



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 <sup>1)</sup>
Type of light:	Visible red light
Light source:	LED <sup>2)</sup>
Wave length:	645 nm
Angle of dispersion:	Ca. 2 °
Special features:	High functional reliability on foil-wrapped objects
Light spot size (distance):	Ø 140 mm (4 m)

<sup>1)</sup> PL80A <sup>2)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

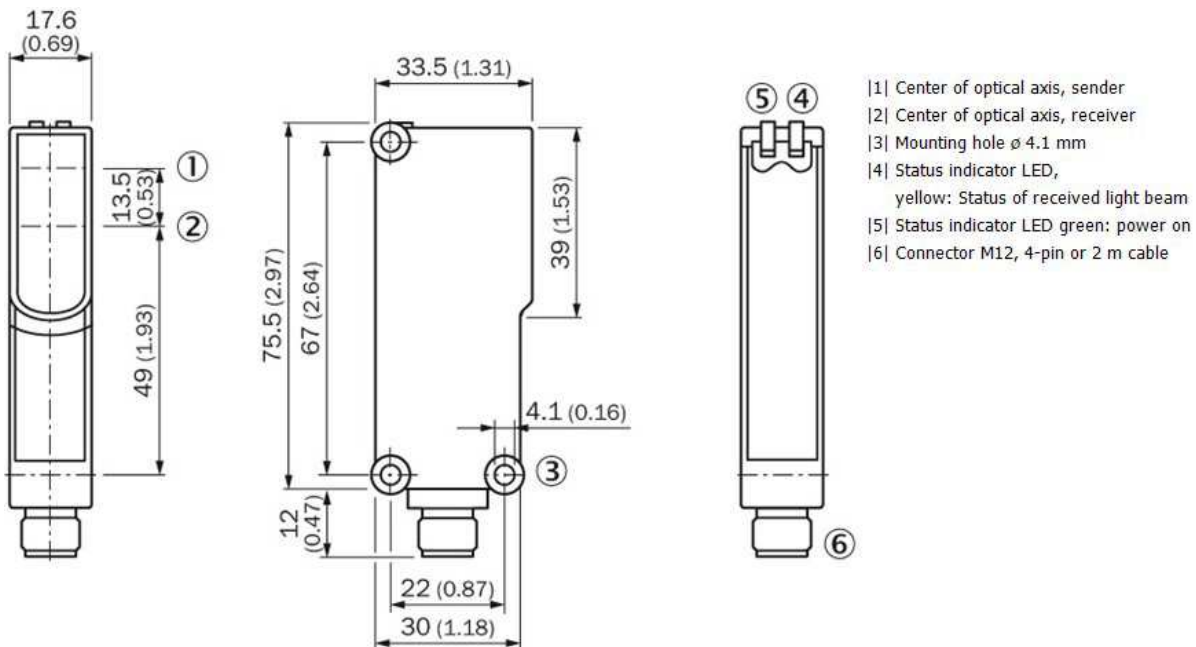
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Power consumption:	≤ 35 mA <sup>2)</sup>
Output type:	PNP
Switching mode:	Dark switching
Output current I <sub>max.</sub> :	≤ 100 mA
Response time:	≤ 2.5 ms <sup>3)</sup>
Switching frequency:	200 Hz <sup>4)</sup>
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, C, D <sup>5) 6) 7)</sup>
Weight:	40 g

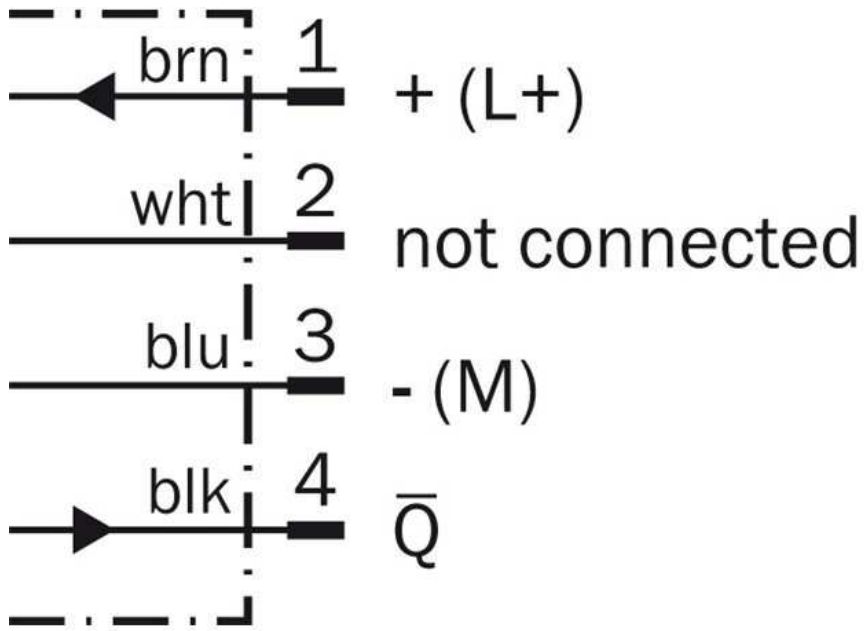
Polarisation filter:	✓
Special device:	✓
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67
Ambient operating temperature:	-25 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 70 °C

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

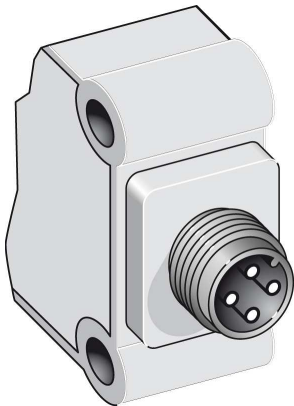
### Dimensional drawing



Connection diagram



Connection type



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