# Positioner
# CMSX-P-SE-C-U-F1-D-130-A

Part number: 3929539



## Data sheet

| Feature | Value |
|---|---|
| Design | Digital, electropneumatic positioner |
| Mode of operation | Double-acting |
| Design characteristics | Safety position – pneumatic outlet 4 exhausted<br>Safety position – pneumatic outlet 2 pressurised |
| Mounting position | optional |
| Type of mounting | With accessories |
| Functional principle of measuring system | Potentiometer |
| Display | 7-segment<br>LCD display<br>With backlighting |
| Size of dead zone | 0.5 %...10 % |
| Operating pressure | 0.3 MPa...0.8 MPa<br>3 bar...8 bar<br>43.5 psi...116 psi |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Lubricated operation not possible<br>Maximum particle size 40 µm |
| Standard nominal flow rate (standardised to DIN 1343) | 130 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 |
| Connection resistance | 80 kOhm |
| digital input, signal range | 0 - 10 V<br>0 - 20 mA<br>4 - 20 mA |
| Analogue inputs, max. dynamic range | 0 - 24 mA<br>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 |

| Feature | Value |
|---|---|
| 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 |
| 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 |
| Digital inputs, reverse polarity protection | yes |
| Digital inputs, electrical isolation | Yes, via 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, electrical isolation | Yes, via optocoupler |
| Electrical connection 1, function | 3x digital output<br>Analogue output<br>Analogue input<br>Digital input<br>Power supply<br>Load power supply |
| 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 mm² |
| Electrical connection 2, function | External path/angle sensor |
| Electrical connection 2, connection type | Terminal strip |
| Electrical connection 2, connector system | Screw terminal |
| Electrical connection 2, number of connections/cores | 3 |
| Electrical connection 2, tightening torque | 0.6 Nm |
| Cable fitting | M12 x 1.5 for electrical connection 2<br>M20 x 1.5 for electrical connection 1 |
| Permissible cable diameter | 3 - 6.5 mm for electrical connection 2<br>7 - 13 mm for electrical connection 1 |
| Max. cable length | 3 m for electrical connection 2<br>30 m for electrical connection 1 |
| Ambient temperature | -5 °C...60 °C |
| Storage temperature | -20 °C...60 °C |
| Relative air humidity | 5 - 95%<br>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<br>As per EN 60068-2-29 |
| Vibration resistance | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6<br>As per EN 60068-2-6 |
| Approval | RCM trademark |
| CE mark (see declaration of conformity) | To EU EMC Directive<br>In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| Material housing | PC-reinforced |
| Material base plate | Wrought aluminium alloy, anodised |

| Feature | Value |
|---|---|
| Material shaft | High-alloy stainless steel |
| Material coupling | High-alloy stainless steel |
| Material screws | High-alloy stainless steel |
| Material seals | NBR |
| Material cable gland | PA |
| Material blanking plug | 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 |