



WTB12-3N1131P01

W12-3

SMALL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WTB12-3N1131P01	1044102

Included in delivery: BEF-WG-W12 (1)

Other models and accessories → www.sick.com/W12-3

Detailed technical data

Features

Functional principle		Photoelectric proximity sensor
Functional principle detail		Background suppression
Sensing range max.		20 mm ... 350 mm ¹⁾
Sensing range		20 mm ... 350 mm
Emitted beam	Light source	LED ²⁾
	Type of light	Visible red light
	Light spot size (distance)	Ø 6 mm (200 mm)
Key LED figures		
	Wave length	640 nm
Adjustment		Potentiometer, 5 turns
Items supplied		BEF-WG-W12 mounting bracket

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

²⁾ Average service life: 100,000 h at T_U = +25 °C.

Safety-related parameters

MTTF _D	672 years
DC _{avg}	0 %
T _M (mission time)	20 years

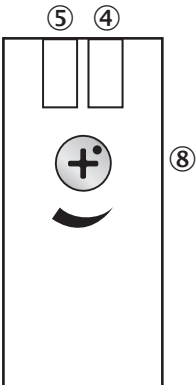
UL File No.	NRKH.E181493 & NRKH7.E181493
-------------	------------------------------

Classifications

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

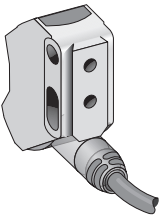
Adjustments

WTB12-3, WTF12-3, potentiometer



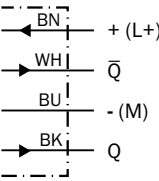
- ④ LED indicator green: Supply voltage active
- ⑤ LED indicator yellow: Status of received light beam
- ⑧ Sensing range adjustment: potentiometer

Connection type



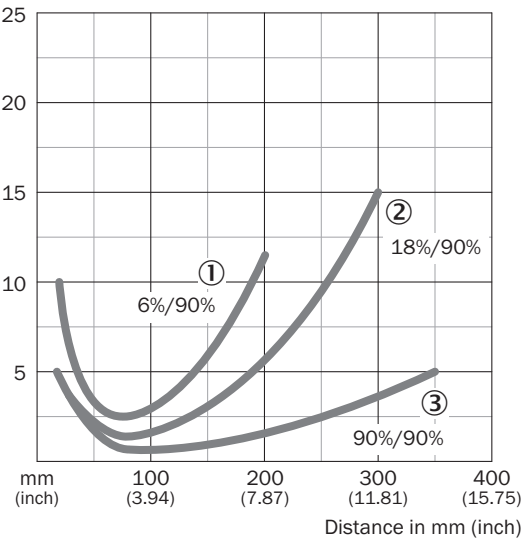
Connection diagram

Cd-094



Characteristic curve

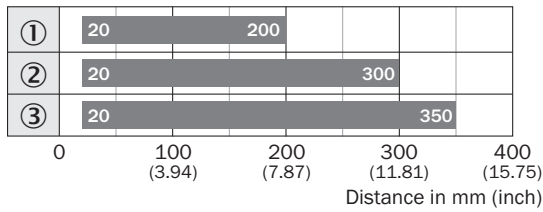
WTB12-3, red light, 350 mm



- ① Sensing range on black, 6% remission factor
- ② Sensing range on gray, 18% remission factor
- ③ Sensing range on white, 90% remission factor

Sensing range diagram

WTB12-3, red light, 350 mm

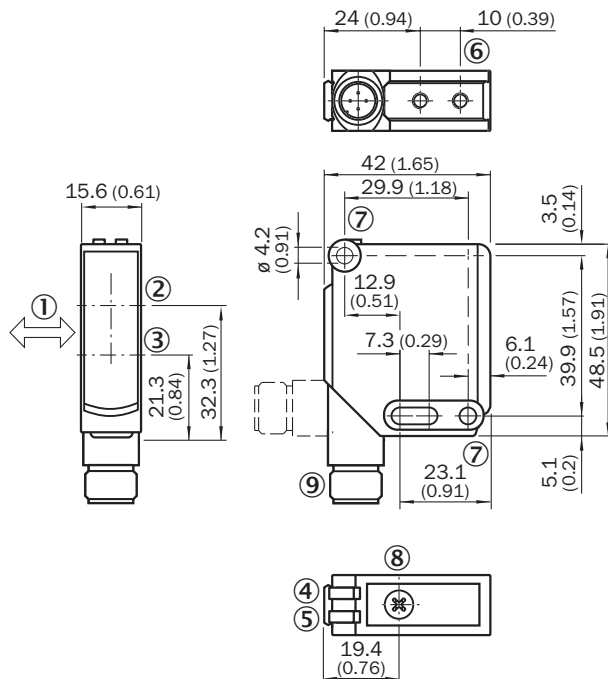


■ Sensing range

- ① Sensing range on black, 6% remission factor
- ② Sensing range on gray, 18% remission factor
- ③ Sensing range on white, 90% remission factor

Dimensional drawing (Dimensions in mm (inch))


WTB12-3, potentiometer



- ① Standard direction of the material being detected
- ② Optical axis, receiver
- ③ Optical axis, sender
- ④ LED indicator green: Supply voltage active
- ⑤ LED indicator yellow: Status of received light beam
- ⑥ M4 threaded mounting hole, 4 mm deep
- ⑦ Mounting hole, Ø 4.2 mm
- ⑧ Sensing range adjustment: potentiometer
- ⑨ Connection

Recommended accessories

Other models and accessories → www.sick.com/W12-3

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none">• Connection type head A: Male connector, M12, 4-pin, straight, A-coded• Description: Unshielded• Connection systems: Screw-type terminals• Permitted cross-section: ≤ 0.75 mm²	STE-1204-G	6009932

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