



WTB4S-3P5232H

W4S-3 Inox Hygiene

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WTB4S-3P5232H	1054864

Other models and accessories → www.sick.com/W4S-3_Inox_Hygiene

Detailed technical data

Features

Sensor/ detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	15.25 mm x 63.2 mm x 22.15 mm
Housing design	Hygiene
Housing design (light emission)	Rectangular
Sensing range max.	4 mm ... 120 mm ¹⁾
Sensing range	10 mm ... 120 mm ¹⁾
Type of light	Visible red light
Light source	PinPoint LED ²⁾
Light spot size (distance)	Ø 2.5 mm (50 mm)
Wave length	650 nm
Adjustment	Single teach-in button
Special applications	Hygienic and washdown zones

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP
Output function	Complementary
Switching mode	Light/dark switching
Output current I_{max}	≤ 100 mA
Response time	< 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Connection type	Male connector M8, 4-pin ⁶⁾
Mechanical connection	D12 adapter shaft
Circuit protection	A ⁷⁾ B ⁸⁾ C ⁹⁾
Protection class	III
Weight	140 g
Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
Optics material	Plastic, PMMA
Enclosure rating	IP66 IP67 IP68 IP69K
Special feature	D12 adapter shaft
Ambient operating temperature	-30 °C ... +70 °C ¹⁰⁾ -30 °C ... +60 °C
Ambient temperature, storage	-30 °C ... +75 °C
UL File No.	FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ 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⁾ Max. tightening torque: 0.6 Nm.

⁷⁾ A = V_S connections reverse-polarity protected.

⁸⁾ B = inputs and output reverse-polarity protected.

⁹⁾ C = interference suppression.

¹⁰⁾ At UV ≤ 24 V and IA < 30 mA.

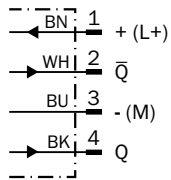
Classifications

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

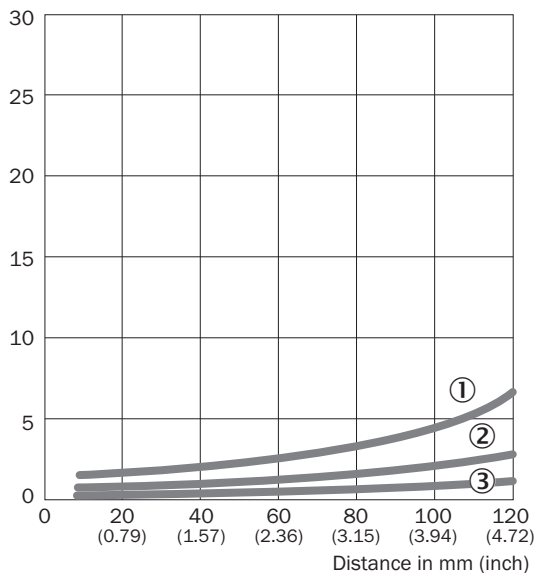
Connection diagram

Cd-083



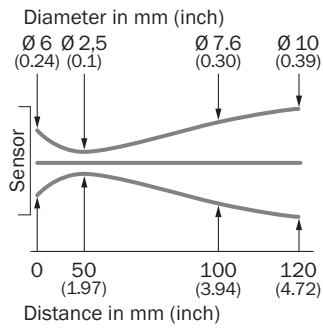
Characteristic curve

WTB4S-3, 120 mm



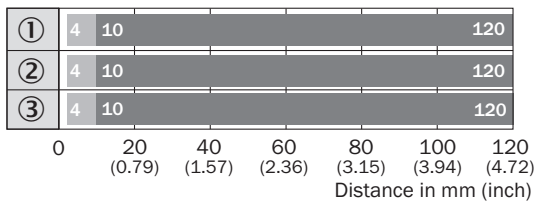
- ① Sensing range on black, 6% remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on white, 90% remission

Light spot size



Sensing range diagram

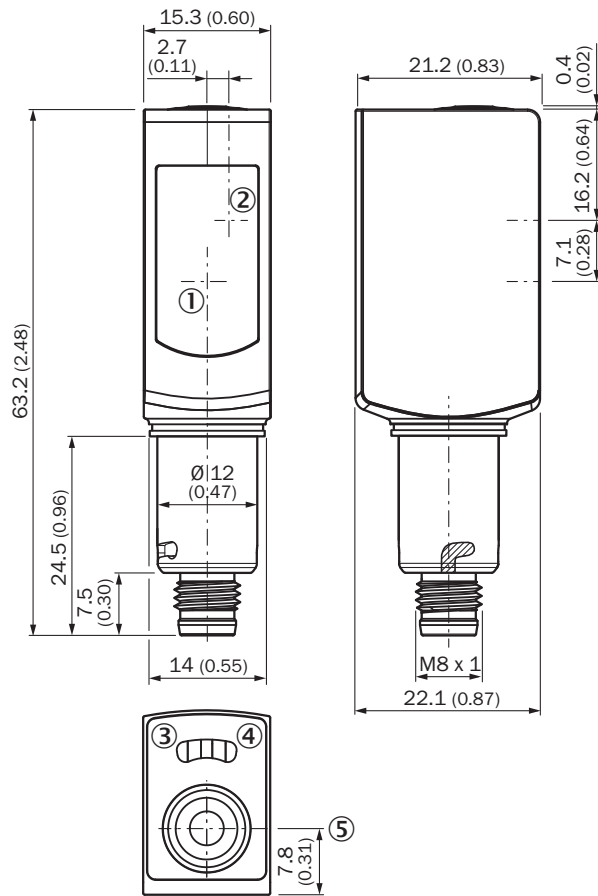
WTB4S-3, 120 mm



■ Sensing range ■ Sensing range max.

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



Dimensional drawing (Dimensions in mm (inch))



- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- ③ LED indicator yellow: Status of received light beam
- ④ LED indicator green: Supply voltage active
- ⑤ Single teach-in button

Recommended accessories

Other models and accessories → www.sick.com/W4S-3_Inox_Hygiene

	Brief description	Type	Part no.
Other mounting accessories			
	Diameter 18 mm x 100 mm for W4S-3 Inox hygiene. Hygienic integration without holes and brackets. Cable run inside tube	BEF-MR18G-NA	4065853
Plug connectors and cables			
	Head A: female connector, M8, 4-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other kind., Not resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-0804-G05MNI	6059194

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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.”

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