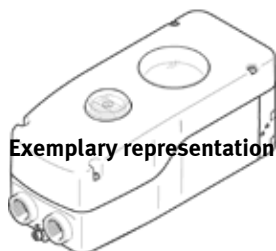


# positioner CMSh-

Part number: 8148076

FESTO



Exemplary representation

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Design structure	Digital electropneumatic positioner
Mode of operation	double-acting single-acting
Design features	Safety position - pneumatic outlets closed Safety position – pneumatic output 2 exhausted Safety position – pneumatic output 4 pressurised
Assembly position	Any
Mounting type	with accessories To VDI/VDE 3845 To VDI/VDE 3847-2
Measuring method: displacement encoder	Potentiometer external
Sensing range	0 ... 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
ATEX category Gas	II (1) 2G II 2G
Explosion ignition protection type Gas	Ex ia [ia Ga] IIC T4/T6 Gb Ex ib IIC T4/T6 Gb
Explosion-proof ambient temperature	T4: -40°C ≤ Ta ≤ +80°C T6: -40°C ≤ Ta ≤ +50°C
Certificate issuing department	BVS 23 ATEX E004 IECEX BVS 23.0001
Max. input parameters for intrinsically safe circuit	See IECEx certificate See ATEX certificate
Max. input power	siehe ATEX Zertifikat siehe IECEx Zertifikat
Max. input voltage	siehe ATEX Zertifikat siehe IECEx Zertifikat
Max. input current	siehe ATEX Zertifikat siehe IECEx Zertifikat
effective capacity	See ATEX certificate See IECEx certificate
effective inductivity	See ATEX certificate See IECEx certificate
Overvoltage category	II
Operating pressure MPa	0.14 ... 0.8 MPa
Operating pressure	1.4 ... 8 bar 20.3 ... 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
Air flow rate at Δp = 6 bar	270 ... 380 l/min

<b>Feature</b>	<b>Value</b>
Note on air flow rate	Depending on additional specific accessories
Pneumatic connection	G1/4 1/4 NPT
Pressure gauge connection	G1/8 1/8 NPT
Polarity protected	Yes
Connection resistance	3 ... 80 kOhm
Analogue inputs, signal range	4 - 20 mA with HART
Analogue inputs, input impedance	480 ohm at 20 mA
Analogue inputs, overload protection	<65 mA
Analogue inputs, galvanic isolation	Yes
Analogue outputs, signal range	4 - 20 mA
Analogue outputs, functional principle	Regulated power source with external supply
Analogue outputs, supply voltage	24 V
Analogue outputs, reverse polarity protection	Yes
Analogue outputs, short circuit current rating	Yes
Analogue outputs, overload protection	Yes
Analogue 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
Switch output	2x to IEC 60947-5-6 or 2x type 2 to DIN EN 61131-2, switchable
Digital outputs, supply voltage	8,2 V 24 V
Digital outputs, short-circuit proof	Yes
Digital outputs, overload proof	Yes, < 30 V
Digital outputs, electrical isolation	Yes
Electrical connection 1, function	Analogue input Digitaleingang External path/angle sensor
Electrical connection 1, connection type	Terminal strip
Electrical connection 1, connection technology	Cage clamp terminal
Electrical connection 1, number of pins/wires	7
Electrical connection 2, function	2x digital output Analogue output Digitaleingang
Electrical connection 2, connection type	Terminal strip
Electrical connection 2, connection technology	Cage clamp terminal
Electrical connection 2, number of pins/wires	8
Cable gland connection	2x 1/2 NPT 2x M20x1,5
Max. line length	30 m for ext. position sensor Shielded
Ambient temperature	-40 ... 80 °C
Note on ambient temperature	Display: -30 - 80 °C
Storage temperature	-40 ... 80 °C
Climatic category	1K5 to EN 60721 for storage 4K3 to EN 60721 for operation
Protection class	IP66 IP67
Shock resistance	Shock test with severity level 1 in accordance with FN 942017-5 and EN 60068-2-27
Vibration resistance	Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6
Degree of contamination	3
Authorisation	RCM Mark
CE mark (see declaration of conformity)	to EU directive for EMC to EU directive explosion protection (ATEX) in accordance with EU RoHS directive

<b>Feature</b>	<b>Value</b>
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK EX instructions To UK RoHS instructions
Explosion protection certification outside the EU	EPL Gb (GB) EPL Gb (IEC-EX)
Material housing	Aluminium, powder-coated
Material screen	PC
Material shaft	High alloy steel, non-corrosive
Material coupling	High alloy steel, non-corrosive
Material screws	High alloy steel, non-corrosive
Material seals	EPDM NBR VMQ
PWIS conformity	VDMA24364 zone III
Materials note	Conforms to RoHS
Product weight	2,055 ... 2,820 g