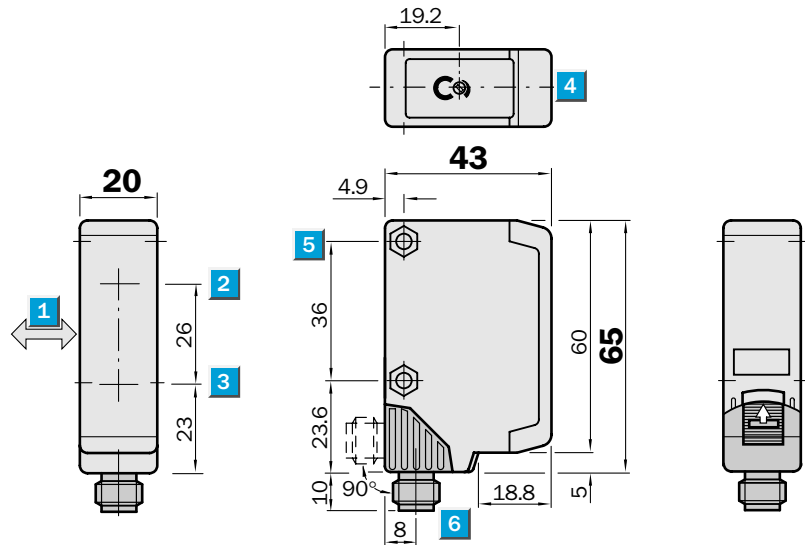

Scanning distance
10...600 mm

Photoelectric proximity switches

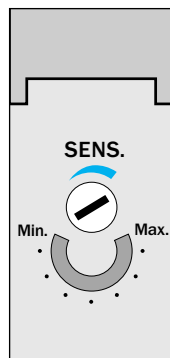
- Background suppression
- Continuous adjustment of scanning distance, scanning distance control (2 turns) with position indicator (270°)
- Visible red light as an alignment aid
- M 12 plug rotatable by 90°

Dimensional drawing



Adjustments possible

WT 250-P 162
WT 250-P 460
WT 250-N 162
WT 250-N 460

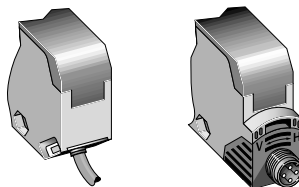


- 1 Standard direction of the material to be scanned
- 2 Transmission axis
- 3 Reception axis
- 4 Red LED signal strength indicator
- 5 Through borehole \varnothing 4.2 mm, for M 4 hexagon nut on both sides
- 6 Connection cable or M 12 plug – 4-pin; plug position rotatable by 90° (V > H), V → vertical final position; H → horizontal final position; can be locked with slider
- 7 Scanning distance adjustment (2 turns), over-turn protected
- 8 Position indicator for scanning distance setting (270°)

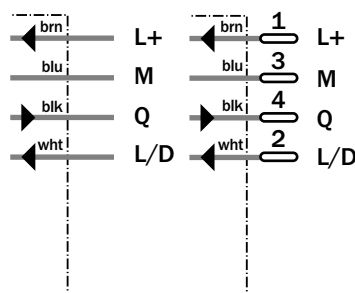


Connection types

WT 250-P 162	WT 250-P 460
WT 250-N 162	WT 250-N 460



4 x 0.18 mm ²	4-pin, M 12
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Accessories	page
Cable receptacles	496
Mounting brackets*	510

* included with delivery



Technical data		WT 250-	P 162	P 460	N 162	N 460						
Scanning distance, adjustable	Max. 10...600 mm ¹⁾											
	Min. 35...110 mm ¹⁾											
Scanning distance, adjustable	Potentiometer, 2 turns, with position indicator											
Light source²⁾, light type	LED, visible red light											
Light spot diameter	Approx. 35 mm at 500 mm											
Angle of dispersion, sender	Approx. 3°											
Supply voltage V_S	10...30 V DC ³⁾											
Residual ripple ⁴⁾	≤ 5 V _{SS}											
Current consumption ⁵⁾	≤ 35 mA											
Switching outputs	PNP, open collector: Q NPN, open collector: Q											
Output current I _A max.	100 mA											
Light receiver, switching type	Light-/dark-switching via control wire: + V _S = light-switching											
	0 V = dark-switching											
Response time ⁶⁾	≤ 2 ms											
Max. switching frequency ⁷⁾	250/s											
Connection types	Cable PVC, 2 m ⁸⁾											
	4 x 0.18 mm ² , ∅ 3.8 mm											
	Plug M 12, 4-pin, 90° rotatable											
VDE protection class⁹⁾	□											
Circuit protection¹⁰⁾	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	Approx. 80 g										
	with plug M 12, 4-pin	Approx. 40 g										
Housing material	Housing: ABS; optics: PC											

- | | | | |
|---|--|---|--|
| 1) 90 % remission of material scanned (based on standard white according to DIN 5033) | 4) May not exceed or fall short of V _S tolerances | 10) A = V _S connections reverse-polarity protected
B = Output Q short-circuit protected
C = Interference pulse suppression
D = Output overcurrent and short-circuit protected | 11) Black = 6 % remission
Gray = 18 % remission
White = 90 % remission |
| 2) Average service life T _A = + 25 °C; LED, red light 100,000 h | 5) Without load | | |
| 3) Limit value | 6) Signal transit time with resistive load | | |
| | 7) With dark/light ratio 1:1 | | |
| | 8) Do not bend below 0 °C | | |
| | 9) Reference voltage 50 V DC | | |

Scanning distance		Order information																						
<table border="1"> <tr><td>1 A</td><td>60/65 100/110</td></tr> <tr><td>1 B</td><td>40/50 400/450</td></tr> <tr><td>2 A</td><td>45/50 100/110</td></tr> <tr><td>2 B</td><td>20/30 500/550</td></tr> <tr><td>3 A</td><td>35/40 100/110</td></tr> <tr><td>3 B</td><td>10/20 550/600</td></tr> </table> <p>0 (mm) 300 600</p> <p>■ Operating distance ■ Scanning distance, max. typical</p>	1 A	60/65 100/110	1 B	40/50 400/450	2 A	45/50 100/110	2 B	20/30 500/550	3 A	35/40 100/110	3 B	10/20 550/600		<table border="1"> <thead> <tr> <th>Type</th> <th>Part no.</th> </tr> </thead> <tbody> <tr> <td>WT 250-P 162</td> <td>6 010 704</td> </tr> <tr> <td>WT 250-P 460</td> <td>6 010 706</td> </tr> <tr> <td>WT 250-N 162</td> <td>6 010 701</td> </tr> <tr> <td>WT 250-N 460</td> <td>6 010 703</td> </tr> </tbody> </table>	Type	Part no.	WT 250-P 162	6 010 704	WT 250-P 460	6 010 706	WT 250-N 162	6 010 701	WT 250-N 460	6 010 703
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