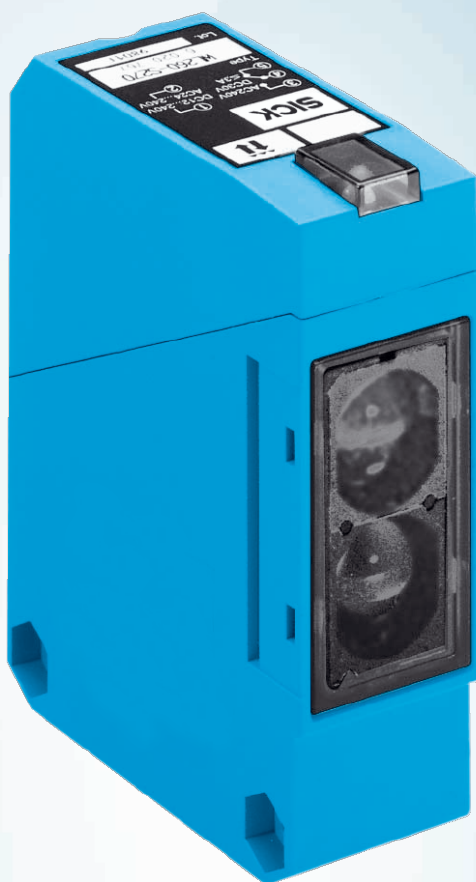




WL260-E270

W260

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
WL260-E270	6020978

Included in delivery: P250 (1), BEF-W260 (1)

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

Detailed technical data

Features

Functional principle	Photoelectric retro-reflective sensor
Functional principle detail	Dual lens
Dimensions (W x H x D)	25 mm x 78 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	0.01 m ... 14 m ¹⁾
Sensing range	0.01 m ... 9.5 m ²⁾ 0.01 m ... 11.5 m ¹⁾
Focus	Approx. 1.7°
Type of light	Visible red light
Light source	LED ³⁾
Light spot size (distance)	Ø 240 mm (8 m)
Angle of dispersion	Approx. 1.7°
Adjustment	Potentiometer, 270°

¹⁾ Reflector PL80A.

²⁾ Reflector P250.

³⁾ 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⁾

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

²⁾ May not exceed or fall below U_V 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.

Current consumption	35 mA ³⁾
Switching output	NPN
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Output current I_{max.}	≤ 100 mA
Response time	≤ 1.5 ms ⁴⁾
Switching frequency	333 Hz ⁵⁾
Connection type	Cable gland
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	II ¹⁰⁾
Weight	120 g
Polarisation filter	✓
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Items supplied	Reflector P250, mounting bracket BEF-W260
Test input sender off	TE to 0 V
Ambient operating temperature	-25 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	EN50081-1, 242356

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

2) May not exceed or fall below U_v 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.

Safety-related parameters

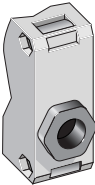
MTTF_D	947 years
DC_{avg}	0 %

Classifications

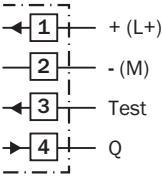
ECLASS 5.0	27270902
ECLASS 5.1.4	27270902
ECLASS 6.0	27270902
ECLASS 6.2	27270902
ECLASS 7.0	27270902
ECLASS 8.0	27270902

ECLASS 8.1	27270902
ECLASS 9.0	27270902
ECLASS 10.0	27270902
ECLASS 11.0	27270902
ECLASS 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

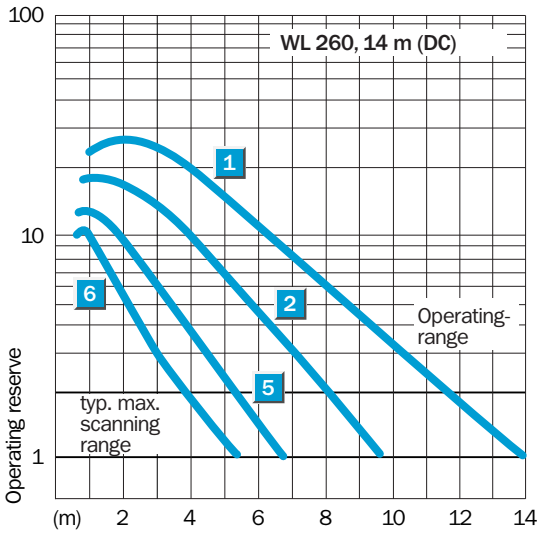
Connection type



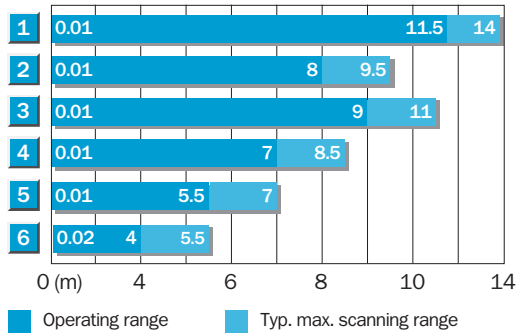
Connection diagram Cd-123



Characteristic curve

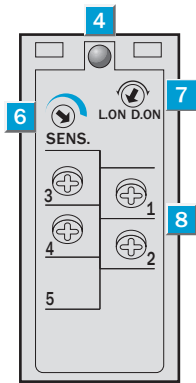


Sensing range diagram



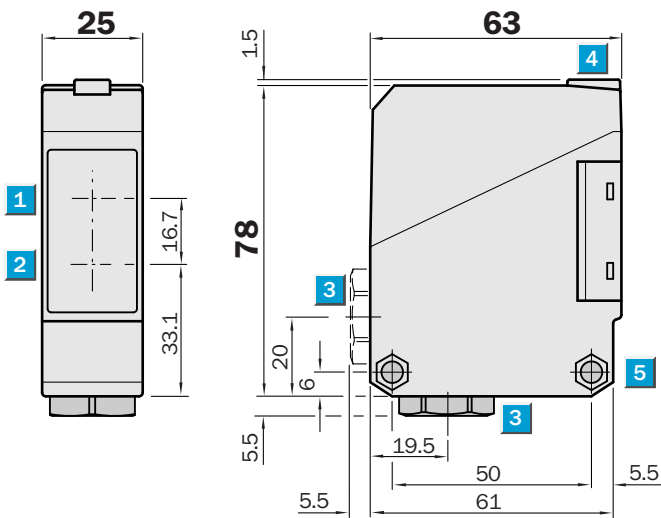
	Reflector type	Operating range
1	PL 80 A	0.01 ... 11.5 m
2	P 250	0.01 ... 8 m
3	PL 50 A or PL 40 A	0.01 ... 9 m
4	PL 30 A or PL 31 A	0.01 ... 7 m
5	PL 20 A	0.01 ... 5.5 m
6	Reflective tape Diamond Grade	0.02 ... 4 m

Adjustments



- ④ Status indicator LED, yellow: Output active
- ⑥ Adjustment of sensing range
- ⑦ Light/ dark rotary switch: L = light switching, D = dark switching
- ⑧ Terminals

Dimensional drawing



Dimensions in mm (inch)

Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware	BEF-W260	5304819
	Description: Universal mounting bracket for reflectors Dimensions (W x H x L): 85 mm x 90 mm x 35 mm Material: Steel Details: Steel, zinc coated Suitable for: C110A, P250, PL20, PL30A, PL40A, PL80A	BEF-WN-REFX	2064574
reflectors and optics			
	Description: Rectangular, screw connection Dimensions: 51 mm 61 mm Ambient operating temperature: -30 °C ... +65 °C	P250	5304812

SICK AT A GLANCE

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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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