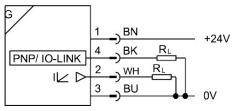
Position transmitter
SDAT-MHS-M80-1L-SA-E-0.3-M8

Part number: 1531266





Data sheet

Feature	Value
Design	For T-slot
Approval	RCM c UL us - Listed (Oil)
CE mark (see declaration of conformity)	To EU EMC Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
Note on materials	RoHS compliant Free of halogen
Instructions on use	https://www.festo.com/Drive-Sensor-Overview
Measured variable	Position
Measuring principle	Magnetic Hall
Sensing range	0 mm...80 mm
Ambient temperature	-25 °C...70 °C
Typical sampling interval	1 ms
Max. travel speed	3 m/s
Displacement resolution	0.05 mm
Repetition accuracy	0.1 mm
Switching output	PNP
Switching element function	NC or NO, switchable
Switch-on time	2 ms
Switch-off time	2 ms
Max. switching frequency	1 kHz
Max. output current	100 mA
Max. switching capacity DC	2.7 W
Voltage drop	2.5 V
Analogue output	4 - 20 mA
Sensitivity	0.2 mA/mm
Typical linearity error	±0.25 mm
Max. load resistance current output	500 Ohm
Short circuit current rating	Yes
Overload protection	Available
Protocol	I-Port IO-Link®

Feature	Value
IO-Link, Protocol version	Device V 1.1
IO-Link, Profile	Smart sensor profile
IO-Link, Function classes	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link, communication mode	COM3 (230.4 kBaud)
IO-Link, SIO-Mode support	Yes
IO-Link, Port class	A
IO-Link, Process data length IN	2 bytes
IO-Link, Process data content IN	12 bit PDV (measured position value) 4 bit BDC (position monitoring)
IO-Link, Min. cycle time	1 ms
Operational voltage range DC	15 V...30 V
Residual ripple	10%
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Cable with plug
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	4
Electrical connection 1, type of mounting	Screw-type lock
Connection outlet orientation	In-line
Material electrical contact	Copper alloy Gold-plated
Test conditions cable	Bending strength: to Festo standard Torsional strength: > 300,000 cycles, ±270°/0.1 m Energy chain: > 5 million cycles, bending radius 28 mm
Cable length	0.3 m
Cable characteristic	Suitable for energy chains/robot applications
Cable sheath colour	Grey
Material cable sheath	TPE-U(PUR)
Type of mounting	Screw-clamped Insertable in the slot from above
Mounting position	Any
Product weight	23 g
Material housing	Brass, nickel-plated Reinforced PA Polyester High-alloy stainless steel
Material union nut	Nickel-plated brass
Material foil	Polyester
Ready status indication	Green LED
Switching status indication	Yellow LED
Status indication	LED red
Setting options	IO-Link® Key
Ambient temperature with moving cable	-20 °C...70 °C
Degree of protection	IP65 IP68
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 4 according to ISO 14644-1