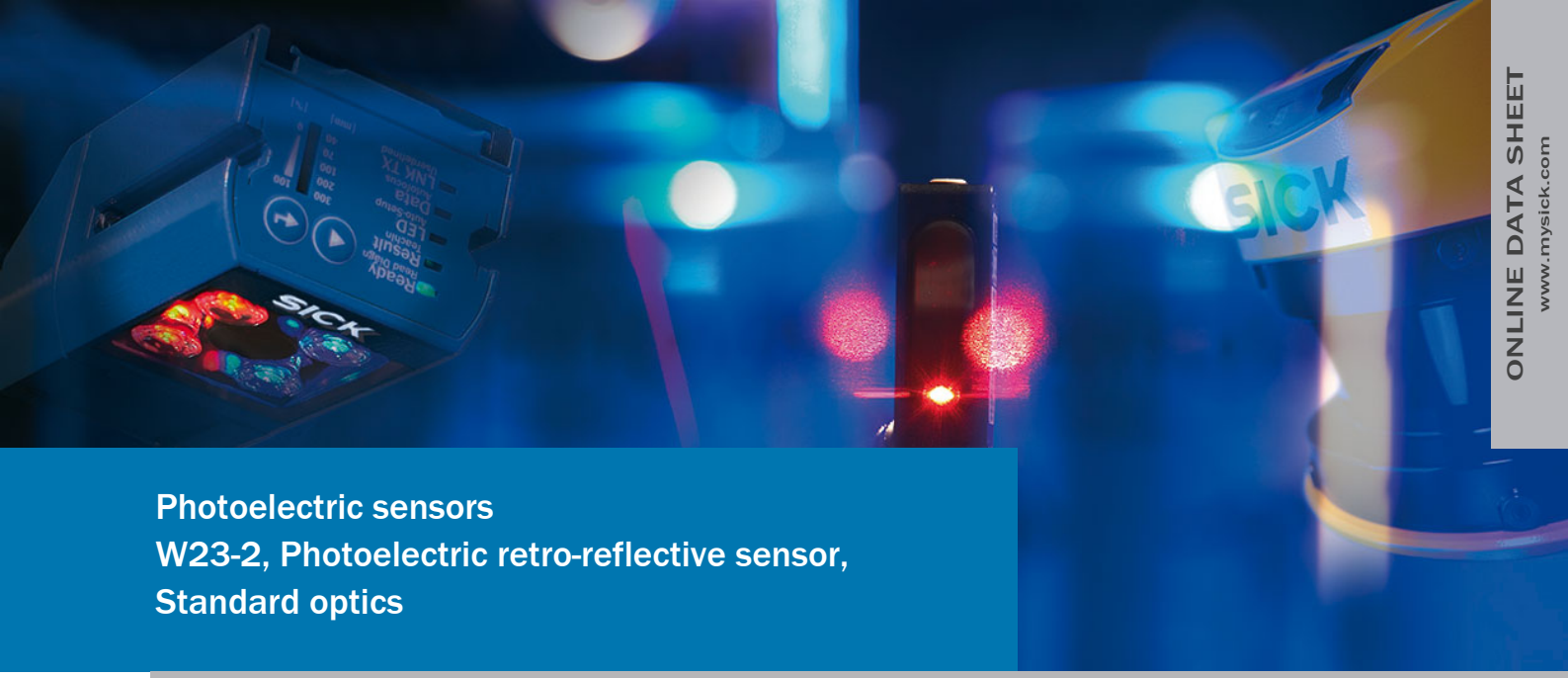

ONLINE DATA SHEET
www.mysick.com

Photoelectric sensors
W23-2, Photoelectric retro-reflective sensor, Standard optics

WL23-2K2462S03

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Photoelectric sensors
W23-2, Photoelectric retro-reflective sensor, Standard optics

Model Name > WL23-2K2462S03
Part No. > 1044397

Illustration may differ

At a glance

- Two variants available: without sensitivity adjustment or with teach button
- Polarizing filter ensures reliable detection, even with shiny targets
- Model with PinPoint for intense, consistent red light spot
- 360° visibility of indicating LEDs

Your benefits

- Adjustability removed to prevent operator tampering and to reduce downtime
- Model with teach-in pushbutton enables quick setup
- Durable housing with reinforced mounting holes withstands harsh conditions
- 360° LEDs provide device status indication from multiple angles
- Polarizing filter ensures reliable detection, even with shiny targets
- Less downtime due to ASIC chip technology by SICK
- High level of mechanical and electronic reliability in industrial environments

Features

Sensor/detection principle:	Photoelectric retro-reflective sensor, Standard optics
Dimensions (W x H x D):	24.6 mm x 80.6 mm x 54 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0.1 m ... 15 m [1]
Sensing range:	0.1 m ... 11 m [2]
Type of light:	Visible red light
Light source:	PinPoint LED [3]
Teach-in:	Single teach-in button
Angle of dispersion:	0.6 °
Adjustment:	Teach-in
Light spot size (distance):	Ø 160 mm (16 m)

1) 2) PL80A 3) 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:	≤ 35 mA [2]
Output type:	PNP
Switching mode:	Dark-switching
Signal voltage PNP HIGH/LOW:	Approx. VS - 2.5 V/0 V
Output current Imax.:	≤ 100 mA

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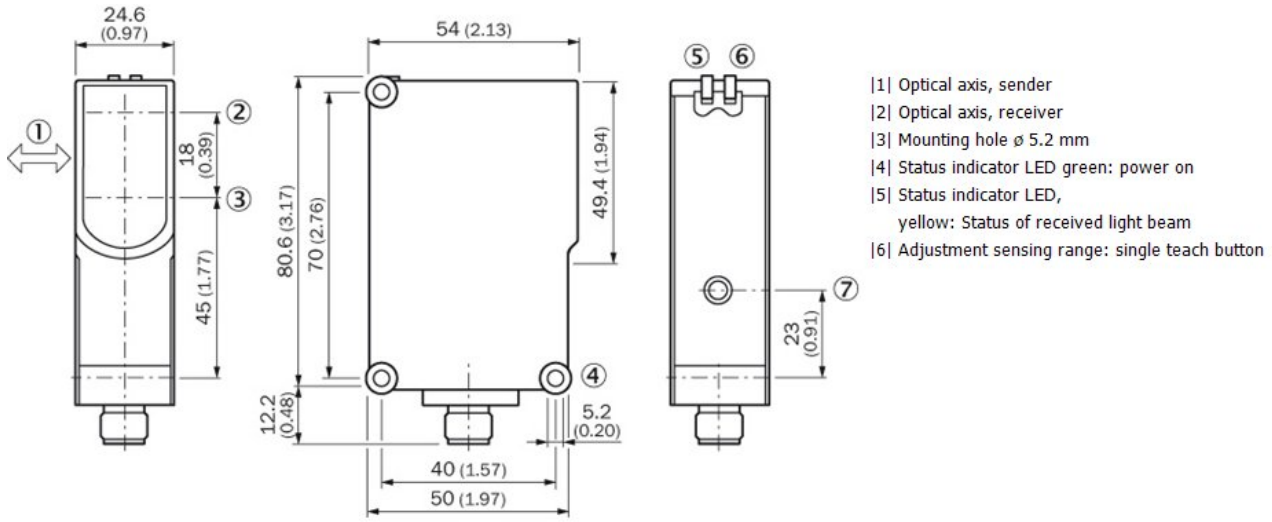
Response time:	≤ 1 ms [3]
Switching frequency:	500 Hz [4]
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, C, D [5] [6] [7]
Protection class:	II [8]
Weight:	100 g
Polarisation filter:	✓
Special device:	✓
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67
Special features:	Pin 2 not assigned, PIN 4: /Q
Ambient operating temperature:	-30 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 70 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

[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 50 V DC

Dimensional drawing



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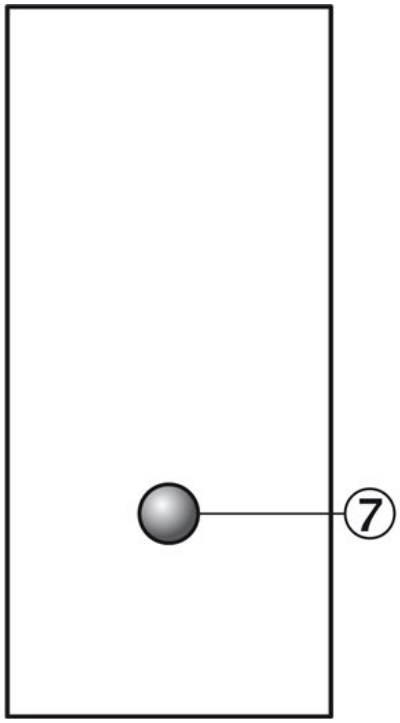
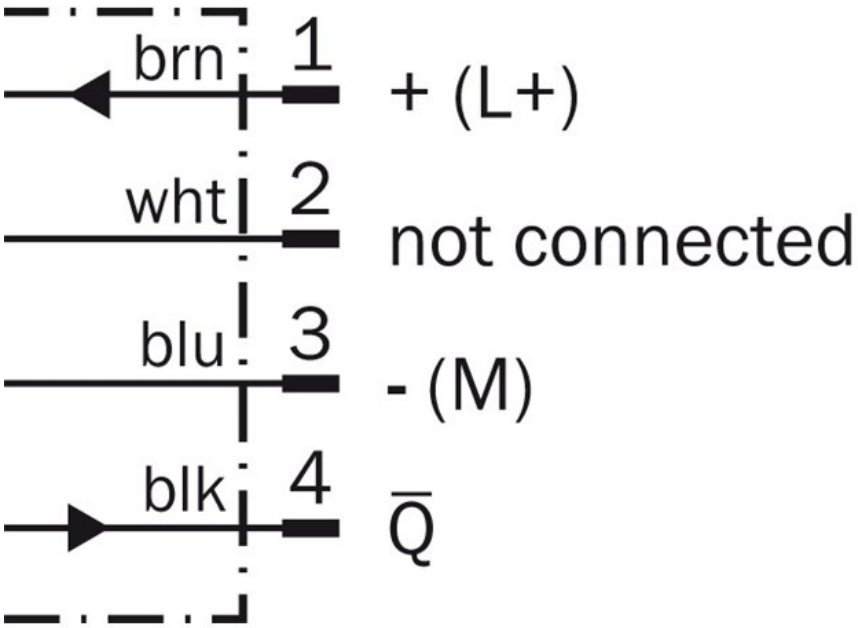
Adjustments possible



|1| Adjustment sensing range: single teach button

Connection diagram



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Connection type

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