

WTB26P-39722122ZZZ

W26

COMPACT PHOTOELECTRIC SENSORS



Illustration may differ

Ordering information

Туре	Part no.
WTB26P-39722122ZZZ	1222809

Other models and accessories → www.sick.com/W26





Detailed technical data

Features

Sensor/ detection principle Photoelectric proximity sensor, Background suppression		
Dimensions (W x H x D)	24.6 mm x 82.5 mm x 53.3 mm	
Housing design (light emission)	Rectangular	
Sensing range max.	30 mm 1,600 mm ¹⁾	
Type of light	Visible red light	
Light source	PinPoint LED ²⁾	
Light spot size (distance)	Ø 7 mm (700 mm)	
Wave length	635 nm	
Adjustment		
Teach-Turn adjustment 1	BluePilot: for setting the sensing range	
Teach-Turn adjustment 2 BluePilot: for configuring the time function		
Wire/pin	For activating the test input	
Indication		
LED indicator blue 1	BluePilot: sensing range indicator	
LED indicator blue 2	indicator blue 2 BluePilot: Time function display	
LED indicator green	Operating indicator Static: power on	
LED indicator yellow	Status of received light beam	

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

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

Static on: object present
Static off: object not present

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Ripple	≤ 5 V _{pp}
Current consumption	30 mA ²⁾ 50 mA ³⁾
Power consumption, sender	3)
Power consumption, receiver	3)
Switching output	Push-pull: PNP/NPN PNP NPN
Output function	Factory setting: Pin 5 / white: NPN normally closed (dark switching), PNP normally open (light switching), pin 6 / gray: Test input acc to. U_B , Pin 4 / black: NPN normally open (light switching), PNP normally closed (dark switching)
Switching mode	Dark/light switching
Signal voltage PNP HIGH/LOW	Approx. V _S – 2.5 V / 0 V
Signal voltage NPN HIGH/LOW	Approx. VS / < 2.5 V
Output current I _{max.}	≤ 100 mA
Response time	≤ 500 µs ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Time functions	Deactivated (factory setting) On delay Off delay ON and OFF delay Impulse (one shot)
Delay time	Teach-turn adjustment, 0 ms 30,000 ms, 0 ms (factory setting)
Connection type	Cable with connector Q6, 6-pin, DC-coding, 270 mm ⁶⁾
Cable material	PVC
Circuit protection	A ⁷⁾ B ⁸⁾ C ⁹⁾ D ¹⁰⁾
Protection class	m
Weight	100 g

¹⁾ Limit values.

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

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

 $^{^{2)}}$ 16 V DC ... 30 V DC, without load.

 $^{^{\}rm 3)}$ 10 V DC ... 16 V DC, without load.

 $^{^{\}rm 4)}$ Signal transit time with resistive load in switching mode.

⁵⁾ With light/dark ratio 1:1 in switching mode.

⁶⁾ Do not bend below 0 °C.

 $^{^{7)}}$ A = V_S connections reverse-polarity protected.

 $^{^{8)}}$ B = inputs and output reverse-polarity protected.

 $^{^{9)}}$ C = interference suppression.

¹⁰⁾ D = outputs overcurrent and short-circuit protected.

Polarisation filter	√
Housing material	Plastic, VISTAL®
Optics material	Plastic, PMMA
Enclosure rating	IP65 (According to EN 60529)
Test input sender off	Test at U _B
Ambient operating temperature	-40 °C +60 °C
Ambient storage temperature	-40 °C +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Limit values.

Classifications

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

Connection diagram

Cd-427

$$\begin{array}{c|c} & & & \\ & & & \\ \hline & & & \\ \hline &$$

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 $^{^{4)}}$ Signal transit time with resistive load in switching mode.

⁵⁾ With light/dark ratio 1:1 in switching mode.

⁶⁾ Do not bend below 0 °C.

 $^{^{7)}}$ A = V_S connections reverse-polarity protected.

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

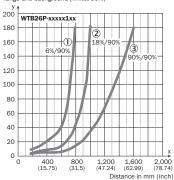
⁹⁾ C = interference suppression.

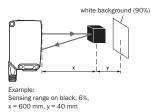
 $^{^{10)}}$ D = outputs overcurrent and short-circuit protected.

Characteristic curve

WTB26P-xxxxx1xx

Minimum distance in mm (y) between the set sensing range and background (white, 90%)

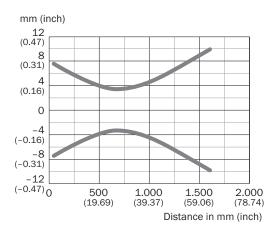




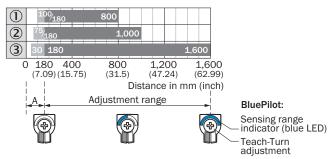
- ① Sensing range on black, 6% remission
- ② Sensing range on gray, 18 % remission
- 3 Sensing range on white, 90% remission

Light spot size

WTB26P-xxxxx1xx



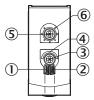
Sensing range diagram



- A = Detection distance (depending on object remission)
- ① Sensing range on black, 6% remission
- ② Sensing range on gray, 18 % remission
- 3 Sensing range on white, 90% remission

Adjustments

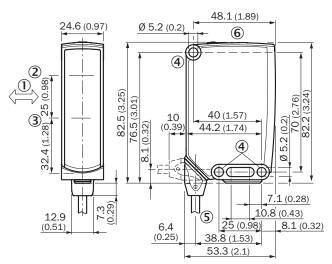
Display and adjustment elements



- ① LED indicator green
- ② LED indicator yellow
- 3 Teach-Turn adjustment 1
- ④ LED indicator blue 1
- ⑤ Teach-Turn adjustment 2
- 6 LED indicator blue 2

Dimensional drawing (Dimensions in mm (inch))

WTB26, WTL26, cable



- ① Standard direction of the material being detected
- ② Center of optical axis, sender
- 3 Center of optical axis, receiver
- 4 Mounting hole, Ø 5.2 mm
- ⑤ Connection
- ⑤ Display and adjustment elements

Recommended accessories

Other models and accessories → www.sick.com/W26

	Brief description	Туре	Part no.
Universal bar clamp systems			
7	Plate N12 for universal clamp. For mounting PL30A, P250 reflectors, W27 and WTR2 sensors., Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (2022726), mounting hardware	BEF-KHS-N12	2071950

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