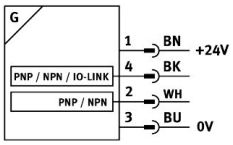
Position transmitter
SDAS-MHS-M40-1L-PNLK-PN-E-0.3-M8

Part number: 8063974





General operating condition

Data sheet

Feature	Value
Design	for T-slot
Symbol	00995894
Certification	RCM compliance mark c UL us - Listed (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing authority	UL E232949
Note on materials	RoHS-compliant Halogen-free
Application note	https://www.festo.com/Drive-Sensor-Overview
Measured variable	Position
Measuring principle	Magnetic Hall
Sensing range	≤52000 µm
Ambient temperature	-40 °C ... 80 °C
Typical sampling interval	2 ms
Max. travel speed	3 m/s
Displacement resolution	≤0.02 mm
Repetition accuracy	0.2 mm
Switching output	2x PNP or 2x NPN adjustable
Switching element function	N/C contact/N/O contact switchable
On time	‹4 ms
Switch-off time	‹4 ms
Max. switching frequency	125 Hz
Max. switching output voltage DC	30 V
Max. output current	50 mA
Max. switching capacity DC	1.5 W
Voltage drop	‹0.5 V
Typical linearity error	±1 mm
Short-circuit protection	yes
Overload protection	Available
Protocol	I-Port IO-Link®
IO-Link®, protocol version	Device V 1.1
IO-Link®, profile	Smart sensor profile

Feature	Value
IO-Link®, function classes	Process data variable (PDV) Identification Diagnostics Teach channel Switching signal channel (SSC)
IO-Link®, communication mode	COM2 (38,4 kBd)
IO-Link®, SIO mode support	Yes
IO-Link®, port class	A
IO-Link®, process data width IN	2 Byte
IO-Link®, process data content IN	12 bit PDV (position measurement) 4 bit SSC (switching signal)
IO-Link®, minimum cycle time	2.5 ms
DC operating voltage range	10 V ... 30 V
Residual ripple	10 %
Idle current	‹12 mA
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Cable with plug
Electrical connection 1, connection technology	M8x1 A-coded as per EN 61076-2-104
Electrical connection 1, number of pins/wires	4
Electrical connection 1, type of mounting	Screw-type lock
Electrical connection for input 1, connection pattern	00991171
Connection outlet orientation	Longitudinal
Material of pin contacts	Copper alloy, gold-plated
Connector cable test conditions	Flexural strength: as per Festo standard Torsion resistance: › 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
Color cable sheath	Gray
Material of cable sheath	TPE-U(PUR)
Type of mounting	Can be inserted in slot from above
Mounting position	Any
Product weight	9.5 g
Housing material	High-alloy stainless steel
Material of union nut	Brass, nickel-plated
Switching status indication	LED yellow
Status indicator	LED red
Setting options	IO-Link® Capacitive pushbutton
Ambient temperature with flexible cable installation	-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