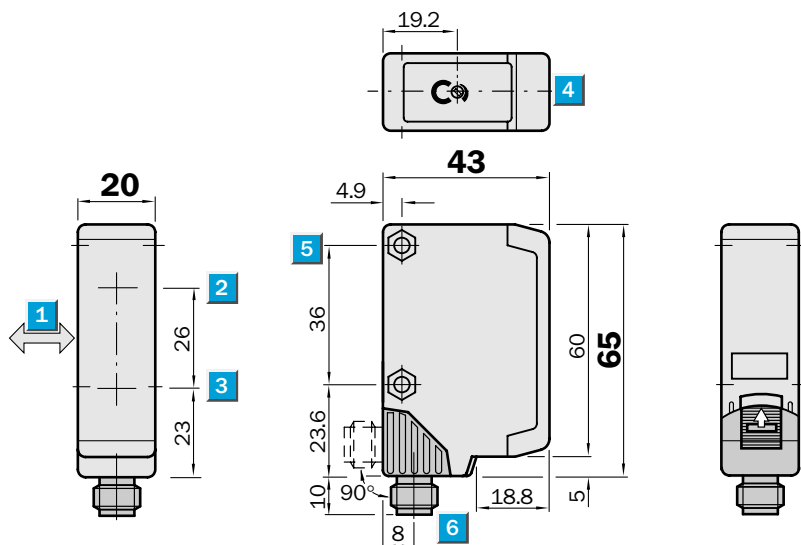


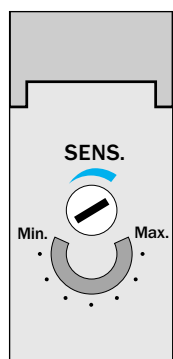
- Background suppression
- Continuous adjustment of scanning distance, scanning distance control (2 turns) with position indicator (270°)
- Visible red light as an alignment aid
- M 12 plug rotatable by 90°

Dimensional drawing



Adjustments possible

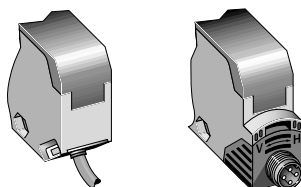
WT 250-P 162
WT 250-P 460
WT 250-N 162
WT 250-N 460



- 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°)

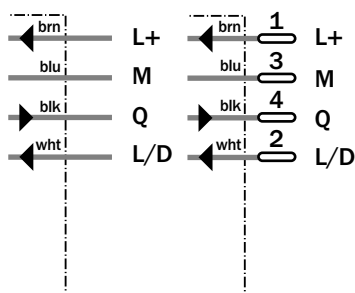
Connection types

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



4 x 0.18 mm²

4-pin, M 12



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 , Ø 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											
	with plug M 12, 4-pin											
Housing material	Housing: ABS; optics: PC											

1) 90 % remission of material scanned (based on standard white according to DIN 5033)

2) Average service life T_A = + 25 °C; LED, red light 100,000 h

3) Limit value

4) May not exceed or fall short of V_S tolerances

5) Without load

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

10) A = V_S connections reverse-polarity protected

B = Output Q short-circuit protected

C = Interference pulse suppression

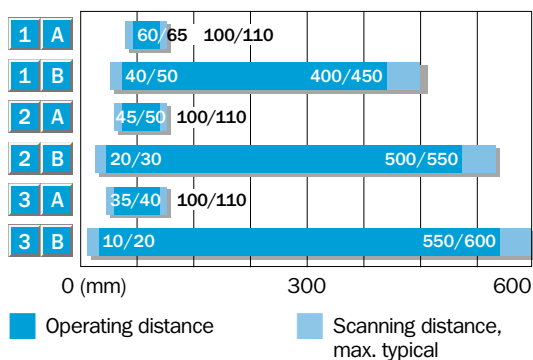
D = Output overcurrent and short-circuit protected

11) Black = 6 % remission

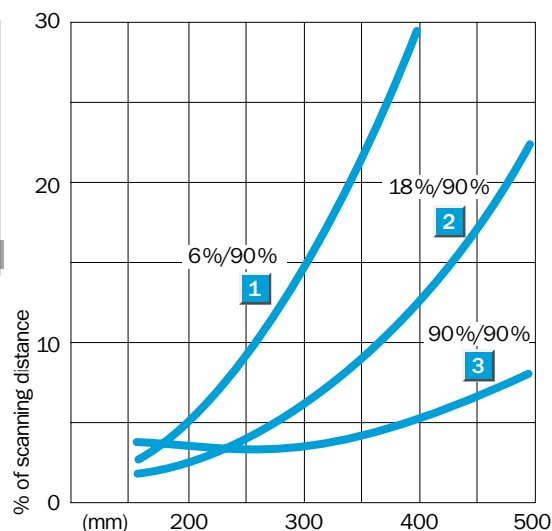
Gray = 18 % remission

White = 90 % remission

Scanning distance



- 1 Scanning range on black¹¹⁾, white background
- 2 Scanning range on gray¹¹⁾, white background
- 3 Scanning range on white¹¹⁾, white background
- A Scanning distance control set to MIN
- B Scanning distance control set to MAX



Order information

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