



Photoelectric sensors W12G, Fotoprzełącznik refleksyjny, autocollimation

WL12G-3B2531



Nazwa modelu > **WL12G-3B2531**

Numer części > **1041456**



At a glance

- Reliable detection of transparent objects
- Optional Continuous Threshold Adaption (CTA)
- Sensing range is adjustable via potentiometer or teach-in pushbutton
- Rugged housing for industrial use
- Highly visible red 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

Your benefits

Reliable detection of transparent objects, including PET bottles and transparent film
PinPoint LED technology provides a bright, small and precise light spot that enables quick and easy sensor alignment

Precise switching characteristics and high-performance object detection provides increased productivity

High immunity to optical interference reduces false readings

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

Highly visible status LEDs simplify commissioning, reduce installation time and provide quick diagnostics information

Easy installation using SICK accessories



Cechy

Wymiary (Szer. x Wys. x Głęb.):	15,6 mm x 48,5 mm x 42 mm
Maks. strefa działania:	0 m ... 4 m ¹⁾
Housing desig (light emission):	Prostopadłościenna
Nadajnik światła:	LED ²⁾
Rodzaj światła:	widzialne światło czerwone
Długość fali:	640 nm
Nastawienie czułości:	Potencjometr, 11 obrotów
Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik refleksyjny, autocollimation
Light spot (distance):	25 mm (1,5 m)

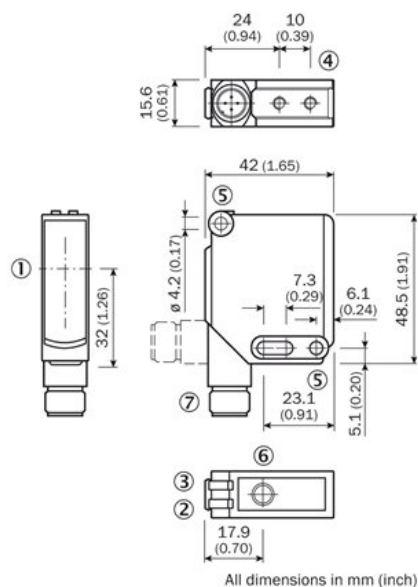
1) PL80A 2) Average service life 100,000 h at Ta = +25 °C

Mechanika/elektronika

Rodzaj zabezpieczenia:	IP 66 IP 67 IP 69K
Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Tętnienia resztkowe:	≤ 5 Vss ²⁾
Pobór prądu:	≤ 30 mA ³⁾
Wyjście przełączające:	PNP, light switching, Selectable via L/D control wire NPN, Dark-switching
Output current I _{max} :	100 mA
Czas reakcji:	≤ 330 μs ⁴⁾
Switching frequency:	1.500 Hz ⁵⁾
Sposób przyłączenia:	Connector M12, 5-pin
Klasa ochronności:	II
Układ zabezpieczenia:::	A C D D) 7) 8)
Ciężar:	120 g
Ambient temperature, operation:	-40 °C ... 60 °C
Ambient temperature, storage:	-40 °C ... 75 °C
Filtr polaryzacyjny:	✓
Napięcie sygnału PNP HIGH/LOW:	> U _v - 3 V/ca. 0 V
Special device:	-
Emitancja:	do obiektów transparentnych
Kąt promieniowania:	Ca. 1,5 °
UL File-No.:	UL No. NRKH.E181493 & cUL No. NRKH7.E181493

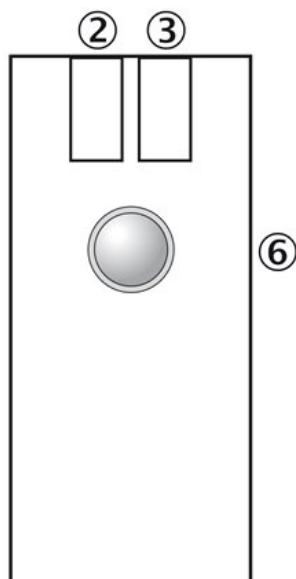
¹⁾ Limit values, operation in short-circuit protected network max. 8 A ²⁾ May not exceed or fall short of V_S ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾
With light/dark ratio 1:1 ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ D = outputs overcurrent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

Dimensional drawing



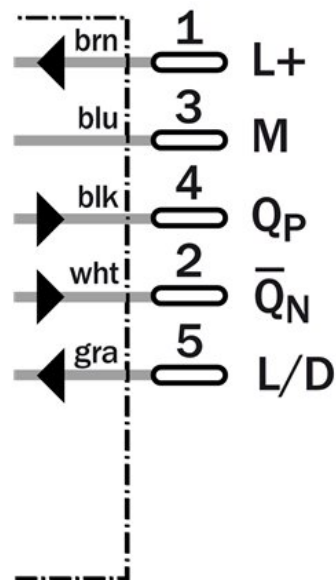
- [1] Optical axis, sender and receiver
- [2] LED indicator yellow: Light received
- [3] LED indicator, green: power on, teach-in mode I, LED indicator, blue: teach-in mode II
- [4] M4 threaded mounting hole, 4 mm deep
- [5] Mounting hole, Ø 4.2 mm
- [6] Single-teach-in button, function 1: teach-in sensitivity on reflector, function 2: change operation/teach-in mode
- [7] M12 plug, 5-pin

Einstell-Möglichkeiten

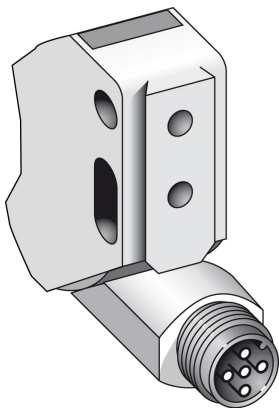


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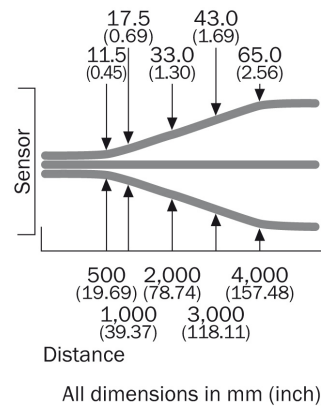
Connection diagram



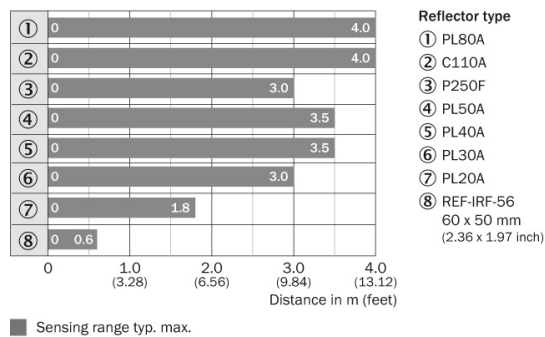
Connection type



Light spot size



Sensing range diagram



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