



Fotoprzełączniki W12-3, Fotoprzełącznik odbiciowy, Tłumienie tła

WTB12-3F2431



Nazwa modelu > **WTB12-3F2431**

Numer części > **1041420**



Produkt może różnić się od ilustracji

At a glance

- State of the art technology provides precise background suppression
- Withstands harsh environments
- PinPoint LED technology with highly visible light spot; variants available with IR LED for highly critical applications
- Rugged die-cast zinc housing, with optional Teflon® coating
- Versatile mounting options due to dovetail mounting - mounting holes and oblong holes
- Flexible sensing ranges and hysteresis settings
- Key lock function, remote teach, quality monitoring
- Diagnostics messages (contamination and short-circuit)

Your benefits

State of the art technology, e.g. OES3 provides precise background suppression and reliable detection of challenging objects

High immunity to ambient light, optical reflections and crosstalk ensures fewer false readings and less downtime

PinPoint LED technology provides a highly visible light spot that enables quick and easy sensor alignment

Highly visible status LEDs simplify sensing distance adjustments and reduce installation time

A rugged metal housing withstands high-pressure cleaners and cleaning agents, reducing downtime

Complementary outputs in one housing reduce inventory and procurement costs

IO-Link enables quick remote diagnostics and maintenance (optional)

Easy installation using SICK accessories



Cechy

Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik odbiciowy, Tłumienie tła
Wymiary (Szer. x Wys. x Głęb.):	15,6 mm x 48,5 mm x 42 mm
Housing design (light emission):	Prostopadłościenna
Maks. strefa działania:	20 mm ... 350 mm ¹⁾
Sensing range:	20 mm ... 350 mm
Rodzaj światła:	Widzialne światło czerwone

Nadajnik światła:	LED ²⁾
Długość fali:	640 nm
Typ czasu:	OFF delay
Czas opóźnienia:	Fix:
Time delay off:	20 ms
Nastawa:	Potencjometr, 5 obrotów
Średnica płamki świetlnej (odległość):	Ø 6 mm (200 mm)

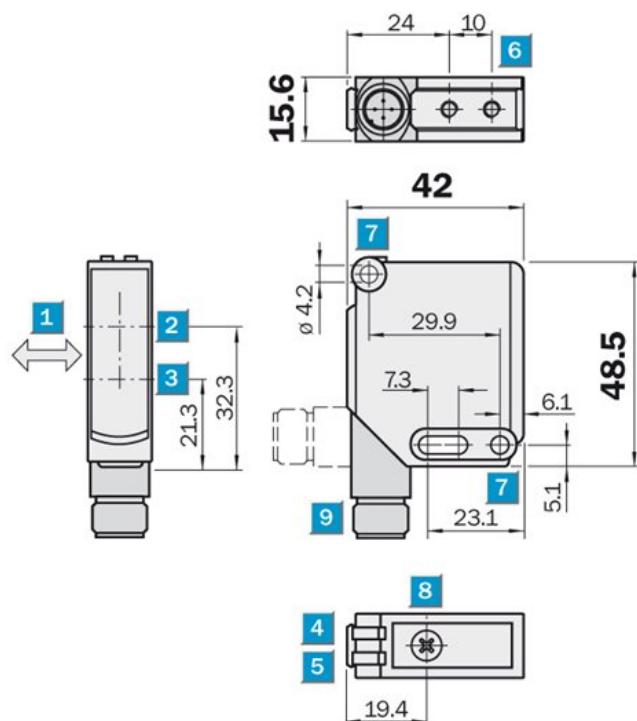
¹⁾ Obiekt odbijający 90% światła (standardowy biały zgodnie z normą DIN 5033) ²⁾ Average service life of 100,000 h at $T_A = +25\text{ °C}$

Mechanika/elektronika

Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Tętnienia resztkowe:	$\leq 5\text{ Vss}$ ²⁾
Current consumption:	$\leq 60\text{ mA}$ ³⁾
Wyjście przełączające:	PNP
Tryb przełączania:	Komplementarne
Tryb przełączania:	Przełączanie jasno/ciemno, wybierane
Output current I _{max} :	100 mA
Czas reakcji:	$\leq 330\text{ }\mu\text{s}$ ⁴⁾
Switching frequency:	1.500 Hz ⁵⁾
Sposób przyłączenia:	Connector M12, 4-pin
Układ zabezpieczenia:::	A, C, D ⁶⁾ ⁷⁾ ⁸⁾
Klasa ochronności:	II
Ciężar:	120 g
Special device:	-
Tworzywo, obudowa:	Metal
Rodzaj zabezpieczenia:	IP 66 IP 67 IP 69K
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

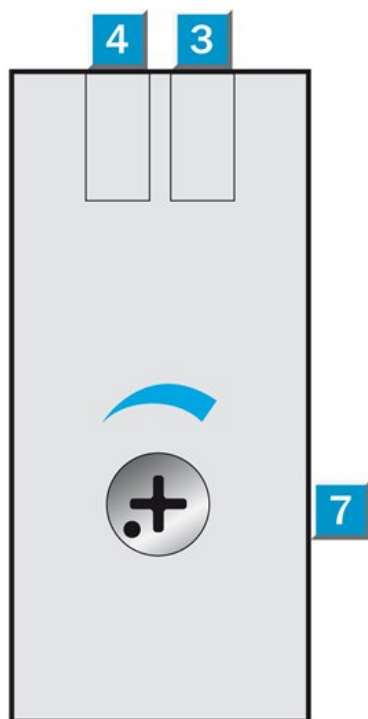
¹⁾ Limit values, operation in short-circuit protected network max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Bez obciążenia ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ $A = V_S$ connections reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ D = outputs overcurrent and short-circuit protected

Dimensional drawing



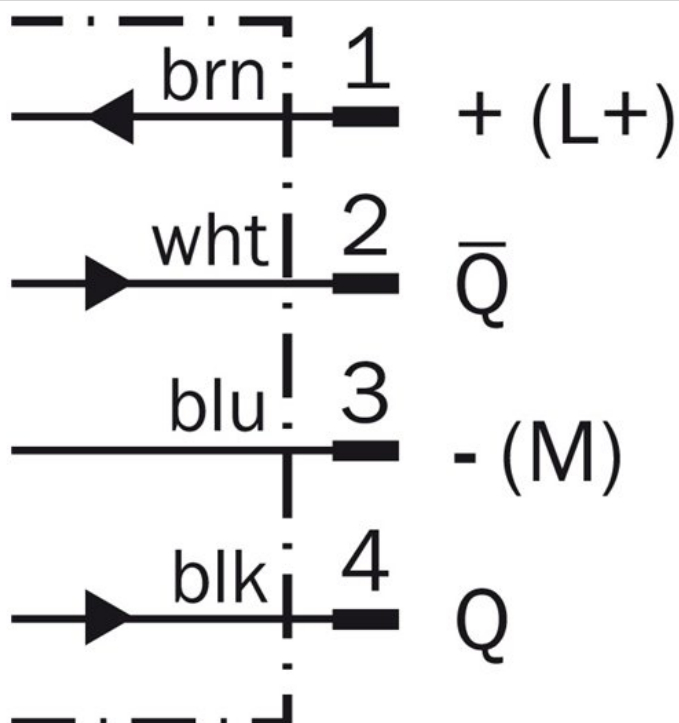
- [1] Standard direction of the material being scanned
- [2] Optical axis, receiver
- [3] Optical axis, sender
- [4] Status indicator LED green: power on
- [5] Status indicator LED,
yellow: Status of received light beam
- [6] M4 threaded mounting hole, 4 mm deep
- [7] Mounting hole, Ø 4.2 mm
- [8] Sensing range adjustment: potentiometer
- [9] Connection

Adjustments possible

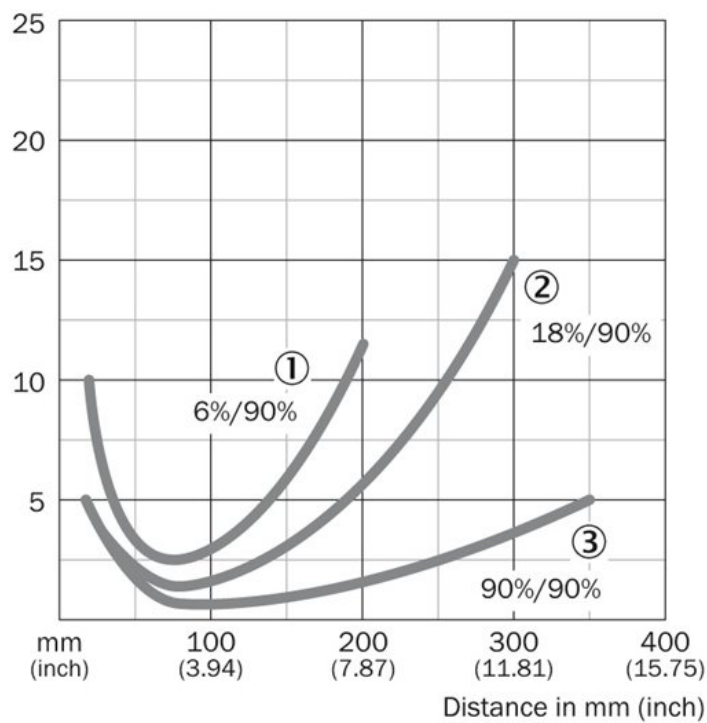


- [4] Green LED indicator: supply voltage active
- [5] LED indicator yellow: Light received
- [8] Sensing range adjustment: potentiometer

Connection diagram

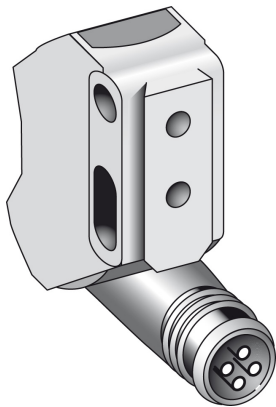


Characteristic curve

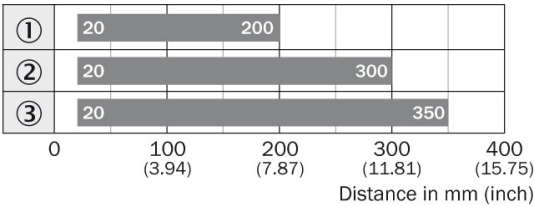


- [1] Sensing range on black, 6 % remission
- [2] Sensing range on grey, 18 % remission
- [3] Sensing range on white, 90 % remission

Connection type



Sensing range diagram



- Sensing range
- ① Sensing range on black, 6 % remission
 - ② Sensing range on gray, 18 % remission
 - ③ Sensing range on white, 90 % remission

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