## Retro-reflective sensor SOOE-RS-R-PNLK-T

Part number: 8075666



## **Data sheet**

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Out/IO-Link		
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## General operating condition

Conforms to standard     EN 60947-5-2       Symbol     00995956       Certification     RCM compliance mark cUL us - Listed (0L)       CE marking (see declaration of conformity)     As per EU EMC directive As per EU EMC directive       UKCA marking (see declaration of conformity)     To UK instructions for EMC To UK Solv Sinstructions       Certificate issuing authority     UL E232949       Note on materials     RoHS-compliant       Measuring principle     Optoelectronic       Detection method     Reflection light barrier       Type of light     Ref       Max. light spot     65 mm at 1000 mm       Working range     0 mm 6500 mm       Ambient temperature     -40 °C 60 °C       Reference material     Reference reflector       Switching output     Push-pull       Switching frequency     1000 Hz       Max. switching frequency     00 V x 1.5 V       Time function     Via IO-Link@       Protocol     IO-Link@       Norticuit protection mode     COM2 (38,4 kBd)       IO-Link@, protocol version     Perice V 1.1       IO-Link@, protocol version     A       IO-L	Feature	Value
Symbol     00995956       Certification     RCM compliance mark c UL us - Listed (OL)       CE marking (see declaration of conformity)     As per EU RMC directive As per EU RMC directive       UKCA marking (see declaration of conformity)     To UK instructions for EMC To UK korts instructions       Certificate issuing authority     UL E232949       Note on materials     RoH5-compliant       Measuring principle     Optoelectronic       Detection method     Reflection light barrier       Type of light     Red LED       Max. light spot     65 mm at 1000 mm       Working range     0 mm 6500 mm       Ambient temperature     -40 °C 60 °C       Reference material     Reference reflector       Switching output     Push-pull       Switching in three     1000 mA       Voltage drop     0 V 1.5 V       Timer function     Valsed       Short-circuit protection mode     CM2       Polical drop     UPL-Link@       Do-Link@, protocol version     Device V 1.1       D-Link@, protocol version     Gerence reflexion       Do-Link@, protocol version     Device V 1.1       D	Design	Block design
Control     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       Detection method     Reflection light barrier       Type of light     Red LED       Max. light spot     65 mm at 1000 mm       Working range     0 mm 6500 mm       Ambient temperature     -40 °C 60 °C       Reference material     Reference reflector       Switching output     Push-pull       Switching frequency     1000 Hz       Max. output current     100 mA       Voltage drop     0 V 1.5 V       Timer function     Via IO-Link@       Short-circuit protection     Pused       IO-Link0, proteol version     Device V 1.1       IO-Link0, proteol version     Device V 1.1       IO-Link0, proces data width OUT     Z bit       IO-Link0, proces data content OUT     Link (init disable)	Conforms to standard	EN 60947-5-2
cUL us - Listed (OL)CE marking (see declaration of conformity)As per EU EMC directiveUKCA marking (see declaration of conformity)To UK instructions for EMC To UK NethS instructionsCertificate issuing authorityUL E232949Note on materialsRoHS-compliantMeasuring principleOptoelectronicDetection methodReflection light barrierType of lightRed LEDMax. light spot65 mm at 1000 mmWorking range0 mm6500 mmAmbient temperature40 °C 60 °CReference materialSwitchableSwitchablePwsh-pullSwitchableNPN, dark-switchingNota, sutching frequency1000 MZMax. output current1000 mAVoltage dopV 1.5 VTime functionVia I0.1 Ink@Short-circuit protection modeDevice V 1.1IO-Link@, protection modeAs KesIO-Link@, protection modeAs KesIO-Link@, proces data width OUT2 bitIO-Link@, proces data content OUT1 bit (midter disable) hit (hold)	Symbol	00995956
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       Measuing principle     Optoelectronic       Detection method     Reflection light barrier       Type of light     Red LED       Max. light spot     65 mm at 1000 mm       Working range     0 mm 6500 mm       Ambient temperature     -40 °C 60 °C       Reference material     Switching       Switching output     Push-pull       Switching frequency     1000 Hz       Max. output current     1000 MZ       Voltage drop     0 V 1.5 V       Timer function     Via IO-Link@       Short-circuit protection mode     CoN2 (38.4 kBd)       IO-Link@, proteos data width OUT     2 bit       IO-Link@, process data content OUT     1 bit (mitter disable) 1 bit (mold)	Certification	
To UK RoHS instructions       Certificate issuing authority     UL E232949       Note on materials     RoHS-compliant       Measuring principle     Optoelectronic       Detection method     Reflection light barrier       Type of light     Reflection light barrier       Max. light spot     65 mm at 1000 mm       Morking range     0 mm 6500 mm       Ambient temperature     40 °C 60 °C       Reference material     Reference reflector       Switching output     Push-pull       Switching element function     Switchable PNP, dark-switching       Max. switching frequency     1000 Hz       Max. output current     1000 mA       Voltage drop     0 V 1.5 V       Timer function     Vial O-Link@       Protocol     IO-Link@       IO-Link@, protocol version     Device V 1.1       IO-Link@, SIO mode support     Yes       IO-Link@, process data width OUT     2 bit       IO-Link@, process data content OUT     Ibit (mentter disable) 1 bit (mentter disable) 1 bit (nold)	CE marking (see declaration of conformity)	
Note on materials     RoHS-compliant       Measuring principle     Optoelectronic       Detection method     Reflection light barrier       Type of light     Red LED       Max. light spot     65 mm at 1000 mm       Working range     0 mm 6500 mm       Ambient temperature     -40 °C 60 °C       Reference material     Reference reflector       Switching output     Push-pull       Switching frequency     1000 Hz       Max. output current     100 mA       Voltage drop     0 V 1.5 V       Timer function     Via I0-Link@       Short-circuit protection     Pulsed       Protocol     I0-Link@       I0-Link@, protocol version     Device V 1.1       I0-Link@, protectson     Xes       I0-Link@, protectson     A       I0-Link@, process data width OUT     2 bit       I0-Link@, process data content OUT     1 bit ((mitter disable) 1 bit ((hold)	UKCA marking (see declaration of conformity)	
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Detection methodReflection light barrierType of lightRed LEDMax. light spot65 mm at 1000 mmWorking range0 mm 6500 mmAmbient temperature-40 °C 60 °CReference materialReference reflectorSwitching outputPush-pullSwitching frequency1000 HzMax. switching frequency1000 HzVoltage drop0 V 1.5 VTimer functionVia IO-Link@Short-circuit protectionPulsedProtocolIO-Link@IO-Link@, protocol versionDevice V 1.1IO-Link@, sol mode supportYesIO-Link@, process data width OUT2 bitIO-Link@, process data content OUT1 bit (entitter disable) 1 bit (hold)	Note on materials	RoHS-compliant
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Working range0 mm 6500 mmAmbient temperature-40 °C 60 °CReference materialReference reflectorSwitching outputPush-pullSwitching element functionSwitchable PNP, dark-switching NPN, bright-switchingMax. switching frequency1000 HzMax. output current100 mAVoltage drop0 V 1.5 VTimer functionVia Io-Link@Short-circuit protectionPulsedProtocolIo-Link@Io-Link@, protocol versionDevice V 1.1Io-Link@, sl0 mode supportYesIo-Link@, process data width OUT2 bitIo-Link@, process data content OUT1 bit (emitter disable) 1 bit (hold)	Type of light	
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Reference materialReference reflectorSwitching outputPush-pullSwitching element functionSwitchable PNP, dark-switching NPN, bright-switchingMax. switching frequency1000 HzMax. output current100 mAVoltage drop0 V 1.5 VTimer functionVia IO-Link®Short-circuit protectionPulsedProtocolIO-Link®I0-Link®, protocol versionDevice V 1.1I0-Link®, sl0 mode supportYesI0-Link®, process data width OUT2 bitI0-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Working range	0 mm 6500 mm
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Switching element functionSwitchable PNP, dark-switching NPN, bright-switchingMax. switching frequency1000 HzMax. output current100 mAVoltage drop0 V 1.5 VTimer functionVia I0-Link®Short-circuit protectionPulsedProtocolI0-Link®I0-Link®, protocol versionDevice V 1.1I0-Link®, SIO mode supportYesI0-Link®, prot classAI0-Link®, process data width OUT2 bitI0-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Reference material	Reference reflector
PNP, dark-switching NPN, bright-switchingMax. switching frequency1000 HzMax. output current100 mAVoltage drop0 V 1.5 VTimer functionVia IO-Link®Short-circuit protectionPulsedProtocolIO-Link®I0-Link®, protocol versionDevice V 1.1I0-Link®, communication modeCOM2 (38,4 kBd)I0-Link®, port classAI0-Link®, process data width OUT2 bitI0-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Switching output	Push-pull
Max. output current100 mAVoltage drop0 V 1.5 VTimer functionVia IO-Link®Short-circuit protectionPulsedProtocolIO-Link®IO-Link®, protocol versionDevice V 1.1IO-Link®, communication modeCOM2 (38,4 kBd)IO-Link®, port classAIO-Link®, process data width OUT2 bitIO-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Switching element function	PNP, dark-switching
Voltage drop0 V 1.5 VTimer functionVia IO-Link®Short-circuit protectionPulsedProtocolIO-Link®IO-Link®, protocol versionDevice V 1.1IO-Link®, communication modeCOM2 (38,4 kBd)IO-Link®, SIO mode supportYesIO-Link®, process data width OUT2 bitIO-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Max. switching frequency	1000 Hz
Timer functionVia IO-Link®Short-circuit protectionPulsedProtocolIO-Link®IO-Link®, protocol versionDevice V 1.1IO-Link®, communication modeCOM2 (38,4 kBd)IO-Link®, sIO mode supportYesIO-Link®, port classAIO-Link®, process data width OUT2 bitIO-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Max. output current	100 mA
Short-circuit protectionPulsedProtocolIO-Link®IO-Link®, protocol versionDevice V 1.1IO-Link®, communication modeCOM2 (38,4 kBd)IO-Link®, SIO mode supportYesIO-Link®, port classAIO-Link®, process data width OUT2 bitIO-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Voltage drop	0 V 1.5 V
ProtocolIO-Link®IO-Link®, protocol versionDevice V 1.1IO-Link®, communication modeCOM2 (38,4 kBd)IO-Link®, SIO mode supportYesIO-Link®, port classAIO-Link®, process data width OUT2 bitIO-Link®, process data content OUT1 bit (emitter disable) 1 bit (hold)	Timer function	Via IO-Link®
IO-Link®, protocol version   Device V 1.1     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)	Short-circuit protection	Pulsed
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)	Protocol	IO-Link®
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®, protocol version	Device V 1.1
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®, communication mode	COM2 (38,4 kBd)
IO-Link®, process data width OUT 2 bit   IO-Link®, process data content OUT 1 bit (emitter disable) 1 bit (hold)	IO-Link®, SIO mode support	Yes
IO-Link®, process data content OUT 1 bit (emitter disable) 1 bit (hold)	IO-Link®, port class	A
1 bit (hold)	IO-Link®, process data width OUT	2 bit
IO-Link®, process data width IN 2 bit	IO-Link®, process data content OUT	
	IO-Link®, process data width IN	2 bit

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Feature	Value	
IO-Link®, process data content IN	1 bit (stability alarm) 1 bit SSC (switching signal)	
IO-Link®, minimum cycle time	2.3 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	
Function reserve indication	LED yellow, flashing	
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	
Contamination level	3	