

WT260-R270 W260

PHOTOELECTRIC SENSORS



PHOTOELECTRIC SENSORS



Ordering information

Туре	part no.
WT260-R270	6020770

Included in delivery: BEF-W260 (1)

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



Illustration may differ



Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Energetic
Dimensions (W x H x D)	25 mm x 78 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	5 mm 1,700 mm ¹⁾
Sensing range	5 mm 1,300 mm
Focus	Approx. 1.8°
Type of light	Visible red light
Light source	LED ²⁾
Light spot size (distance)	Ø 60 mm (1,300 mm)
Angle of dispersion	Approx. 1.8°
Adjustment	Potentiometer, 270°

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

Mechanics/electronics

Supply voltage	12 V DC 240 V DC ¹⁾

 $^{^{2)}}$ Average service life: 100,000 h at T_{U} = +25 $^{\circ}\text{C}.$

 $^{^{2)}}$ Provide suitable spark suppression for inductive or capacitive loads.

 $^{^{3)}}$ With light/dark ratio 1:1.

 $^{^{\}rm 4)}$ A = V $_{\rm S}$ connections reverse-polarity protected.

 $^{^{5)}}$ C = interference suppression.

⁶⁾ Rated voltage: 250 V AC/DC.

	24 V AC 240 V AC ¹⁾
Power consumption	≤ 5 VA
Switching output	Relay, electrically isolated ²⁾
Output function	Change-over contacts
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⁾
Time functions	On delay Off delay
Delay time	Adjustable via time delay selector switch, $0.1\mathrm{s}\dots10\mathrm{s}$ Adjustable via time control
Connection type	Cable gland
Circuit protection	A ⁴⁾ C ⁵⁾
Protection class	II ⁶⁾
Weight	120 g
Interference emission	Level EN 61000-6-3 Residential and commercial areas
Housing material	Plastic, ABS
Optics material	Plastic, PC
Enclosure rating	IP67
Items supplied	Mounting bracket BEF-W260
Electromagnetic compatibility (EMC)	Level EN 61000-6-3 Residential and commercial areas
Ambient operating temperature	-25 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C
UL File No.	EN50081-1, 242356

¹⁾ +- 10%

Safety-related parameters

MTTF _D	613 years
DC _{avg}	0 %

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓

 $^{^{\}rm 2)}$ 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.

WT260-R270 | W260

PHOTOELECTRIC SENSORS

cRUus certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

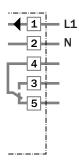
Classifications

ECLASS 5.0	27270903
ECLASS 5.1.4	27270903
ECLASS 6.0	27270903
ECLASS 6.2	27270903
ECLASS 7.0	27270903
ECLASS 8.0	27270903
ECLASS 8.1	27270903
ECLASS 9.0	27270903
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

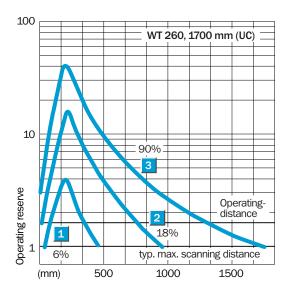
Connection type



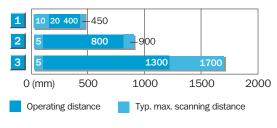
Connection diagram



Characteristic curve

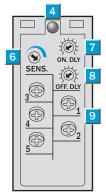


Sensing range diagram



Scanning range on black, 6 % remission
 Scanning range on grey, 18 % remission
 Scanning range on white, 90 % remission

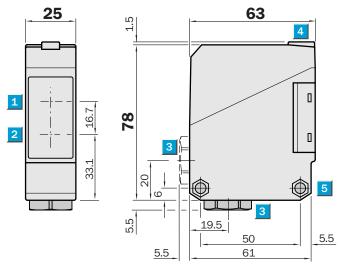
Adjustments



- ④ LED signal strength indicator, red
- 6 sensitivity control
- $\ensuremath{\mbox{\Large ?}}$ Time control ON delay t_{ON}
- $\ensuremath{\$}$ Time control OFF delay $t_{\ensuremath{\mathsf{OFF}}}$

Terminals

Dimensional drawing



Dimensions in mm (inch)

Recommended accessories

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

	Brief description	Туре	part no.
Mounting sys	tems		
	 Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-W260	5304819

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

