male thread R1/8
Product weight	31 g
Material housing	PA-reinforced
Material in contact with the medium	FPM Nickel-plated brass PA-reinforced
Display type	Illuminated LCD
Displayable units	MPa bar inHg kPa mmHg psi
Setting options	Teach-in Via display and keys
Protection against tampering	PIN code
Setting range threshold value	0 %100 %
Setting range hysteresis	0 %90 %
Degree of protection	IP40
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom class	Class 4 according to ISO 14644-1