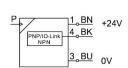
Pressure sensor SPAE-V1R-PC10-PNLK-2.5K

FESTO

Part number: 8025978





Data sheet

Feature	Value
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing authority	UL E322346
Note on materials	RoHS-compliant
Measured variable	Relative pressure
Method of measurement	Piezoresistive pressure sensor with display
Pressure measuring range initial value	O MPa O bar O psi
Pressure measuring range end value	-0.1 MPa -1 bar -14.5 psi
Overload pressure	0.5 MPa 5 bar 72.5 psi
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication possible
Temperature of medium	0 °C50 °C
Ambient temperature	0 °C50 °C
ADC resolution	10 bit
Accuracy in ± % FS	1.5 %FS
Repetition accuracy in ± %FS	0.3 %FS
Temperature co-efficient in ± %FS/K	0.05 %FS/K
Switching output	PNP/NPN switchable
Switching function	Freely programmable
Switching element function	N/C contact N/O contact Switchable
On time	1 ms
Switch-off time	1 ms

Display range start value 9 %FS Display range end value 99 %FS Short-circuit protection yes Protocol 10-Link®, protocol version 9 bevice V 1.1 Ol-Link®, protocol version 9 bevice V 1.1 Ol-Link®, function classes Process data variable (PDV) Identification Diagnostics Teach channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel (DOLInk®, function classes Process data variable (PDV) Identification Diagnostics Teach channel (DOLInk®, prot class A A OOLInk®, prot class A A Poll-Link®, prot class A A Poll-Link®, process data width IN 2 8yee OOLInk®, process data width IN 2 8yee OoLink®, process data width IN 2 8yee OoLink®, process data void the IN 2 8yee OoLink®, process data content IN 2 bit BDC (pressure measurement) 2 bit BDC (pressure monitoring) OoLink®, data more yrequired OoLink®, data will be producted to the production of the product weight Oolink®, data will be producted to the production of t	Feature	Value
Display range end value Short-circuit protection yes Frotoclor 10-Link®, protocol version Device V 1.1 O-Link®, protocol version D-Link®, protocol data width OUT D-Link®, protocol data width OUT D-Link®, protocol data width N D-Link®, protocol data width N D-Link®, protocol data vidth	Max. output current	100 mA
Short-drault protection Protect IO-Link®, profile Smart sensor profile S	Display range start value	0 %FS
Protocol OLInk®, protocol version OLInk®, protocol version Device V 1.1 OLInk®, protocol version OLInk®, function classes Binary data channel (BDC) Process data variable (PDV) discrimination mode COM2 (38,4 REd) OLInk®, protess data variable (PDV) OLInk®, minimum cycle time 3 ms OLInk®, minimum cycle time 3 ms OLInk®, data memory required 0.5 kB OLInk®, data memory required 0.5 kB OL operating voltage range 18 V30 V Reverse polarity protection For all electrical connections Electrical connection Carbie Open end Cable (PDV) Open end Cable (PDV) Open end Cable (PDV) Open end Carbie (PDV) Open end Op	Display range end value	99 %FS
O-Link®, protocol version Device V 1.1	Short-circuit protection	yes
O-Link®, profile Smart sensor profile O-Link®, function classes Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Floats channel (BDC) Process data variable (PDV) Identification Diagnostics Floats channel COM2 (38.4 kBd) O-Link®, SIO mode support Yes O-Link®, SIO mode support Yes O-Link®, port class A O-Link®, process data width OUT O Style O-Link®, process data width IN 2 Byte O-Link®, process data width IN 2 Byte O-Link®, process data content IN 14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring) O-Link®, process data content IN 2 bit BDC (pressure monitoring) O-Link®, data memory required O.5 kB O-Link®, data memory required O-Link	Protocol	IO-Link®
Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Process data variable (PDV) Identification Identifi	IO-Link®, protocol version	Device V 1.1
Process data variable (PDV) Identification Diagnostics Treach channel O-Link®, communication mode COM2 (38,4 kBd) O-Link®, process data width OUT O Byte O-Link®, process data width NI 2 byte O-Link®, process data width NI 2 byte O-Link®, process data width NI 2 bit BDC (pressure measurement) 2 bit BDC (pressure monitoring) O-Link®, minimum cycle time 3 ms O-Link®, minimum cycle time 3 ms O-Link®, process planty protection O-Link®, process planty protection Electrical connection Cable length 2.5 m Yever polarity protection Electrical connection Cable length 2.5 m Processure measurement) 2.5 m Processure monitoring Prin-type connection Cartridge 10 mm Product weight A0 g Housing material PA-reinforced Sealing ring material PA-reinforced Sealing ring material PA-reinforced Sealing ring material PA-reinforced Sealing ring material Displays bye ELED display 2-digit Displays and pushbuttons Protection against tampering Product corresponds to Festo's internal product definition for use in battery production-fleatisk with more than 1% by mass of copper, zinc or rickle are excluded from use. The exceptions are client in steel, chemically in connection steels, cables, electrical plug connection steels, chemically view chemically view production-fleatisk with more than 1% by mass of copper, zinc or rickle are excluded from use in battery production-fleatisk with more than 1% by mass of copper, zinc or rickle are excluded from use. The exceptions are client is teel, chemically rickles places, circuit boards, cables, electrical plug connection are connection and cable.	IO-Link®, profile	Smart sensor profile
O-Link®, SIO mode support Yes	IO-Link®, function classes	Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link®, process data width OUT	·	
10-Link®, process data width OUT 0 Byte 14 bit PDV (pressure measurement) 2 Byte 10-Link®, process data content IN 14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring) 10-Link®, minimum cycle time 3 ms 18 V30 V 18	IO-Link®, SIO mode support	Yes
10-Link®, process data width IN 2 Byte 14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring) 10-Link®, process data content IN 2 bit BDC (pressure monitoring) 10-Link®, minimum cycle time 3 ms 3 ms 10-Link®, data memory required 0.5 kB 18 V30 V 18 V30		А
10-Link®, process data content IN 14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring) 10-Link®, minimum cycle time 3 ms 10-Link®, data memory required 0.5 KB DC operating voltage range 18 V30 V Reverse polarity protection 5 of all electrical connections Electrical connection 2 mire Cable Open end Cable length 2.5 m Type of mounting Pin-type conneciton Any Prenumatic connection Cartridge 10 mm Product weight 40 g Housing material PA-reinforced Sealing ring material PA-reinforced Sealing ring material PBM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options 10-Link® Feach-in Via display and pushbuttons Protection against tampering PIN code Setting ange threshold value 1 1%98 % Degree of protection Corrosion resistance class (CRC) 2 - Moderate corrosion stress VDMA24364-B2-L Suitability for the production of Li-ion batteries Display batter, circuit boards, cables, electrical plug connections are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils	·	0 Byte
2 bit BDC (pressure monitoring) 10-Link®, minimum cycle time 10-Link®, data memory required 10-Link®, data memory required 10-Link®, data memory required 10-Link®, data memory required 11 8 V30 V Reverse polarity protection 12 awire Cable Open end Cable Open end Cable length 2.5 m Type of mounting Mounting position Preumatic connection Cartridge 10 mm Product weight 40 g PA-reinforced Sealing ring material PA-reinforced Sealing ring material PPM NBR Display type 1ED display 2-digit Displayable unit(s) Swifts Switching status indication LED yellow Setting options Protection against tampering PIN code Setting range threshold value Degree of protection Corrosion resistance class (CRC) 1 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product overseand coils Product overseponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	IO-Link®, process data width IN	2 Byte
DC-Link®, data memory required DC operating voltage range 18 V30 V Reverse polarity protection For all electrical connections Selectrical connection Cable Open end Cable Interpret Cable Open end Cable Interpret Cable Open end Cathe Open end Cartridge 10 mm Product weight Any Preumatic connection Cartridge 10 mm Product weight Any Pa-reinforced Sealing ring material FPM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication ELED Vellow Setting options Fortection against tampering Protection against tampering Protection against tampering Protection Protection Product Sealing ring materian Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection PLA Corrosion resistance class (CRC) 2 - Moderate corrosion stress VolMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	IO-Link®, process data content IN	
DC operating voltage range Reverse polarity protection For all electrical connections Savire Cable Open end Cable length 2.5 m Type of mounting Pin-type connection Cartridge 10 mm Product weight Housing material Pareinforced Sealing ring material Pareinforced Sealing ring material Pisplay by 2-digit Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options 10-Link® Teach-in Via display and pushbuttons Protection against tampering Pin code Setting range threshold value 1 %98 % Degree of protection Corrosion resistance class (CRC) LABS (PWIS) conformity Product corresponds to Festo's internal product definition 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 intickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils	IO-Link®, minimum cycle time	3 ms
Reverse polarity protection Electrical connection 3-wire Cable Open end Cable length 2.5 m Type of mounting Mounting position Any Preduct weight 40 g Housing material Sealing ring material FPM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options Foetection against tampering Protection against tampering Protection against tampering Protection Protection against tampering Protection against tampering Protection against tampering Protection against tempering	IO-Link®, data memory required	0.5 KB
Electrical connection 3-wire Cable Open end Cable length 2.5 m Type of mounting Pin-type conneciton Mounting position Any Premuratic connection Cartridge 10 mm Product weight 40 g Housing material PA-reinforced Sealing ring material PFM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options IO-Link® Feach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 Moderate corrosion stress VDMA24364-B2-L VDMA24364-B2-L Product corresponds to Festo's internal product definition 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 hickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils	DC operating voltage range	18 V30 V
Cable Open end Cable length 2.5 m Type of mounting Pin-type conneciton Mounting position Any Pneumatic connection Cartridge 10 mm Product weight 40 g Housing material PA-reinforced Sealing ring material FPM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 - Moderate corrosion stress VDMA24364-B2-L Suitability for the production of Li-ion batteries Product value in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils	Reverse polarity protection	for all electrical connections
Pin-type of mounting Mounting position Any Pneumatic connection Product weight Housing material Pa-reinforced Sealing ring material PFM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value Degree of protection Corrosion resistance class (CRC) LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Electrical connection	Cable
Mounting position Pneumatic connection Cartridge 10 mm Product weight 40 g Housing material PA-reinforced Sealing ring material PFM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value Degree of protection Corrosion resistance class (CRC) LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are lickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils	Cable length	2.5 m
Pneumatic connection Cartridge 10 mm Product weight 40 g PA-reinforced Sealing ring material PPM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection Corrosion resistance class (CRC) LABS (PWIS) conformity VDMA24364-B2-L Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Type of mounting	Pin-type conneciton
Product weight Housing material PA-reinforced FPM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection Corrosion resistance class (CRC) LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Mounting position	Any
Housing material Sealing ring material FPM NBR Display type LED display 2-digit Displayable unit(s) Switching status indication LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection Corrosion resistance class (CRC) 2 · Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Pneumatic connection	Cartridge 10 mm
Sealing ring material FPM NBR Display type LED display 2-digit Displayable unit(s) %FS Switching status indication LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 · Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition for use in battery production:Metals with more than 1% by mass of copper, zinc or nicked are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils	Product weight	40 g
NBR LED display 2-digit Displayable unit(s) Setting options LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection Corrosion resistance class (CRC) LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Housing material	PA-reinforced
2-digit Displayable unit(s) %FS Switching status indication LED yellow Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Sealing ring material	
Switching status indication LED yellow IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Display type	
Setting options IO-Link® Teach-in Via display and pushbuttons Protection against tampering PIN code	Displayable unit(s)	%FS
Teach-in Via display and pushbuttons Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Switching status indication	LED yellow
Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class (CRC) 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Setting options	Teach-in
Degree of protection IP40 Corrosion resistance class (CRC) 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Protection against tampering	PIN code
Corrosion resistance class (CRC) 2 - Moderate corrosion stress VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Setting range threshold value	1 %98 %
LABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Degree of protection	IP40
Suitability for the production of Li-ion batteries Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils	Corrosion resistance class (CRC)	2 - Moderate corrosion stress
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, circuit boards, cables, electrical plug connectors and coils	LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom class Class 4 according to ISO 14644-1	Suitability for the production of Li-ion batteries	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, circuit boards, cables, electrical plug
	Cleanroom class	Class 4 according to ISO 14644-1