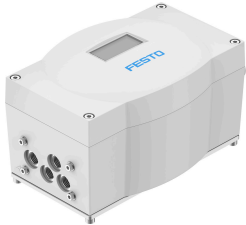


Positioner CMSX-P-SE-C-U-F1-D-50-A

Part number: 8171507

FESTO



Data sheet

| Feature | Value |
|---|--|
| Structural design | digital, electropneumatic positioner |
| Mode of operation | Double-acting |
| Design features | Safety position – pneumatic outlet 4 exhausted Safety position – pneumatic output 2 pressurized |
| Mounting position | Any |
| Type of mounting | With accessories |
| Measuring principle of linear potentiometer | Potentiometer |
| Display | 7-segment LCD display With backlighting |
| Size of dead space | 0.5 %...10 % |
| Operating pressure | 0.3 MPa...0.8 MPa 3 bar...8 bar 43.5 psi...116 psi |
| Operating medium | Compressed air as per ISO 8573-1:2010 [7:4:4] |
| Information on operating and pilot media | Operation with oil lubrication not possible |
| Standard nominal flow rate | 50 l/min |
| Pneumatic connection | G1/8 |
| Nominal operating voltage DC | 24 V |
| DC operating voltage range | 21.6 V...26.4 V |
| Max. current consumption | 600 mA |
| Reverse polarity protection | for operating voltage connections |
| Connection resistance | 80 kOhm |
| Analog inputs, signal range | 0 - 10 V 0 - 20 mA 4 - 20 mA |
| Analog inputs, max. dynamic range | 0 - 24 mA 0 - 11 V |
| Analog inputs, linearity error at 25°C | 0.5 % |
| Analog inputs, temperature coefficient | 0.02 %FS/K |
| Analog inputs, resolution | 16 bit |
| Analog inputs, overload protection | yes |
| Analog inputs, galvanic isolation | no |
| Analog outputs, signal range | 4 - 20 mA |

| Feature | Value |
|--|--|
| Analog outputs, max. load resistance | 600 Ohm |
| Analog outputs, linearity error at 25°C | 0.5% |
| Analog outputs, temperature coefficient | 0.02 %FS/K |
| Analog outputs, resolution | 12 bit |
| Analog outputs, reverse polarity protection | yes |
| Analog outputs, short-circuit protection | yes |
| Analog outputs, overload protection | yes |
| Analog outputs, galvanic isolation | no |
| Input characteristics | As per IEC 61131-2, type 3 |
| Digital inputs, reverse polarity protection | yes |
| Digital inputs, electrical isolation | Yes, optocoupler |
| Digital outputs, reverse polarity protection | yes |
| Digital outputs, output current | 100 mA |
| Digital outputs, short circuit current rating | yes |
| Digital outputs, overload protection | yes |
| Digital outputs, potential separation | Yes, optocoupler |
| Electrical connection 1, function | 3x digital output Analog output Analog input Digital input Power supply Load power supply |
| Electrical connection 1, connection type | Terminal strip |
| Electrical connection 1, connection technology | Screw terminal |
| Electrical connection 1, number of pins/wires | 13 |
| Electrical connection 1, tightening torque | 0.6 Nm |
| Electrical connection 1, conductor cross section | 1.5 mm ² |
| Electrical connection 2, function | External path/angle sensor |
| Electrical connection 2, connection type | Terminal strip |
| Electrical connection 2, connection technology | Screw terminal |
| Electrical connection 2, number of pins/wires | 3 |
| Electrical connection 2, tightening torque | 0.6 Nm |
| Electrical connection 2, conductor cross section | 1.5 mm ² |
| Cable fitting | M12 x 1.5 for electrical connection 2 M20 x 1.5 for electrical connection 1 |
| Approved cable diameter | 3-6.5 mm for electrical connection 2 7-13 mm for electrical connection 1 |
| Max. cable length | 3 m for electrical connection 2 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 as per FN 942017-5 and EN 60068-2-27 as per EN 60068-2-29 |
| Vibration resistance | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 as per EN 60068-2-6 |
| Certification | RCM compliance mark |
| 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 |
| Housing material | PC-reinforced |
| Base plate material | Wrought aluminum alloy, anodized |

| Feature | Value |
|------------------------------|----------------------------|
| Shaft material | High-alloy stainless steel |
| Quick-coupling material | High-alloy stainless steel |
| Material of screws | High-alloy stainless steel |
| Seals material | NBR |
| Material for cable connector | PA |
| Blanking plug material | PA |
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Note on materials | RoHS-compliant |
| Product weight | 970 g |
| Dimensions W x L x H | 190 mm x 105 mm x 130 mm |