



Fotoprzełączniki W8, Photoelectric retro-reflective sensor, autocollimation

WL8-P2231



Nazwa modelu > [WL8-P2231](#)

Numer części > [6033182](#)



At a glance

- Autocollimation
- Red PinPoint LED
- Standard miniature housing with M3 threaded mounting holes
- Switching frequency up to 2 kHz
- Light/dark switching selectable via rotary switch
- Adjustable sensing range
- Polarizing filter used
- All necessary accessories (BEF-W100-A and P250) are included with delivery

Your benefits

- Reliable object detection even at the shortest distances (no blind spot) or through narrow gaps
- Highly visible light spot makes alignment quick and easy
- Autocollimation combined with 2 kHz switching frequency ensures reliable detection of small objects, even at fast detection speeds
- M3 threaded holes provide quick installation
- Polarization filters prevent false readings on glossy objects
- All necessary accessories (bracket and reflector) are included with delivery, reducing installation and procurement costs



Cechy

Wymiary (Szer. x Wys. x Głęb.):	11 mm x 31 mm x 20 mm
Maks. strefa działania:	0 m ... 4 m ¹⁾
Sensing range:	0 ... 3 m ²⁾
Housing desig (light emission):	Prostopadłościenna, Slim
Nadajnik światła:	LED ³⁾
Rodzaj światła:	widzialne światło czerwone
Długość fali:	650 nm
Nastawienie czułości:	Potentiometer, 270°

Zasada działania czujnika/Sposób detekcji:

Fotoprzełącznik refleksyjny, autocollimation

Light spot (distance):

30 mm (1 m)

Wyjście alarmowe:

-

1) 2) PL80A 3) Average service life of 100,000 h at $T_A = +25\text{ °C}$

Mechanika/elektronika

Rodzaj zabezpieczenia:

IP 67

Napięcie zasilania:

10 V DC ... 30 V DC ¹⁾

Tętnienia resztkowe:

$\pm 10\%$ ²⁾

Pobór prądu:

$\leq 30\text{ mA}$ ³⁾

Wyjście przełączające:

PNP, light/dark-switching, manually selectable, open collector

Output current I_{max}:

100

Czas reakcji:

$\leq 25\text{ ms}$ ⁴⁾

Switching frequency:

2.000 ⁵⁾

Sposób przyłączenia:

Connector M8, 4-pin

Układ zabezpieczenia:::

A

B

D ^{6) 7) 8)}

Ciężar:

10 g

Tworzywo, obudowa:

ABS

Tworzywo, układ optyczny:

PMMA

Ambient temperature, operation:

-25 °C ... 55 °C

Ambient temperature, storage:

-40 °C ... 70 °C

Filtr polaryzacyjny:

✓

Dostawa:

Stainless steel mounting bracket (1.4301/304) BEF-W100-A, Reflector P250

Ognisko nastawne:

-

Napięcie zasilania silnika:

-

Output state-LED:

-

Napięcie sygnału PNP HIGH/LOW:

approx. VS - 1.8 V/0 V

Ogrzewanie przedniej szyby:

-

AS-Interface-Chip:

-

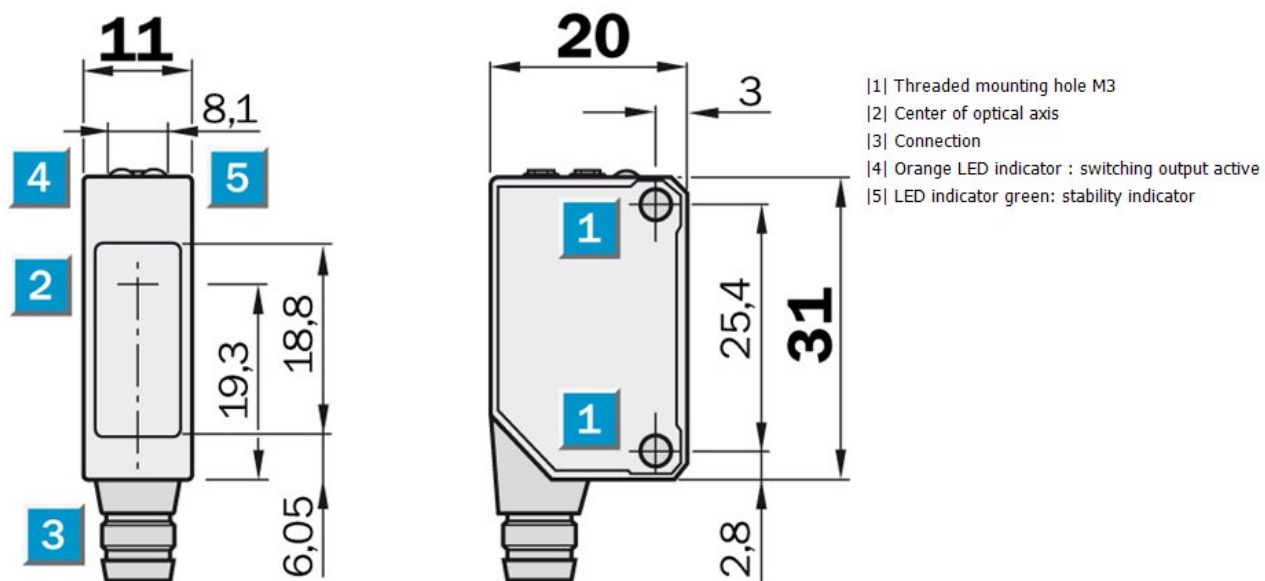
Anti-interference:

0

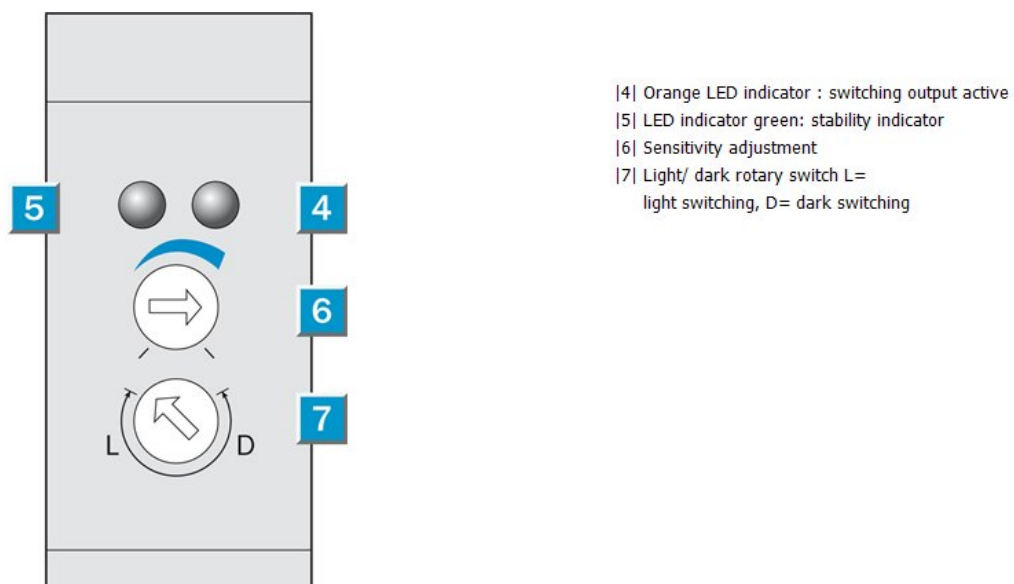
1) Limit values, operation in short-circuit protected network max. 8 A 2) May not exceed or fall short of V_S ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾

With light/dark ratio 1:1 ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ B = inputs and output reverse-polarity protected ⁸⁾ D = outputs overcurrent and short-circuit protected

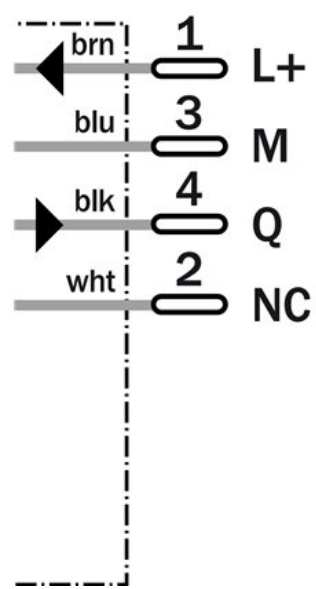
Dimensional drawing



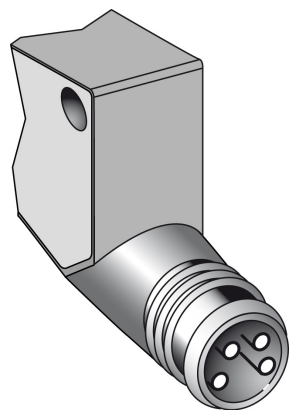
Einstell-Möglichkeiten



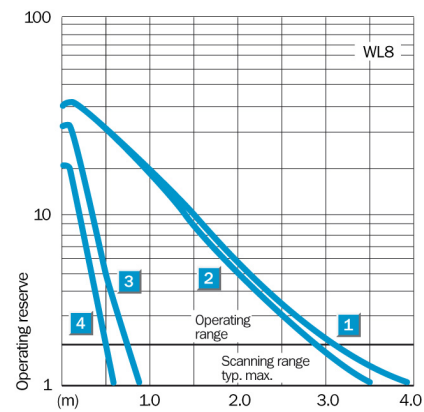
Connection diagram



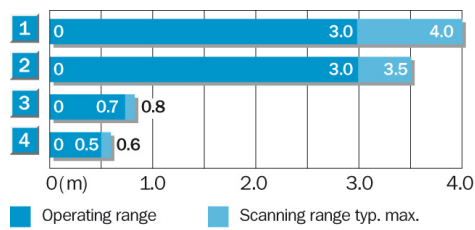
Connection type



Characteristic curve



Sensing range diagram



	Reflector type	Operating range
1	PL80A	0 ... 3.0 m
2	P250	0 ... 3.0 m
3	P45	0 ... 0.7 m
4	Diamond Grade	0 ... 0.5 m

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