

Positioner CMSX-P-S-C-U-F1-S-50-A

Part number: 3929370

FESTO



 General operating condition

Data sheet

| Feature | Value |
|---|--|
| Design | Digital, electropneumatic positioner |
| Mode of operation | Single-acting |
| Design characteristics | Safety position – pneumatic outlet 4 exhausted |
| Mounting position | Any |
| Type of mounting | With accessories |
| Functional principle of measuring system | Potentiometer |
| Sensing range | 0 deg ... 100 deg |
| Display | 7-segment LCD display With backlighting |
| Setting options | Via display and buttons |
| Size of dead zone | 0.5 % ... 10 % |
| Operating pressure | 0.3 MPa ... 0.8 MPa |
| Operating pressure | 3 bar ... 8 bar |
| Operating pressure | 43.5 psi ... 116 psi |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Maximum particle size 40 µm |
| Standard nominal flow rate (standardised to DIN 1343) | 50 l/min |
| Pneumatic connection | G1/8 |
| Nominal operating voltage DC | 24 V |
| Operational voltage range DC | 21.6 V ... 26.4 V |
| Max. current consumption | 600 mA |
| Reverse polarity protection | For operating voltage connections |
| digital input, signal range | 0 - 10 V 0 - 20 mA 4 - 20 mA |
| Analogue inputs, max. dynamic range | 0 - 24 mA 0 - 11 V |
| Analogue inputs, linearity error at 25 °C | 0.5 % |
| Analogue inputs, temperature coefficient | <0.02 %FS/K |
| Analogue inputs, resolution | 16 bit |
| Analog inputs, overload protection | Yes |
| Analogue inputs, electrical isolation | No |
| digital output, signal range | 4 - 20 mA |
| Analogue outputs, max. load impedance | ≤600 Ohm |
| Analogue outputs, linearity error at 25°C | 0.5% |
| Analogue outputs, temperature coefficient | <0.02 %FS/K |

| Feature | Value |
|--|--|
| Analogue outputs, resolution | 12 bit |
| Analogue outputs, reverse polarity protection | Yes |
| Analog outputs, short circuit current rating | Yes |
| Analog outputs, overload protection | Yes |
| Analogue outputs, galvanic isolation | No |
| Characteristic for inputs | To IEC 61131-2, type 3 |
| Switching input | PNP NPN |
| Digital inputs, reverse polarity protection | Yes |
| Digital inputs, electrical isolation | yes, optocoupler |
| Digital outputs, reverse polarity protection | Yes |
| Switching output | 3 x PNP or 3 x NPN, switchable |
| Digital outputs, output current | 100 mA |
| Digital outputs, short circuit current rating | Yes |
| Digital outputs, overload protection | Yes |
| Digital outputs, electrical isolation | yes, optocoupler |
| Electrical connection 1, function | 3x digital output Analogue output Analogue input Digital input Power supply Power supply load |
| Electrical connection 1, connection type | Terminal strip |
| Electrical connection 1, connector system | Screw terminal |
| Electrical connection 1, number of connections/cores | 13 |
| Electrical connection 1, tightening torque | 0.6 Nm |
| Electrical connection 1, conductor cross section | <1.5 mm ² |
| Cable fitting | M20 x 1.5 for electrical connection 1 |
| Permissible cable diameter | 7 - 13 mm for electrical connection 1 |
| Max. cable length | 30 m for electrical connection 1 |
| Ambient temperature | -5 °C ... 60 °C |
| Storage temperature | -20 °C ... 60 °C |
| Relative air humidity | 5 - 95% Non-condensing |
| Degree of protection | IP65 |
| Corrosion resistance class CRC | 2 - Moderate corrosion stress |
| Shock resistance | Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27 As per EN 60068-2-29 |
| Vibration resistance | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 As per EN 60068-2-6 |
| Pollution degree | 3 |
| Approval | RCM |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| Material housing | Reinforced PC |
| Material screen | Makrolon® |
| Material base plate | Wrought aluminium alloy, anodised |
| Material shaft | High-alloy stainless steel |
| Material coupling | High-alloy stainless steel |
| Material screws | High-alloy stainless steel |
| Material seals | NBR |
| Material cable gland | Process automation |
| Material blanking plug | Process automation |
| LABS (PWIS) conformity | VDMA24364-B2-L |

| Feature | Value |
|------------------------|--------------------------|
| Note on materials | RoHS compliant |
| Product weight | 970 g |
| Dimensions (W x L x H) | 190 mm x 105 mm x 130 mm |