

WTT4SLC-3B2262B01

PowerProx

MULTITASK PHOTOELECTRIC SENSORS



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Ordering information

Туре	Part no.
WTT4SLC-3B2262B01	1106949

Other models and accessories → www.sick.com/PowerProx

Illustration may differ



Detailed technical data

Features

Device type	Photoelectric sensors
Sensor/ detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	12.2 mm x 41.8 mm x 17.3 mm
Housing design (light emission)	Rectangular
Sensing range max.	50 mm 1,300 mm ¹⁾
Sensing range	100 mm 1,300 mm ²⁾
Distance value	
Measuring range	90 mm 1,300 mm ¹⁾
Resolution	1 mm
Repeatability	4,5 mm 11 mm ^{3) 4) 5)}
Accuracy	± 35 mm
Distance value output	Via IO-Link
Update rate of the distance value	0.8 ms
Type of light	Visible red light
Light source	Laser ⁶⁾
Light spot size (distance)	Ø 4.4 mm (1,300 mm)
Wave length	658 nm

 $^{^{1)}}$ Object with 6 ... 90 % remission (based on standard white to DIN 5033).

²⁾ Adjustable.

 $^{^{3)}}$ Equivalent to 1 $\sigma.$

 $^{^{}m 4)}$ See characteristic curves repeatability.

⁵⁾ 6 % ... 90 % remission.

 $^{^{6)}}$ Average service life: 50,000 h at T_{IJ} = +25 °C.

Laser class	1 (IEC 60825-1 / CDRH 21 CFR 1040.10 & 1040.11)
Adjustment	Single teach-in button IO-Link
Pin 2 configuration	External input, Teach-in input, Sender off input, Detection output, logic output

 $^{^{1)}}$ Object with 6 ... 90 % remission (based on standard white to DIN 5033).

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	25 mA ³⁾
Switching output	Push-pull: PNP/NPN
Output function	Factory setting: Pin 2 $/$ white (MF): test input, Pin 4 $/$ black: NPN normally closed (light switching), PNP normally open (dark switching)
Switching mode	Dark/light switching
Output current I _{max.}	≤ 50 mA
Response time	≤ 5 ms ⁴⁾
Switching frequency	100 Hz ⁵⁾
Input	MF _{in} = multifunctional input programmable
Connection type	Male connector M8, 4-pin
Circuit protection	A ⁶⁾ B ⁷⁾ D ⁸⁾
Protection class	III
Weight	10 g
Housing material	Plastic, MABS ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-40 °C +50 °C ⁹⁾
Ambient temperature, storage	-40 °C +75 °C
Warm-up time	< 10 min ¹⁰⁾

 $^{^{1)}}$ Limit values. Operated in short-circuit protected network: max. 8 A.

²⁾ Adjustable.

 $^{^{3)}}$ Equivalent to 1 σ .

⁴⁾ See characteristic curves repeatability.

 $^{^{5)}}$ 6 % ... 90 % remission.

 $^{^{6)}}$ Average service life: 50,000 h at T_U = +25 °C.

 $^{^{2)}\,\}mathrm{May}$ not exceed or fall below U_{V} tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

⁷⁾ B = output reverse-polarity protected.

 $^{^{8)}}$ D = outputs overcurrent and short-circuit protected.

 $^{^{9)}}$ As of $\rm T_a$ = 45 °C, a max.load current $\rm I_{max}$ = 50 mA is permitted.

 $^{^{10)}}$ Below T_u = -10 °C a warm-up time is necessary.

Initialization time	< 300 ms
UL File No.	E181493

¹⁾ Limit values. Operated in short-circuit protected network: max. 8 A.

Safety-related parameters

MTTF _D	256 years
DC _{avg}	0 %
T _M (mission time)	20 years

Communication interface

Communication interface	IO-Link V1.1
Communication Interface detail	COM3 (230,4 kBaud)
Cycle time	0.8 ms
Process data length	4 Byte
Process data structure	Bit 0 = switching signal Q _{L1} Bit 1 = switching signal Q _{L2} Bit 2 = detection signal Qint.1 Bit 3 = detection signal Qint.2 Bit 4 = detection signal Qint.3 Bit 5 = detection signal Qint.4 Bit 6 = detection signal Qint.5 Bit 7 = detection signal Qint.6 Bit 8 = detection signal Qint.7 Bit 9 = detection signal Qint.8 Bit 10 15 = empty Bit 16 31 = distance value
VendorID	26
DeviceID HEX	0x800264
DeviceID DEC	8389220

Smart Task

Smart Task name	Base logics
Logic function	Direct AND OR WINDOW Hysteresis
Timer function	Deactivated On delay Off delay ON and OFF delay Impulse (one shot)
Inverter	Yes
Switching signal	

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³⁾ Without load.

 $^{^{4)}}$ Signal transit time with resistive load.

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Switching signal Q _{L1}	Switching output
Switching signal Q _{L2}	Switching output

Diagnosis

Dev	ice temperature	
	Measuring range	-127 °C +127 °C
Dev	ice status	Yes
Ope	erating hour counter	Yes

Classifications

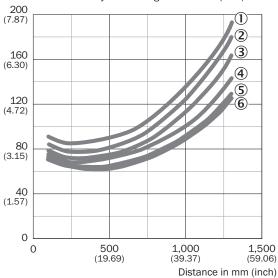
eCl@ss 5.0	27270904
eCl@ss 5.1.4	27270904
eCl@ss 6.0	27270904
eCl@ss 6.2	27270904
eCl@ss 7.0	27270904
eCl@ss 8.0	27270904
eCl@ss 8.1	27270904
eCl@ss 9.0	27270904
eCl@ss 10.0	27270904
eCl@ss 11.0	27270904
eCl@ss 12.0	27270903
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Connection diagram

Cd-450

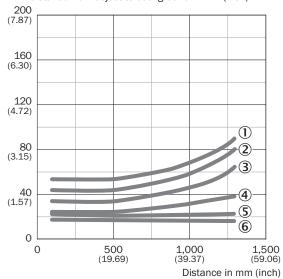
Characteristic curve

Min. distance from object to background in mm (inch)



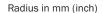
- ① 6 % / 90 % AVG1
- ② 6 % / 90 % AVG2
- 3 6 % / 90 % AVG4
- 4 6 % / 90 % AVG8
- ⑤ 6 % / 90 % AVG64
- 6 6 % / 90 % AVG512

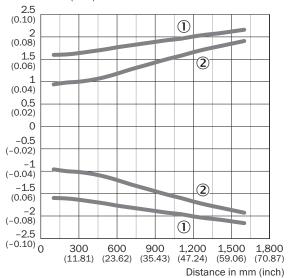
Min. distance from object to background in mm (inch)



- \bigcirc 90 % / 90 % AVG1
- 2 90 % / 90 % AVG2
- $\ \, \textbf{30} \,\, \% \, / \,\, \textbf{90} \,\, \% \,\, \textbf{AVG4} \\$
- ④ 90 % / 90 % AVG8
- ⑤ 90 % / 90 % AVG64
- 6 90 % / 90 % AVG512

Light spot size

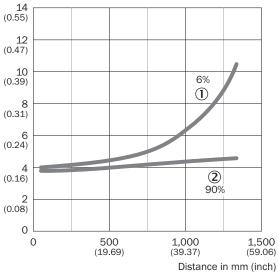




- ① Light spot horizontal
- ② Light spot vertical

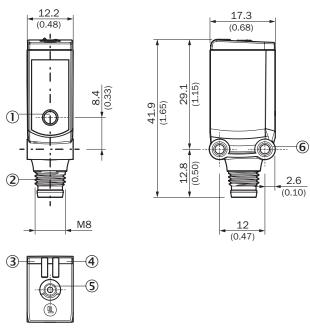
Repeatability

Repeatablility in mm (inch)



- ① 6 % remission, on black
- ② 90 % remission, on white

Dimensional drawing (Dimensions in mm (inch))



- ① Center of optical axis
- ② Connection
- 3 LED indicator green: power
- 4 LED indicator yellow: Status of received light beam
- ⑤ Single teach-in button
- ® Threaded mounting hole M3

Recommended accessories

Other models and accessories → www.sick.com/PowerProx

	Brief description	Туре	Part no.
Universal ba	r clamp systems		
	Plate N08N for universal clamp bracket, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp (5322627), mounting hardware	BEF-KHS-N08N	2051616

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

Contacts and other locations -



