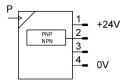
## **Pressure sensor SPAN-B-V1R-Q4-PN-L1+2.5S**Part number: 8114776

**FESTO** 





## **Data sheet**

C UL us listed (OL)  CE mark (see declaration of conformity)  To EU EMC Directive In accordance with EU ROHS Directive  UKCA marking (see declaration of conformity)  To UK RoHS instructions for EMC To UK RoHS instructions  Note on materials  Relative pressure Measured variable Relative pressure Measurement method  Plezoresistive pressure sensor  Start value for pressure measuring range  O MPa O bar O psi  End value for pressure measuring range  O.1 MPa -1 bar	Feature	Value
In accordance with EU ROHS Directive  UKCA marking (see declaration of conformity)  To UK instructions for EMC To UK ROHS instructions  Note on materials  Relative pressure  Measured variable  Measurement method  Piezoresistive pressure sensor  Start value for pressure measuring range  O MPa O bar O psi  End value for pressure measuring range  1-0.1 MPa -1 bar -14.5 psi  Max. overload pressure  Overload pressure  Overload pressure  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  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 element function  Mich or N/C or N/C or nA/C or ontact, switchable  Max. output current  Max. output current rating  Note on A  Short circuit current rating	Approval	
To UK ROHS instructions  Note on materials  Measured variable  Measurement method  Piezoresistive pressure sensor  Start value for pressure measuring range  End value for pressure measuring range  End value for pressure measuring range  Found of the pressure of the pressure measuring range  End value for pressure measuring range  Found of the pressure of the press	CE mark (see declaration of conformity)	
Measured variable       Relative pressure         Measurement method       Piezoresistive pressure sensor         Start value for pressure measuring range       0 MPa 0 bar 0 psi         End value for pressure measuring range       -0.1 MPa - 1 bar - 14.5 psi         Max. overload pressure       5 bar         Overload pressure       0.5 MPa 5 bar 72.5 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	UKCA marking (see declaration of conformity)	
Measurement method  Piezoresistive pressure sensor  O MPa O bar O psi  End value for pressure measuring range  End value for pressure measuring range  End value for pressure measuring range  O-0.1 MPa -1 bar -14.5 psi  Max. overload pressure  Overload pressure  O-5 MPa 5 bar 72.5 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  O.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	Note on materials	RoHS-compliant
Start value for pressure measuring range  O MPa O bar O psi  End value for pressure measuring range  -0.1 MPa -1 bar -14.5 psi  Max. overload pressure  Overload pressure  Overload pressure  Ocertaing 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  Switching function  Window comparator Threshold value comparator Switching element function  Mx output current  Mx. output current  Mx on MA  Short circuit current rating  O NAPa O par O psi  O par O psi O psi O par O psi O	Measured variable	Relative pressure
End value for pressure measuring range  End value for pressure measuring range  -0.1 MPa -1 bar -14.5 psi  Max. overload pressure  5 bar  Overload pressure  0.5 MPa 5 bar  72.5 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  Switching function  Window comparator Threshold value comparator Switching lement function  M/C or N/O contact, switchable  Max. output current  Max. output current  Max. output current rating  yes	Measurement method	Piezoresistive pressure sensor
-1 bar -14.5 psi  Max. overload pressure  5 bar  Overload pressure  0.5 MPa 5 bar 72.5 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  80 mA  Short circuit current rating  yes	Start value for pressure measuring range	0 bar
Overload pressure  Outerload pressure  Outerlo	End value for pressure measuring range	-1 bar
5 bar 72.5 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  80 mA  Short circuit current rating	Max. overload pressure	5 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	5 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 wall/surface bracket
Mounting position	optional
Pneumatic connection	For tubing O.D. 4 mm
Product weight	21 g
Material housing	PA-reinforced
Material in contact with the medium	FPM NBR 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
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 4 according to ISO 14644-1