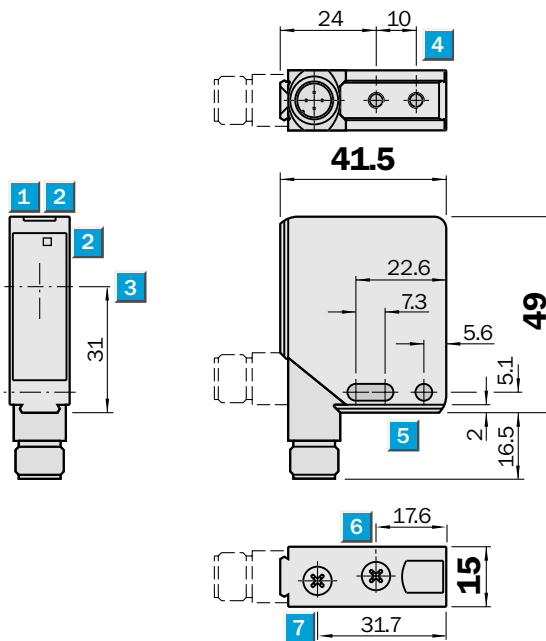

**Scanning range**  
**18 m**

Photoelectric reflex switches

- Laser class 2
- Adjustable focus
- 90° rotatable M 12 plug

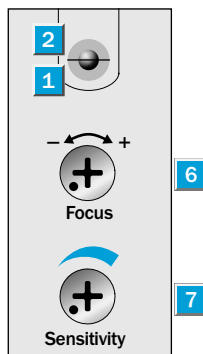
**Dimensional drawing**



**Adjustments possible**

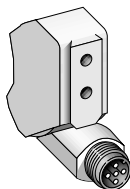
- WL 12L-2B 530
- WL 12L-2B 520

- 1 LED operating indicator, green
- 2 LED reception indicator, yellow
- 3 Centre of optical axis
- 4 M4 threaded mounting hole – 4 mm deep
- 5 Mounting hole  $\varnothing$  4.2 mm
- 6 Focal adjustment
- 7 Sensitivity adjustment

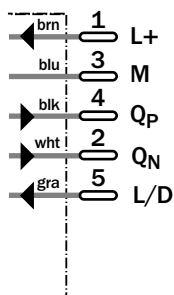


**Connection type**

- WL 12L-2B 530
- WL 12L-2B 520



5-pin, M 12



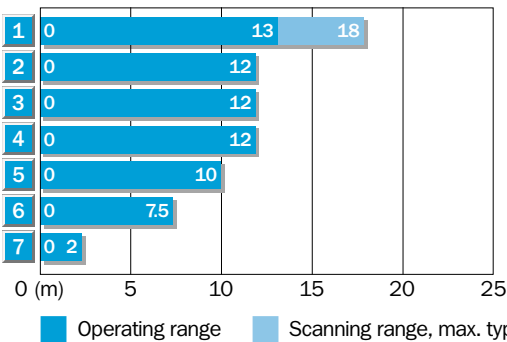
Accessories	page
Cable receptacles	496
Clamps	510
Mounting brackets	510
Reflectors	520

Technical data		WL 12L-2	B530	B520							
<b>Scanning range,</b>	18 m/PL 80 A										
max. typical/on reflector	15 m/PL 80 A										
<b>Light source<sup>1)</sup></b>	Laser 650 nm, pulsed										
Light spot diameter	min. 0.8 mm										
in focal range	300 mm to ∞										
	150 mm to 450 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> - < 2.9 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										

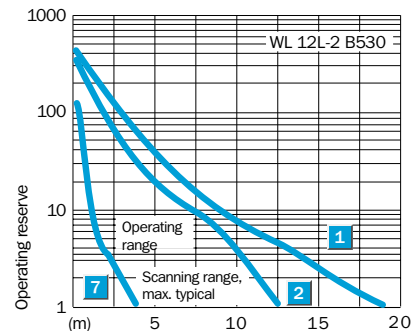
- 1) Average service life 50,000 h at T<sub>A</sub> = + 25 °C
- 2) Limit values
- 3) May not exceed or fall short of V<sub>S</sub> tolerances
- 4) Without load
- 5) At T<sub>A</sub> = + 25 °C and 100 mA output current
- 6) Reversible via control input L/D
- 7) Signal transit time with resistive load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

**Scanning range and operating reserve**

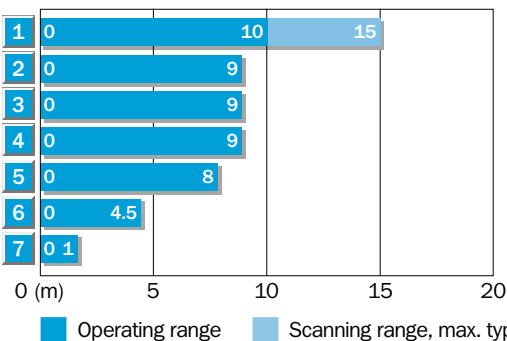
WL 12L-2 B530



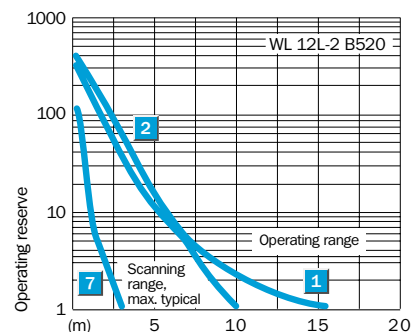
Reflector type	Operating range
1 PL 80 A	0...13.0 m
2 PL 50 A	0...12.0 m
3 PL 40 A	0...12.0 m
4 P 250	0...12.0 m
5 PL 30 A	0...10.0 m
6 PL 20 A	0...7.5 m
7 Reflective tape «Diamond Grade»	0...2.0 m



WL 12L-2 B520



Reflector type	Operating range
1 PL 80 A	0...10.0 m
2 PL 50 A	0...9.0 m
3 PL 40 A	0...9.0 m
4 P 250	0...9.0 m
5 PL 30 A	0...8.0 m
6 PL 20 A	0...4.5 m
7 Reflective tape «Diamond Grade»	0...1.0 m



**Order information**

Type	Part no.
WL 12L-2B 530	1 018 252
WL 12L-2B 520	1 018 253