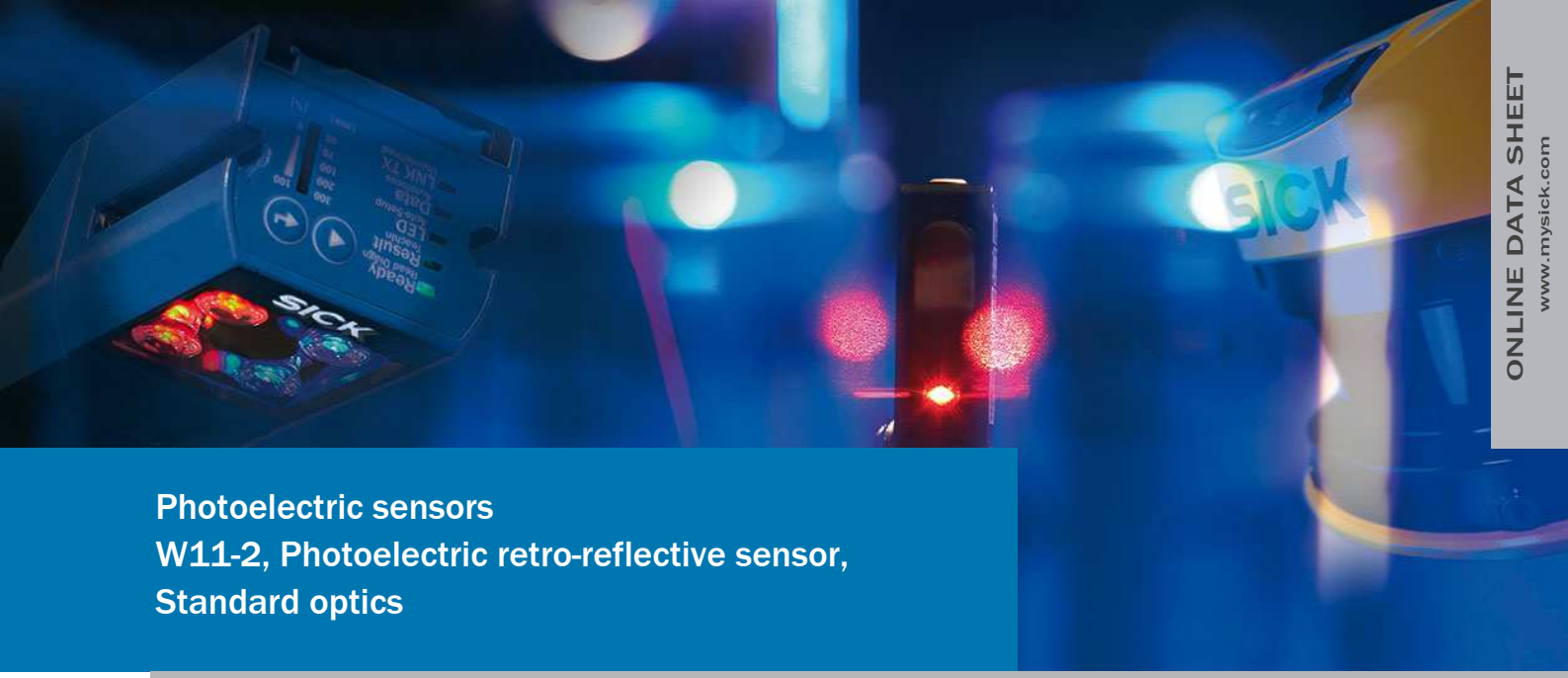


ONLINE DATA SHEET
www.mysick.com

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

WL11-2P2430



SICK
Sensor Intelligence.

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

Model Name > WL11-2P2430
Part No. > 1041385





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

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.:	0.15 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

© SICK AG. Subject to change without notice.

Mechanics/electronics

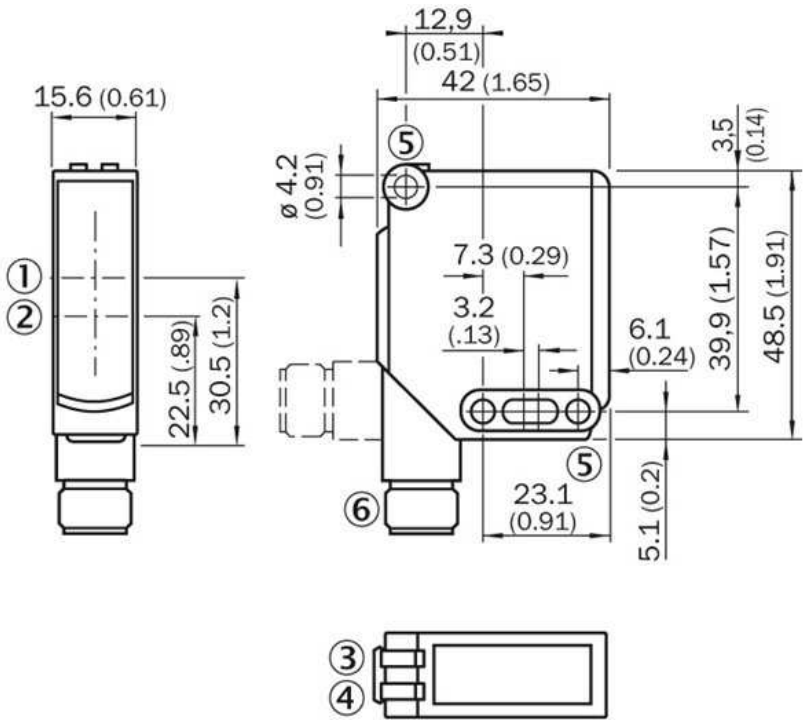
Supply voltage:	10 V DC ... 30 V DC [1]
Power consumption:	≤ 30 mA [2]
Output type:	PNP
Output function:	Complementary
Switching mode:	Light/dark switching
Signal voltage PNP HIGH/LOW:	Uv - 2.5 V/approx. 0 V
Output current Imax.:	100 mA
Response time:	≤ 2.5 ms [3]
Switching frequency:	200 Hz [4]
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, C, D [5] [6] [7]
Protection class:	II [8]
Weight:	120 g
Polarisation filter:	✓
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 66 IP 67 IP 69K
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 connections reverse-polarity protected [6] C = interference suppression [7] D = outputs overcurrent and short-circuit protected [8] Reference voltage DC 50 V

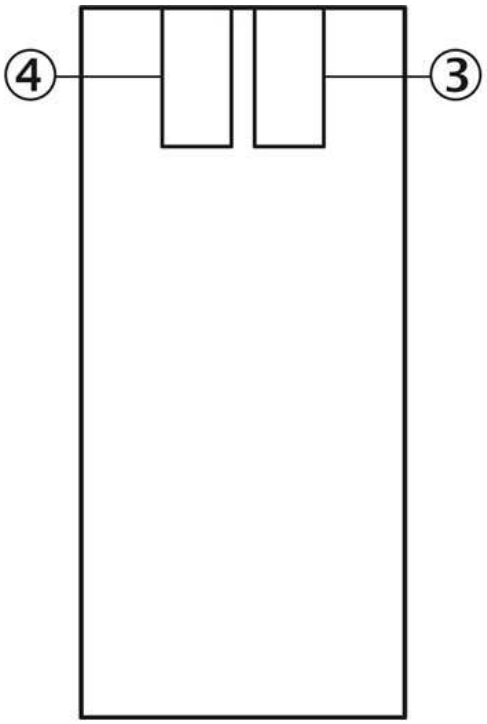
© SICK AG. Subject to change without notice.

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

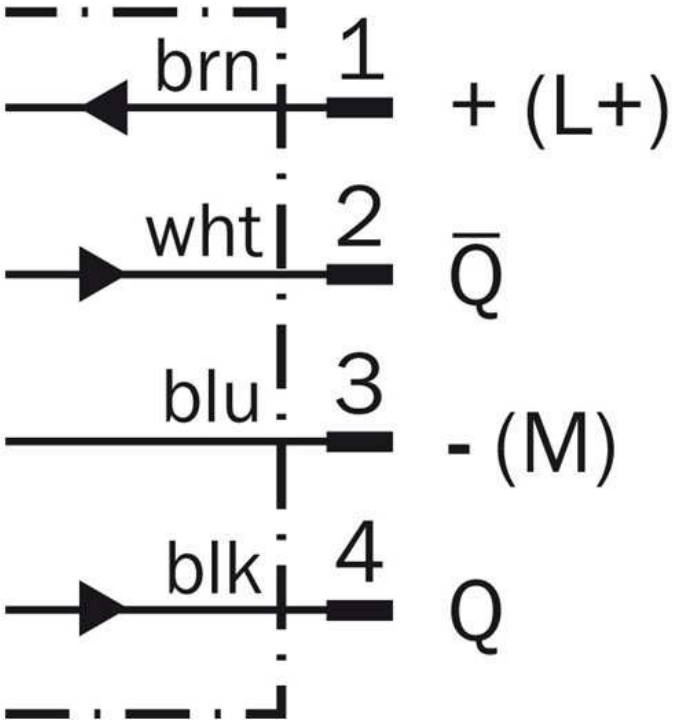
Adjustments possible



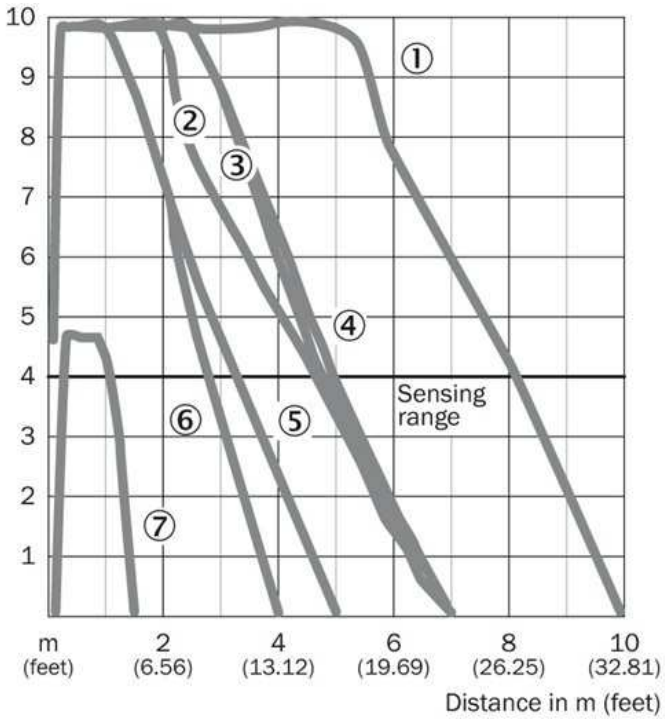
|3| Status indicator LED green: power on
|4| Status indicator LED,
yellow: Status of received light beam

© SICK AG. Subject to change without notice.

Connection diagram



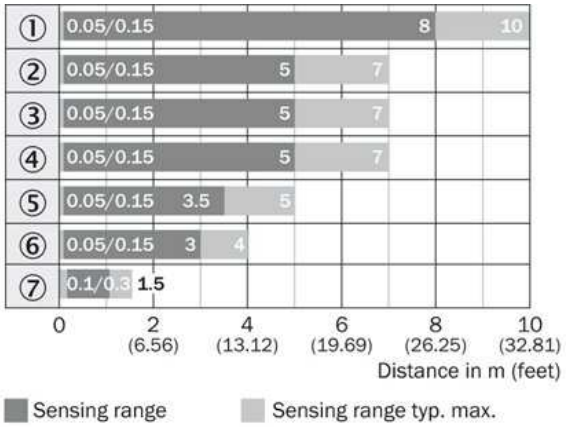
Characteristic curve



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

© SICK AG. Subject to change without notice.

Sensing range diagram

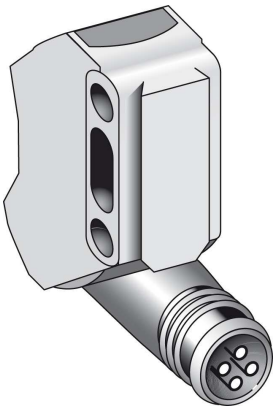


|1| PL80A
|2| C110A
|3| PL50A
|4| PL40A
|5| PL30A
|6| PL20A
|7| Reflective tape Diamond Grade

Reflector type

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

Connection type



© SICK AG. Subject to change without notice.

A4 4c int43

Australia
Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg
Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil
Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada
Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika
Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China
Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark
Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland
Phone +49 211 5301-301
E-Mail info@sick.de

España
Phone +34 93 480 31 00
E-Mail info@sick.es

France
Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain
Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India
Phone +91–22–4033 8333
E-Mail info@sick-india.com

Israel
Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia
Phone +39 02 27 43 41
E-Mail info@sick.it

Japan
Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország
Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland
Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge
Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich
Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska
Phone +48 22 837 40 50
E-Mail info@sick.pl

România
Phone +40 356 171 120
E-Mail office@sick.ro

Russia
Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz
Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore
Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija
Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa
Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea
Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi
Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige
Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan
Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye
Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates
Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México
Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at **www.sick.com**

SICK
Sensor Intelligence.