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DATA SHEET

WT260-P560

W260
Photoelectric sensors

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Sensor Intelligence



Illustration may differ

PHOTOELECTRIC SENSORS

WT260-P560

ORDERING INFORMATION

Type	part no.
WT260-P560	1011541

Further device versions and accessories at www.sick.com/WT260

DETAILED TECHNICAL DATA

FEATURES

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	25 mm x 77.8 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 mm ... 380 mm ¹⁾
Sensing range	0 mm ... 380 mm ²⁾ 75 mm ... 160 mm ³⁾
Focus	Approx. 1.5°
Type of light	Infrared light
Light source	LED ⁴⁾
Light spot size (distance)	Ø 17 mm (300 mm)
Angle of dispersion	Approx. 1.5°
Adjustment	Potentiometer, 270°

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

²⁾ Set sensing range at MAX.

³⁾ Set sensing range at MIN.

⁴⁾ 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	35 mA ³⁾
Switching output	PNP
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Output current I _{max}	≤ 100 mA
Response time	≤ 2 ms ⁴⁾
Switching frequency	250 Hz ⁵⁾
Connection type	Male connector M12, 5-pin
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	II ¹⁰⁾
Weight	120 g
Alarm output	100 mA, permanently ¹¹⁾
Housing material	Plastic, ABS
Optics material	Plastic, PC
Enclosure rating	IP66
Items supplied	Mounting bracket BEF-W260
Test input sender off	TE to V _s
Ambient operating temperature	-25 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not exceed or fall below U_i tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ A = V_s connections reverse-polarity protected.

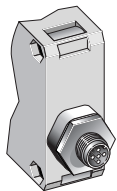
⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

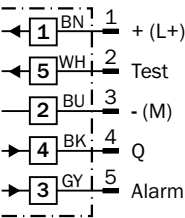
⁹⁾ D = outputs overcurrent and short-circuit protected.

¹⁰⁾ Reference voltage: 50 V DC.

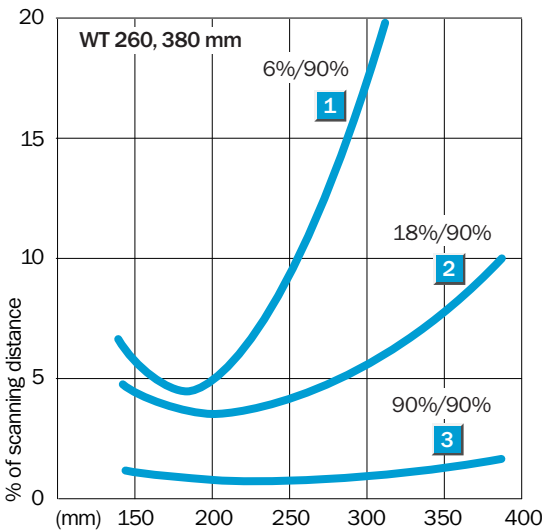
¹¹⁾ Operating reserve < 50 %.

CONNECTION TYPE

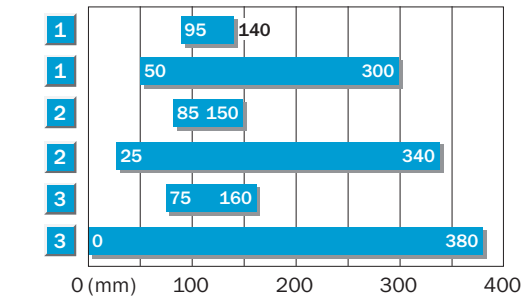
CONNECTION DIAGRAM CD-151



CHARACTERISTIC CURVE

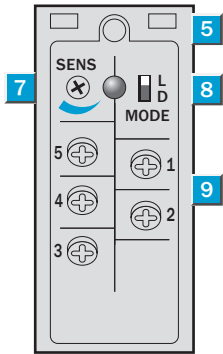


SENSING RANGE DIAGRAM



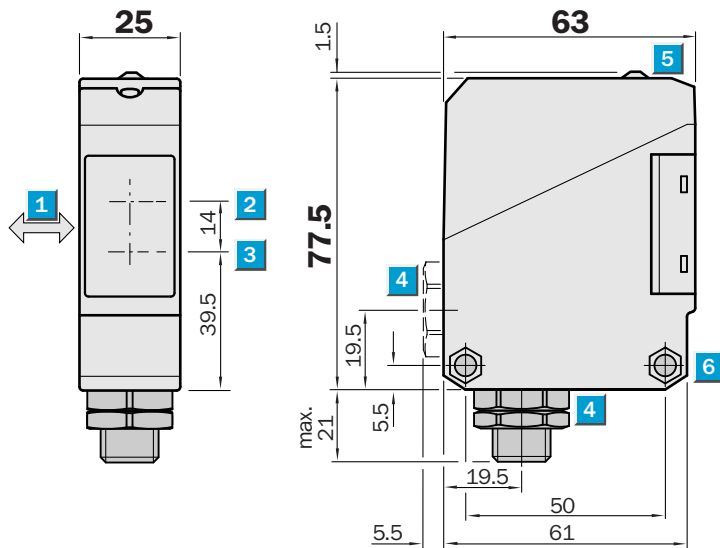
1	Scanning range on black, 6 % remission
2	Scanning range on grey, 18 % remission
3	Scanning range on white, 90 % remission
A	Scanning distance control set to MIN
B	Scanning distance control set to MAX

ADJUSTMENTS



- ⑤ LED signal strength indicator, red
- ⑦ Adjustment of sensing range
- ⑧ Light/ dark rotary switch: L = light switching, D = dark switching
- ⑨ Terminals

DIMENSIONAL DRAWING



Dimensions in mm (inch)

- ① Standard direction of the material being detected
- ② Center of optical axis, receiver
- ③ Center of optical axis, sender
- ④ Cable entry gland 1/2" PF for cable diameter 6 to 10 mm optionally at bottom or rear
- ⑤ LED reception indicator, red
- ⑥ Mounting hole $\varnothing$ 5.2 mm, for M5 hexagon nuts on both sides

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1011541



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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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