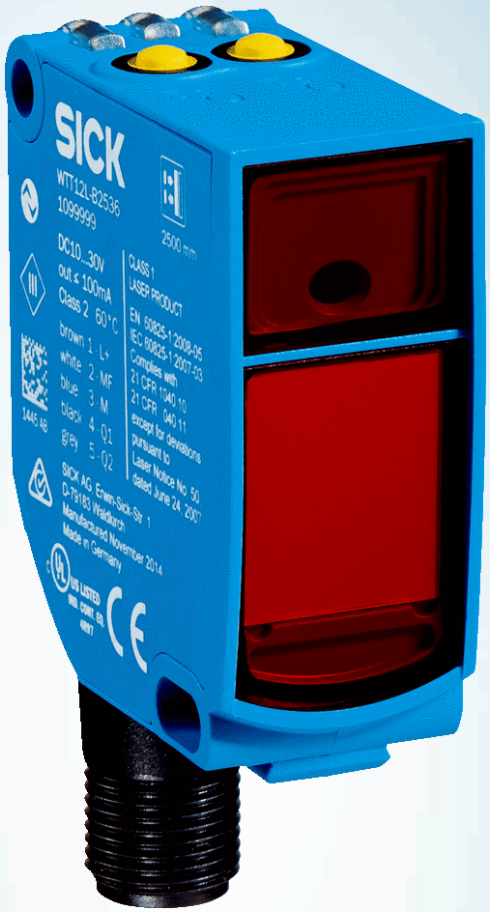
Online data sheet



WTT12L-B2547

PowerProx

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

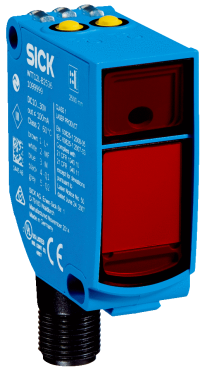


Illustration may differ

Ordering information

Type	Part no.
WTT12L-B2547	1072653

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

Detailed technical data

Features

Sensor/detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	20 mm x 49.6 mm x 44.2 mm
Housing design (light emission)	Rectangular
Sensing range max.	50 mm ... 1,800 mm [1]
Sensing range	100 mm ... 1,800 mm [2]
Type of light	Visible red light
Light source	Laser [3]
Light spot size (distance)	Ø 12 mm (1,800 mm)
Wave length	658 nm
Laser class	1 (IEC 60825-1 / CDRH 21 CFR 1040.10 & 1040.11)
Adjustment	Single teach-in button (2 x)

[1] Object with 6 ... 90 % remission (based on standard white to DIN 5033).
[2] Adjustable.
[3] Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]

[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. At V_S = 24 V.
[4] Q1, Q2 = 2 switching thresholds, light switching.
[5] Signal transit time with resistive load.
[6] With light/dark ratio 1:1.
[7] A = V_S connections reverse-polarity protected.
[8] B = inputs and output reverse-polarity protected.
[9] C = interference suppression.
[10] As of T_a = 45 °C, a max.load current I_{max} = 50 mA is permitted.
[11] Below T_a = –10 °C a warm-up time is required.

Ripple	≤ 5 V_{pp} [2]
Power consumption	≤ 70 mA [3]
Output type	PUSH/PULL, PNP, NPN [4]
Number of switching outputs	2 (Q1, Q2) [4]
Switching mode	Light switching [4]
Output current $I_{max.}$	≤ 100 mA
Response time	≤ 16.7 ms [5]
Switching frequency	30 Hz [6]
Analog output	-
Input	L/D = light/dark switching
Connection type	Male connector M12, 5-pin
Circuit protection	A [7] B [8] C [9]
Protection class	III
Weight	48 g
Housing material	Plastic, VISTAL®, Plastic, PMMA
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–35 °C ... +50 °C [10]
Ambient storage temperature	–40 °C ... +70 °C
Warm-up time	< 15 min [11]
Initialization time	< 300 ms
UL File No.	NRKH.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. At V_S = 24 V.
[4] Q1, Q2 = 2 switching thresholds, light switching.
[5] Signal transit time with resistive load.
[6] With light/dark ratio 1:1.
[7] A = V_S connections reverse-polarity protected.
[8] B = inputs and output reverse-polarity protected.
[9] C = interference suppression.
[10] As of T_a = 45 °C, a max.load current I_{max} = 50 mA is permitted.
[11] Below T_a = –10 °C a warm-up time is required.

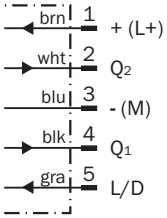
Classifications

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
ETIM 5.0	EC002719
ETIM 6.0	EC002719
UNSPSC 16.0901	39121528

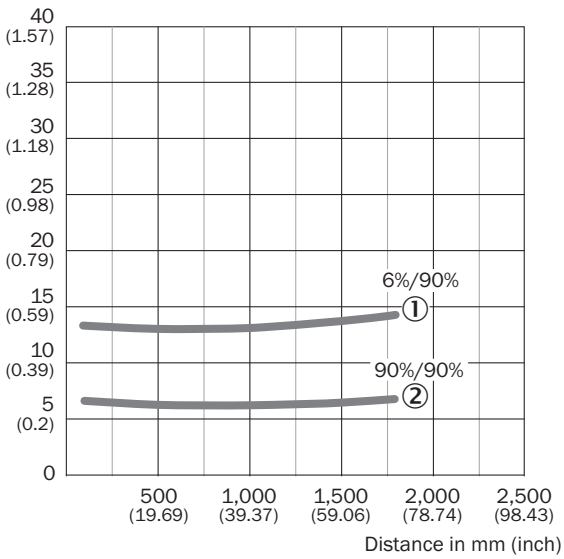
Connection diagram

Cd-286



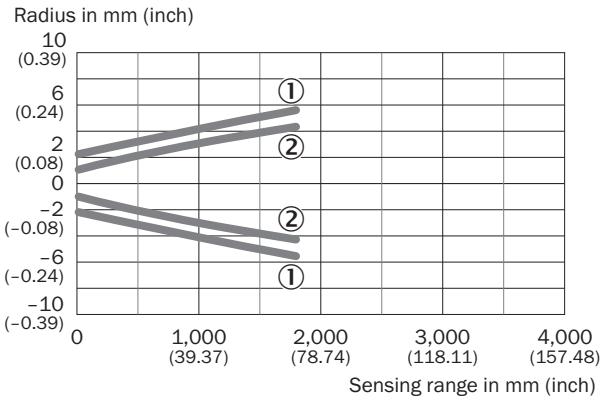
Characteristic curve

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



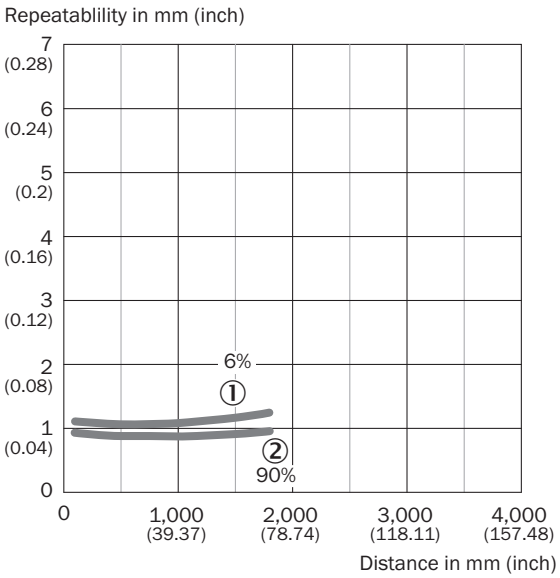
① Sensing range on black, 6% remission
② Sensing range on white, 90% remission

Light spot size



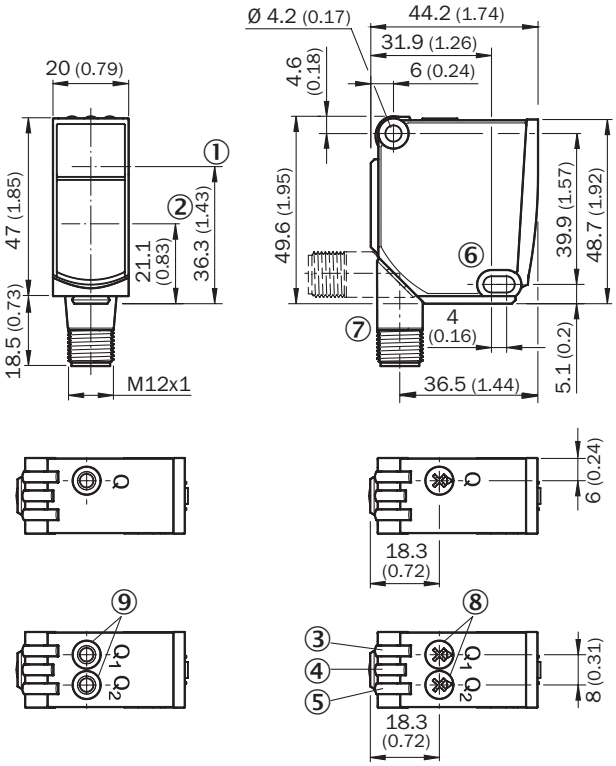
① Light spot horizontal
② Light spot vertical

Reproducibility



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

Dimensional drawing (Dimensions in mm (inch))



① Optical axis sender
② Optical axis receiver
③ LED indicator yellow: Status of received light beam
④ LED indicator green: power on
⑤ LED indicator yellow: Status of received light beam
⑥ Mounting hole, Ø 4.2 mm
⑦ Connection
⑧ Potentiometer
⑨ Single teach-in button

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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Sick ***manufacturer:***

Other Similar products are found below :

6-020-768 CSM-WP11122P GRL18-P2437 IM05-0B8NS-ZT1 IM12-04BPS-ZC1 KT6W-2P5116 GRSE18-P2442 GRSE18-P2447 GRTE18-P2412 IM30-15NPS-ZW1 IME08-02BPSZT0S IME08-2N5PSZT0K KTM-MB31111P VTE18-4N2212 WTB11-2P2431 WLL180T-P434 VTF18-4P1612 VTF-18-4N1240 VTE18-4P8240 VS/VE18-4P3740 WTE280-2P1131 WTE11-2P2432 WTB8-P2231 CM30-25NNP-EC1 CM18-08BNP-EW1 CM18-12NNP-EC1 CM30-16BPP-EC1 CM30-16BPP-EW1 CM30-25NPP-EW1 E100-A2A22C05A GRL18-P1137 KUP-0606-B KUP-0610-D P250H VT12T-2P410 CQ28-10NPP-KW1 DFS60B-S1PA10000 GL6-P7111 GRL18-P1132 KT5W-2P1116 WSE11-2N2430 WTB11-2P2461 WSE4-3P2230 WL2SG-2F3235 IMB12-08NPPVC0S DBS36E-BBAK02048 DBS36E-BBEK00500 DBS36E-S3AK01024 DBS36E-S3AK02048 DBS36E-S3EK00600