Valve positioners
CMSX-P-S-C-U-F1-D-130-C

Part number: 3929314



Data sheet

Feature	Value
Type code	CMSX
Design	digital, electropneumatic positioner
Mode of operation	Double-acting
Design features	Safety position - pneumatic outlets closed
Mounting position	Any
Type of mounting	With accessories
Measuring principle of linear potentiometer	Potentiometer
Display	7-segment LCD display With backlighting
Setting options	Via display and pushbuttons
Size of dead space	0.5 % ... 10 %
Operating pressure	3 bar ... 8 bar
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
Standard nominal flow rate	130 l/min
Pneumatic connection	G1/8
Nominal operating voltage DC	24 V
DC operating voltage range	21.6 V ... 26.4 V
Max. current consumption	600 mA
Reverse polarity protection	for operating voltage connections
Analog inputs, signal range	0 - 10 V 0 - 20 mA 4 - 20 mA
Analog inputs, linearity error at 25°C	0.5 %
Analog inputs, temperature coefficient	<0.02 %FS/K
Analog inputs, resolution	16 bit
Analog inputs, overload protection	yes
Analog inputs, galvanic isolation	no
Analog outputs, signal range	4 - 20 mA
Analog outputs, max. load resistance	≤600 Ohm
Analog outputs, linearity error at 25°C	0.5%
Analog outputs, temperature coefficient	<0.02 %FS/K
Analog outputs, resolution	12 bit
Analog outputs, reverse polarity protection	yes
Analog outputs, short-circuit protection	yes
Analog outputs, overload protection	yes

Feature	Value
Analog outputs, galvanic isolation	no
Input characteristics	As per IEC 61131-2, type 3
Switching input	PNP NPN
Digital inputs, reverse polarity protection	yes
Digital inputs, electrical isolation	Yes, optocoupler
Digital outputs, reverse polarity protection	yes
Switching output	3 x PNP or 3 x NPN switchable
Digital outputs, output current	100 mA
Digital outputs, short circuit current rating	yes
Digital outputs, overload protection	yes
Digital outputs, potential separation	Yes, optocoupler
Electrical connection 1, function	2x digital input 3x digital output Analog output Analog input Power supply Load power supply
Electrical connection 1, connection type	Terminal strip
Electrical connection 1, connection technology	Screw terminal
Electrical connection 1, number of pins/wires	14
Electrical connection 1, tightening torque	0.6 Nm
Electrical connection 1, conductor cross section	‹1.5 mm²
Cable fitting	M20 x 1.5 for electrical connection 1
Approved cable diameter	7-13 mm for electrical connection 1
Max. cable length	30 m for electrical connection 1
Ambient temperature	-5 °C ... 60 °C
Storage temperature	-20 °C ... 60 °C
Relative air humidity	93 %
Degree of protection	IP65
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27 as per EN 60068-2-29
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 as per 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 RoHS directive
Housing material	PC-reinforced
Inspection window material	PC
Base plate material	Wrought aluminum alloy Anodized
Shaft material	High-alloy stainless steel
Quick-coupling material	High-alloy stainless steel
Material of screws	High-alloy stainless steel
Seals material	NBR
Material for cable connector	PA
Blanking plug material	PA
Note on materials	RoHS-compliant
Product weight	970 g
Dimensions W x L x H	190 mm x 105 mm x 130 mm