



WSE26P-39112102ZZZ

W26

COMPACT PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
WSE26P-39112102ZZZ	1102912

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

Illustration may differ



Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
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.	0 m ... 60 m
Type of light	Visible red light
Light source	PinPoint LED ¹⁾
Light spot size (distance)	Ø 115 mm (15 m)
Wave length	635 nm
Adjustment	
Teach-Turn adjustment	BluePilot: for configuring the time function
Wire/pin	For activating the test input
Indication	
LED indicator blue 1	BluePilot: Alignment aid
LED indicator blue 2	BluePilot: Time function display
LED indicator green	Operating indicator Static: power on
LED indicator yellow	Status of received light beam Static: object not present Static off: object present Flashing: Below the 1.5 function reserve

¹⁾ 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}
Power consumption, sender	≤ 30 mA ²⁾ < 50 mA ³⁾
Power consumption, receiver	≤ 30 mA ²⁾ < 50 mA ³⁾
Switching output	Push-pull: PNP/NPN
Output function	Factory setting: Pin 5 / black: NPN normally closed (light switching), PNP normally open (dark switching), Pin 4 / black: NPN normally open (dark switching), PNP normally closed (light switching)
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	Approx. V _S – 2.5 V / 0 V
Signal voltage NPN HIGH/LOW	Approx. V _S / < 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	III
Weight	200 g
Housing material	Plastic, VISTAL®
Optics material	Plastic, PMMA
Enclosure rating	IP65 (According to EN 60529)
Test input sender off	Test at 0 V
Ambient operating temperature	–40 °C ... +60 °C
Ambient storage temperature	–40 °C ... +75 °C

¹⁾ Limit values.

²⁾ 16 V DC ... 30 V DC, without load.

³⁾ 10 V DC ... 16 V DC, without load.

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.

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

- 1) Limit values.
- 2) 16 V DC ... 30 V DC, without load.
- 3) 10 V DC ... 16 V DC, without load.
- 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.

Safety-related parameters

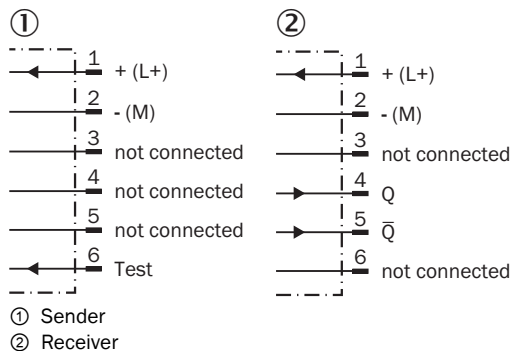
MTTF_D	438 years
DC_{avg}	0%

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
UNSPSC 16.0901	39121528

Connection diagram

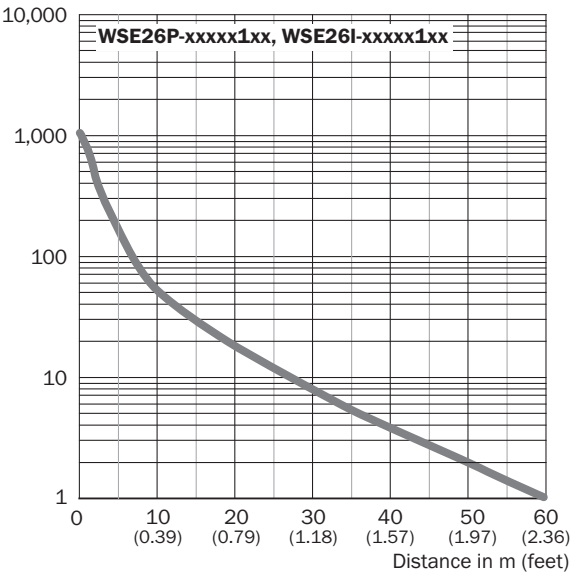
Cd-075



Characteristic curve

WSE26P-xxxxx1xx

Function reserve

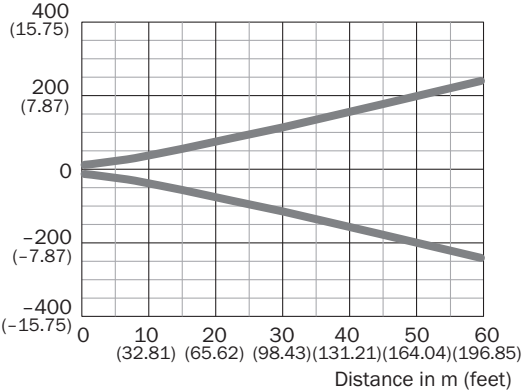


WSE26I-xxxxx1xx

Light spot size

Visible red light

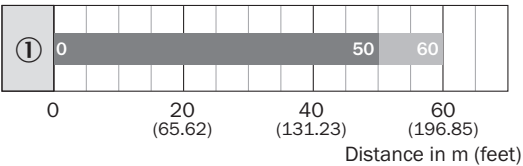
Radius in mm (inch)



WSE26P-xxxxx1xx

Sensing range diagram

WSE26P-xxxxx1xx



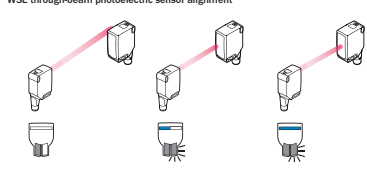
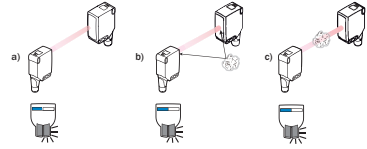
■ Sensing range ■ Sensing range typ. max.

WSE26I-xxxxx1xx

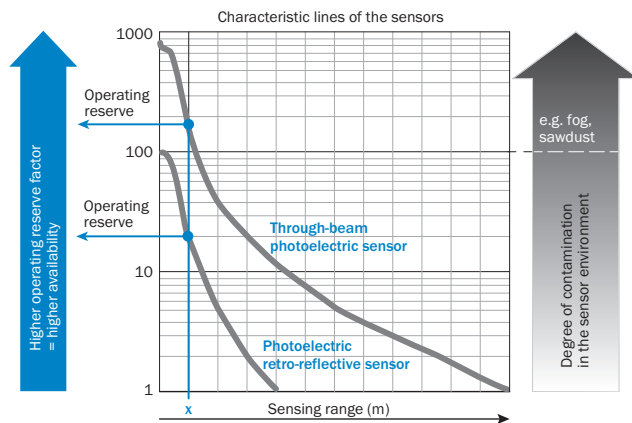
Functions

Operation note

BluePilot: Blue indicator LEDs with double benefits

Easy and quick sensor alignment with the help of the LED indicator All blue LEDs illuminate - optimum alignment - highest possible operating reserve	WSE through-beam photoelectric sensor alignment 
Service note A reduction in sensor availability is displayed by a decrease of the blue LEDs. Possible causes: a) insufficient alignment b) contamination of the optical surfaces c) particles in the light beam	

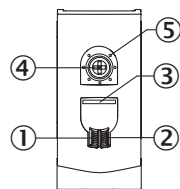
Operation note



At a sensing range of „x“ the photoelectric retro-reflective and through-beam photoelectric sensors have different operating reserves (see blue arrow). The higher the operating reserve factor, the better the sensor can compensate the contamination in the air or in the light beam and on the optical surfaces (front screen, reflector), i.e. the sensor has the maximum availability, otherwise the sensor switches due to pollution although there is no object in the path of the light beam.

Adjustments

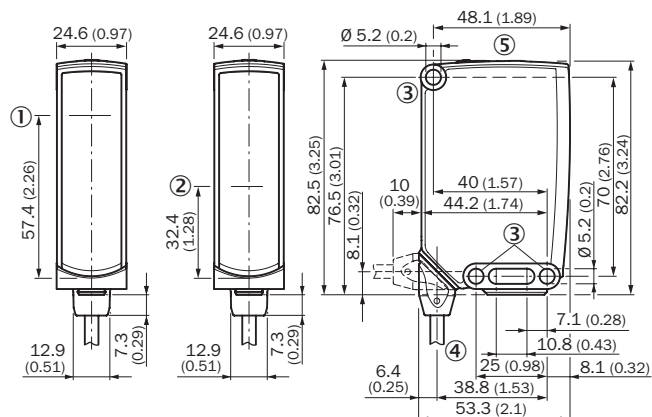
Display and adjustment elements



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

Dimensional drawing (Dimensions in mm (inch))

WSE26, cable



- ① Center of optical axis, sender
- ② Center of optical axis, receiver
- ③ Mounting hole, Ø 5.2 mm
- ④ Connection
- ⑤ Display and adjustment elements

Recommended accessories

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

	Brief description	Type	Part no.
Universal bar clamp systems			
	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
Plug connectors and cables			
	Head A: female connector, 6-pin, angled, DC-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	DOL-1306-W02M	6030217

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