

# Positioner CMSX-P-S-C-U-F1-S-130-A

Part number: 3929369

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                                     | optional                                       |
| Type of mounting                                      | With accessories                               |
| Functional principle of measuring system              | Potentiometer                                  |
| Sensing range   | 0 deg ... 100 deg                              |
| Display   | 7-segment<br>LCD display<br>With backlighting  |
| Setting options                                       | Via display and keys                           |
| 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) | 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              |
| 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   |
| 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<br>NPN   |
| Digital inputs, reverse polarity protection          | yes  |
| Digital inputs, electrical isolation                 | Yes, via 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, 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 mm <sup>2</sup>   |
| 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%<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      |
| Pollution degree                                     | 3  |
| 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 RoHS instructions  |
| Material housing                                     | PC-reinforced  |
| Material screen                                      | PC   |
| 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                                 | PA   |
| Material blanking plug                               | PA   |
| LABS (PWIS) conformity                               | VDMA24364-B2-L   |

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