



Photoelectric sensors  
W260, Through-beam photoelectric sensor

WS/WE260-F270



**Model Name** > [WS/WE260-F270](#)  
**Part No.** > [6020973](#)



*Actual item may differ*

**At a glance**

- Long sensing ranges
- Mounting brackets for sender and receiver are 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



**Features**

Dimensions (W x H x D):	25 mm x 78 mm x 63 mm
Sensing range max.:	0 m ... 35 m
Sensing range:	0 m ... 30 m
Housing desig (light emission):	Cuboid
Light source:	LED <sup>1)</sup>
Type of light:	visible red light
Sensitivity adjustment:	Potentiometer, 270°
Sensor/detection principle:	Through-beam photoelectric sensor
Light spot (distance):	700 mm (30 m)

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

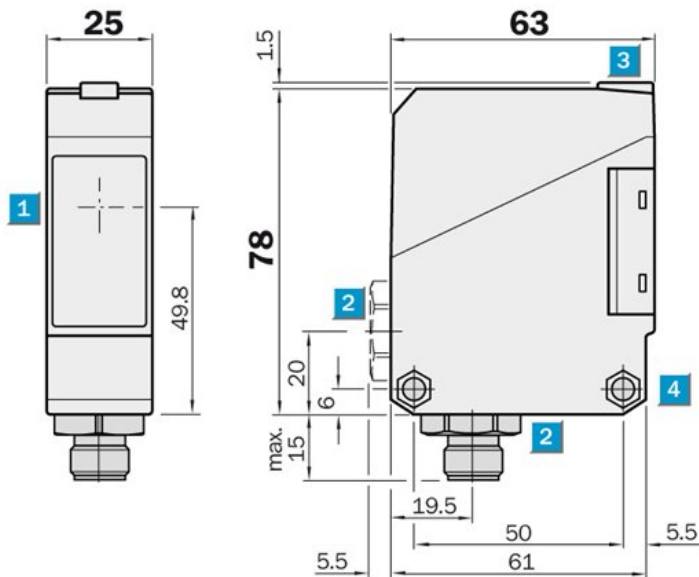
**Mechanics/electronics**

Enclosure rating:	IP 67
Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 5 Vpp <sup>2)</sup>
Switching output:	PNP, light/dark-switching, selectable via light/dark selector, open collector
Output current I <sub>max.</sub> :	100 mA
Response time:	≤ 0.5 ms <sup>3)</sup>

Switching frequency:	1,000 Hz <sup>4)</sup>
Connection type:	Cable gland
Protection class:	II <sup>5)</sup>
Circuit protection::::	A B C <sup>6) 7) 8) 9)</sup> D
Weight:	120 g
Housing material:	ABS
Optics material:	PC
Ambient temperature, operation:	-25 °C ... 55 °C
Ambient temperature, storage:	-40 °C ... 70 °C
Test input sender off:	TE to 0 V
Items supplied:	mounting bracket BEF-W260
Power consumption, sender:	20 mA <sup>10)</sup>
Power consumption, receiver:	35 mA <sup>11)</sup>
Angle of reception:	20 °
Angle of dispersion:	1.4 °

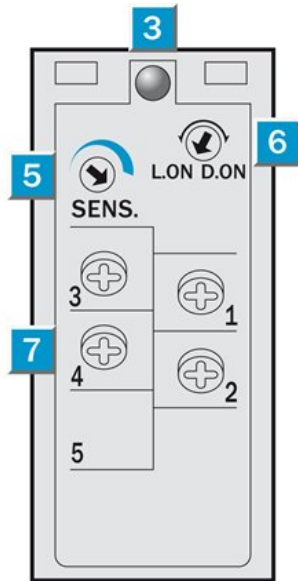
<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A <sup>2)</sup> May not exceed or fall short of  $V_S$  <sup>3)</sup> Signal transit time with resistive load <sup>4)</sup> With light/dark ratio  
<sup>5)</sup> Reference voltage 50 V DC <sup>6)</sup> A = V<sub>S</sub> connections reverse-polarity protected <sup>7)</sup> B = inputs and output reverse-polarity protected <sup>8)</sup> C = interference  
<sup>9)</sup> D = outputs overcurrent and short-circuit protected <sup>10) 11)</sup> Without load

## Dimensional drawing



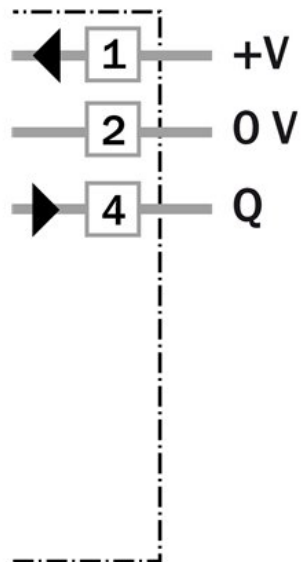
- [1] centre of optical axis, sender/ receiver
- [2] Cable entry gland 1/2" PF thread for cable diameters from 6 to 10 mm optionally at bottom or rear; or M12 equipment plug, bottom
- [3] LED indicator orange: WE 260: switching output activeWS 260: sender active
- [4] Mounting hole  $\varnothing$  5.2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

## Einstell-Möglichkeiten

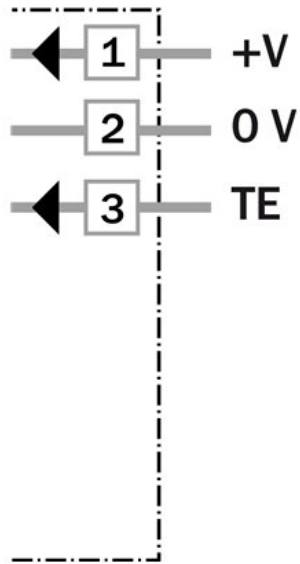


- [3] LED indicator orange: WE 260:  
switching output activeWS 260: sender active
- [5] LED signal strength indicator (WE)
- [6] Light/ dark rotary switch L=  
light switching, D= dark switching
- [7] Terminals

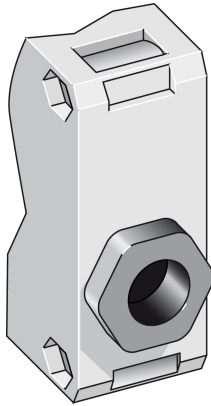
## Connection diagram



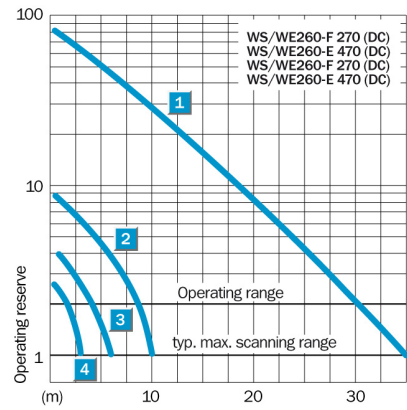
## Connection diagram



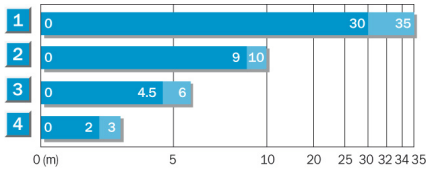
## Connection type



## Characteristic curve



## Sensing range diagram



Operating range      Typ. max. scanning range

### Scanning range reduction when using slotted masks

1	Without slotted mask
2	Orifice width 5 mm
3	Orifice width 2 mm
4	Orifice width 1 mm

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