Positioner
CMSH-S-VDE1-D-A-AL-G14-C1M20-HA-V2

FESTO

Part number: 8186699

Data sheet

Feature	Value
Structural design	digital, electropneumatic positioner
Mode of operation	Double-acting
Design features	Safety pneumatic output 2 exhausted Safety pneumatic output 4 pressurized
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 medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication not possible Maximum particle size 40 µm
Air performance at Δp = 6 bar	270 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
Analog outputs, signal range	4 - 20 mA
Analog outputs, functional principle	Regulated power source with external supply
Analog outputs, supply voltage	24 V
Analog outputs, reverse polarity protection	yes
Analog outputs, short-circuit protection	yes
Analog outputs, overload protection	yes
Analog outputs, galvanic isolation	yes

Feature	Value
Input characteristics	2x to IEC 61131-2, type 3
Digital inputs, reverse polarity protection	yes
Digital inputs, electrical isolation	yes
Digital inputs, overload protection	33 V
Switching output	2x as per IEC 60947-5-6 or 2x Type 2 as per DIN EN 61131-2, switchable
Digital outputs, supply voltage	8.2 V 24 V
Digital outputs, short circuit current rating	yes
Digital outputs, overload protection	yes, <30 V
Digital outputs, potential separation	yes
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
Electrical connection 2, function	2x digital output Analog output Digital input
Electrical connection 2, connection type	Terminal strip
Electrical connection 2, connection technology	Spring-loaded terminal
Electrical connection 2, number of pins/wires	8
Cable fitting	2x M20x1.5
Max. cable length	30 m for external position sensor Shielded
Note on ambient temperature	Display: -30 - 80ºC
Storage temperature	-40 ºC...80 ºC
Climatic category	1K5 as per EN 60721 for storage 4K3 as per EN 60721 for operation
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	Steel, galvanized
Seals material	EPDM NBR VMQ
Product weight	2640 g