

Illustration may differ



Ordering information

Type	Part no.
WTT12L-B2526	1082419

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

Detailed technical data

Features

Device type	Photoelectric sensors
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 ... 1,400 mm ¹⁾
Sensing range	100 mm ... 1,400 mm ^{2) 3)}
Type of light	Visible red light
Light source	Laser ⁴⁾
Light spot size (distance)	Ø 10 mm (1,400 mm)
Wave length	658 nm
Laser class	1 (IEC 60825-1 / CDRH 21 CFR 1040.10 & 1040.11)
Adjustment	Potentiometer, 4 turns (2 x)

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

²⁾ Adjustable.

³⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

⁴⁾ Average service life: 100,000 h at T_J = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	70 mA ³⁾
Switching output	Push-pull: PNP/NPN ⁴⁾
Number of switching outputs	2 (Q ₁ , Q ₂) 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	Sender off
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®
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-35 °C ... +50 °C ¹⁰⁾
Ambient temperature, storage	-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_u = -10 °C a warm-up time is necessary.

Safety-related parameters

MTTF_D	133 years
DC_{avg}	0 %
T_M (mission time)	20 years

Classifications

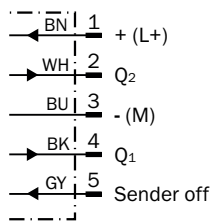
ECl@ss 5.0	27270904
ECl@ss 5.1.4	27270904
ECl@ss 6.0	27270904
ECl@ss 6.2	27270904
ECl@ss 7.0	27270904
ECl@ss 8.0	27270904
ECl@ss 8.1	27270904
ECl@ss 9.0	27270904
ECl@ss 10.0	27270904
ECl@ss 11.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Connection/pin assignment

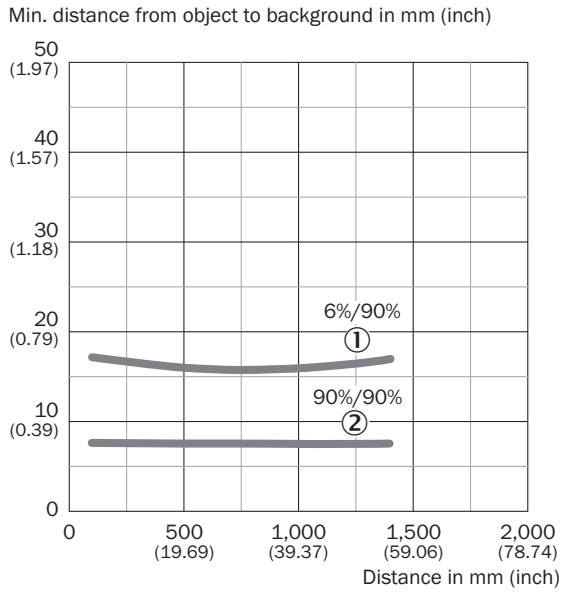
Connection type	Male connector M12, 5-pin
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Connection diagram

Cd-284

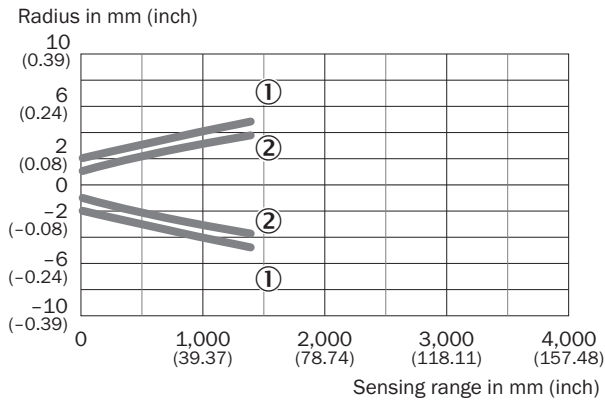


Characteristic curve



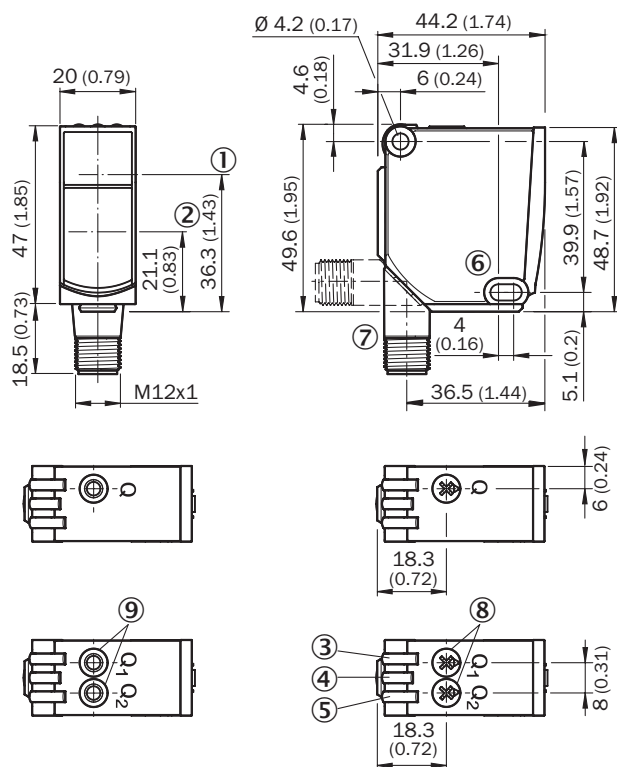
- ① Sensing range on black, 6% remission
- ② Sensing range on white, 90% remission

Light spot size



- ① Light spot horizontal
- ② Light spot vertical

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

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	BEF-WTT12L	BEF-WTT12L	2078538
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A15-050VB5XLEAX	2096240
	Head A: male connector, M12, 5-pin, straight Cable: unshielded For field bus technology	STE-1205-G	6022083

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