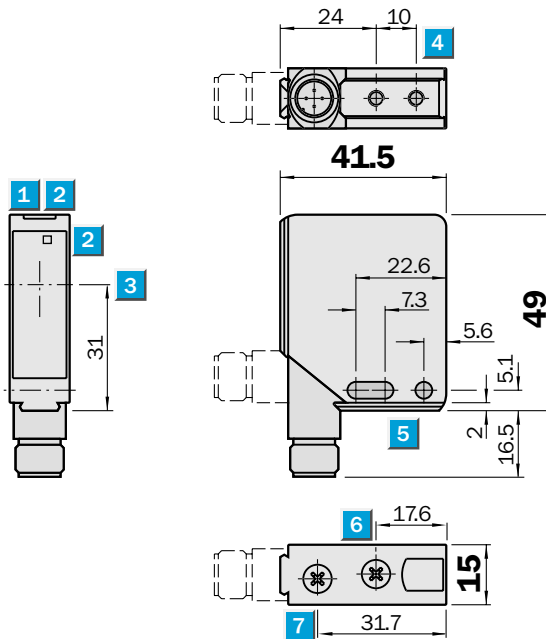

Scanning range
18 m

Photoelectric reflex switches

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



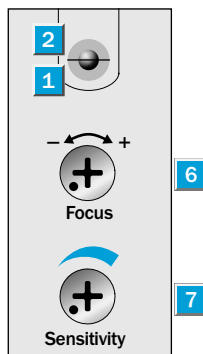
Dimensional drawing



Adjustments possible

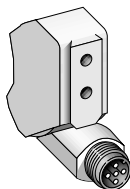
- WL 12L-2B 530
- WL 12L-2B 520

- 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

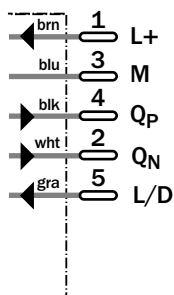


Connection type

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



5-pin, M 12



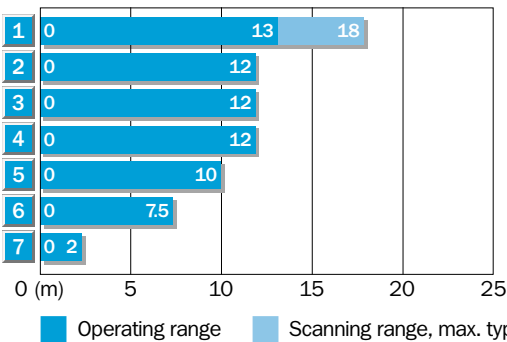
| Accessories | page |
|-------------------|------|
| Cable receptacles | 496 |
| Clamps | 510 |
| Mounting brackets | 510 |
| Reflectors | 520 |

| Technical data | | WL 12L-2 | B530 | B520 | | | | | | | |
|---|--|----------|------|------|--|--|--|--|--|--|--|
| Scanning range, | 18 m/PL 80 A | | | | | | | | | | |
| max. typical/on reflector | 15 m/PL 80 A | | | | | | | | | | |
| Light source¹⁾ | Laser 650 nm, pulsed | | | | | | | | | | |
| Light spot diameter | min. 0.8 mm | | | | | | | | | | |
| in focal range | 300 mm to ∞ | | | | | | | | | | |
| | 150 mm to 450 mm | | | | | | | | | | |
| Supply voltage V_S | 10...30 V DC ²⁾ | | | | | | | | | | |
| Ripple ³⁾ | ≤ 5 V _{SS} | | | | | | | | | | |
| Current consumption ⁴⁾ | ≤ 55 mA | | | | | | | | | | |
| Switching output Q_N and Q_P | PNP, NPN | | | | | | | | | | |
| Signal voltage HIGH | V _S - < 2.9 V, V _S | | | | | | | | | | |
| Signal voltage LOW ⁵⁾ | 0 V, ≤ 1.5 V | | | | | | | | | | |
| Output current I _A max. | 100 mA | | | | | | | | | | |
| Operating mode | Light- or dark-switching ⁶⁾ | | | | | | | | | | |
| Control input L/D | 0 V or open, light-switching | | | | | | | | | | |
| Control input L/D | V _S , dark-switching | | | | | | | | | | |
| Response time max. ⁷⁾ | Typ. 200 μs | | | | | | | | | | |
| Max. switching frequency ⁸⁾ | 2500/s | | | | | | | | | | |
| Laser class | 2 (IEC 825-1; EN 60825-1:97) | | | | | | | | | | |
| VDE protection class⁹⁾ | □ | | | | | | | | | | |
| Enclosure rating | IP 67 | | | | | | | | | | |
| Circuit protection¹⁰⁾ | A, B, C | | | | | | | | | | |
| Ambient temperature T_A | Operation - 10 °C...+ 50 °C | | | | | | | | | | |
| | Storage - 25 °C...+ 75 °C | | | | | | | | | | |
| Connection type | M 12 plug, 5-pin | | | | | | | | | | |
| Weight | Approx. 130 g with plug | | | | | | | | | | |

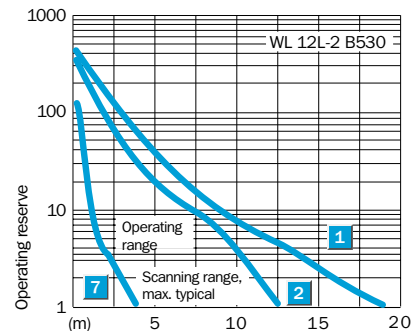
- 1) Average service life 50,000 h at T_A = + 25 °C
- 2) Limit values
- 3) May not exceed or fall short of V_S tolerances
- 4) Without load
- 5) At T_A = + 25 °C and 100 mA output current
- 6) Reversible via control input L/D
- 7) Signal transit time with resistive load
- 8) At light/dark ratio 1:1
-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

Scanning range and operating reserve

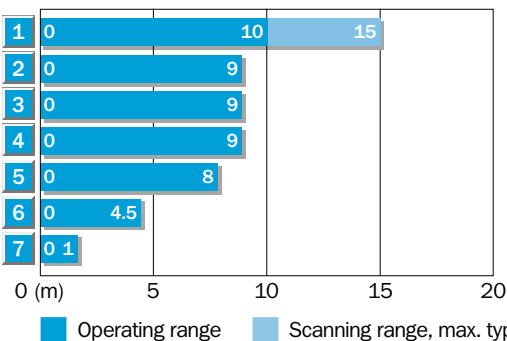
WL 12L-2 B530



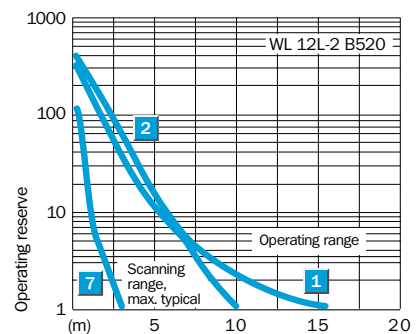
| Reflector type | Operating range |
|-----------------------------------|-----------------|
| 1 PL 80 A | 0...13.0 m |
| 2 PL 50 A | 0...12.0 m |
| 3 PL 40 A | 0...12.0 m |
| 4 P 250 | 0...12.0 m |
| 5 PL 30 A | 0...10.0 m |
| 6 PL 20 A | 0...7.5 m |
| 7 Reflective tape «Diamond Grade» | 0...2.0 m |



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 |