



Fotoprzełączniki W24-2, Fotoprzełącznik refleksyjny, Standard optics

WL24-2B430



SICK
Sensor Intelligence.

Nazwa modelu > **WL24-2B430**

Numer części > **1017860**



At a glance

- Metal housing that has been IP 69k tested
- Switch selectable PNP or NPN output
- Switch selectable Light or Dark operating mode
- Variants with DC voltage and universal AC/DC voltage with UL approval
- Optional test input, adjustable ON and OFF time delays, alarm output and front screen heating
- M12 or terminal chamber connection: 90° rotatable

Your benefits

- Metal housing that has been IP 69K tested provides reliability and a long service life
- High operating reserve at a long sensing range reduces downtime
- Alarm output signals marginal operation to provide an early warning
- Test input provides diagnostic feedback for example misalignment
- Selectable output type, operating mode, and adjustable time delays makes integration easier and reduce the number of devices needed
- Ensuring reliable operation in environments with temperatures fluctuation due to standard or high-power front lens heating (prevention and reduction of condensation water on the front lens)
- Variants with DC voltage and universal AC/DC voltage provide installation flexibility
- Red light provides easy alignment, which saves time



Cechy

Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik refleksyjny, Standard optics
Wymiary (Szer. x Wys. x Głęb.):	27 mm x 87,5 mm x 65 mm
Housing design (light emission):	Prostopadłościenna
Maks. strefa działania:	0 m ... 22 m ¹⁾
Sensing range:	0 m ... 15 m ²⁾
Rodzaj światła:	Widzialne światło czerwone
Nadajnik światła:	LED ³⁾
Light spot diameter (distance):	Ø 250 mm (15 m)
Nastawienie czułości:	Sensitivity adjustment

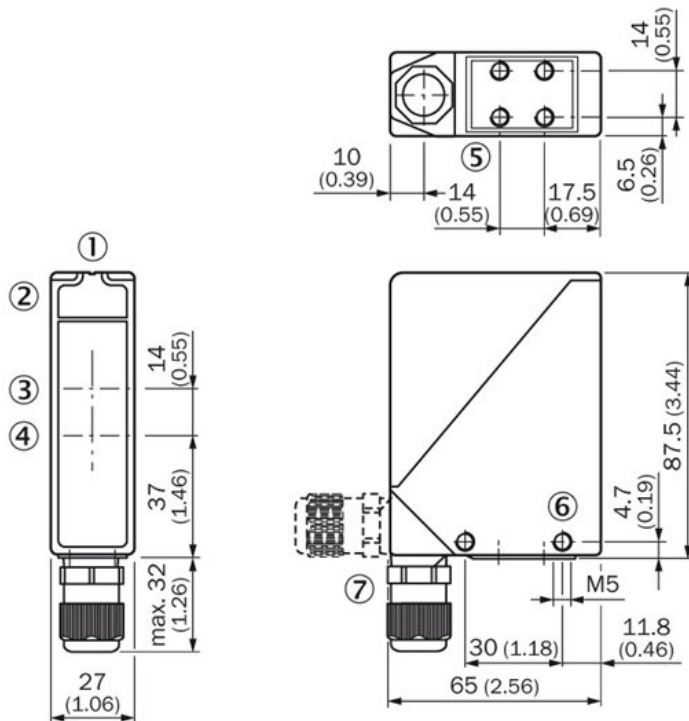
^{1) 2)} PL80A ³⁾ Average service life 100,000 h at Ta = +25 °C

Mechanika/elektronika

Napięcie zasilania:	10 V DC ... 30 V DC
Tętnienia resztkowe:	< 5 V _{ss} ²⁾
Pobór prądu:	≤ 50 mA ³⁾
Switching output:	NPN, przełączanie jasno/ciemno, wybierane, selectable via NPN/PNP selector, PNP, selectable via light/dark selector
Switching mode selector:	Selectable via light/dark selector, Selectable via NPN/PNP selector
Output current I _{max} ..:	100 mA
Czas reakcji:	≤ 500 μs ⁴⁾
Switching frequency:	1.000 Hz ⁵⁾
Typ połączenia:	Connector M12, 4-pin ⁶⁾
Układ zabezpieczenia:::	A, C, D ⁷⁾ ⁸⁾ ⁹⁾
Klasa ochronności:	II ¹⁰⁾
Ciężar:	330 g
Filtr polaryzacyjny:	✓
Tworzywo, obudowa:	Cynkowa, odlewana
Tworzywo, układ optyczny:	PMMA
Rodzaj zabezpieczenia:	IP 69K
Wejście testowe, nadajnik wyłączony:	TE to 0 V
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
UL File-No.:	UL No. NRKH.E181493 & cUL No. NRKH7.E181493

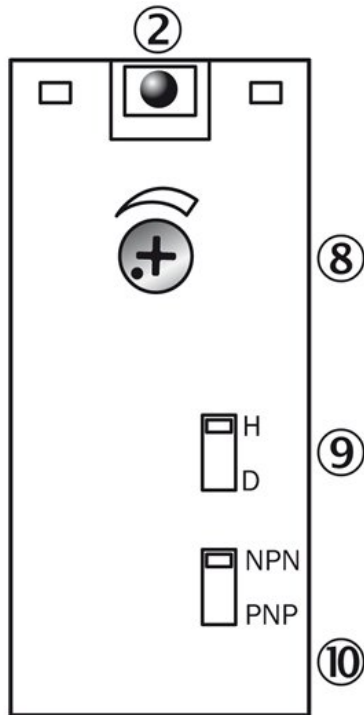
¹⁾ Limit values ²⁾ May not exceed or fall short of V_S ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ Connection rotatable by 90° ⁷⁾ A = V_S connections reverse-polarity protected ⁸⁾ C = interference suppression ⁹⁾ D = outputs overcurrent and short-circuit protected ¹⁰⁾ Reference voltage 50 V DC

Dimensional drawing



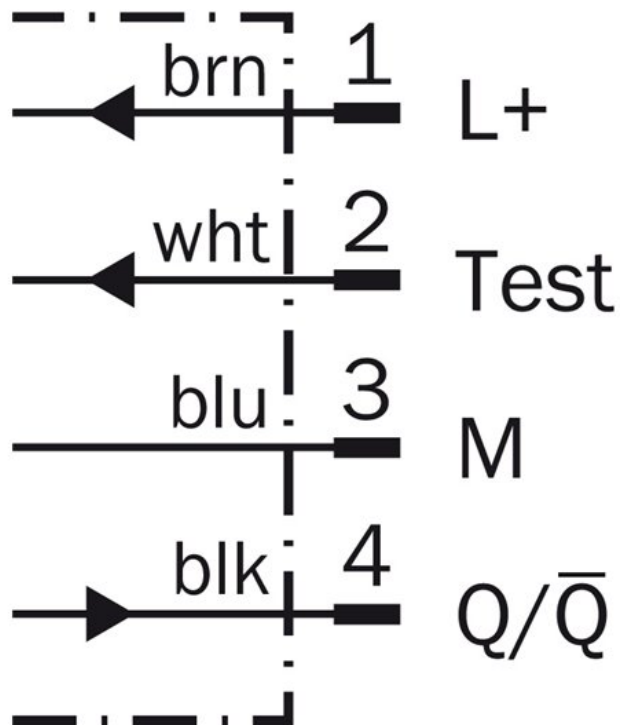
- |1| Alignment sight
- |2| LED signal strength indicator
- |3| Center of optical axis, sender
- |4| Center of optical axis, receiver
- |5| M5 threaded mounting hole, 6 mm deep
- |6| M5 threaded mounting hole, through-hole
- |7| M16 screw fixing and plug rotatable by 90°

Adjustments possible

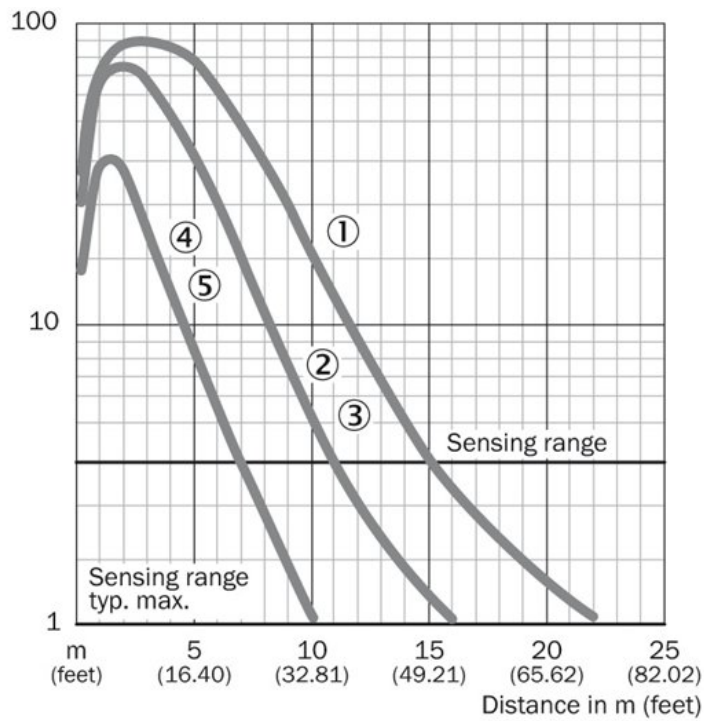


- |2| LED signal strength indicator
- |8| Sensitivity adjustment
- |9| Light/dark selector
- |10| NPN/ PNP selector

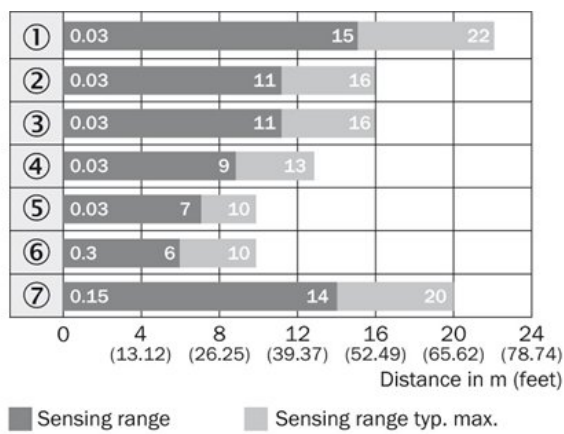
Connection diagram



Characteristic curve



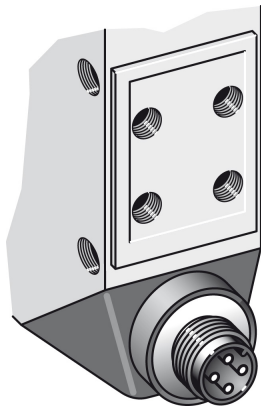
Sensing range diagram



Reflector type

- ① PL80A
- ② PL50A
- ③ PL40A
- ④ PL30A
- ⑤ PL20A
- ⑥ Diamond Grade (20 cm x 20 cm)
- ⑦ C110

Connection type



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