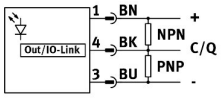
Diffuse sensor
SOOE-BS-R-PNLK-T

Part number: 8075664



Data sheet

Feature	Value
Design	Block design
Conforms to standard	EN 60947-5-2
Approval	RCM c UL us - Listed (Oil)
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
Detection method	Diffuse sensor with background clipping
Type of light	Red LED
Max. light spot	20 mm at a sensing range of 350 mm
Min. object diameter	10 mm
Operating distance	5 mm...350 mm
Ambient temperature	-40 °C...60 °C
Max. black-white difference	15 %
Reference material	Standard white 90%, 100x100 mm
Switching output	Push-pull
Switching element function	Switchable PNP light switching NPN dark switching
Hysteresis	21 mm
Max. switching frequency	500 Hz
Max. output current	100 mA
Voltage drop	0 V...1.5 V
Timer function	Via IO-Link®
Short circuit current rating	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 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	1 bit
IO-Link, Process data content IN	1 bit SSC (Switching Signal)
IO-Link, Min. cycle time	2.3 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	Plug
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	Any
Product weight	10 g
Material housing	Makrolon® PLEXIGLAS®
Ready status indication	Green LED
Switching status indication	Yellow LED
Setting options	IO-Link® Poti Teach-in
Setting range lower limit	25 mm
Setting range upper limit	350 mm
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
Pollution degree	3