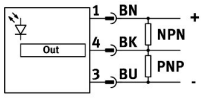
Diffuse sensor
SOOD-BS-L-PN-50

Part number: 8075659



Data sheet

Feature	Value
Design	Block design
Conforms to standard	EN 60947-5-2
Approval	RCM c UL us - Recognised (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	Laser Red
Max. light spot	1.5 mm at a sensing range of 50 mm
Min. object diameter	1.5 mm
Operating distance	7 mm...50 mm
Ambient temperature	-20 °C...60 °C
Max. black-white difference	13 %
Reference material	Standard white 90%, 100x100 mm
Switching output	Push-pull
Switching element function	PNP light switching NPN dark switching
Hysteresis	1 mm
Max. switching frequency	2000 Hz
Max. output current	50 mA
Voltage drop	0 V...1.5 V
Short circuit current rating	Pulsed
Operational voltage range DC	10 V...30 V
Residual ripple	10%
No-load supply current	10 mA
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Cable with plug

Feature	Value
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 with AF9
Material electrical contact	Gold-plated brass
Cable length	150 mm
Cable characteristic	Standard
Material cable sheath	TPE-U(PUR)
Type of mounting	With through-hole
Tightening torque	0.5 Nm
Mounting position	Any
Product weight	10 g
Material housing	ABS Makrolon® TPE-U(PU)
Ready status indication	Green LED
Switching status indication	Yellow LED
Degree of protection	IP65 IP67
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