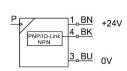
Pressure sensor SPAE-V1R-PC10-PNLK-2.5K

FESTO

Part number: 8025978





Data sheet

| Feature | Value |
|--|---|
| Approval | RCM trademark c UL us - Recognized (OL) |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with 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 |
| Measurement method | Piezoresistive pressure sensor with display |
| Start value for pressure measuring range | 0 MPa 0 bar 0 psi |
| End value for pressure measuring range | -0.1 MPa -1 bar -14.5 psi |
| Overload pressure | 0.5 MPa 5 bar 72.5 psi |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Lubricated operation possible |
| Media temperature | 0 °C50 °C |
| Ambient temperature | 0 °C50 °C |
| Resolution ADC | 10 bit |
| Accuracy in ± % FS | 1.5 %FS |
| Repetition accuracy in ± %FS | 0.3 %FS |
| Temperature coefficient 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 |
| Switch-on time | 1 ms |
| Switch-off time | 1 ms |

| Display range start value 9 %FS Sipplay range end value 99 %FS Thort circuit current rating yes Thort circuit current rating yes Thort circuit current rating 99 %FS Thort circuit current rating 99 %FS Thort circuit current rating 90 Merice V 1.1 Define Protocol 10-Link P | Feature | Value |
|--|--|---|
| Splay range end value 99 %FS | Max. output current | 100 mA |
| ritorocol (O-Link@) Poticol (Poticol version (O-Link@) D-Link, Protocol version (O-Link Protocos data variable (PDV) detentification (O-Link, Function classes (O-Link Process data variable (PDV) detentification (O-Link, Communication mode (O-Link Process data variable (PDV) detentification (O-Link Process data length (O-Link Protocos data length (O-Link Protocos data length (O-Link Process data length (O-Link Proce | Display range start value | 0 %FS |
| Policin, Protocol version Delinic, Protocol version Device V 1.1 Delinic, Protocol version Device V 1.1 Delinic, Function classes Delinic, Function classes Delinic, Function classes Delinic, Function classes Delinic, Function mode COM2 (38.4 R83ud) Delinic, Stol-Mode support Ves Delinic, Process data length OUT Delinic, Process data length OUT Delinic, Process data length OUT Delinic, Process data length IN Delinic, Process data tength IN Delinic, Process data content IN Delinic, Process data tength IN Delinic, Process data content IN Delinic, Process data tength IV D | Display range end value | 99 %FS |
| D-Link, Protocol version D-Link, Profice Smart sensor profile Smart sensor profile D-Link, Function classes Binary data channel (BIC) Process data variable (PDV) identification Diagnostics Teach channel D-Link, Communication mode COM2 (38.4 kBaud) D-Link, Port Class A D-Link, Process data length OUT D-Link, Process data length OUT D-Link, Process data length NI D-Link, Process data length NI D-Link, Process data length NI D-Link, Process data content N D-Link, Process data length NI D-Link, | Short circuit current rating | yes |
| O-Link, Profile O-Link, Function classes Process data variable (PDV) Identification D-Link, communication mode COM2 (38.4 kBaud) O-Link, SIO-Mode support Ves O-Link, Profices data variable (PDV) Identification D-Link, SIO-Mode support Ves O-Link, Profices data length OUT O-Link, Process data length OUT O-Link, Process data length IN O-Link, Process data content IN 1 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring) O-Link, Min. cycle time O-Link, Min. cycle time O-Link, Data storage required O-Link Data sto | Protocol | IO-Link® |
| D-Link, Function classes Binary data channel (BDC) Process data variable (PDV) identification Diagnostics reach channel O-Link, communication mode COM2 (38.4 kBaud) O-Link, Process data length OUT O-Link, Min. cycle time O-Link, Data storage required O-S KB O-Link, Data storage required O-S KB O-Link, Data storage required O-S KB O-Link, Data storage required O- | IO-Link, Protocol version | Device V 1.1 |
| Process data variable (PDV) Identification Diagnostics Teach channel PO-Link, communication mode COM2 (38.4 kBaud) Po-Link, Si.O-Mode support Yes A Po-Link, Si.O-Mode support Yes A Po-Link, Process data length OUT Objects A Po-Link, Process data length NO D-Link, Process data length NO D-Link, Process data content IN D-Link, Product corresponds to the Internal product definition from Fest of use in battery production Metals with more than 1% by maced on process of use in battery production Metals with more than 1% by maced on the linternal product definition from Fest of use in battery production delical winces, printed clincuit boards, cables, electrical plug onnectors and colis. | IO-Link, Profile | Smart sensor profile |
| O-Link, SIO-Mode support O-Link, Process data length OUT O-Link, Process data length IN O-Link, Process data length IN O-Link, Process data length IN O-Link, Process data content IN 14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring) 3 ms O-Link, Min. cycle time O-Link, Min. cycle time O-Link, Min. cycle time O-Link, Data storage required O-Link, Deverse polarity protection For all electrical connections lectrical connection Cable Open end Cable O | IO-Link, Function classes | Process data variable (PDV) Identification Diagnostics Teach channel |
| O-Link, Port class O-Link, Process data length OUT O-Link, Process data length IN 2 bytes O-Link, Process data length IN 2 bytes O-Link, Process data content IN 14 bit PDV (pressure measurement value) 2 bit BOC (pressure monitoring) O-Link, Min. cycle time O-Link, Data storage required 0.5 KB O-Link Data storage required 0.5 KB Operational voltage range DC 18 V., 30 V teverse polarity protection For all electrical connections lectrical connection 3 -wire Cable Open end J. 5 m Open end J. 5 m Open end John Data development Open one of the production optional Open end Auterial position Optional Auterial sealing ring Auterial sealing ring PPM NBR Jisplay type 1 ED indicator 2-digit Jisplayable units Wr. 5 Witching status indication Vellow LED Open end John LED | · | ` ' |
| O-Link, Process data length OUT O-Link, Process data length IN O-Link, Process data content IN 14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring) O-Link, Min. cycle time O-Link, Min. cycle time O-Link, Data storage required O-Link, Data storage required O-Link Data storage required O- | | |
| D-Link, Process data length IN D-Link, Process data content IN 14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring) D-Link, Min. cycle time 3 ms D-Link, Data storage required 0.5 KB Deparational voltage range DC 18 V30 V Reverse polarity protection Reverse polarity protection Relectrical connections Relectrical connection Relectrical connection Relectrical connection Reverse polarity protection Reverse polarity protection Reverse polarity protection Relectrical connection Relectrical connection Relectrical connection Reverse polarity protection protection production from Festo 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-plade surfaces, printed circuit boards, cables, electrical plug connectors and colis | | |
| D-Link, Process data content IN 14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring) O-Link, Min. cycle time O-Link, Data storage required O. S. KB Operational voltage range DC 18 V30 V Reverse polarity protection For all electrical connections Rectrical connection 2 -wire Cable Open end able length 2.5 m Yie of mounting Pin-type connection Outning position Optional Auterial rounder weight 40 g Material housing PA-reinforced Aterial sealing ring Aterial sealing ring Aterial sealing ring PRM NBR Risplayable units Wisplayable units Wisplayable units Wisplayable units Wisplayable units Ortication against tampering PIN code Petting options PIN code | <u> </u> | 0 bytes |
| 2 bit BDC (pressure monitoring) O-Link, Min. cycle time O-Link, Data storage required Departational voltage range DC 18 V30 V Reverse polarity protection For all electrical connections 3 wire Cable Open end Able length 2.5 m Pin-type connection Outning position Optional Anounting position Optional Anounting position Orduct weight 40 g Alaterial housing PA-reinforced Material sealing ring NBR Alaterial sealing ring ANBR Display type LED indicator 2-digit Displayable units WFS Witching status indication Vellow LED Setting options Feach-in Via display and keys Protection IP40 Orrosion resistance class CRC 2 - Moderate corrosion stress ABS (PWIS) conformity VDMA 24364-B2-L Product corresponds to the internal product definition from Festo 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 surface surface printed circuit boards, cables, electrical plug connectors and colls | IO-Link, Process data length IN | 2 bytes |
| O-Link, Data storage required O-Elink, Data storage range DC 18 V30 V Reverse polarity protection For all electrical connections 3-wire Cable Open end 2.5 m Pin-type connection Optional Pin-type connection Pin-type connection Cartridge 10 mm Product weight Agerial sealing ring PA-reinforced Asterial sealing ring PA-reinforced PBM NBR Oisplay type LED indicator 2-digit Vellow LED Vellow LED Veltow LED Portection against tampering PIN code Verting ange threshold value Page of protection PAS (PMS) Corrosion resistance class CRC PABS (PWIS) conformity VDMA24364-B2-L VDMA24364-B2-L VDMASS (PWIS) conformity Vans (Pass) Van | IO-Link, Process data content IN | |
| Departional voltage range DC teverse polarity protection For all electrical connections 3-wire Cable Open end Able length 2.5 m ype of mounting Pin-type connection Outling position Optional Anterial housing Anterial housing Anterial sealing ring PPM NBR Displayable units Witching status indication Vellow LED Ortoetction against tampering PIN code Setting options PIN code Ortoetction against tampering PIN code Setting range threshold value 1 %98 % Degree of protection PP40 Orrosion resistance class CRC ABS (PWIS) conformity VolMA24364-B2-L Product corresponder of parties of copper, zinc or nickel are excluded from use. The exceptions are nickel in steet, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils | IO-Link, Min. cycle time | 3 ms |
| Feverse polarity protection Savire | IO-Link, Data storage required | 0.5 KB |
| lectrical connection 3-wire Cable Open end able length 2.5 m Yee of mounting Pin-type connection Aounting position optional Are making connection Cartridge 10 mm Aroduct weight 40 g Alterial housing PA-reinforced Afterial sealing ring FPM NBR Display type LED indicator 2-digit Displayable units WFS Witching status indication Vellow LED Setting options Touch with tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class CRC 2 Moderate corrosion stress ABS (PWIS) conformity Volum Late or a production of Li-ion batteries Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Operational voltage range DC | 18 V30 V |
| Cable Open end (able length (able length) (able of mounting (able length) (able optional) (able o | Reverse polarity protection | For all electrical connections |
| Pin-type connection Adounting position Adounting position Another connection Anoth | Electrical connection | Cable |
| Advanting position Advanting position Advanting position Advanting position Advanting position Advanting position Advantage 10 mm Advanting position Advanting | Cable length | 2.5 m |
| Acterial connection Cartridge 10 mm Product weight Acterial housing PA-reinforced FPM NBR Display type LED indicator 2-digit Displayable units WFS Witching status indication Fetting options Potection against tampering FIN code Setting range threshold value Protection FPM NBR Feach-in Via display and keys Protection FPN Corrosion resistance class CRC ABS (PWIS) conformity VDMA24364-B2-L Froduct corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Type of mounting | Pin-type connection |
| Aderial housing PA-reinforced Material sealing ring PA-reinforced Material sealing ring FPM NBR Display type LED indicator 2-digit Displayable units %FS Witching status indication Yellow LED Setting options IO-Link® Feach-in Via display and keys Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection PP40 Corrosion resistance class CRC 2 - Moderate corrosion stress ABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Mounting position | optional |
| Aaterial housing Aaterial sealing ring FPM NBR Display type LED indicator 2-digit Displayable units FFS Witching status indication Vellow LED Setting options FOR Correction against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Sorrosion resistance class CRC ABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries For open, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils | Pneumatic connection | Cartridge 10 mm |
| Adaterial sealing ring FPM NBR LED indicator 2-digit Displayable units FFS Witching status indication Vellow LED Feeting options FOR Correction against tampering FIN code Fietting range threshold value Perotection FP40 Fortic corresion resistance class CRC ABS (PWIS) conformity VDMA24364-B2-L Forduct corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Product weight | 40 g |
| NBR LED indicator 2-digit Displayable units %FS Witching status indication Yellow LED Setting options IO-Link® Teach-in Via display and keys Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Sorrosion resistance class CRC ABS (PWIS) conformity VDMA24364-B2-L Forduct corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Material housing | PA-reinforced |
| 2-digit Displayable units Disp | Material sealing ring | |
| Switching status indication Yellow LED IO-Link® Teach-in Via display and keys Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class CRC 2 - Moderate corrosion stress ABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Display type | |
| IO-Link® Teach-in Via display and keys Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class CRC 2 - Moderate corrosion stress ABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Displayable units | %FS |
| Teach-in Via display and keys Protection against tampering PIN code Setting range threshold value 1 %98 % Degree of protection IP40 Corrosion resistance class CRC 2 - Moderate corrosion stress ABS (PWIS) conformity VDMA24364-B2-L Suitability for the production of Li-ion batteries Froduct corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Switching status indication | Yellow LED |
| 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 corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Setting options | Teach-in |
| Degree of protection IP40 Corrosion resistance class CRC 2 - Moderate corrosion stress ABS (PWIS) conformity VDMA24364-B2-L Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Protection against tampering | PIN code |
| ABS (PWIS) conformity VDMA24364-B2-L Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Setting range threshold value | 1 %98 % |
| ABS (PWIS) conformity VDMA24364-B2-L Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Degree of protection | IP40 |
| Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils | Corrosion resistance class CRC | 2 - Moderate corrosion stress |
| 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, printed circuit boards, cables, electrical plug connectors and coils | LABS (PWIS) conformity | VDMA24364-B2-L |
| Class 4 according to ISO 14644-1 | Suitability for the production of Li-ion batteries | 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, printed circuit boards, cables, |
| | Cleanroom class | Class 4 according to ISO 14644-1 |