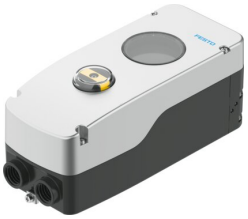
Positioner
CMSH-S-VDE1-D-A-AL-G14-C1M20-HA

Part number: 8097420



Data sheet

Feature	Value
Design	Digital, electropneumatic positioner
Mode of operation	Double-acting
Design characteristics	Safety pneumatic output 2 exhausted Safety pneumatic output 4 pressurised
Mounting position	Any
Type of mounting	With accessories in accordance with VDI/VDE 3845
Functional principle of measuring system	Potentiometer
Sensing range	0 deg...115 deg
Display	LCD display, via software 90° rotatable
Setting options	Via display and buttons
Cycle time	20 ms
Nominal altitude of use	<= 2000 m NHN
Overvoltage category	II
Operating pressure	0.14 MPa...0.8 MPa 1.4 bar...8 bar 20.3 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 Maximum particle size 40 µm
Air flow rate at Δp = 6 bar	270 l/min
Pneumatic connection	G1/4
Reverse polarity protection	Yes
Connection resistance	3 kOhm...80 kOhm
digital input, signal range	4 - 20 mA with HART
Analogue inputs, input impedance	480 ohm at 20 mA
Analog inputs, overload protection	<65 mA
Analogue inputs, electrical isolation	Yes
Characteristic for inputs	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	Analogue input

Feature	Value
	Digital input External path/angle sensor
Electrical connection 1, connection type	Terminal strip
Electrical connection 1, connector system	Spring-loaded terminal
Electrical connection 1, number of connections/cores	7
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 to EN 60721 for storage 4K3 to EN 60721 for operation
Degree of protection	IP66 IP67
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Pollution degree	3
Approval	RCM
CE mark (see declaration of conformity)	To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Material housing	Aluminium, powder-coated
Material screen	Makrolon®
Material shaft	High-alloy stainless steel
Material coupling	High-alloy stainless steel
Material screws	Galvanised steel
Material seals	EPDM NBR VMQ
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS compliant
Product weight	2640 g