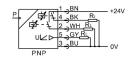
## Pressure sensor SPAW-P2R-G12M-2PV-M12

**FESTO** 

Part number: 8022805





## **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 RoHS instructions  Note on materials  Note on materials  Measured variable  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  Ambient temperature  O °C80 °C  Accuracy in ± %FS  Switching output  Switching output  Switching function  Switchable  Max. output current  Analog output  Mexicology and seed as per ISO Note of the composition of the composit	Feature	Value
As per EU ROHS directive  UKCA marking (see declaration of conformity)  To UK instructions for EMC To UK ROHS instructions  Note on materials  Relative pressure  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  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  O °C80 °C  Accuracy in ± % FS  Repetition accuracy in ± %FS  Switching output  Switching output  Switching element function  Max. output current  Analog output  O coperating voltage range  15 V35 V	Certification	
To UK ROHS instructions  Note on materials  Relative pressure  Method of measurement  Pressure measuring range initial value  O MPa O bar O psi O psi Overload pressure  Overload pressure  Operating medium  Operating medium  Temperature of medium  Ambient temperature  Analog output  Switching Juntotion  Switching lement function  Measured  Analog output  Rise time  Short-circuit protection  Measure was ressure  Relative pressure  Pressure measuring range end value  O MPa O bar O Piezoressure  O AMPa A bar S8 psi Ocernating medium  Compressed air as per ISO 8573-1;2010 [] Liquid media Gaseous media  Gaseous media  O *C80 *C  Accuracy in ± % FS  Repetition accuracy in ± % FS  Switching function  Freely programmable  Switchable  Max. output current  Analog output  O - 10 V  Rise time  3 ms  Short-circuit protection yes DC operating voltage range	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         Opsi       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         Switching output       2xPNP         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  Operating medium  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  2xPNP  Switching function  Freely programmable  Switchable  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  Ocarboard 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  Repetition accuracy in ± %FS  Switching output  2xPNP  Switching function  Freely programmable  Switchable  Max. output current  Analog output  O -10 V  Rise time  3 ms  Short-circuit protection  yes  DC operating voltage range  15 V35 V	Measured variable	Relative pressure
O bar O psi  Pressure measuring range end value  D.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  Ambient temperature  O °C80 °C  Accuracy in ± % FS  Repetition accuracy in ± %FS  Switching output  2xPNP  Switching function  Freely programmable  Switching element function  Switchable  Max. output current  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  O.15 %FS  Switching output  2xPNP  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	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  2xPNP  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  15 V35 V	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  0.15 %FS  Switching output  2xPNP  Switching function  Freely programmable  Switchable  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 2xPNP  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 2xPNP 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  2xPNP  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  Switchable  Freely programmable  Switchable  250 mA  0 - 10 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  2xPNP  Freely programmable  Switchable  250 mA  0 - 10 V  Rise time  3 ms  Short-circuit protection  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	2xPNP
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 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	
Mounting position	Any	
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/cm² 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	