

# Positioners

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

Part number: 8097412

**FESTO**



## Data sheet

Feature	Value
Structural design	digital, electropneumatic positioner
Mode of operation	Single-acting
Design features	Safety pneumatic output 2 exhausted
Mounting position	Any
Type of mounting	With accessories 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 pushbuttons
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	Operation with oil lubrication not possible
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 ohms 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 Digital input 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

Feature	Value
Cable fitting	2x M20x1.5
Max. cable length	30 m for external position sensor 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 4K3 as per EN 60721 for operation
Degree of protection	IP66 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
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC 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	High-alloy stainless steel
Seals material	EPDM NBR VMQ
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Product weight	2640 g