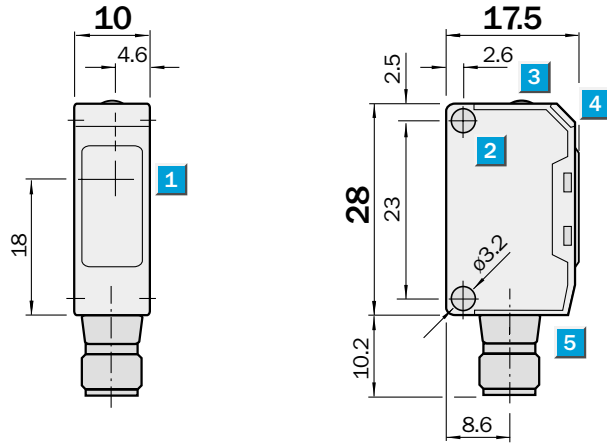


Scanning range
4.4 m

Through-beam photoelectric switches

- Slotted masks 0.5 mm, 1 mm and 2 mm for detection of small parts or for positioning tasks
- Adjustable sensitivity
- Direct voltage supply 10...30 V DC

Dimensional drawing

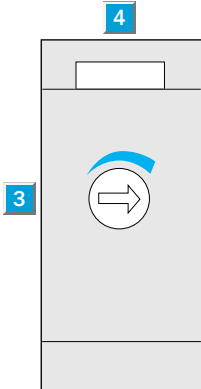


Adjustments possible

- WS/WE 150-P132
- WS/WE 150-N132
- WS/WE 150-P430
- WS/WE 150-N430

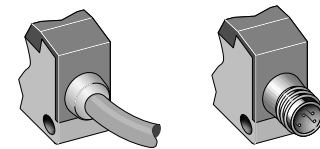
- 1** Centre of optical axis, sender (WS)
Centre of optical axis, receiver (WE)
- 2** Mounting holes \varnothing 3.2 mm
- 3** Sensitivity adjustment 270° (WE only)
- 4** LED indicator, red (WE only):
Light received \geq switching threshold
- 5** M 8 plug – 4-pin or cable

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Connection types

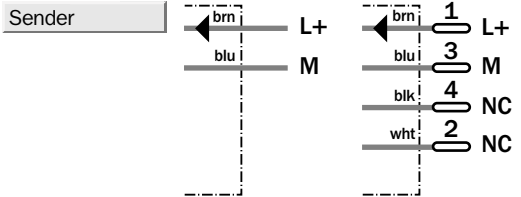
- WS/WE 150-P132
- WS/WE 150-N132
- WS/WE 150-P430
- WS/WE 150-N430



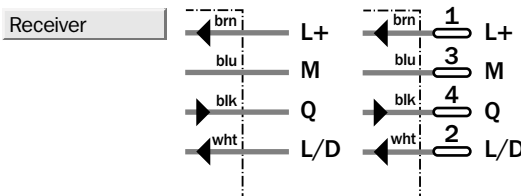
2 x 0.18 mm² 4-pin, M 8

Accessories	page
Cable receptacles	496
Mounting brackets Type A*	510
Slotted masks	556

* included with delivery



4 x 0.18 mm² 4-pin, M 8



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Technical data		WS/WE 150-	P 132	P 430	N 132	N 430
Scanning range, max. typical	4.4 m					
Operating range	4 m					
Operating range with mask,						
Aperture width 2.0 mm	2.0 m					
Aperture width 1.0 mm	1.0 m					
Aperture width 0.5 mm	0.5 m					
Sensitivity, adjustable	Potentiometer, 270°					
Light source¹⁾, light type	LED, red light					
Light spot diameter	Approx. 400 mm at 4 mm					
Angle of dispersion of sender	Approx. 6°					
Angle of reception of receiver	Approx. 15°					
Supply voltage V_A	10...30 V DC ²⁾					
Ripple ³⁾	± 10 %					
Current consumption ⁴⁾ sender	≤ 15 mA					
receiver	≤ 20 mA					
Switching outputs	PNP, open collector: Q					
	NPN, open collector: Q					
Max. output current I _A	100 mA					
Switching mode ⁵⁾	Dark-/light-switching via control cable L/D					
	+ V _S = light-switching					
	0 V = dark-switching					
Response time ⁶⁾	≤ 0.5 ms					
Max. switching frequency ⁷⁾	1000/s					
Connection types cable	PVC, 2 m ⁸⁾					
sender WS	2 x 0.18 mm ² , Ø 3.5 mm					
receiver WE	4 x 0.18 mm ² , Ø 3.5 mm					
Plug	M 8 – 4-pin					
VDE protection class⁹⁾	□					
Circuit protection¹⁰⁾						
sender	A, B					
receiver	A, B, C, D					
Enclosure rating	IP 67					
Ambient temperature T_A	Operation – 25 °C...+ 55 °C					
	Storage – 40 °C...+ 70 °C					
Weight with cable 2 m	Sender: appr. 44 g, receiver: appr. 44 g					
with plug	Sender: appr. 7 g, receiver: appr. 7 g					
Housing material	Housing: ABS/optics: PC					

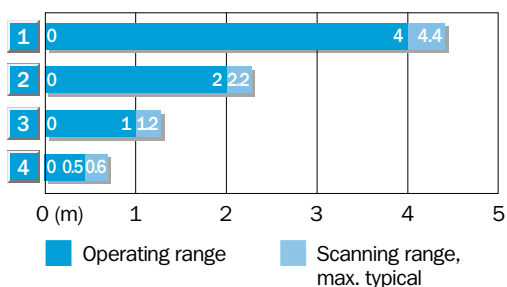
- 1) Average service life 100,000 h at T_A = + 25 °C
- 2) Limit values
- 3) May not exceed or fall short of V_S tolerances
- 4) Without load

- 5) Control cable open:
NPN: light-switching
PNP: dark-switching
- 6) Signal transit time with resistive load
- 7) With light/dark ratio 1:1
- 8) Do not bend below 0 °C

- 9) Reference voltage 50 V DC
- 10) A = V_S connections reverse-polarity protected
B = Inputs and outputs reverse-polarity protected

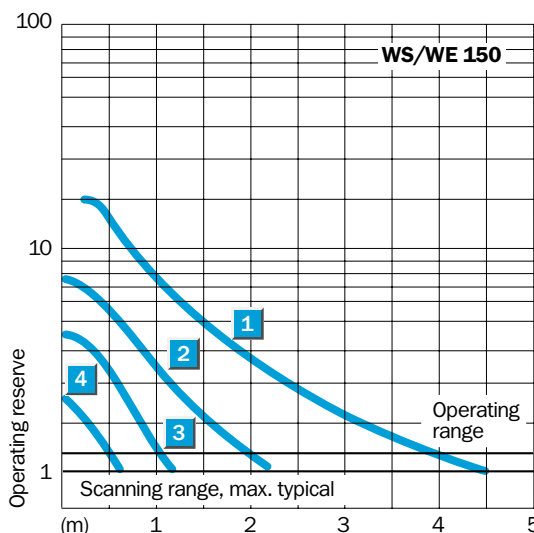
- C = Interference impulse suppression
- D = Outputs overcurrent and short-circuit protected
- 11) Part no. includes both sender and receiver!

Scanning range and operating reserve



Reduction in scanning range with slotted masks

1	Without slotted mask
2	Mask aperture width 2.0 mm
3	Mask aperture width 1.0 mm
4	Mask aperture width 0.5 mm



Order information

Type	Part no. ¹¹⁾
WS/WE 150-P132	6 011 030
WS/WE 150-P430	6 011 032
WS/WE 150-N132	6 011 027
WS/WE 150-N430	6 011 029