



Photoelectric sensors
W11-2, Photoelectric proximity sensor, energetic

WTE11-2P2432



Model Name > [WTE11-2P2432](#)
Part No. > [1041381](#)



Illustration may differ

At a glance

- Energetic proximity sensor
- 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
- Simple sensing distance adjustment via teach-in pushbutton
- Operating distance up to 1,000 mm

Your benefits

- Reliable detection of objects ranging from light to dark thanks to superior chip technology
- PinPoint LED technology provides a bright, small and precise light spot that enables quick and easy sensor alignment
- Precise switching characteristics ensure high performance even in changing application conditions
- Rugged housing design withstands harsh environments, reducing downtime and maintenance effort
- Highly visible 360° status LEDs provide quick and easy setup without additional personnel or costly training
- Easy installation using SICK accessories



Features

Sensor/detection principle:	Photoelectric proximity sensor, energetic
Dimensions (W x H x D):	15.6 mm x 48.5 mm x 42 mm
Housing design (light emission):	Rectangular
Sensing range max.:	40 mm ... 1,000 mm ¹⁾
Sensing range:	40 mm ... 600 mm
Type of light:	Visible red light
Light source:	LED ²⁾
Wave length:	633 nm
Teach-in:	Single teach-in button
Adjustment:	Teach-in
Light spot size (distance):	Ø 90 mm (600 mm)

¹⁾ Object with 90 % reflectance (referred to standard white DIN 5033) ²⁾ Average service life of 100,000 h at T_A = +25 °C

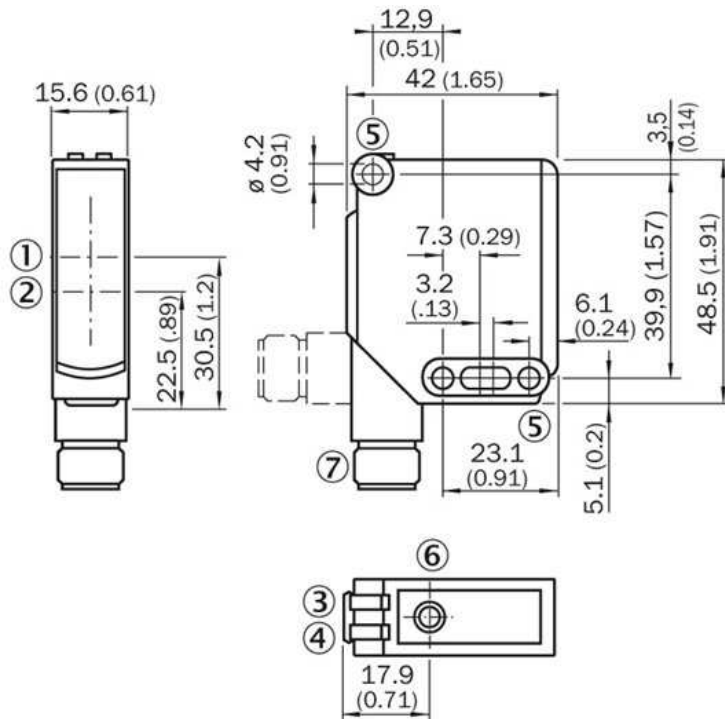
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Power consumption:	≤ 30 mA ²⁾
Output type:	PNP
Output function:	Complementary
Switching mode:	Light/dark switching
Signal voltage PNP HIGH/LOW:	U _v - 2.5 V / approx. 0 V
Output current I _{max.} :	100 mA
Response time:	≤ 2.5 ms ³⁾
Switching frequency:	200 Hz ⁴⁾
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, C, D ^{5) 6) 7)}
Protection class:	II
Weight:	120 g
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 66 IP 67
Ambient operating temperature:	-30 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

May not exceed or fall short of V_S tolerances;

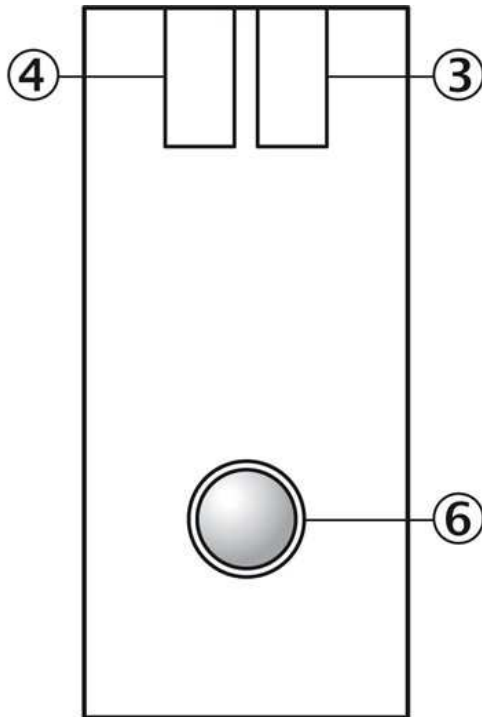
¹⁾ Limit values, operation in short-circuit protected network max. 8 A ²⁾ Without load ³⁾ Signal transit time with resistive load ⁴⁾ With light/dark ratio 1:1 ⁵⁾ A = V_S
⁶⁾ C = interference suppression ⁷⁾ D = outputs overcurrent and short-circuit protected

Dimensional drawing



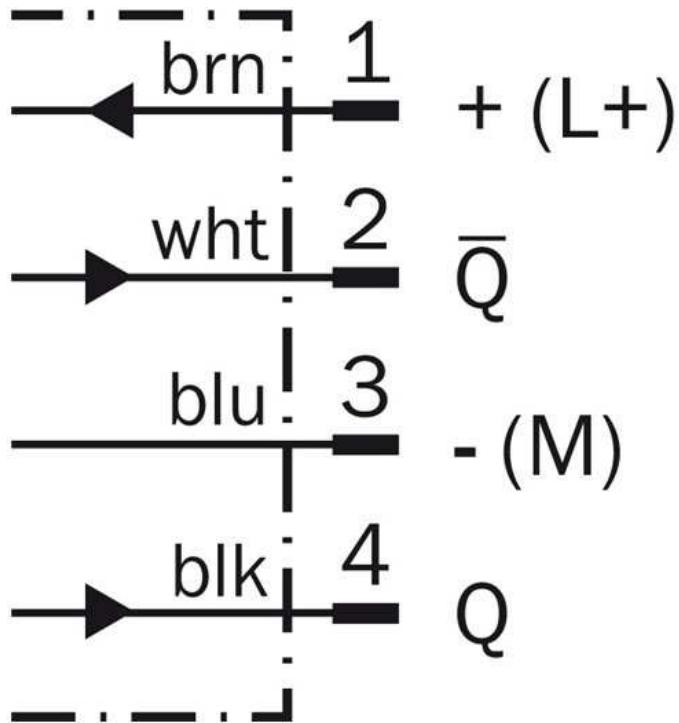
- |1| Optical axis, sender
- |2| Optical axis, receiver
- |3| Status indicator LED green: power on
- |4| Status indicator LED,
yellow: Status of received light beam
- |5| Mounting hole $\varnothing 4.2$ mm
- |6| Sensitivity setting; single teach button
- |7| Connector M12 or cable

Adjustments possible

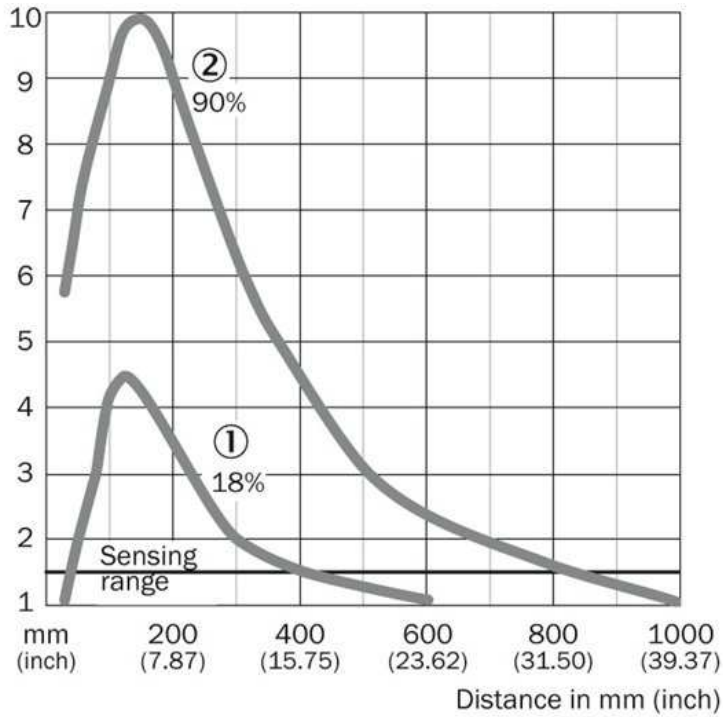


- |3| Status indicator LED green: power on
- |4| Status indicator LED,
yellow: Status of received light beam
- |6| Adjustment sensing range: single teach button

Connection diagram

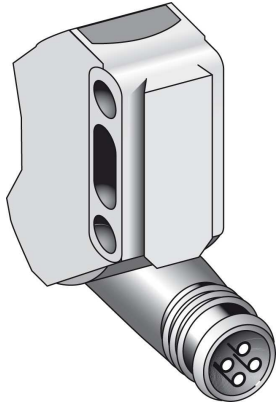


Characteristic curve

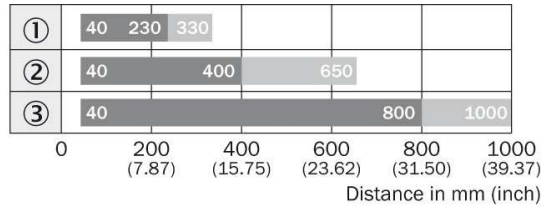


- [1] Sensing range on grey, 18 % remission
- [2] Sensing range on white, 90 % remission

Connection type



Sensing range diagram



■ Sensing range ■ Sensing range typ. max.

- 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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