



Fotoprzełączniki W12 Teflon, Fotoprzełącznik refleksyjny, autocollimation

WL12-3P2431T01



Nazwa modelu > **WL12-3P2431T01**

Numer części > **1041439**



Produkt może różnić się od ilustracji

At a glance

- Best-in-class optical performance due to superior OES technology
- Autocollimation in retro-reflective sensors
- Background and foreground suppression with second emitter LED in proximity sensors
- Highly visible, bright, precise light spot
- Rugged metal housing, optional with Teflon® coating
- Connection via cable or rotatable connector
- Mounting options with through holes, base blind holes, oblong through holes and dovetail
- IO-Link communication available (optional)

Your benefits

Reliable detection due to superior ASIC (application-specific integrated circuit) technology and immunity to optical interference factors from the industrial environment

PinPoint LED technology for a bright, small and precise light spot, enabling quick and easy sensor alignment

Precise switching characteristics ensure reliable object detection, reducing downtime caused by re-adjusting sensors during recipe changes

Quick and easy setup due to highly visible status LEDs

Wide range of products enclosed in a rugged metal housing enables application flexibility in a broad range of industrial environments

Uniform design for entire product family regardless of connection, which ensures simple machine integration

Quick and easy mounting due to several mounting options

Easy installation using SICK accessories



Cechy

Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik refleksyjny, autocollimation
Wymiary (Szer. x Wys. x Głęb.):	15,6 mm x 48,5 mm x 42 mm
Housing design (light emission):	Prostopadłościenna
Maks. strefa działania:	0 m ... 7 m ¹⁾
Sensing range:	0 m ... 5 m ²⁾

Rodzaj światła:	Widzialne światło czerwone
Nadajnik światła:	LED ³⁾
Długość fali:	640 nm
Kąt promieniowania:	Ca. 1,5 °
Nastawa:	Potencjometr, 5 obrotów
Średnica plamki świetlnej (odległość):	Ø 70 mm (3 m)

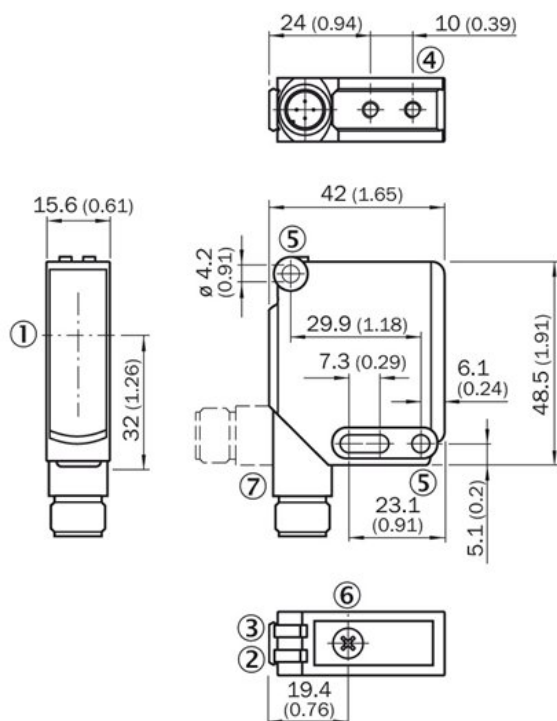
1) 2) PL80A³⁾ Average service life of 100,000 h at T_A = +25 °C

Mechanika/elektronika

Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Current consumption:	≤ 30 mA ²⁾
Wyjście przełączające:	PNP
Tryb przełączania:	Komplementarne
Tryb przełączania:	Przełączanie jasno/ciemno, wybierane
Output current I _{max} :	100 mA
Czas reakcji:	≤ 330 µs ³⁾
Switching frequency:	1.500 Hz ⁴⁾
Sposób przyłączenia:	Connector M12, 4-pin
Układ zabezpieczenia:::	A, C, D ^{5) 6) 7)}
Klasa ochronności:	II
Ciężar:	120 g
Filtr polaryzacyjny:	✓
Tworzywo, obudowa:	PTFE
Rodzaj zabezpieczenia:	IP 66 IP 67 IP 69K
Funkcje specjalne:	Teflon coated housing
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

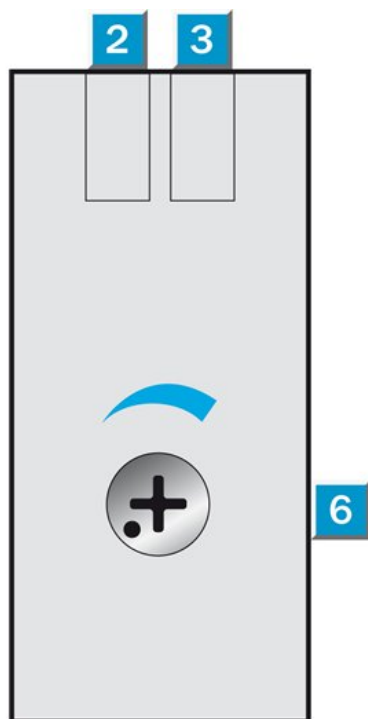
1) Limit values, operation in short-circuit protected network max. 8 A²⁾ Bez obciążenia³⁾ Signal transit time with resistive load⁴⁾ With light/dark ratio 1:1⁵⁾ A = V_S
connections reverse-polarity protected⁶⁾ C = interference suppression⁷⁾ D = outputs overcurrent and short-circuit protected

Dimensional drawing



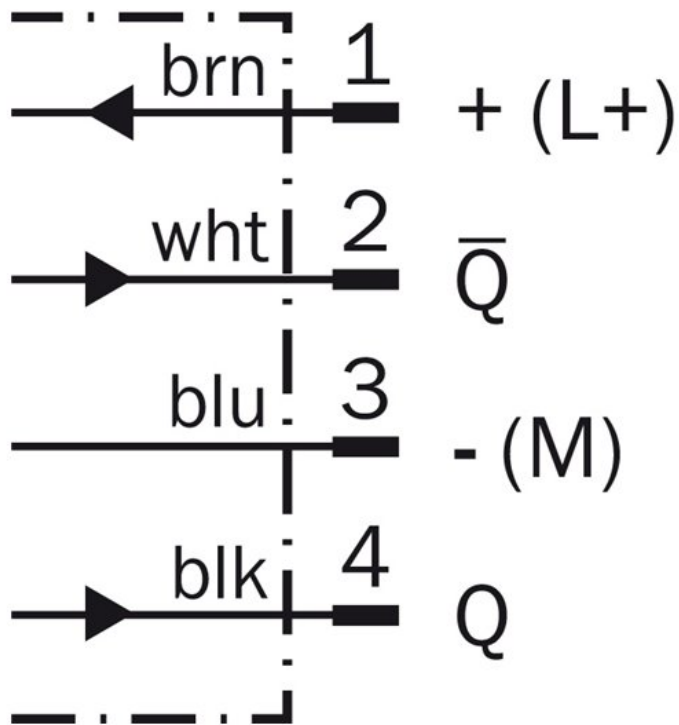
- [1] Optical axis
- [2] LED indicator yellow: Light received
- [3] Green LED indicator: supply voltage active
- [4] M4 threaded mounting hole, 4 mm deep
- [5] Mounting hole, Ø 4.2 mm
- [6] Sensitivity adjustment: poti
- [7] Connection

Adjustments possible

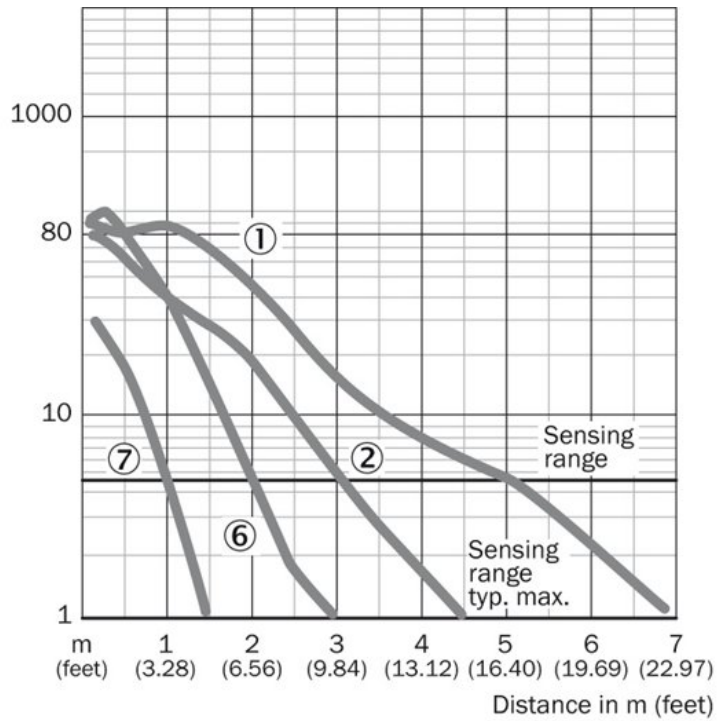


- [2] LED indicator yellow: Light received
- [3] Green LED indicator: supply voltage active
- [6] Sensitivity adjustment: poti

Connection diagram

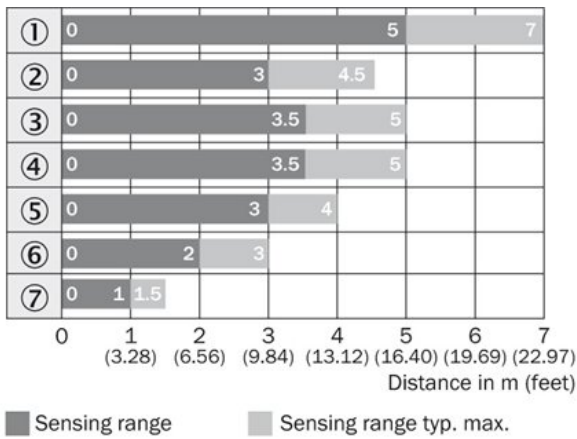


Characteristic curve



- [1] Reflector type PL80A
- [2] Reflector type C110A
- [6] Reflector type PL20A
- [7] Reflective tape

Sensing range diagram

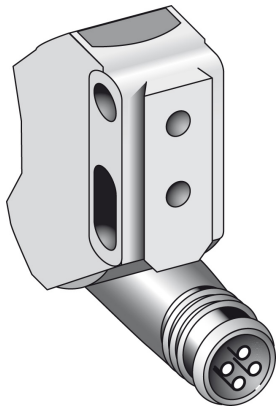


- |1| PL80A
- |2| C110A
- |3| PL50A
- |4| PL40A
- |5| PL30A
- |6| PL20A
- |7| Reflective tape Diamond Grade

Reflector type

- ① PL80A
- ② C110
- ③ PL50A
- ④ PL40A
- ⑤ PL30A
- ⑥ PL20A
- ⑦ Reflective tape

Connection type



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