

Positioner CMSh-

Part number: 8148076

FESTO



Data sheet

Feature	Value
Structural design	digital, electropneumatic positioner
Mode of operation	Double-acting Single-acting
Design features	Safety position - pneumatic outlets closed Safety switch, pneumatic output 2 exhausted Safety switch 4 pressurized
Mounting position	Any
Type of mounting	With accessories As per VDI/VDE 3845 As per VDI/VDE 3847-2
Measuring principle of linear potentiometer	Potentiometer External
Sensing range	0 deg...115 deg
Display	LCD display, via software 90° rotatable
Cycle time	20 ms
Nominal altitude of use above sea level	<= 2000 m NHN
Max. input power P_i	See ATEX certificate See IECEx certificate
Max. input voltage V_i	See ATEX certificate See IECEx certificate
Max. input current I_i	See ATEX certificate See IECEx certificate
Effective internal capacitance C_i	See ATEX certificate See IECEx certificate
Effective internal inductance L_i	See ATEX certificate See IECEx certificate
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 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 $\Delta p = 6$ bar	270 l/min...380 l/min
Note on air performance	Depending on additional specific accessories

Feature	Value
Pneumatic connection	G1/4 1/4 NPT
Pressure gauge connection	G1/8 1/8 NPT
Reverse polarity protection	Yes
Connection resistance	3 kOhm...80 kOhm
Analog inputs, signal range	4–20 mA with HART
Analog inputs, input impedance	480 ohm 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
Input characteristics	1x to IEC 61131-2, type 3 2x to IEC 61131-2, type 3
Digital inputs, reverse polarity protection	Yes
Digital inputs, electrical isolation	Yes
Digital inputs, overload protection	33 V
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
Cable fitting	2x 1/2 NPT 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 as per EN 60721 for storage 4K3 as per EN 60721 for operation
Degree of protection	IP66 IP67
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
Certification	RCM compliance mark c UL us - Listed (OL)
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 acc. to UK EX instructions To UK RoHS instructions
Explosion protection certification outside the EU	EPL Da (CA) EPL Da (US) EPL Db (BR) EPL Db (CN) EPL Db (GB) EPL Db (IEC-EX) EPL Ga (CA) EPL Ga (US) EPL Gb (BR) EPL Gb (CN) EPL Gb (GB)

Feature	Value
	EPL Gb (IEC-EX)
Housing material	Aluminum, powder-coated
Seals material	EPDM
LABS (PWIS) conformity	VDMA24364 Zone III
Note on materials	RoHS compliant
Product weight	2045 g...2820 g