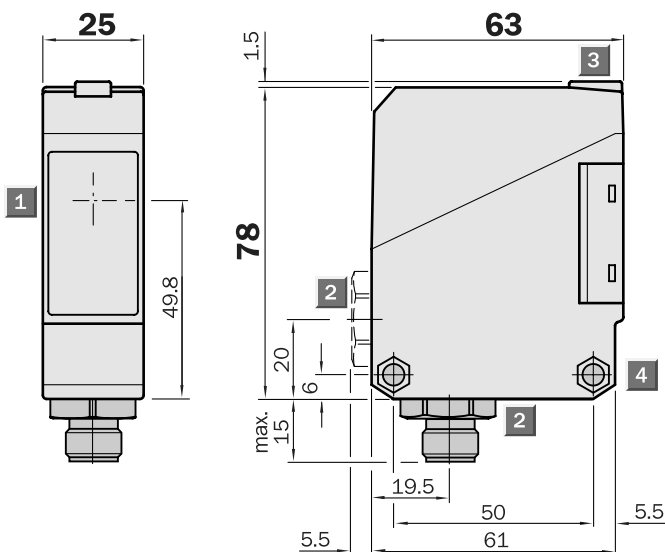
 **Scanning range**  
0 ... 35 m

**Through-beam photoelectric switch**

- Sensitivity, adjustable
- Terminal chamber or plug  
M12, 4-pin
- Test input

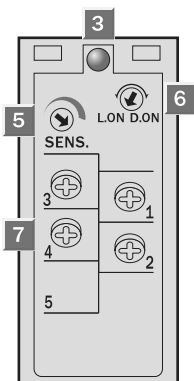
**Dimensional drawing**



**Adjustments possible**

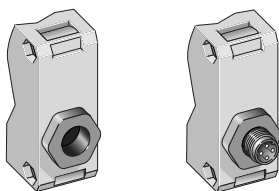
- WS/WE 260-F 270
- WS/WE 260-F 470
- WS/WE 260-E 270
- WS/WE 260-E 470

- 1** Middle of optic 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 signal indicator orange  
WE 260: switching output active  
WS 260: sender active
- 4** Through hole Ø 5.2 mm on both sides for M5 hex nut
- 5** Sensitivity control (WE 260)
- 6** Light/dark rotary switch (WE 260)  
L.ON = light-switching, D.ON = dark-switching
- 7** Terminals  
Terminal 3: WS 260 only  
Terminal 4: WE 260 only

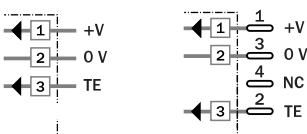


**Connection types**

- WS/WE 260-F 270
- WS/WE 260-F 470
- WS/WE 260-E 270
- WS/WE 260-E 470



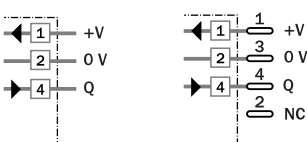
Terminals	4-pin, M12
WS 260-G 270	WS 260-G 470



Sender

Receiver

WE 260-E 270	WE 260-F 470
WE 260-F 270	WE 260-E 470



- See chapter Accessories**
- Cables and connectors
  - Mounting systems\*)
  - Special accessories

\*) Mounting bracket included with delivery

Technical data		WS/WE 260-	F 270	F 470	E 270	E 470						
Scanning range, typ. max.	0 ... 35 m											
Operating range	0 ... 30 m											
Sensitivity	Adjustable, potentiometer 270°											
<b>Light source<sup>4)</sup></b>	LED, visible red light											
Light spot diameter	Approx. 700 mm at 30 m											
Aperture angle sender	Approx. 1.4°											
Angle of reception receiver	Approx. 20°											
<b>Supply voltage V<sub>s</sub></b>	10 to 30 V DC <sup>2)</sup>											
Ripple <sup>3)</sup>	≤ 5 V <sub>pp</sub>											
Current consumption <sup>4)</sup>												
sender	≤ 20 mA											
receiver	≤ 35 mA											
<b>Switching outputs</b>	PNP, open collector: Q NPN, open collector: Q											
Output current I <sub>A</sub> max.	100 mA											
Light receiver, switching mode	Light-/dark-switching by rotary switch											
Response time <sup>5)</sup>	≤ 1.5 ms											
Switching frequency max. <sup>6)</sup>	333/s											
<b>Test input »TE«</b> sender off	PNP, NPN: TE to 0 V											
<b>Connection types</b>	Terminal chamber Plug M12, 4-pin											
<b>VDE protection class<sup>7)</sup></b>	□											
<b>Circuit protection<sup>8)</sup></b>												
sender	A, B											
receiver	A, B, C, D											
<b>Enclosure rating</b>	IP 67											
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C Storage -40 °C ... +70 °C											
<b>Weight</b>	Approx. 120 g											
<b>Material</b>	Housing: ABS; Optics: PC											

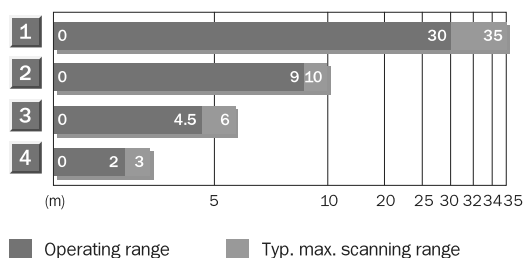
<sup>1)</sup> Average service life 100,000 h at T<sub>A</sub> = +25 °C  
<sup>2)</sup> Limit values, operation in short circuit protected network max. 8 A

<sup>3)</sup> Must be within V<sub>s</sub> tolerances  
<sup>4)</sup> Without load  
<sup>5)</sup> With resistive load  
<sup>6)</sup> With light/dark ratio 1:1

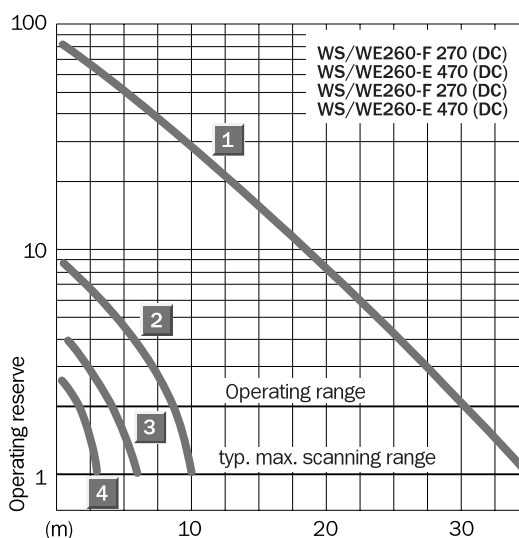
<sup>7)</sup> Reference voltage 50 V DC  
<sup>8)</sup> A = V<sub>s</sub> connections reverse-polarity protected  
 B = Inputs/outputs reverse-polarity protected

C = Interference suppression  
 D = Outputs overcurrent and short-circuit protected

**Operating range and operating reserve**




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



**Order information**

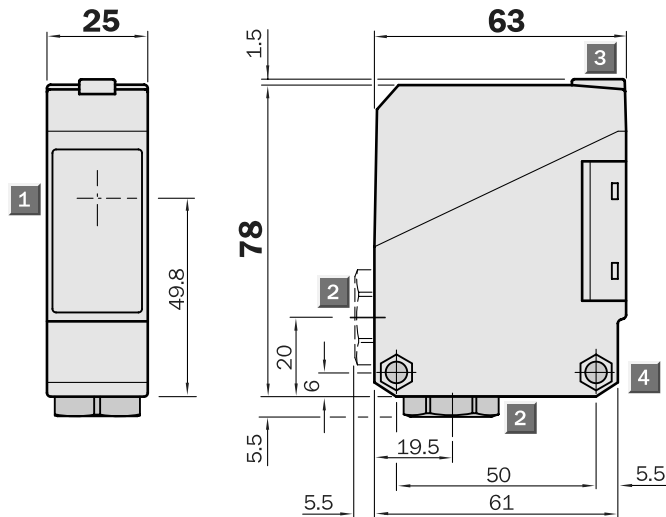
Type	Order no.
WS/WE 260-F 270	6 020 973
WS/WE 260-F 470	6 020 974
WS/WE 260-E 270	6 020 975
WS/WE 260-E 470	6 021 817

 **Scanning range**  
0 ... 45 m

**Through-beam photoelectric switch**

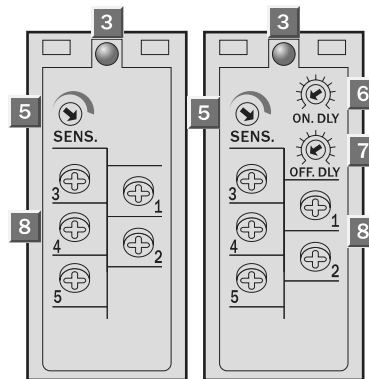
- Universal voltage
- Sensitivity, adjustable
- Terminal chamber
- Relay output, SPDT, time delays
- CE generic emission standard EN 61000-6-3 (“Residential and Commercial Areas”)

**Dimensional drawing**



**Adjustments possible**

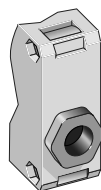
WS/WE 260-S 270      WS/WE 260-R 270



- 1 Middle of optic axis, sender resp. receiver
- 2 Cable entry gland 1/2" PF thread for cable diameters from 6 to 10 mm optionally at bottom or rear
- 3 LED signal indicator orange; WE 260: switching output active WS 260: sender active
- 4 Through hole  $\varnothing$  5.2 mm on both sides for M5 hex nut
- 5 Sensitivity control (WE 260)
- 6 Time control ON delay  $t_{ON}$  (WE 260)
- 7 Time control OFF delay  $t_{OFF}$  (WE 260)
- 8 Terminals 3, 4, 5: WE 260 only

**Connection types**

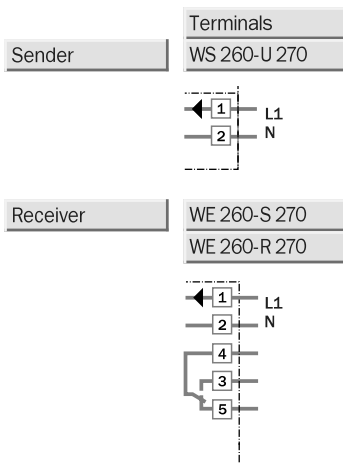
WS/WE 260-S 270  
WS/WE 260-R 270



**See chapter Accessories**

- Mounting systems\*)
- Special accessories

\*) Reflector P 250 included with delivery



Technical data		WS/WE 260-	S 270	R 270								
<b>Scanning range, typ. max.</b>	0 ... 45 m											
<b>Operating range</b>	0 ... 40 m											
Sensitivity	Adjustable, potentiometer 270°											
<b>Light source<sup>1)</sup></b>	LED, visible red light											
Light spot diameter	Approx. 700 mm at 40 m											
Aperture angle sender	Approx. 1°											
Angle of reception receiver	Approx. 20°											
<b>Supply voltage V<sub>s</sub><sup>2)</sup></b>	12 to 240 V DC											
	24 to 240 V AC											
<b>Power consumption</b>												
Sender	≤ 4 VA											
Receiver	≤ 5 VA											
<b>Switching output</b>	Relay, SPDT, electrically isolated <sup>3)</sup>											
Switching current I max.	3 A/240 V AC; 3 A/30 V DC <sup>4)</sup>											
Light receiver, switching mode	Light-switching											
Response time	≤ 20 ms											
Switching frequency max. <sup>5)</sup>	25/s											
<b>Time delays</b>												
ON delay t <sub>ON</sub>	0.1 to 10 s, can be connected separately											
OFF delay t <sub>OFF</sub>	0.1 to 10 s, can be connected separately											
<b>Connection type</b>	Terminal chamber											
<b>CE generic emission standard</b>	Level EN 61000-6-3 ("Residential and Commercial Areas")											
<b>VDE protection class<sup>6)</sup></b>	<input type="checkbox"/>											
<b>Circuit protection<sup>7)</sup></b>	A, C											
<b>Enclosure rating</b>	IP 67											
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C Storage -40 °C ... +70 °C											
<b>Weight</b>	Approx. 120 g											
<b>Material</b>	Housing: ABS; Optics: PC											

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

<sup>2)</sup> ± 10 %

<sup>3)</sup> Provide suitable spark suppression for inductive or capacitive loads

<sup>4)</sup> Usage categorie to EN 60947-1, 15 AC, 13 DC

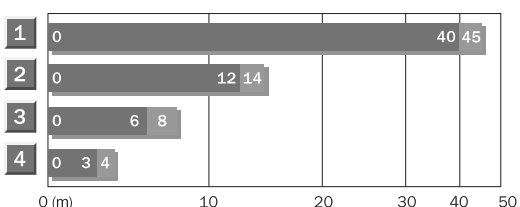
<sup>5)</sup> With light/dark ratio 1:1

<sup>6)</sup> Reference voltage 250 V UC

<sup>7)</sup> A = V<sub>s</sub> connections reverse-polarity protected

C = Interference suppression

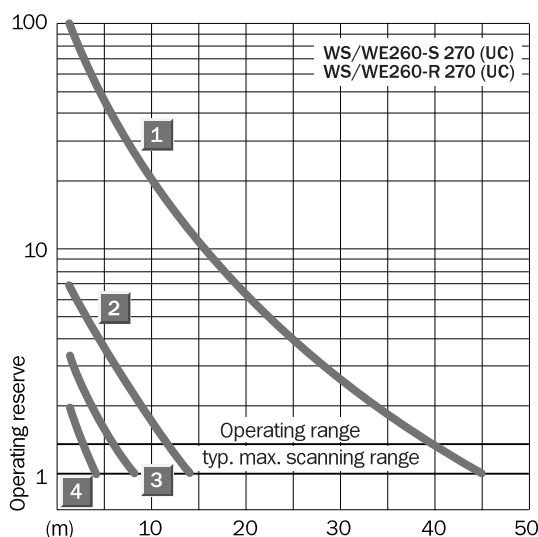
**Operating range and operating reserve**



■ Operating range ■ Typ. max. scanning range

**Scanning range reduction when using slotted masks**

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



**Order information**

Type	Order no.
WS/WE 260-S 270	6 020 773
WS/WE 260-R 270	6 020 774