

positioner CMSX-P-SE-C-U-F1-D-50-A

Part number: 8171507

FESTO



Data sheet

Feature	Value
Design structure	Digital electropneumatic positioner
Mode of operation	double-acting
Design features	Safety position - pneumatic outlet 4 exhausted Safety position – pneumatic outlet 2 pressurised
Assembly position	Any
Mounting type	with accessories
Measuring method: displacement encoder	Potentiometer
Display	7-segment LCD-Display With background illumination
Setting options	Via display and buttons
Size of the dead zone	0.5 ... 10 %
Operating pressure MPa	0.3 ... 0.8 MPa
Operating pressure	3 ... 8 bar 43.5 ... 116 psi
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation not possible
Standard nominal flow rate	50 l/min
Pneumatic connection	G1/8
Nominal operating voltage DC	24 V
Operating voltage range DC	21.6 ... 26.4 V
Max. current consumption	600 mA
Polarity protected	For operating voltage connections
Connection resistance	≤ 80 kOhm
Analogue inputs, signal range	0 - 10 V 0 - 20 mA 4 - 20 mA
Analogue inputs, max. dynamic range	0 - 24 mA 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
Analogue inputs, overload protection	Yes
Analogue inputs, galvanic isolation	No
Analogue outputs, signal range	4 - 20 mA
Analogue outputs, max. load resistance	≤ 600 Ohm
Analogue outputs, linearity error at 25 ° C	0,5%
Analogue outputs, temperature coefficient	< 0.02 %FS/K
Analogue outputs, resolution	12 bit
Analogue outputs, reverse polarity protection	Yes
Analogue outputs, short circuit current rating	Yes
Analogue outputs, overload protection	Yes
Analogue outputs, galvanic isolation	No
Input characteristics	to IEC 61131-2, type 3
Switching input	PNP NPN

Feature	Value
Digital inputs, reverse polarity protection	Yes
Digital inputs, electrical isolation	Yes, via optocoupler
Digital outputs, reverse polarity protection	Yes
Switch output	3 x PNP or 3 x NPN, switchable
Digital outputs, output current	100 mA
Digital outputs, short-circuit proof	Yes
Digital outputs, overload proof	Yes
Digital outputs, electrical isolation	Yes, via optocoupler
Electrical connection 1, function	3x digital output Analogue output Analogue input Digitaleingang Power supply Power supply load
Electrical connection 1, connection type	Terminal strip
Electrical connection 1, connection technology	Screwed terminal
Electrical connection 1, number of pins/wires	13
Electrical connection 1, tightening torque	0.6 Nm
Electrical connection 1, conductor cross section	< 1.5 mm ²
Electrical connection 2, function	External path/angle sensor
Electrical connection 2, connection type	Terminal strip
Electrical connection 2, connection technology	Screwed terminal
Electrical connection 2, number of pins/wires	3
Electrical connection 2, tightening torque	0.6 Nm
Electrical connection 2, conductor cross section	< 1.5 mm ²
Cable gland connection	M12x1.5 electrical connection 2 M20x1.5 electrical connection 1
Permissible cable diameter	7 - 13 mm electrical connection 1 3 - 6.5 mm electrical connection 2
Max. line length	3 m for electrical connection 2 30 m for electrical connection 1
Ambient temperature	-5 ... 60 °C
Storage temperature	-20 ... 60 °C
Relative air humidity	5 - 95 % non-condensing
Protection class	IP65
Corrosion resistance classification CRC	2 - Moderate corrosion stress
Shock resistance	Shock test with severity level 1 in accordance with FN 942017-5 and EN 60068-2-27 as per EN 60068-2-29
Vibration resistance	Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 as per EN 60068-2-6
Degree of contamination	3
Authorisation	RCM Mark
CE mark (see declaration of conformity)	to EU directive for EMC in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Material housing	Reinforced PC
Material screen	PC
Material sub-base	Anodised wrought aluminium alloy
Material shaft	High alloy steel, non-corrosive
Material coupling	High alloy steel, non-corrosive
Material screws	High alloy steel, non-corrosive
Material seals	NBR
Information on materials, cable connector	PA
Material blanking plug	PA
PWIS conformity	VDMA24364-B2-L
Materials note	Conforms to RoHS
Product weight	970 g

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Dimensions W x L x H	190 mm x 105 mm x 130 mm