

ONLINE DATA SHEET
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Photoelectric sensors
W260, Through-beam photoelectric sensor

WS/WE260-F270



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W260, Through-beam photoelectric sensor

Model Name > WS/WE260-F270
Part No. > 6020973



Illustration 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

CE

Features

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 ... 35 m
Sensing range:	0 m ... 30 m
Type of light:	Visible red light
Light source:	LED [1)]
Angle of dispersion:	Ca. 1.4 °
Adjustment:	Potentiometer, 270 °
Light spot size (distance):	Ø 700 mm (30 m)

[1)] Average service life of 100,000 h at T_A = +25 °C

Mechanics/electronics

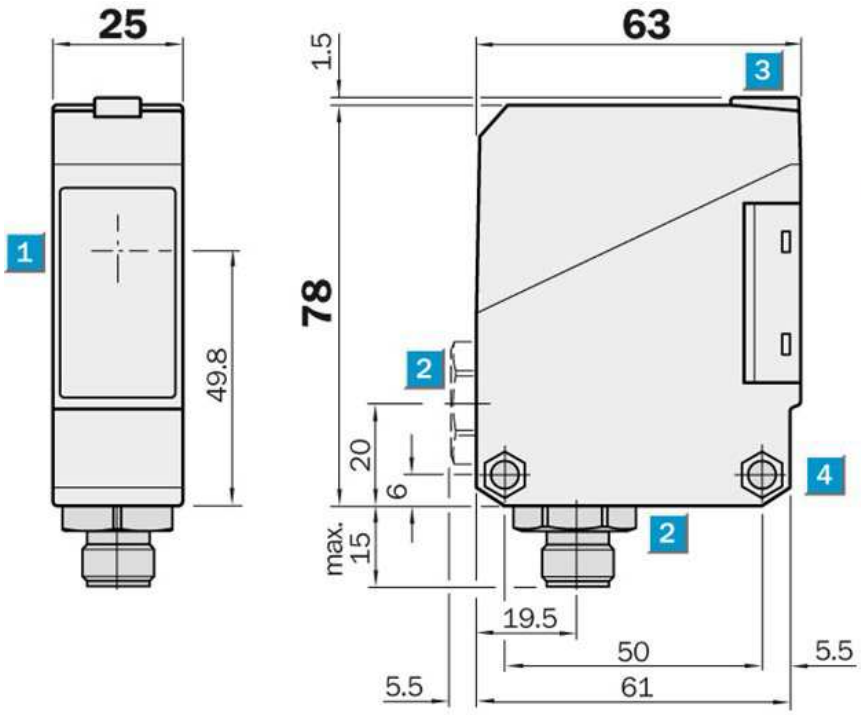
Supply voltage:	10 V DC ... 30 V DC [1)]
Residual ripple:	≤ 5 Vpp [2)]
Power consumption, sender:	20 mA [3)]
Power consumption, receiver:	35 mA [4)]
Output type:	PNP, open collector

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Switching mode:	Light/dark switching
Switching mode selector:	Selectable via light/dark selector
Output current Imax.:	100 mA
Response time:	≤ 0.5 ms [5]
Switching frequency:	1,000 Hz [6]
Angle of reception:	Ca. 20 °
Electrical connection:	Cable gland
Circuit protection::::	A, B, C, D [7] [8] [9] [10]
Protection class:	II [11]
Weight:	120 g
Optics material:	PC
Enclosure rating:	IP 67
Items supplied:	Mounting bracket BEF-W260
Test input sender off:	TE to 0 V
Ambient temperature operation:	-25 °C ... +55 °C
Ambient storage temperature:	-40 °C ... +70 °C
UL File No.:	EN50081-1, 242356
Housing material:	ABS, Plastic

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

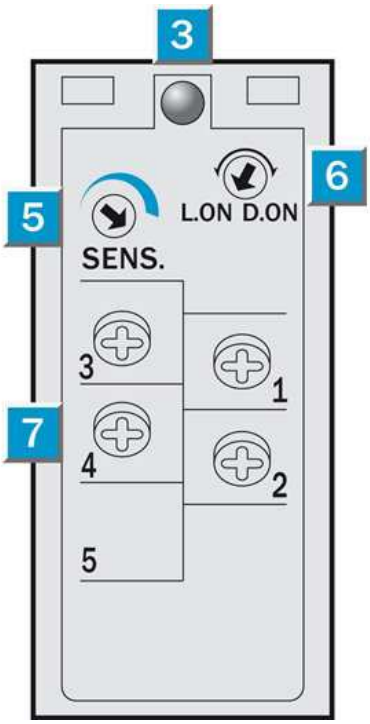
Dimensional drawing



|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

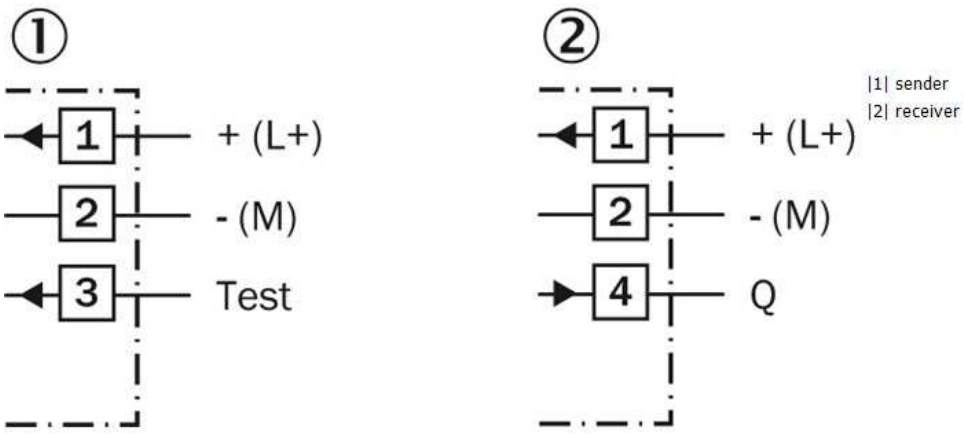
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Adjustments possible



|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

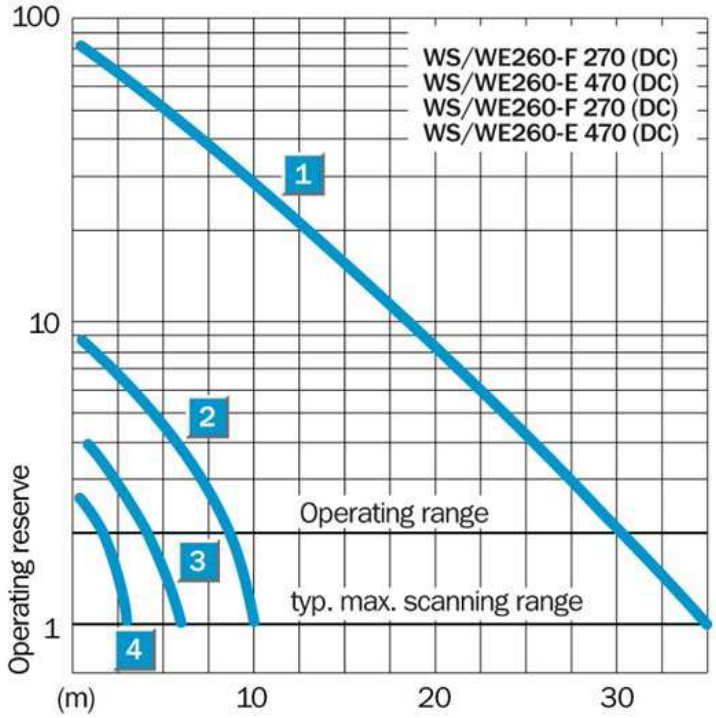
Connection diagram



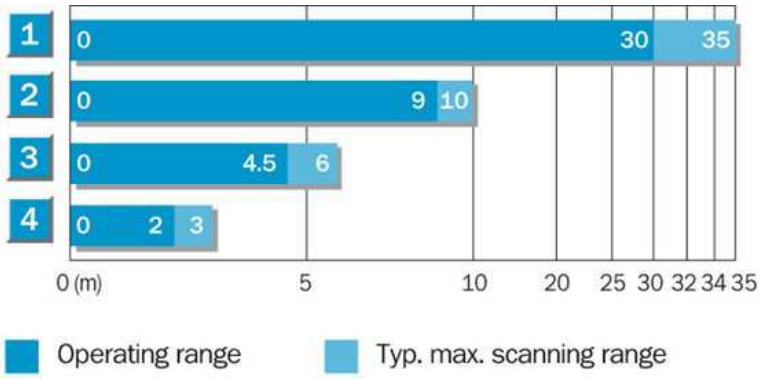
|1| sender
|2| receiver

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Characteristic curve



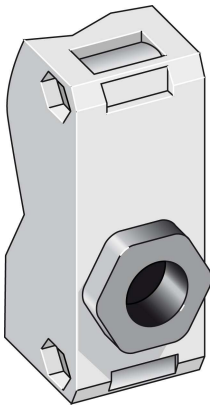
Sensing range diagram



	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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Connection type



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