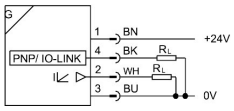
Position transmitter
SDAT-MHS-M50-1L-SA-E-0.3-M8

Part number: 1531265





Data sheet

Feature	Value
Design	For T-slot
Approval	RCM trademark c UL us listed (OL)
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...50 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	N/C or N/O contact, 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	0.32 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 Bronze
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	optional
Product weight	19 g
Material housing	Brass, nickel-plated PA-reinforced 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	Red LED
Setting options	IO-Link® Pushbutton
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 class	Class 4 according to ISO 14644-1