



Photoelectric sensors  
W260, Photoelectric retro-reflective sensor

WL260-F270



**Model Name** > [WL260-F270](#)  
**Part No.** > [6020976](#)



*Illustration may differ*

**At a glance**

- Long sensing ranges
- Mounting bracket and reflector included with delivery
- Selectable operation mode (light/dark)
- Optional time stages
- M12 connector or terminal chamber
- Versions for 10 - 30 V DC or 12 - 240 V DC/ 24 – 240 V AC voltage supply

**Your benefits**

- High operating reserve provides increased reliability
- Configuration controls are protected by a cover, ensuring less damage and a longer service life
- Easily accessible terminal chamber for electrical connections simplifies installation
- Simplified integration due to mounting compatibility since variants for DC or DC/AC voltage supply are available in the same design
- Polarizing filter ensures reliable detection, even with shiny targets



**Features**

Sensor/detection principle:	Photoelectric retro-reflective sensor
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 <sup>1)</sup>
Sensing range:::	0.01 m ... 11.5 m, 0.01 m ... 9.5 m <sup>2) 3)</sup>
Type of light:	Visible red light
Light source:	LED <sup>4)</sup>
Light spot (distance):	240 mm (8 m)
Sensitivity adjustment:	Potentiometer, 270°
Angle of dispersion:	1.7 °

<sup>1) 3)</sup> PL80A <sup>2)</sup> P250 <sup>4)</sup> Average service life 100,000 h at Ta = +25 °C

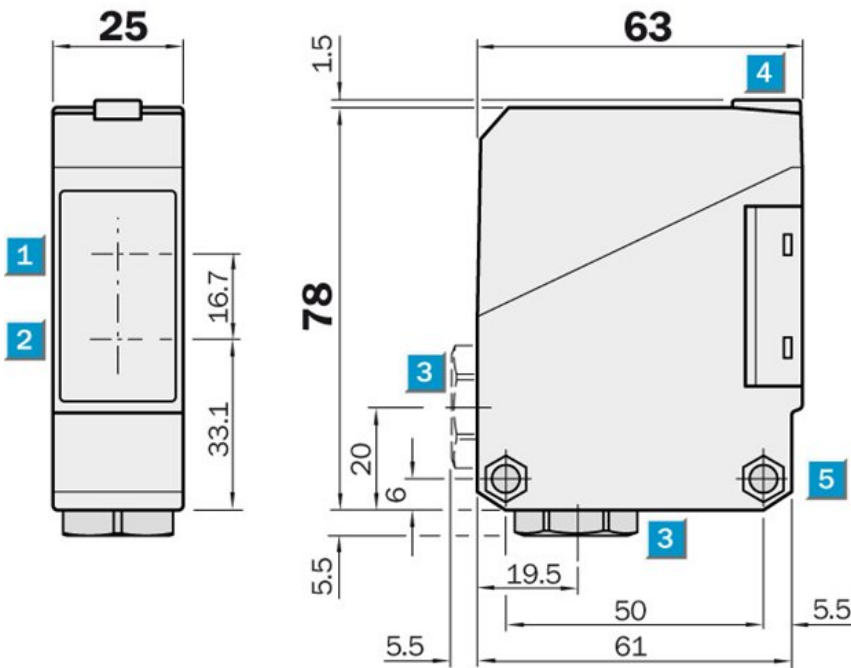
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:	≤ 5 Vpp <sup>2)</sup>
Power consumption:	≤ 35 mA <sup>3)</sup>
Output type:	PNP, Light/dark-switching, selectable via light/dark selector, open collector

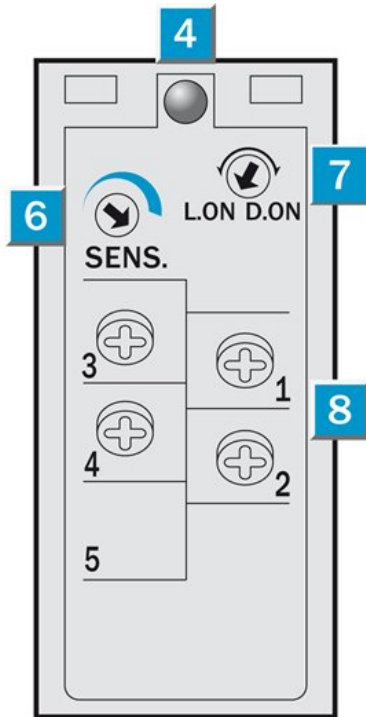
Output current I <sub>max</sub> ..:	100 mA
Response time:	≤ 1.5 ms <sup>4)</sup>
Switching frequency:	333 Hz <sup>5)</sup>
Connection type:	Cable gland
Circuit protection:::	A, B, C, D <sup>6) 7) 8) 9)</sup>
Protection class:	II <sup>10)</sup>
Weight:	120 g
Polarisation filter:	✓
Housing material:	ABS
Optics material:	PMMA
Enclosure rating:	IP 67
Items supplied:	Mounting bracket BEF-W260, Reflector P250
Test input sender off:	TE to VS
Ambient operating temperature:	-25 °C ... 55 °C
Ambient storage temperature:	-40 °C ... 70 °C
UL File-No.:	EN50081-1, 242356

1) Limit values, operation in short-circuit protected network max. 8 A 2) May not exceed or fall short of  $V_S$  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

### Dimensional drawing

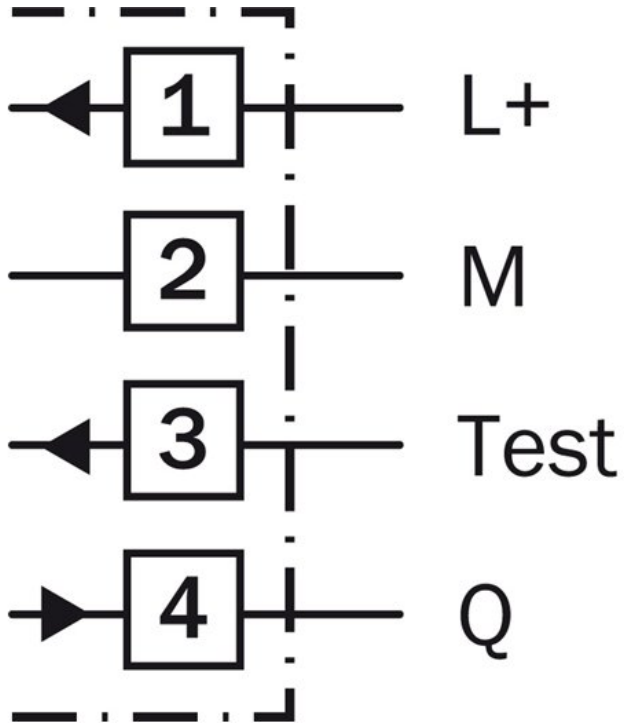


## Adjustments possible

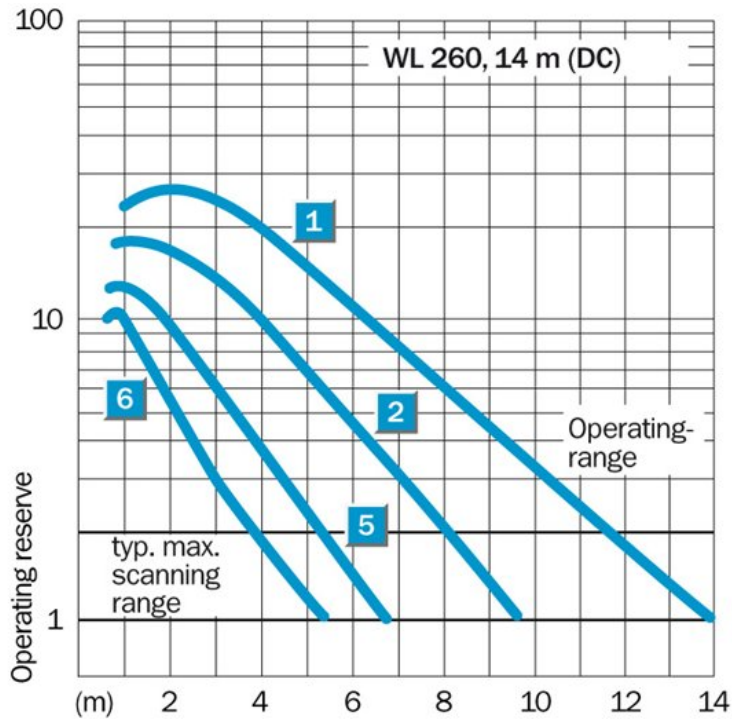


- |4| Status indicator LED, yellow: Output active
- |6| Sensing distance adjustment
- |7| Light/ dark rotary switch L= light switching, D= dark switching
- |8| Terminals

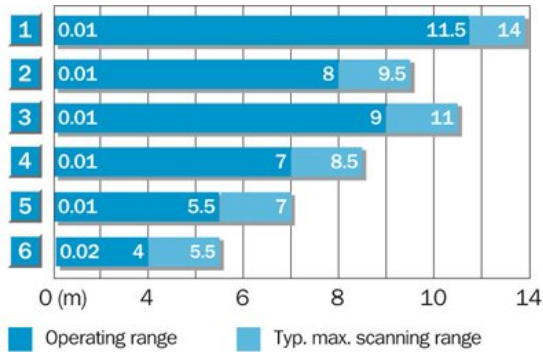
## Connection diagram



## Characteristic curve



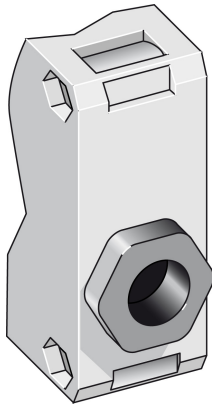
## Sensing range diagram



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

**Connection type**

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