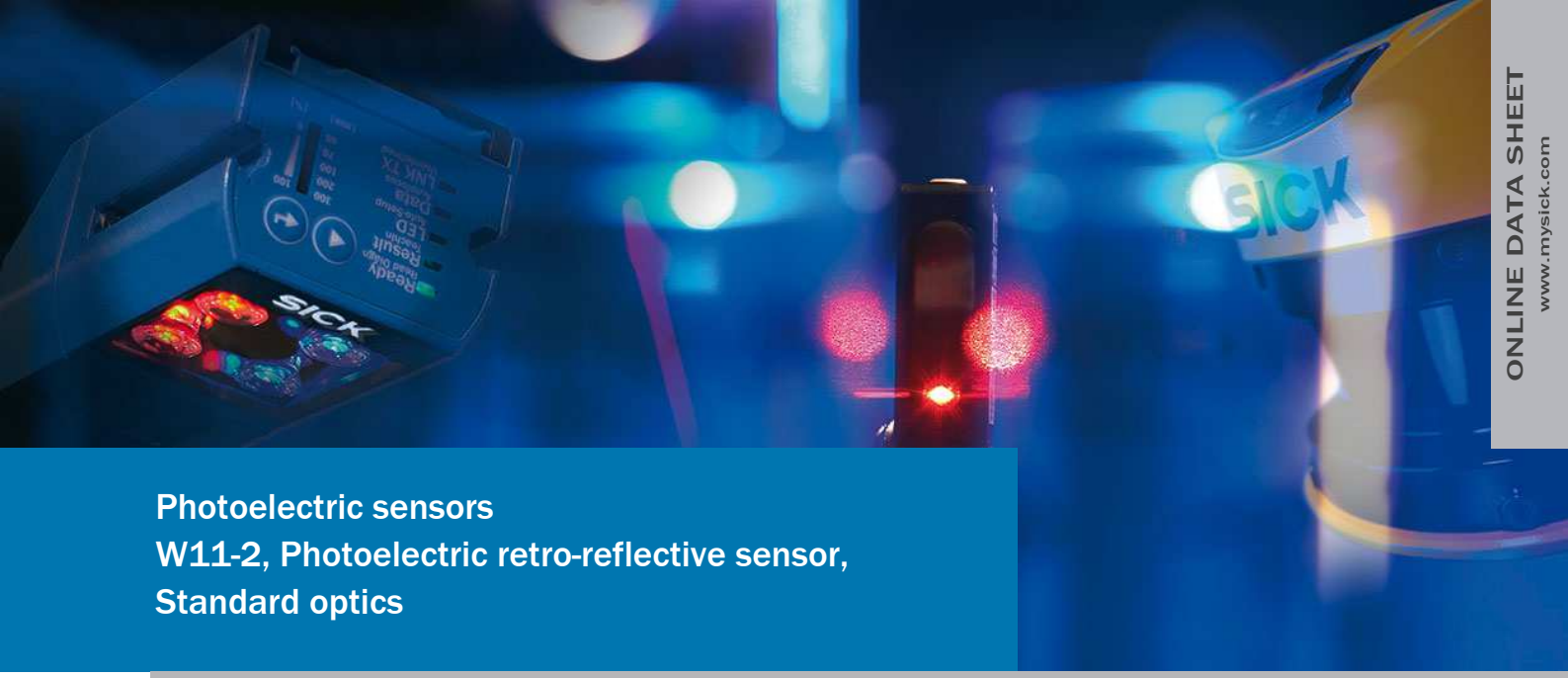


ONLINE DATA SHEET
www.mysick.com

Photoelectric sensors
W11-2, Photoelectric retro-reflective sensor, Standard optics

WL11-2P2430S02



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Photoelectric sensors
W11-2, Photoelectric retro-reflective sensor, Standard optics

Model Name > WL11-2P2430S02
Part No. > 1047578





Illustration may differ

At a glance

- Retro-reflective with standard lens principle
- Rugged housing for industrial use
- PinPoint LED technology with 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
- Optional sensing range adjustment via teach-in pushbutton
- Operating distance up to 10 m

Your benefits

- Custom ASIC provides reliable object detection
- High immunity to optical interference reduces false readings and downtime
- 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

CE ECOLAB

Features

Sensor/detection principle:	Photoelectric retro-reflective sensor, Standard optics
Dimensions (W x H x D):	15.6 mm x 48.5 mm x 42 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0.05 m ... 10 m [1)]
Sensing range:	0.15 m ... 8 m [2)]
Type of light:	Visible red light
Light source:	LED [3)]
Wave length:	640 nm
Angle of dispersion:	Ca. 2.2 °
Light spot size (distance):	Ø 50 mm (3 m)

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

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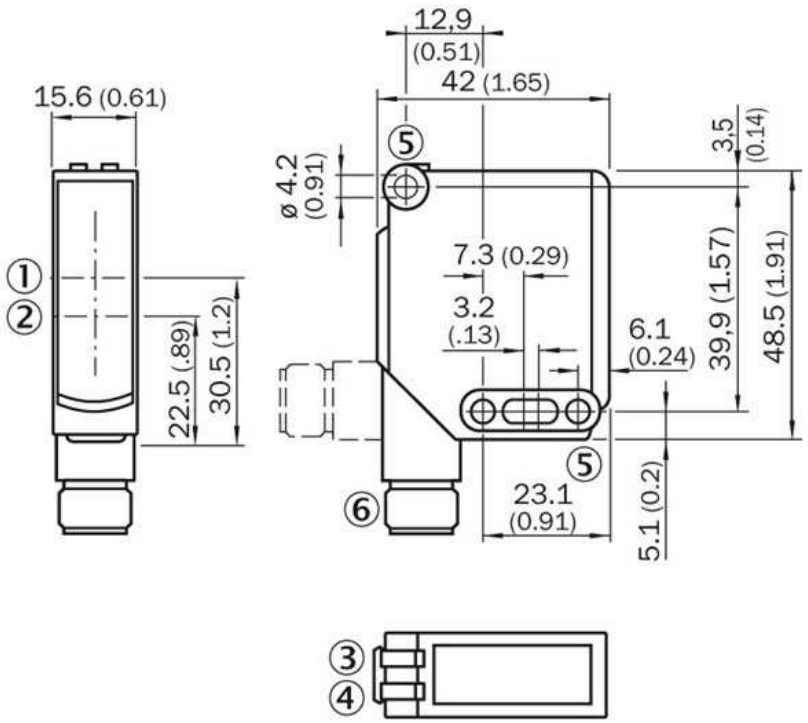
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC [1]
Ripple:	≤ 5 Vpp [2]
Power consumption:	≤ 30 mA [3]
Output type:	PNP
Switching mode:	Light switching
Output current Imax.:	100 mA
Response time:	≤ 2.5 ms [4]
Switching frequency:	200 Hz [5]
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, C, D [6] [7] [8]
Protection class:	II [9]
Weight:	120 g
Polarisation filter:	✓
Special device:	✓
Optics material:	PMMA
Enclosure rating:	IP 67 IP 68 IP 69K
Ambient operating temperature:	-30 °C ... +60 °C
Ambient storage temperature:	-40 °C ... +75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493
Signal voltage PNP HIGH/LOW:	Uv - 2.5 V / approx. 0 V
Housing material:	ABS, Plastic

[1] Limit values, operation in short-circuit protected network max. 8 A [2] May not exceed or fall short of V_S tolerances [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 [9] Reference voltage DC 50 V

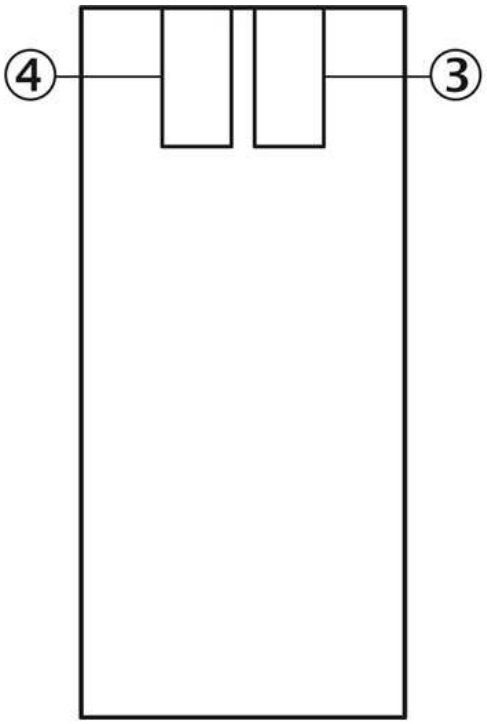
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Dimensional drawing



|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 ø 4.2 mm
|6| M12 connector, 4-pin or cable

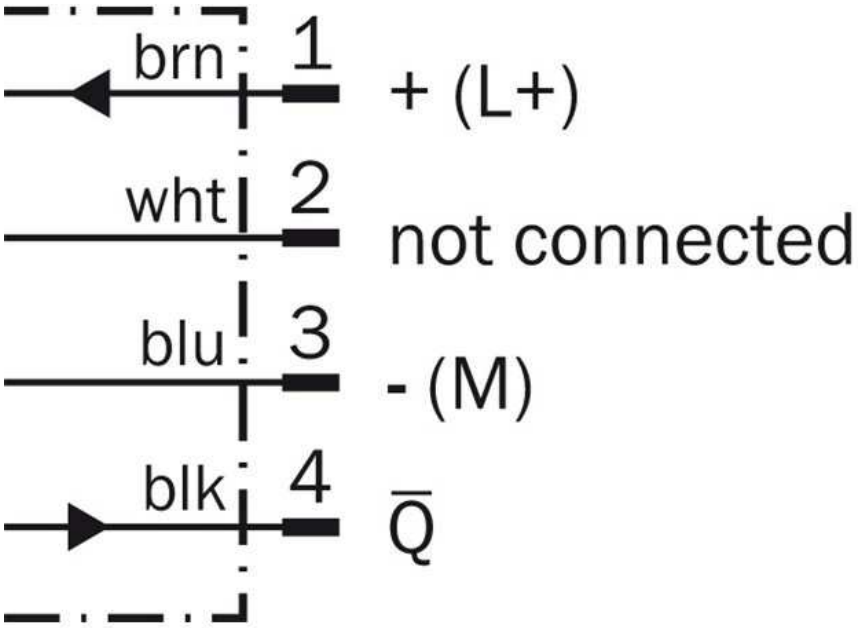
Adjustments possible



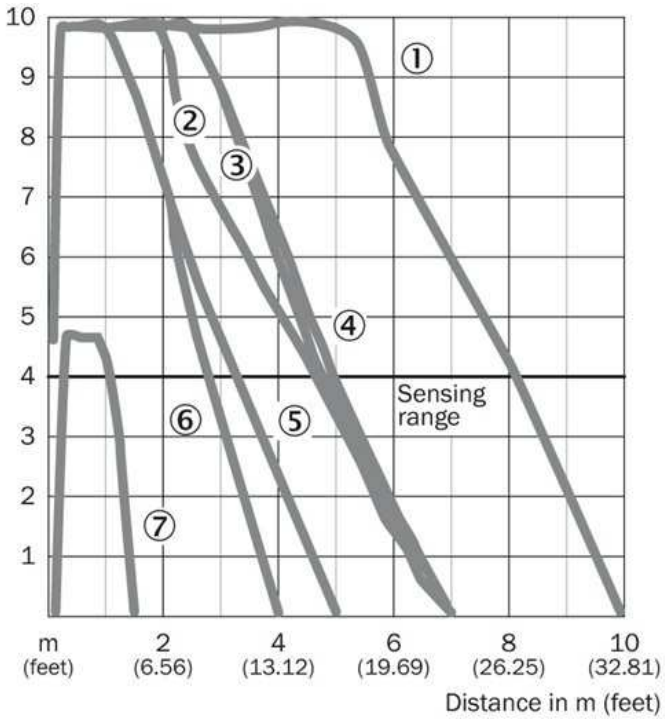
|3| Status indicator LED green: power on
|4| Status indicator LED,
yellow: Status of received light beam

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Connection diagram



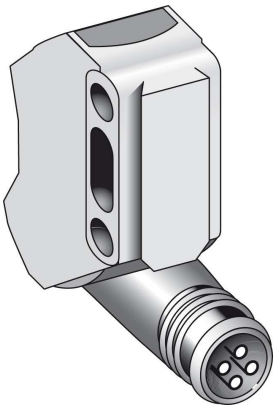
Characteristic curve



|1| PL80A
|2| C110A
|3| PL50A
|4| PL40A
|5| PL30A
|6| PL20A
|7| Reflective tape Diamond Grade

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Connection type



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