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Product data sheet



WS/WE260-S270

W260

COMPACT PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

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WS/WE260-S270 | W260

COMPACT PHOTOELECTRIC SENSORS



Illustration may differ

Ordering information

Type	Part no.
WS/WE260-S270	6020773

Included in delivery: BEF-W260 (2)

Other models and accessories ➜ www.sick.com/W260

Detailed technical data

Features

Device type	Photoelectric sensors
Sensor/ detection principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	25 mm x 78 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m ... 45 m
Sensing range	0 m ... 40 m
Focus	Approx. 1°
Type of light	Visible red light
Light source	LED [1]
Light spot size (distance)	Ø 700 mm (40 m)
Angle of dispersion	Approx. 1°
Adjustment	Potentiometer, 270°

[1] Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	12 V DC ... 240 V DC [1] 24 V AC ... 240 V AC [1]
Power consumption, sender	≤ 4 VA
Power consumption, receiver	≤ 5 VA
Switching output	Relay, electrically isolated [2]
Output function	Change-over contacts

[1] +- 10%.
[2] Provide suitable spark suppression for inductive or capacitive loads.
[3] With light/dark ratio 1:1.
[4] A = V_S connections reverse-polarity protected.
[5] C = interference suppression.
[6] Rated voltage: 250 V AC/DC.

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Switching mode	Light switching [2]
Switching current (switching voltage)	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 20 ms
Switching frequency	25 Hz [3]
Angle of reception	Approx. 20°
Connection type	Cable gland
Circuit protection	A [4] C [5]
Protection class	II [6]
Weight	120 g
Interference emission	Level EN 61000-6-3
Housing material	Plastic, ABS
Optics material	Plastic, PC
Enclosure rating	IP67
Items supplied	Mounting bracket BEF-W260
Usage category	AC-15, DC-13, according to EN 60947-1
Electromagnetic compatibility (EMC)	Level EN 61000-6-3
Ambient operating temperature	–25 °C ... +55 °C
Ambient temperature, storage	–40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

[1] +- 10%.
[2] Provide suitable spark suppression for inductive or capacitive loads.
[3] With light/dark ratio 1:1.
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[5] C = interference suppression.
[6] Rated voltage: 250 V AC/DC.

Safety-related parameters

$MTTF_D$	361 years
DC_{avg}	0 %

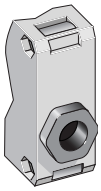
Classifications

ECl@ss 5.0	27270901
ECl@ss 5.1.4	27270901
ECl@ss 6.0	27270901
ECl@ss 6.2	27270901
ECl@ss 7.0	27270901
ECl@ss 8.0	27270901
ECl@ss 8.1	27270901
ECl@ss 9.0	27270901
ECl@ss 10.0	27270901
ECl@ss 11.0	27270901
ETIM 5.0	EC002716

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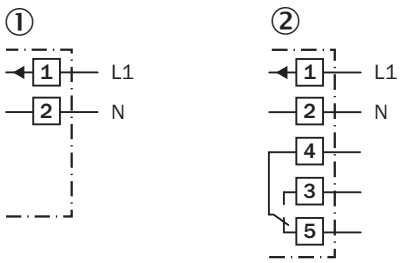
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Connection type



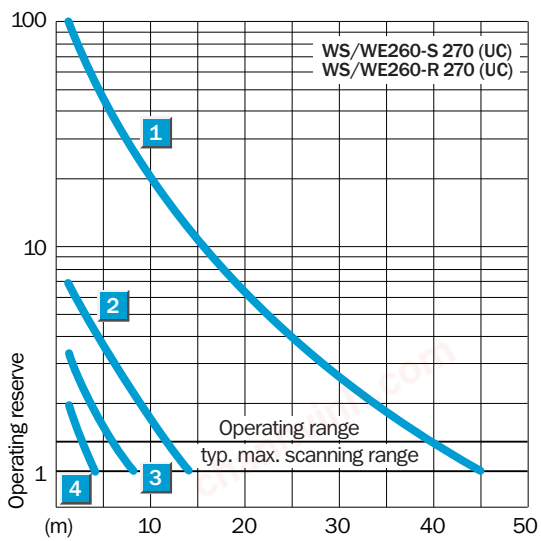
Connection diagram

Cd-227



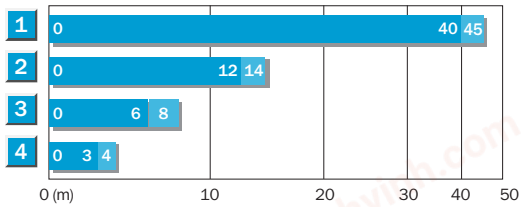
① Sender
② Receiver

Characteristic curve



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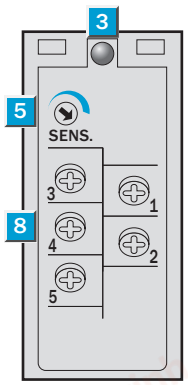
Sensing range diagram



Operating range Typ. max. scanning range

	Scanning range reduction when using slotted masks
1	Without slotted mask
2	Slot width 5 mm
3	Slot width 2 mm
4	Slot width 1 mm

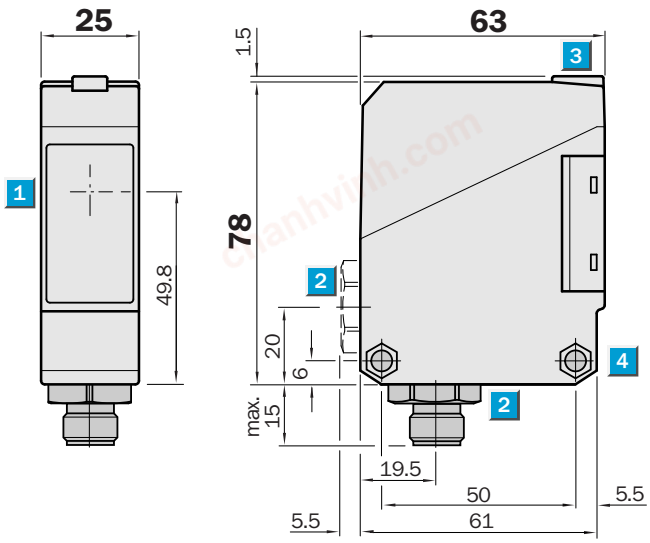
Adjustments



③ LED indicator orange: WE 260: switching output activeWS 260: sender active
⑤ Sensitivity control
⑧ Terminals

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Dimensional drawing (Dimensions in mm (inch))



① Center of optical axis, sender/ receiver
② Cable entry gland 1/2" PF thread for cable diameters from 6 to 10 mm optionally at bottom or rear; or connector M12, bottom
③ LED indicator orange: WE 260: switching output activeWS 260: sender active
④ Mounting hole ø 5.2 mm, for M5 hexagon nuts on both sides

Recommended accessories

Other models and accessories ➜ www.sick.com/W260

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket, steel, zinc coated, without mounting hardware	BEF-W260	5304819

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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.”

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