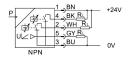
Pressure sensor SPAW-P2R-G12M-2NV-M12

FESTO

Part number: 8022841





Data sheet

c UL us - Listed (OL) CE marking (see declaration of conformity) As per EU RMC directive As per EU RMS directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RNHS instructions Note on materials Relative pressure Measured variable Relative pressure Method of measurement Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value O.2 MPa 2 bar 29 psi Overload pressure O.4 MPa 4 bar 58 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -20 °C85 °C Annibent temperature O °C80 °C Accuracy in ± % FS Switching output Switching output Switching function Freely programmable Switching element function Max. output current 250 mA Analog output Max. output current 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Feature	Value
As per EU RoHS directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK ROHS instructions RoHS-compliant Measured variable Measured variable Method of measurement Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value 2.2 MPa 2.3 psi Overload pressure 0.4 MPa 4 bar 58 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -20 °C85 °C Ambient temperature 0 °C80 °C Accuracy in ± % FS Repetition accuracy in ± %FS Switching output Switching output Switching lement function Max. output current Analog output No Coperating voltage range DC operating voltage range 15 V35 V	Certification	
To UK ROHS instructions Note on materials Measured variable Method of measurement Pressure measuring range initial value O MPa O bar O psi O psi Overload pressure Overload pressure Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Gaseous media Temperature of medium Ambient temperature O °C80 °C Accuracy in ± %FS Switching output Switching function Freely programmable Switching lement function Max. output current Analog output Rise time Short-circuit protection DC operating voltage range DC operating youtpus Skitching runction Simple stime Short-circuit protection yes DC operating voltage range Pressure sensor ARCHAPA Priezoressive pressure sensor Priezoressure sensor AMPa A bar A pa bar A b	CE marking (see declaration of conformity)	
Measured variable Relative pressure Method of measurement Piezoresistive pressure sensor Pressure measuring range initial value 0 MPa 0 bar 0 psi Pressure measuring range end value 0.2 MPa 2 bar 29 psi Overload pressure 0.4 MPa 4 bar 58 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:-:-] Liquid media Gaseous media Temperature of medium -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 Analog output 0 · 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	UKCA marking (see declaration of conformity)	
Method of measurement Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value O.2 MPa 2 bar 29 psi Overload pressure Overload pressure Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -20 °C85 °C Ambient temperature O °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS O.15 %FS Switching output Switching function Switching function Freely programmable Switching element function Max. output current Analog output O · 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range	Note on materials	RoHS-compliant
Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value O.2 MPa 2 bar 29 psi Overload pressure Oerload pressure Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -20 °C85 °C Anabient temperature O °C80 °C Accuracy in ± % FS Repetition accuracy in ± %FS Switching output Switching function Freely programmable Switching lement function Switchable Max. output current Analog output O -10 V Rise time 3 ms Short-circuit protection DC operating voltage range	Measured variable	Relative pressure
O bar O psi Pressure measuring range end value O.2 MPa 2 bar 29 psi Overload pressure O.4 MPa 4 bar 58 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -20 °C85 °C Anhient temperature O °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS O.15 %FS Switching output 2xNPN Switching function Freely programmable Switchable Max. output current 250 mA Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range	Method of measurement	Piezoresistive pressure sensor
2 bar 29 psi Overload pressure 0.4 MPa 4 bar 58 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -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 Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range	Pressure measuring range initial value	0 bar
4 bar 58 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Temperature of medium -20 °C85 °C Ambient temperature O °C80 °C Accuracy in ± % FS Repetition accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switching element function Max. output current Analog output 0 - 10 V Rise time 3 ms Short-circuit protection DC operating voltage range	Pressure measuring range end value	2 bar
Liquid media Gaseous media Temperature of medium -20 °C85 °C Ambient temperature 0 °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switchable Switching element function Max. output current 250 mA Analog output Rise time 3 ms Short-circuit protection DC operating voltage range 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 Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Operating medium	Liquid media
Accuracy in ± % FS Repetition accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switchable Max. output current 250 mA Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Temperature of medium	-20 °C85 °C
Repetition accuracy in ± %FS Switching output 2xNPN Switching function Freely programmable Switchable Max. output current 250 mA Analog output 0 - 10 V Rise time 3 ms Short-circuit protection DC operating voltage range 0.15 %FS 0.15 %FS 0.15 %FS 0.15 %FS Switch Freely programmable Switchable 3 ms 5 to -10 V 1 To V 1	Ambient temperature	0 °C80 °C
Switching output Switching function Freely programmable Switchable Max. output current Analog output Rise time Short-circuit protection DC operating voltage range 2xNPN Freely programmable Switchable 250 mA 0 - 10 V 3 ms yes 15 V35 V	Accuracy in ± % FS	1 %FS
Switching function Freely programmable Switching element function Switchable Max. output current 250 mA Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Repetition accuracy in ± %FS	0.15 %FS
Switching element function Max. output current 250 mA Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Switching output	2xNPN
Max. output current 250 mA Analog output 0 - 10 V Rise time 3 ms Short-circuit protection DC operating voltage range 15 V35 V	Switching function	Freely programmable
Analog output 0 - 10 V Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Switching element function	Switchable
Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Max. output current	250 mA
Short-circuit protection yes DC operating voltage range 15 V35 V	Analog output	0 - 10 V
DC operating voltage range 15 V35 V	Rise time	3 ms
· ·	Short-circuit protection	yes
Reverse polarity protection for operating voltage	DC operating voltage range	15 V35 V
	Reverse polarity protection	for operating voltage

Feature	Value
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	M12x1 A-coded as per EN 61076-2-101
Electrical connection 1, number of pins/wires	5
Electrical connection 1, type of mounting	Screw-type lock
Type of mounting	With external thread
Pneumatic connection	External thread G1/2
Product weight	230 g
Housing material	ABS High-alloy stainless steel
Materials in contact with the media	High-alloy stainless steel
Sealing ring material	NBR
Display type	4-character alphanumeric LED display
Displayable unit(s)	MPa bar kPa kg/cm ² psi
Switching status indication	LED red
Setting options	Via display and pushbuttons
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 - Particularly high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III