

WTB11-2N2431



Nazwa modelu > **WTB11-2N2431**

Numer części > **1041378**



At a glance

- Precise background suppression
- Rugged housing for industrial use
- PinPoint LED technology with a highly visible light spot
- Space-saving plastic housing in chemically, thermally or mechanically resistant designs
- Dovetail mounting - standard mounting holes and oblong holes
- Highly visible 360° status LEDs
- Sensing distance adjustment via potentiometer
- Operating distance up to 1,100 mm

Your benefits

- State of the art technology e.g OES-3 provides, reliable background suppression and object detection, independent of object color
- High immunity to optical inference reduces false readings and downtime
- PinPoint LED technology provides a bright, small and precise light spot that enables easy sensor alignment
- Precise switching characteristics ensure high performance even in changing application conditions
- Highly visible 360° status LEDs provide quick and easy setup without additional personnel or costly training
- Rugged housing design withstands harsh environments, reducing downtime and maintenance effort
- 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:	20 mm ... 350 mm ¹⁾
Sensing range:	20 mm ... 350 mm
Housing desig (light emission):	Prostopadłościenna
Nadajnik światła:	LED ²⁾
Rodzaj światła:	widzialne światło czerwone
Długość fali:	640 nm
Nastawienie czułości:	Potencjometr, 5 obrotów
Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik odbiciowy, Tłumienie tła
Light spot (distance):	6 mm (200 mm)

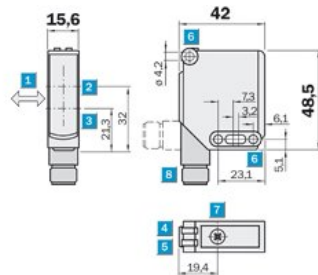
¹⁾ Obiekt odbijający 90% światła (standardowy biały zgodnie z norma DIN 5033) ²⁾ Average service life 100,000 h at Ta = +25 °C

Mechanika/elektronika

Rodzaj zabezpieczenia:	IP 66 IP 67 IP 69K
Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Tętnienia resztkowe:	$\leq 5 V_{ss}$ ²⁾
Pobór prądu:	$\leq 40 \text{ mA}$ ³⁾
Wyjście przełączające:	NPN, przełączanie jasno/ciemno, wybierane, Komplementarne
Output current I _{max} :	100 mA
Czas reakcji:	$\leq 2,5 \text{ ms}$ ⁴⁾
Switching frequency:	200 Hz ⁵⁾
Sposób przyłączenia:	Connector M12, 4-pin
Klasa ochronności:	II
Układ zabezpieczenia:::	A C D ⁶⁾ ⁷⁾ ⁸⁾
Ciężar:	120 g
Tworzywo, obudowa:	ABS
Tworzywo, układ optyczny:	PMMA
Ambient temperature, operation:	-30 °C ... 60 °C
Ambient temperature, storage:	-40 °C ... 75 °C
Napięcie sygnału NPN HIGH/LOW:	approx. $V_S / < 2.5 \text{ V}$
Special device:	-
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

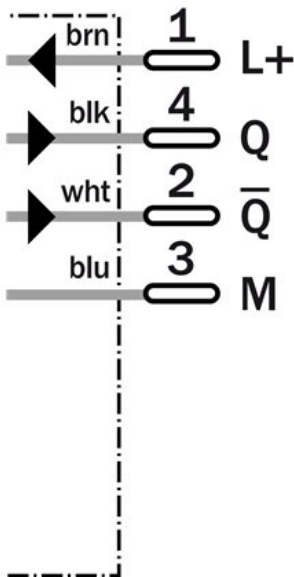


1) CONNECTION POINT OF THE PNP AND NPN
2) MOUNTING POINT
3) MOUNTING POINT
4) MOUNTING POINT
5) MOUNTING POINT
6) MOUNTING POINT
7) MOUNTING POINT
8) MOUNTING POINT

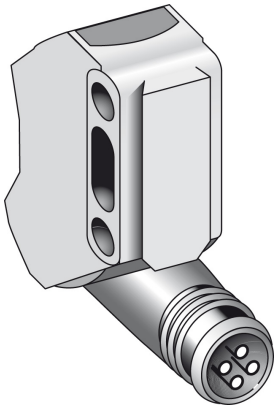
Einstell-Möglichkeiten



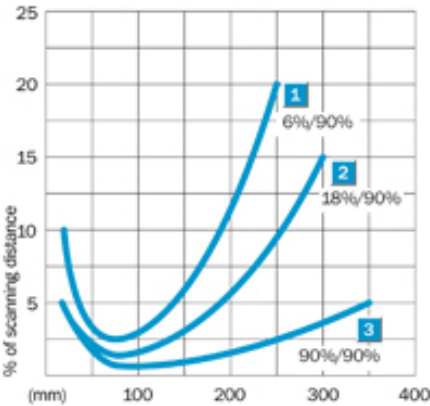
Connection diagram



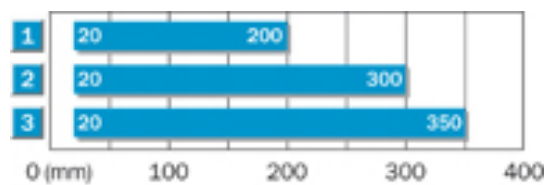
Connection type



Characteristic curve



Sensing range diagram



1	Scanning distance on black, 6 % remission
2	Scanning distance on grey, 18 % remission
3	Scanning distance on white, 90 % remission

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