



Photoelectric sensors
W14-2, Photoelectric retro-reflective sensor,
Standard optics

WL14-2P430S12



Model Name > [WL14-2P430S12](#)
Part No. > [1047021](#)



Illustration may differ

At a glance

- Emitter LED with visible red light
- Polarizing filter
- High immunity to ambient light
- Rugged plastic housing

Your benefits

- Fast installation due to highly visible red light
- Reliable object detection, even on shiny objects due to a polarizing filter
- Crosstalk and ambient light immunity reduces false readings and downtime
- High availability in the field



Features

Sensor/detection principle:	Photoelectric retro-reflective sensor, Standard optics
Dimensions (W x H x D):	17.6 mm x 75.5 mm x 33.5 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0.5 m ... 5 m ¹⁾
Type of light:	Visible red light
Light source:	LED ²⁾
Wave length:	645 nm
Angle of dispersion:	Ca. 2 °
Light spot size (distance):	Ø 140 mm (4 m)

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

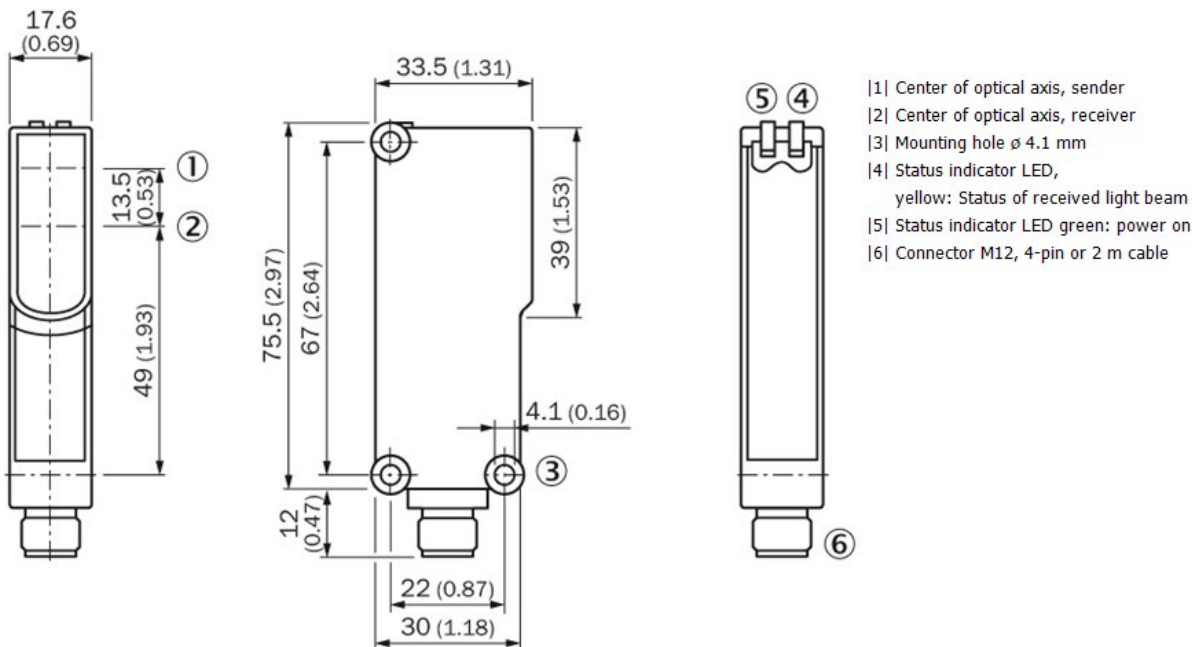
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Power consumption:	≤ 35 mA ²⁾
Output type:	PNP
Switching mode:	Dark-switching
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)}
Weight:	40 g
Polarisation filter:	✓

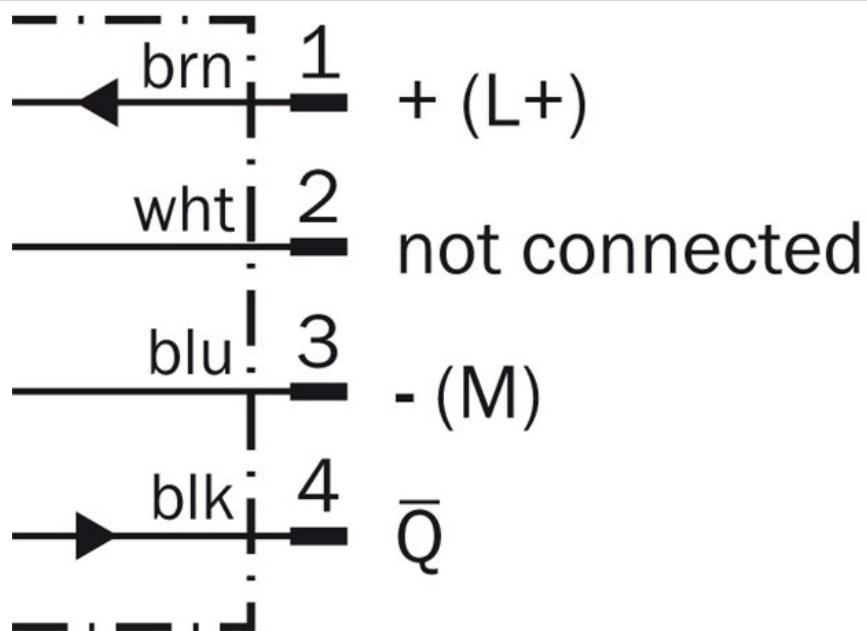
Special device:	✓
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67
Special features:	High functional reliability on foil-wrapped objects
Ambient operating temperature:	-25 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 70 °C

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

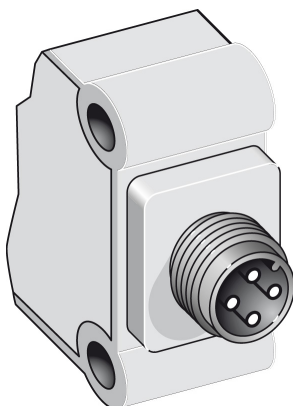
Dimensional drawing



Connection diagram



Connection type



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