

# Valve positioners

## CMSX-P-S-C-U-F1-D-50-A

FESTO

Part number: 3929313



### Data sheet

Feature	Value
Material of screws	High-alloy stainless steel
Shaft material	High-alloy stainless steel
Analog outputs, resolution	12 bit
Analog inputs, overload protection	yes
Analog inputs, resolution	16 bit
Digital inputs, electrical isolation	Yes, optocoupler
Analog inputs, galvanic isolation	no
Digital outputs, output current	100 mA
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
Approved cable diameter	7-13 mm for electrical connection 1
Contamination level	3
Quick-coupling material	High-alloy stainless steel
Switching input	PNP NPN
Display	7-segment LCD display With backlighting
Analog outputs, galvanic isolation	no
Relative air humidity	93 %
Blanking plug material	PA
Mounting position	Any
Electrical connection 1, connection type	Terminal strip
Mode of operation	Double-acting
Switching output	3 x PNP or 3 x NPN switchable
Analog inputs, signal range	0 - 10 V 0 - 20 mA 4 - 20 mA
Digital outputs, short circuit current rating	yes
Analog outputs, reverse polarity protection	yes
Digital outputs, potential separation	Yes, optocoupler
Electrical connection 1, connection technology	Screw terminal
Inspection window material	PC
Max. cable length	30 m for electrical connection 1
Analog outputs, short-circuit protection	yes
Analog inputs, linearity error at 25°C	0.5%
Analog outputs, overload protection	yes

Feature	Value
Analog outputs, linearity error at 25°C	0.5%
Digital outputs, reverse polarity protection	yes
Dimensions W x L x H	190 mm x 105 mm x 130 mm
Electrical connection 1, function	2x digital input 3x digital output Analog output Analog input Power supply Load power supply
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27 as per EN 60068-2-29
Design	digital, electropneumatic positioner
Digital inputs, reverse polarity protection	yes
Analog outputs, signal range	4 - 20 mA
Base plate material	Wrought aluminum alloy Anodized
Digital outputs, overload protection	yes
Input characteristics	As per IEC 61131-2, type 3
Design features	Safety position – pneumatic outlet 4 exhausted Safety position – pneumatic outlet 2 exhausted
Analog outputs, temperature coefficient	<0.02 %FS/K
Electrical connection 1, tightening torque	0.6 Nm
Analog inputs, temperature coefficient	<0.02 %FS/K
Analog outputs, max. load resistance	≤600 Ohm
Max. current consumption	600 mA
Nominal operating voltage DC	24 V
Electrical connection 1, conductor cross section	<1.5 mm <sup>2</sup>
Electrical connection 1, number of pins/wires	14
Type code	CMSX
Reverse polarity protection	for operating voltage connections
Setting options	Via display and pushbuttons
Measuring principle of linear potentiometer	Potentiometer
Operating pressure	3 bar ... 8 bar
DC operating voltage range	21.6 V ... 26.4 V
Size of dead space	0.5 % ... 10 %
Certification	RCM compliance mark
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
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
Degree of protection	IP65
Ambient temperature	-5 °C ... 60 °C
Cable fitting	M20 x 1.5 for electrical connection 1
Type of mounting	With accessories
Product weight	970 g
Pneumatic connection	G1/8
Standard nominal flow rate	50 l/min
Note on materials	RoHS-compliant
Housing material	PC-reinforced
Seals material	NBR
Material for cable connector	PA
Storage temperature	-20 °C ... 60 °C