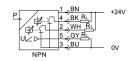
Pressure sensor SPAW-P2R-G14F-2NV-M12

Part number: 8022832







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 RoHS instructions Note on materials ROHS-compliant Measured variable Relative pressure Measurement method Piezoresistive pressure sensor Start value for pressure measuring range O MPa O bar O bar O bar O bar O psi End value for pressure measuring range O.2 MPa 2 bar 29 psi Overload pressure O,4 MPa 4 bar 58 psi Operating medium Compressed air to ISO 8573-1:2010 [] Liquid media Gaseous media Media temperature O °C85 °C Ambient temperature O °C85 °C Ambient temperature Piezo Science Accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switching element function Switchable Max. output current Rise time 3 ms Short circuit current rating yes	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 O MPa O bar O psi End value for pressure measuring range O2. MPa 2 bar 29 psi Overload pressure O4. MPa 4 bar 58 psi Operating medium Compressed air to ISO 8573-1:2010 [] Liquid media Gaseous media Media temperature O *C85 *C Ambient temperature O *C80 *C Accuracy in ± % FS Repetition accuracy in ± % FS Switching output 2 xNPN Switching output Switching function Freely programmable Switchable Max. output current Analogue output O *C80 *C Analogue output O *O	Approval	
Note on materials Measured variable Measurement method Piezoresistive pressure sensor Start value for pressure measuring range End value for pressure measuring range Overload pressure Overload pressure Overload pressure Operating medium Operating medium Media temperature Ambient temperature Ambient temperature Ambient temperature Accuracy in ± % FS Repetition accuracy in ± % FS Switching output Switching function Switching element function Max. output current Analogue output Rise time 3 ms Short circuit current rating Operational voltage range DC OMPa Piezoresistive pressure O MPa O DAP O DAP	CE mark (see declaration of conformity)	
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 Overload pressure Overload pressure Overload pressure Operating medium Compressed air to ISO 8573-1:2010 [-:] Liquid media Gaseous media Media temperature -20 °C85 °C Ambient temperature O °C80 °C Accuracy in ± % FS Nitching output Switching output Switching function Switchable Max. output current Max. output current Max. output current Analogue output Rise time Operational voltage range DC I S V35 V	CE marking (see declaration of conformity)	
Measurement method Piezoresistive pressure sensor O MPa O bar O psi End value for pressure measuring range Copsi End value for pressure measuring range Overload pressure Overload pressure Operating medium Operating medium Compressed air to ISO 8573-1:2010 [-:] Liquid media Gaseous media Media temperature -20 °C85 °C Ambient temperature O°C80 °C Accuracy in ± % FS Repetition accuracy in ± % FS Switching output Switching function Switching tunction Switching element function Max. output current Analogue output O -10 V Rise time 3 ms Short circuit current rating Operational voltage range DC O MPa	Note on materials	RoHS-compliant
Start value for pressure measuring range OMPa Obar Opsi End value for pressure measuring range O.2 MPa 2 bar 29 psi Overload pressure Oerload pressure Operating medium Compressed air to ISO 8573-1:2010 [] Liquid media Gaseous media Media temperature Accuracy in ± % FS Repetition accuracy in ± %FS Switching output Switching function Freely programmable Switching element function Max. output current Analogue output Rise time 3 ms Short circuit current rating Operational voltage range DC O.2 MPa 2 bar 29 psi O.4 MPa 4 bar 4 bar 58 psi O.4 MPa 4 bar 4 bar 58 psi O.4 MPa 4 bar 6 ba	Measured variable	Relative pressure
End value for pressure measuring range End value for pressure measuring range O.2 MPa 2 bar 29 psi Overload pressure O.4 MPa 4 bar 58 psi Operating medium Compressed air to ISO 8573-1:2010 [-:] Liquid media Gaseous media Media temperature -20 °C85 °C Ambient temperature 0 °C80 °C Accuracy in ± % FS Repetition accuracy in ± %FS Switching output Switching function Freely programmable Switching lement function Switching element function Switching element function Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Measurement method	Piezoresistive pressure sensor
2 bar 29 psi Overload pressure 0.4 MPa 4 bar 58 psi Operating medium Compressed air to ISO 8573-1:2010 [-:] Liquid media Gaseous media Media temperature -20 °C85 °C Ambient temperature 0°C80 °C Accuracy in ± % FS 1 % FS Repetition accuracy in ± % FS Switching output 2xNPN Switching function Freely programmable Switching element function Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC A MPa 4 bar 29 psi Ocmpressed air to ISO 8573-1:2010 [-:] Liquid media Gaseous media A bar 4 bar	Start value for pressure measuring range	0 bar
4 bar 58 psi Operating medium Compressed air to ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media Media temperature -20 °C85 °C Ambient temperature 0 °C80 °C Accuracy in ± % FS Repetition accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switching element function Max. output current Analogue output 250 mA Analogue output Rise time 3 ms Short circuit current rating Operational voltage range DC Compressed air to ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media Compressed air to ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media 1 %FS Compressed air to ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media 1 %FS Compressed air to ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media 20 °C85 °C Ambient temperature 20 °C85 °C 2 NPN 5 WFS Switchiage air to ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media 20 °C85 °C 2	End value for pressure measuring range	2 bar
Liquid media Gaseous media Media temperature -20 °C85 °C Ambient temperature 0 °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS 0.15 %FS Switching output 2xNPN Switching function Freely programmable Switching element function Switchable Max. output current 250 mA Analogue output 0-10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Overload pressure	4 bar
Ambient temperature 0 °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS 0.15 %FS Switching output 2xNPN Switching function Freely programmable Switching element function Switchable Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Operating medium	Liquid media
Accuracy in ± % FS Repetition accuracy in ± %FS Switching output Switching function Freely programmable Switchable Max. output current Analogue output O - 10 V Rise time Short circuit current rating Operational voltage range DC 1 %FS 0.15 %FS 2xNPN Freely programmable Switchable 250 mA 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Media temperature	-20 °C85 °C
Repetition accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switchable Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating Operational voltage range DC 0.15 %FS 0.15 %FS 0.15 %FS 0.15 %FS Switch Freely programmable Switchable 3 ms 5 ms Short circuit current rating yes Operational voltage range DC	Ambient temperature	0 °C80 °C
Switching output Switching function Freely programmable Switchable Max. output current Analogue output O - 10 V Rise time 3 ms Short circuit current rating Operational voltage range DC 2xNPN Freely programmable Switchable 250 mA 0 - 10 V yes 15 V35 V	Accuracy in ± % FS	1 %FS
Switching function Freely programmable Switching element function Switchable Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Repetition accuracy in ± %FS	0.15 %FS
Switching element function Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Switching output	2xNPN
Max. output current 250 mA Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Switching function	Freely programmable
Analogue output 0 - 10 V Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Switching element function	Switchable
Rise time 3 ms Short circuit current rating yes Operational voltage range DC 15 V35 V	Max. output current	250 mA
Short circuit current rating yes Operational voltage range DC 15 V35 V	Analogue output	0 - 10 V
Operational voltage range DC 15 V35 V	Rise time	3 ms
	Short circuit current rating	yes
Reverse polarity protection For operating voltage	Operational voltage range DC	15 V35 V
	Reverse polarity protection	For operating voltage

Feature	Value
Electrical connection 1, connection type	Plugs
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, number of connections/cores	5
Electrical connection 1, type of mounting	Screw-type lock
Type of mounting	Via female thread With accessories
Pneumatic connection	Female thread G1/4
Product weight	230 g
Material housing	ABS High-alloy stainless steel
Material in contact with the medium	High-alloy stainless steel
Display type	4-place alphanumeric LED indicator
Displayable units	MPa bar kPa kg/cm² psi
Switching status indication	Red LED
Setting options	Via display and keys
Protection against tampering	PIN code
Setting range threshold value	0.5 %100 %
Setting range hysteresis	0.5 %99.5 %
Degree of protection	IP65 IP67
Corrosion resistance class CRC	4 - Very high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III