

# Positioner CMSH-S-VDE1-S-A-AL-G14-C1M20-HA

Part number: 8097412

FESTO



 General operating condition

## Data sheet

| Feature  | Value   |
|--|---|
| Structural design                              | digital, electropneumatic positioner                        |
| Mode of operation                              | Single-acting   |
| Design features                                | Safety switch, pneumatic output 2 exhausted                 |
| Mounting position                              | Any   |
| Type of mounting                               | With accessories<br>As per VDI/VDE 3845                     |
| Measuring principle of linear potentiometer    | Potentiometer   |
| Sensing range                                  | 0 deg ... 115 deg   |
| Display  | LCD display, via software 90° rotatable                     |
| Setting options                                | Via display and keys  |
| Cycle time                                     | 20 ms   |
| Nominal altitude of use above sea level        | ≤ 2000 m NHN  |
| Overvoltage category                           | II  |
| Operating pressure                             | 0.14 MPa ... 0.8 MPa  |
| Operating pressure                             | 1.4 bar ... 8 bar   |
| Operating pressure                             | 20.3 psi ... 116 psi  |
| Operating medium                               | Compressed air as per ISO 8573-1:2010 [7:4:4]               |
| Information on operating and pilot media       | Maximum particle size 40 µm                                 |
| Air performance at $\Delta p = 6$ bar          | 380 l/min   |
| Pneumatic connection                           | G1/4  |
| Reverse polarity protection                    | Yes   |
| Connection resistance                          | 3 kOhm ... 80 kOhm  |
| Analog inputs, signal range                    | 4–20 mA with HART   |
| Analog inputs, input impedance                 | 480 ohm at 20 mA  |
| Analog inputs, overload protection             | ≤ 65 mA   |
| Analog inputs, galvanic isolation              | Yes   |
| Input characteristics                          | 1x to IEC 61131-2, type 3                                   |
| Digital inputs, reverse polarity protection    | Yes   |
| Digital inputs, electrical isolation           | Yes   |
| Digital inputs, overload protection            | 33 V  |
| Electrical connection 1, function              | Analog input<br>Digital input<br>External path/angle sensor |
| Electrical connection 1, connection type       | Terminal strip  |
| Electrical connection 1, connection technology | Spring-loaded terminal                                      |
| Electrical connection 1, number of pins/wires  | 7   |

| <b>Feature</b>                               | <b>Value</b>   |
|--|--|
| Cable fitting                                | 2x M20x1.5   |
| Max. cable length                            | 30 m for external position sensor<br>Shielded  |
| Ambient temperature                          | -40 °C ... 80 °C   |
| Note on ambient temperature                  | Display: -30 - 80 °C   |
| Storage temperature                          | -40 °C ... 80 °C   |
| Climatic category                            | 1K5 as per EN 60721 for storage<br>4K3 as per EN 60721 for operation                                   |
| Degree of protection                         | IP66<br>IP67   |
| Shock resistance                             | Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27                                  |
| Vibration resistance                         | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6                   |
| Contamination level                          | 3  |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>as per EU explosion protection directive (ATEX)<br>As per EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions  |
| Housing material                             | Aluminum, powder-coated  |
| Inspection window material                   | PC   |
| Shaft material                               | high-alloy stainless steel   |
| Quick-coupling material                      | high-alloy stainless steel   |
| Material of screws                           | Galvanized steel   |
| Seals material                               | EPDM<br>NBR<br>VMQ   |
| LABS (PWIS) conformity                       | VDMA24364 Zone III   |
| Note on materials                            | RoHS compliant   |
| Product weight                               | 2640 g   |