



Fotoprzełączniki W12-2 Laser, Fotoprzełącznik refleksyjny, autocollimation

WL12L-2B530S03



Nazwa modelu > **WL12L-2B530S03**

Numer części > **1019615**



At a glance

- Laser protection class 1 or 2
- Autocollimation optics
- Rugged sensors for industrial use
- Highly visible laser light spot for versatile detection of objects
- Rugged die-cast zinc housing with optional Teflon® coating
- Versatile mounting options due to dovetail mounting - mounting holes and oblong holes
- Highly visible status LEDs
- Adjustable sensing range and focus

Your benefits

Reliable detection of all types of objects

High immunity to optical interference ensures fewer false readings and less downtime

Highly visible laser light spot provides quick and easy setup

Highly visible status LEDs simplify commissioning and reduce installation time

Rugged metal housing (optional Teflon® coating available) requires less maintenance due to its resistance to high-pressure cleaning environments

Laser protection class 1 or 2 for eye safety

Rotatable connectors simplify installation



Cechy

Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik refleksyjny, autocollimation
Wymiary (Szer. x Wys. x Głęb.):	15 mm x 49 mm x 41,5 mm
Housing design (light emission):	Prostopadłościenna
Maks. strefa działania:	0 m ... 18 m ¹⁾
Rodzaj światła:	Widzialne światło czerwone
Nadajnik światła:	Laser ²⁾
Light spot (distance):	0,8 mm (300 mm)
Długość fali:	650 nm

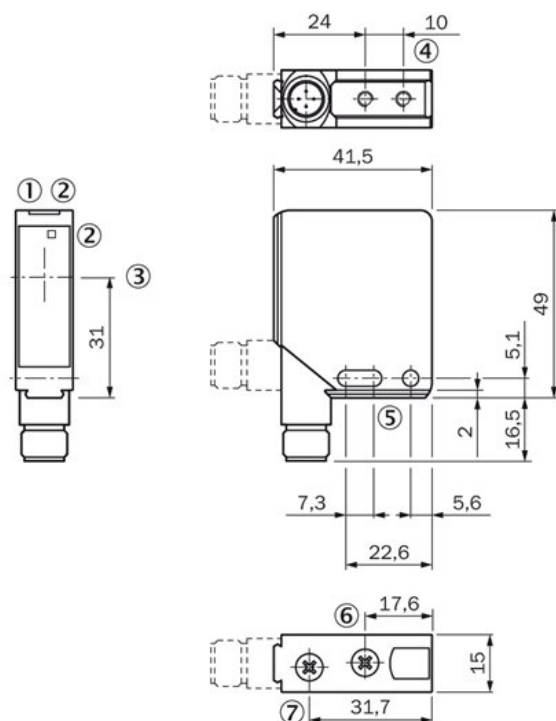
¹⁾ PL80A ²⁾ Average service life 50,000 h at Ta = +25 °C

Mechanika/elektronika

Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Tętnienia resztkowe:	$\leq 5 V_{SS}$ ²⁾
Current consumption:	$\leq 55 \text{ mA}$ ³⁾
Wyjście przełączające:	NPN, Dark-switching, 0 V oder unbeschaltet, hellschaltend, PNP, Light-switching, Selectable via L/D control wire, Uv, dark-switching
Napięcie sygnału PNP HIGH/LOW:	$U_v - < 2,9 \text{ V}$, $U_v V/0 V \leq 1,5 \text{ V}$
Napięcie sygnału NPN HIGH/LOW:	$U_v - < 2,9 \text{ V}$, $U_v V/0 V \leq 1,5 \text{ V}$
Output current I _{max} :	100 mA
Czas reakcji:	$\leq 200 \mu\text{s}$ ⁴⁾
Switching frequency:	2.500 Hz ⁵⁾
Sposób przyłączenia:	Wtyk M12, 5-pinowe
Układ zabezpieczenia:::	A, C, D ⁶⁾ ⁷⁾ ⁸⁾
Klasa ochronności:	II
Ciężar:	130 g
Filtr polaryzacyjny:	✓
Special device:	✓
Rodzaj zabezpieczenia:	IP 67 IP 69K
Funkcje specjalne:	Fixed sensitivity control (position: "Max"), Fixed focus adjustment
Ambient operating temperature:	-10 °C ... 50 °C
Ambient storage temperature:	-25 °C ... 75 °C
UL File-No.:	UL No. NRKH.E181493, CDRH-Konform (0312012-00)

¹⁾ Limit values ²⁾ May not exceed or fall short of V_{SS} ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ D = outputs overcurrent and short-circuit protected

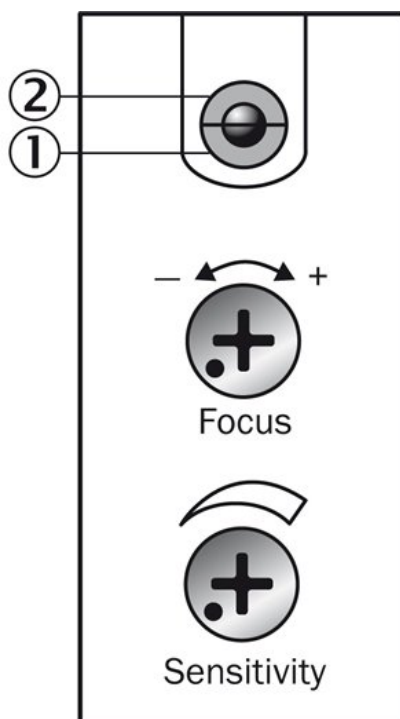
Dimensional drawing



- |1| Operating indicator, green
- |2| LED reception indicator, yellow
- |3| Center of optical axis

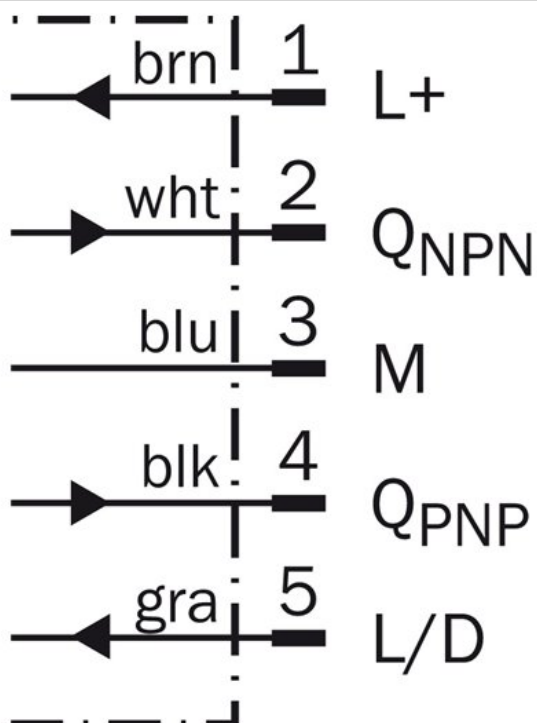
- |5| Mounting hole, $\varnothing$ 4.2 mm
- |6| Focal adjustment
- |7| Sensitivity adjustment

Adjustments possible

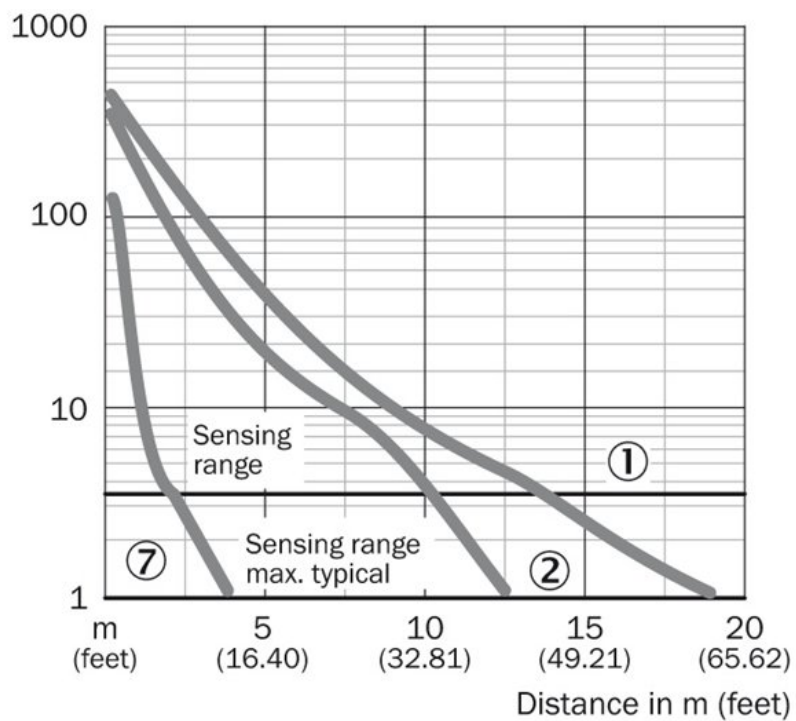


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- |2| LED reception indicator, yellow
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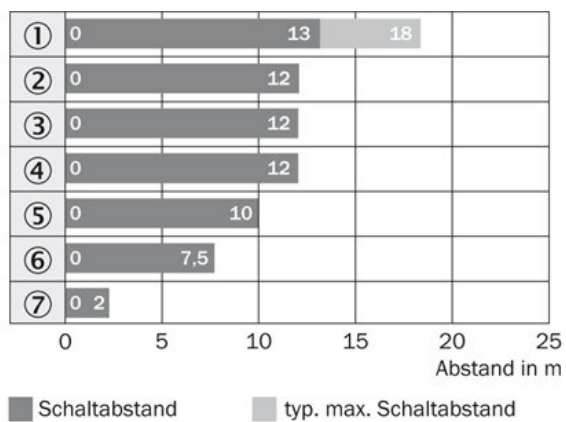
Connection diagram



Characteristic curve



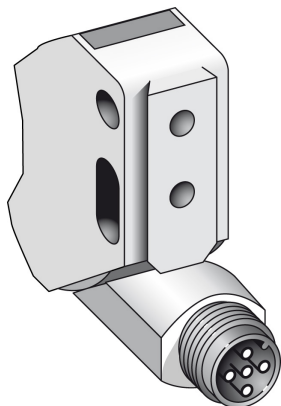
Sensing range diagram



Reflektor-Typ

- ① PL80A
- ② PL50A
- ③ PL40A
- ④ P250
- ⑤ PL30A
- ⑥ PL20A
- ⑦ Reflektionsfolie
Diamond Grade

Connection type



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