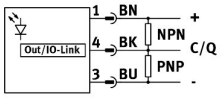
Distance sensor
SOOE-MS-L-PNLK-T

Part number: 8075673





General operating condition

Data sheet

Feature	Value
Design	Block design
Conforms to standard	EN 60947-5-2
Symbol	00995956
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
Measuring principle	Optoelectronic
Method of measurement	Distance sensor
Type of light	Laser Red
Max. light spot	3 mm for scan width of 100 mm
Minimum object diameter	4 mm
Position 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 coefficient	0.03 %/K
Switching output	Push-pull
Switching element function	Switchable PNP, bright-switching NPN, dark-switching
Max. switching frequency	270 Hz
Max. output current	100 mA
Voltage drop	0 V ... 1.5 V
Linearity error FS	0.75 %
Timer function	Via IO-Link®
Short-circuit protection	Pulsed
Protocol	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 OUT	2 bit
IO-Link®, process data content OUT	1 bit (emitter disable) 1 bit (hold)
IO-Link®, process data width IN	3 Byte
IO-Link®, process data content IN	1 bit (signal quality indicator) 16 bit PDV (distance) 2 bit SSC (switching signal)
IO-Link®, minimum cycle time	3 ms
IO-Link®, data memory required	2000 byte
DC operating voltage range	10 V ... 30 V
Residual ripple	10 %
Idle current	25 mA
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	M8x1 A-coded as per EN 61076-2-104
Electrical connection 1, number of pins/wires	3
Electrical connection 1, type of mounting	Screw-type lock
Electrical connection for input 1, connection pattern	00991155
Material of pin contacts	Brass, gold-plated
Type of mounting	With through-hole for M3 screw
Tightening torque	0.8 Nm
Mounting position	Any
Product weight	10 g
Housing material	PC PMMA
Ready status indication	LED green
Switching status indication	LED yellow
Setting options	IO-Link® Potentiometer Teach-in
Degree of protection	IP65 IP67 IP69K
Insulation voltage	500 V
Surge resistance	1 kV
Corrosion resistance class (CRC)	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Laser safety class	1
Contamination level	3