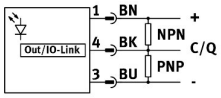
Distance sensor
SOOE-MS-L-PNLK-T

Part number: 8075673



Data sheet

Feature	Value
Design	Block design
Conforms to standard	EN 60947-5-2
Approval	RCM trademark c UL us listed (OL)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with 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
Measuring principle	Optoelectronic
Measurement method	Distance sensor
Type of light	Laser Red
Max. light spot	3 mm at a sensing range of 100 mm
Min. object diameter	4 mm
Displacement measuring range	40 mm...100 mm
Ambient temperature	10 °C...60 °C
Reference material	Standard white 90%, 100x100 mm
Displacement resolution	0.1 mm
Repetition accuracy	0.5 mm
Temperature cooefficient	0.03 %/K
Switching output	Push-pull
Switching element function	Switchable PNP, light switching NPN, dark switching
Max. switching frequency	270 Hz
Max. output current	100 mA
Voltage drop	0 V...1.5 V
Linearity error in ± %FS	0.75 %
Timer function	Via IO-Link®
Short circuit current rating	Pulsed
Protocol	IO-Link®

Feature	Value
IO-Link, Protocol version	Device V 1.1
IO-Link, Profile	Smart sensor profile
IO-Link, Function classes	Process data variable (PDV) Identification Diagnostics Teach channel Switching signal channel (SSC)
IO-Link, communication mode	COM2 (38.4 kBaud)
IO-Link, SIO-Mode support	Yes
IO-Link, Port class	A
IO-Link, Process data length OUT	2 bit
IO-Link, Process data content OUT	1 bit (emitter disable) 1 bit (Hold)
IO-Link, Process data length IN	3 bytes
IO-Link, Process data content IN	1 bit (signal quality indicator) 16 bit PDV (distance) 2 bit SSC (switching signal)
IO-Link, Min. cycle time	3 ms
IO-Link, Data storage required	2 KB
Operational voltage range DC	10 V...30 V
Residual ripple	10 %
No-load supply current	25 mA
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Plugs
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	3
Electrical connection 1, type of mounting	Screw-type lock
Material electrical contact	Gold-plated brass
Type of mounting	Via through-hole for M3 screw
Tightening torque	0.8 Nm
Mounting position	optional
Product weight	10 g
Material housing	PC PMMA
Ready status indication	Green LED
Switching status indication	Yellow LED
Setting options	IO-Link® Potentiometer Teach-in
Degree of protection	IP65 IP67 IP69K
Insulation voltage	500 V
Immunity to surge	1 kV
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Laser safety class	1
Pollution degree	3