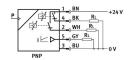
Pressure sensor SPAW-P16R-G14F-2PA-M12

FESTO

Part number: 8022781





Data sheet

c UL us - Listed (OL) CE marking (see declaration of conformity) As per EU EMC directive As per EU RNHS directive DUKCA marking (see declaration of conformity) To UK instructions for EMC To UK RNHS instructions Note on materials ROHS-compliant Measured variable Relative pressure Method of measurement Metal thin-film pressure sensor Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value 1.6 MPa 1.6 bar 232 psi Overload pressure 3.2 MPa 3.2 bar 464 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Femperature of medium -20 °C85 °C Ambient temperature O °C80 °C Accuracy in ± % FS Switching output 2xPNP Switching output 2xPNP Switching output 5xitching element function Max. output current Analog output Ale 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 Note on materials Measured variable Measured variable Metal thin-film pressure sensor Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value 1.6 MPa 16 bar 232 psi Overload pressure 3.2 MPa 3.2 MPa 3.2 bar 464 psi Operating medium Compressed air as per ISO 8573-1:2010 [] Liquid media Gaseous media Emperature of medium -20 °C85 °C Ambient temperature O °C80 °C Accuracy in ± % FS Switching output Ewitching output Switching lement function Max. output current DC operating voltage range 15 V35 V DC operating voltage range 15 V35 V	Certification	
To UK ROHS instructions Note on materials Relative pressure Method of measurement Method of measurement Method of measurement Pressure measuring range initial value O MPa O bar O par O par O par O par Overload pressure 3.2 MPa 3.2 par 464 psi Operating medium Coperating medium Coperating medium Compensure O °C85 °C Anabient temperature O °C80 °C Accuracy in ± %FS Switching output Switching function Freely programmable Switching lement function Max. output current Analog output Analog output Analog output Rieg time Short-circuit protection Method of measure sensor Metal thin-film pressure O MPa O Method Infellement Sensor O MPa	CE marking (see declaration of conformity)	
Measured variable Method of measurement Method of measure sensor O MPa O bar O psi 1.6 MPa 1.6 bar 2.32 psi Overload pressure 3.2 MPa 3.2 bar 4.64 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 1 %FS Repetition accuracy in ± %FS O.15 %FS Switching output 2xPNP Switching function Switching in function Switching element function Switching element function Switching element function Max. output current 250 mA Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection yes DC operating voltage range	UKCA marking (see declaration of conformity)	
Metal thin-film pressure sensor O MPa O bar O psi Pressure measuring range initial value O MPa O bar O psi Pressure measuring range end value 1.6 MPa 16 bar 232 psi Overload pressure 3.2 MPa 32 bar 464 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 1 %FS Repetition accuracy in ± %FS O.15 %FS Switching output Switching function Freely programmable Switching lement function Max. output current Analog output 4 · 20 mA Analog output 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 1.6 MPa 1.6 bar 232 psi Overload pressure 3.2 MPa 32 bar 464 psi Operating medium Compressed air as per ISO 8573-1:2010 [-:] Liquid media Gaseous media Femperature of medium -20 °C85 °C Anabient temperature O °C85 °C Accuracy in ± % FS 1 % FS Repetition accuracy in ± % FS Switching output 2xPNP Switching function Freely programmable Switchable Max. output current Analog output 4 - 20 mA Analog output Rise time 3 ms Short-circuit protection yes DC operating voltage range	Measured variable	Relative pressure
O bar O psi Pressure measuring range end value 1.6 MPa 1.6 bar 232 psi Overload pressure 3.2 MPa 3.2 bar 464 psi Operating medium Compressed air as per ISO 8573-1:2010 [-···-] Liquid media Gaseous media Femperature of medium -20 °C85 °C Anhient temperature 0 °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS o.15 %FS Switching output 2xPNP Switching function Freely programmable Switching element function Max. output current Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Method of measurement	Metal thin-film pressure sensor
16 bar 232 psi Diverload pressure 3.2 MPa 32 bar 464 psi Diperating medium Compressed air as per ISO 8573-1:2010 [-::-] Liquid media Gaseous media Femperature 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 Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Pressure measuring range initial value	0 bar
32 bar 464 psi Departing 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 2xPNP Switching function Freely programmable Switchable Max. output current Analog output 250 mA Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Pressure measuring range end value	16 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 O.15 %FS Switching output 2xPNP Switching function Freely programmable Switchable Switchable Max. output current 250 mA Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection DC operating voltage range 15 V35 V	Overload pressure	32 bar
Ambient temperature 0 °C80 °C Accuracy in ± % FS 1 %FS Repetition accuracy in ± %FS Switching output 2xPNP Switching function Freely programmable Switchable Max. output current 250 mA Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection DC operating voltage range 15 V35 V	Operating medium	Liquid media
Accuracy in ± % FS Repetition accuracy in ± %FS O.15 %FS Switching output 2xPNP Switching function Freely programmable Switchable Max. output current 250 mA Analog output 4 - 20 mA 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 4 - 20 mA Rise time 3 ms Short-circuit protection yes DC operating voltage range 0.15 %FS 0.15 %FS Switchable Freely programmable Switchable 250 mA 4 - 20 mA 15 V35 V	Ambient temperature	0 ℃80 ℃
Switching output 2xPNP Switching function Freely programmable Switching element function Switchable Max. output current 250 mA Analog output 4 - 20 mA Rise time 3 ms Short-circuit protection yes DC operating voltage range 15 V35 V	Accuracy in ± % FS	1 %FS
Switching function Freely programmable Switching element function Switchable Max. output current 250 mA Analog output 4 - 20 mA 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 Switchable Max. output current 250 mA Analog output 4 - 20 mA 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 4 - 20 mA Rise time 3 ms Short-circuit protection DC operating voltage range 15 V35 V	Switching function	Freely programmable
Analog output 4 - 20 mA 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	4 - 20 mA
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 internal thread With accessories
Mounting position	Any
Pneumatic connection	Internal thread G1/4
Product weight	230 g
Housing material	ABS High-alloy stainless steel
Materials in contact with the media	High-alloy stainless steel
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