chanhvinh.com

Product data sheet



WTT2SLC-2P3292B02

PowerProx

MULTITASK PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

chanhvinh.com

WTT2SLC-2P3292B02 | PowerProx

MULTITASK PHOTOELECTRIC SENSORS



Illustration may differ

Ordering information

Type	Part no.
WTT2SLC-2P3292B02	1101641

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

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression, Optical time-of-flight
Dimensions (W x H x D)	7.7 mm x 27.5 mm x 13.5 mm
Housing design (light emission)	Rectangular
Sensing range max.	50 mm ... 800 mm [1]
Sensing range	50 mm ... 800 mm [1]
Distance value	
Repeatability	2 mm ... 5 mm [2]
Accuracy	± 20 mm
Type of light	Infrared light
Light source	Laser [3]
Light spot size (distance)	Ø 10 mm (300 mm)
Wave length	940 nm
Laser class	1
Adjustment	Single teach-in button [4] IO-Link
Pin 2 configuration	External input, Teach-in input, Sender off input, Detection output, logic output
Special applications	Detecting small objects
Special features	Sensing range QL1, SP1 preset to 350 mm, Pin 2 deactivated

[1] Object with 6 ... 90% remission (based on standard white, DIN 5033).

[2] Equivalent to 1 σ.

[3] Average service life: 50,000 h at T_U = +25 °C.

[4] Teach-Offset 15 mm.

chanhvinh.com

	Inverter active

[1] Object with 6 ... 90% remission (based on standard white, DIN 5033).
[2] Equivalent to 1 σ.
[3] Average service life: 50,000 h at T_U = +25 °C.
[4] Teach-Offset 15 mm.

Mechanics/electronics

Supply voltage U_B	10 V DC ... 30 V DC [1]
Ripple	< 5 V_{pp} [2]
Current consumption	20 mA [3]
Switching output	PNP
Switching mode	Light/dark switching
Output current $I_{max.}$	≤ 50 mA
Response time	Typ. 95 ms [4]
Switching frequency	5 Hz [5]
Analog output	-
Input	MF_{in} = multifunctional input programmable
Connection type	Cable with M8 male connector, 4-pin, 90 mm [6]
Cable material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A [7] B [8] D [9]
Protection class	III
Housing material	Plastic, MABS, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–25 °C ... +50 °C
Ambient temperature, storage	–40 °C ... +75 °C
UL File No.	E181493

[1] Limit values. Operated in short-circuit protected network: max. 8 A.
[2] May not exceed or fall below U_V tolerances.
[3] Without load.
[4] Jitter +- 20 ms.
[5] With light/dark ratio 1:1.
[6] Do not bend below 0 °C.
[7] A = V_S connections reverse-polarity protected.
[8] B = output reverse-polarity protected.
[9] D = outputs overcurrent and short-circuit protected.

Safety-related parameters

$MTTF_D$	925 years
DC_{avg}	0 %

Communication interface

Communication interface	IO-Link V1.1

Communication Interface detail	COM2 (38,4 kBaud)
Cycle time	5 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 ... 15 = empty Bit 16 ... 31 = distance value
VendorID	26
DeviceID HEX	0x8001B8
DeviceID DEC	8389048

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 frequency	SIO Direct: 5 Hz [1] SIO Logic: 5 Hz [2] IOL: 5 Hz [3]
Response time	SIO Direct: typ. 90 ms [1] SIO Logic: typ. 90 ms [2] IOL: typ. 95 ms [3]
Repeatability	[2] [3]

[1] SIO Direct: sensor operation in standard I/O mode without IO-Link communication and without using internal sensor logic or time parameters (set to "direct"/"deactivated").
[2] SIO Logic: Sensor operation in standard I/O mode without IO-Link communication. Sensor-internal logic or timing parameters plus Automation Functions used.
[3] IOL: Sensor operation with full IO-Link communication and usage of logic, timing and Automation Function parameters.

Diagnosis

Device status	Yes

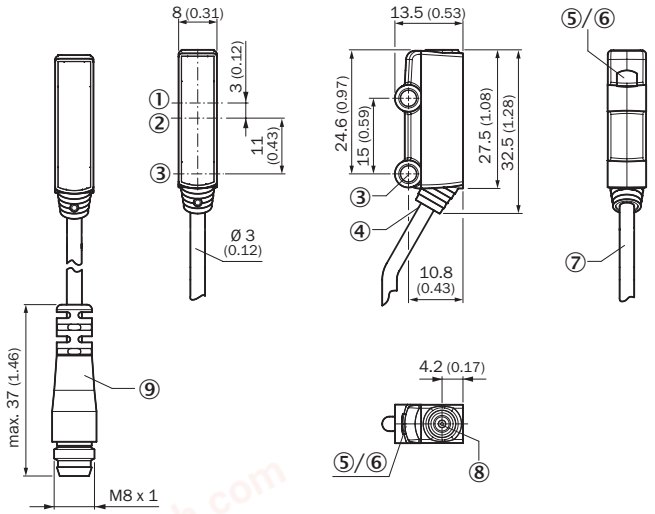
Classifications

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

chanhvinh.com

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

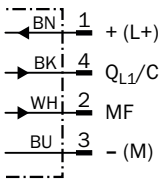
Dimensional drawing (Dimensions in mm (inch))



① Optical axis, receiver
② Optical axis, sender
③ Mounting hole, Ø 3.2 mm
④ Connection
⑤ LED indicator green: Supply voltage active
⑥ LED indicator yellow: Status of received light beam
⑦ Cable
⑧ Single teach-in button
⑨ Cable with connector M8

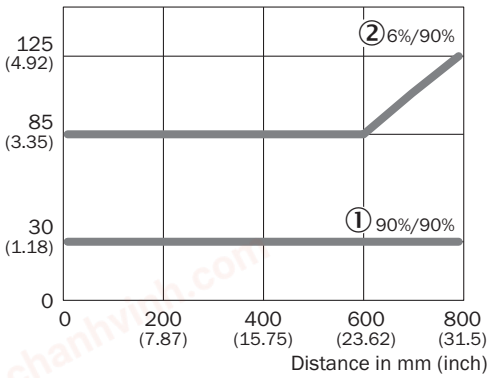
Connection diagram

Cd-367



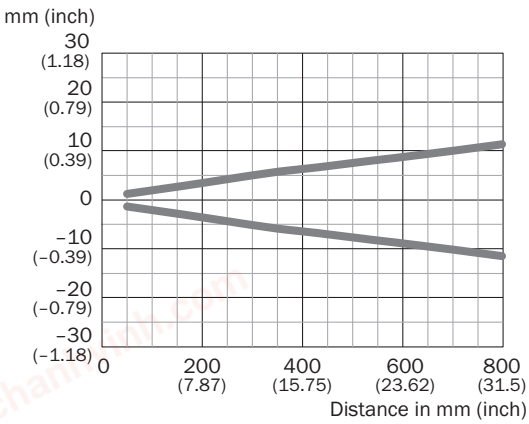
Characteristic curve

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



① Sensing range on white, 90% remission factor
② Sensing range on black, 6% remission factor

Light spot size



Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket for wall mounting, steel, zinc coated, without mounting hardware	BEF-W2S-B	4034749
Plug connectors and cables			
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U14-050VA3XLEAX	2095889

chanhvinh.com

	Brief description	Type	Part no.
	Head A: male connector, M8, 4-pin, straight Cable: unshielded	STE-0804-G	6037323

Recommended services

Additional services ➜ www.sick.com/PowerProx

	Type	Part no.
Function Block Factory		
• **Description:** The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found here. • **Note:** You can configure your function block at Function Block Factory. As a login please use your SICK ID.	Function Block Factory	On request

chanhvinh.com

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 –www.sick.com

SICK
Sensor Intelligence.