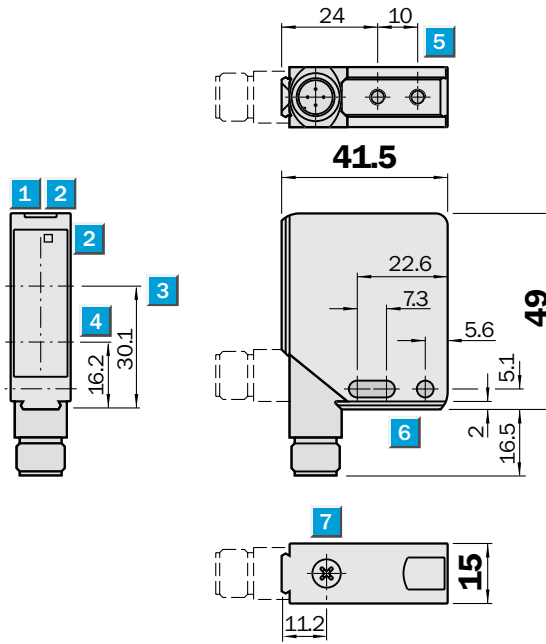

**Scanning distance**  
**30...200 mm**

Photoelectric proximity switches

- Laser class 2
- 90° rotatable M 12 plug
- Adjustable and fixed background suppression



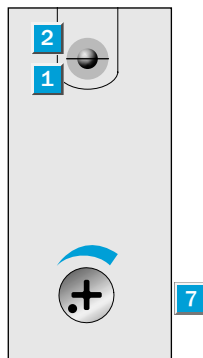
**Dimensional drawing**



**Adjustments possible**

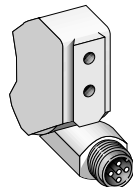
- WT 12L-2B 510\*
- WT 12L-2B 530
- WT 12L-2B 540
- WT 12L-2B 550

- 1 LED operating indicator, green
  - 2 LED reception indicator, yellow
  - 3 Optical axis, receiver
  - 4 Optical axis, sender
  - 5 M4 threaded mounting hole – 4 mm deep
  - 6 Mounting hole  $\varnothing$  4.2 mm
  - 7 Scanning distance control
- \* (not for fixed scanning distances)

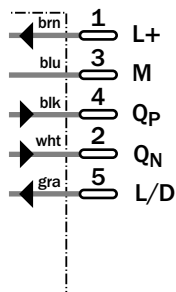


**Connection type**

- WT 12L-2B 510
- WT 12L-2B 530
- WT 12L-2B 540
- WT 12L-2B 550



5-pin, M 12



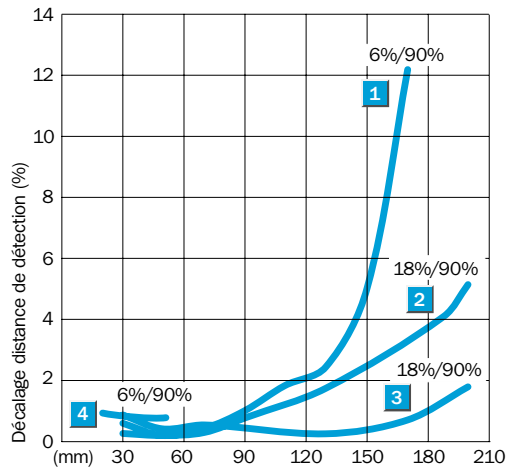
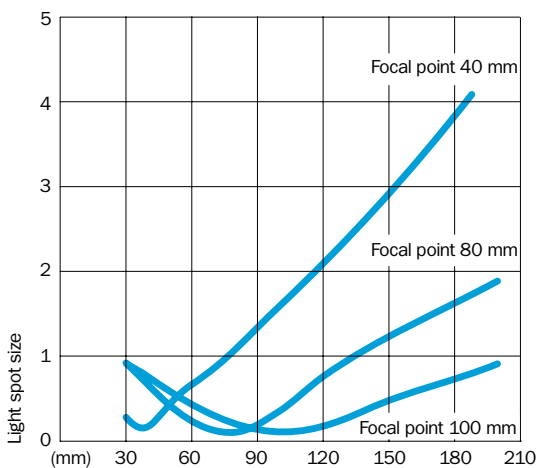
Accessories	page
Clamps	496
Mounting brackets	510

<b>Technical data</b>	WT 12L-2	B510	B530	B540	B550						
-----------------------	----------	------	------	------	------	--	--	--	--	--	--

<b>Scanning distance, adjustable</b>	30...200 mm, 18 % remission										
	Focus 45 mm										
	Focus 80 mm										
	Focus 100 mm										
<b>Scanning range, fixed, 6 % remission</b>	20... 50 mm, focus 45 mm										
<b>Light source<sup>1)</sup></b>	Laser 650 nm, pulsed										
Light spot diameter focal point	0.1 mm										
	0.2 mm										
<b>Supply voltage V<sub>S</sub></b>	10...30 V DC <sup>2)</sup>										
Ripple <sup>3)</sup>	≤ 5 V <sub>SS</sub>										
Current consumption <sup>4)</sup>	≤ 55 mA										
<b>Switching output Q<sub>N</sub> and Q<sub>P</sub></b>	PNP, NPN										
Signal voltage HIGH	V <sub>S</sub> - < 2 V, V <sub>S</sub>										
Signal voltage LOW <sup>5)</sup>	0 V, ≤ 1.5 V										
Output current I <sub>A</sub> max.	100 mA										
Operating mode	Light- or dark-switching <sup>6)</sup>										
Control input L/D	0 V or open, light-switching										
Control input L/D	V <sub>S</sub> , dark-switching										
Response time max. <sup>7)</sup>	Typ. 200 μs										
Max. switching frequency <sup>8)</sup>	2500/s										
<b>Laser class</b>	2 (IEC 825-1; EN 60825-1:97)										
<b>VDE protection class<sup>9)</sup></b>	□										
<b>Enclosure rating</b>	IP 67										
<b>Circuit protection<sup>10)</sup></b>	A, B, C										
<b>Ambient temperature T<sub>A</sub></b>	Operation - 10 °C...+ 50 °C										
	Storage - 25 °C...+ 75 °C										
<b>Connection type</b>	M 12 plug, 5-pin										
<b>Weight</b>	Approx. 130 g with plug										

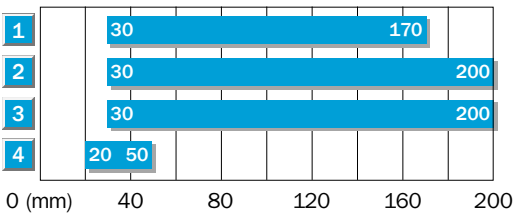
- |                                                              |                                                              |                                            |                                                              |
|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------|
| 1) Average service life 50,000 h at T <sub>A</sub> = + 25 °C | 3) May not exceed or fall short of V <sub>S</sub> tolerances | 6) Reversible via control input L/D        | 7) A = V <sub>S</sub> connections reverse-polarity protected |
| 2) Limit values                                              | 4) Without load                                              | 7) Signal transit time with resistive load | B = Outputs protected against short-circuiting               |
|                                                              | 5) At T <sub>A</sub> = + 25 °C and 100 mA output current     | 8) At light/dark ratio 1:1                 | C = Interference pulse suppression                           |
|                                                              |                                                              | 9) Reference voltage 50 V DC               |                                                              |

**Scanning distance and light spot size**



**Order information**

Type	Part no.
WT 12L-2B 510	1 017 959
WT 12L-2B 530	1 018 250
WT 12L-2B 540	1 018 251
WT 12L-2B 550	1 017 904



- |   |                                                  |
|---|--------------------------------------------------|
| 1 | Scanning distance on black, 6 % remission        |
| 2 | Scanning distance on grey, 18 % remission        |
| 3 | Scanning distance on white, 90 % remission       |
| 4 | Scanning distance on black, 6 % remission, fixed |