



Photoelectric sensors  
Reflex Array, Photoelectric retro-reflective sensor

WL27-3P3402S19



**Model Name** > [WL27-3P3402S19](#)  
**Part No.** > [1056382](#)



*Illustration may differ*

**At a glance**

- Detects objects > 12 mm within a 50 mm light array, regardless of position
- Sensing range for detection from 0 m to max. 4.5 m
- Minimum distance of 0.5 m between sensor and reflector for all variants
- PinPoint technology for intense red light
- Automatic adjustment of the switching threshold when there is contamination

**Your benefits**

- Reduces the installation work required by up to 50% compared to light grids or multiple photoelectric sensors
- Detects objects > 12 mm within a 50 mm light array, regardless of position Three other variants are available for other objects.
- PinPoint technology and optical alignment procedure enables simple and quick commissioning
- Continuous Threshold Adjustment (CTA) ensures less downtime



**Features**

Sensor/detection principle:	Photoelectric retro-reflective sensor
Dimensions (W x H x D):	24.6 mm x 80 mm x 54.2 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 3.5 m <sup>1)</sup>
Sensing range::	0 m ... 2 m, 0 m ... 3.5 m <sup>2) 3)</sup>
Type of light:	Visible red light
Light source:	PinPoint LED <sup>4)</sup>
Minimum object size:	10 mm, position-independent detection within the light array
Special features:	Detection height 45 mm
Adjustment:	Single teach-in button
Distance of the sensor to reflector:	0.5 m ... 4.5 m

1) 2) PL80A 3) PL40A 4) Average service life of 100,000 h at T<sub>A</sub> = +25 °C

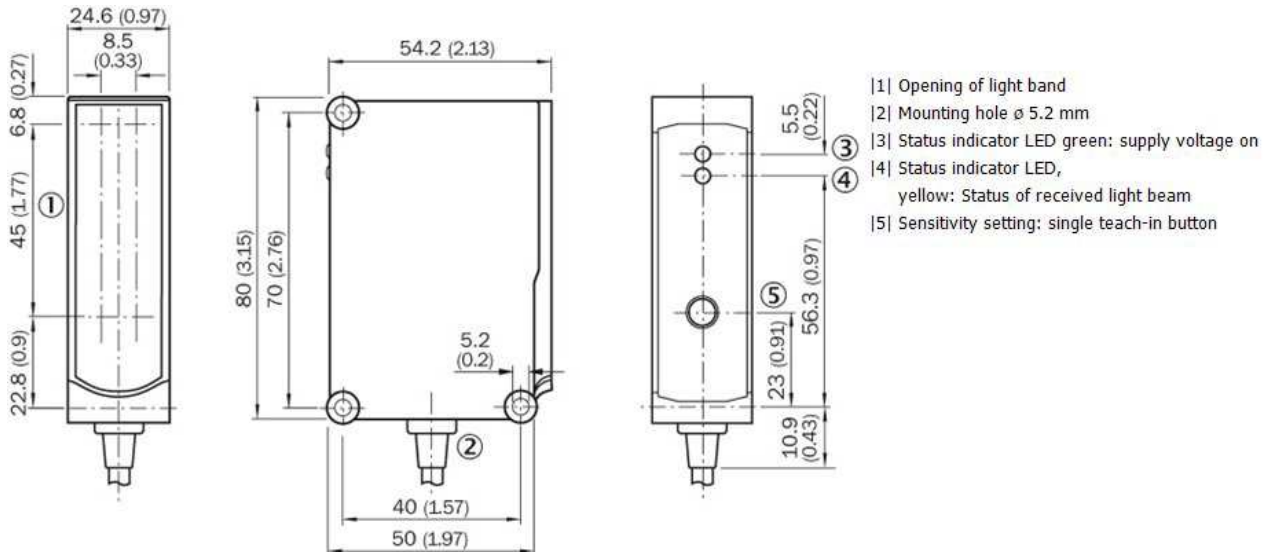
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:	≤ 5 Vpp <sup>2)</sup>
Power consumption:	≤ 35 mA <sup>3)</sup>
Output type:	PNP
Output function:	Complementary

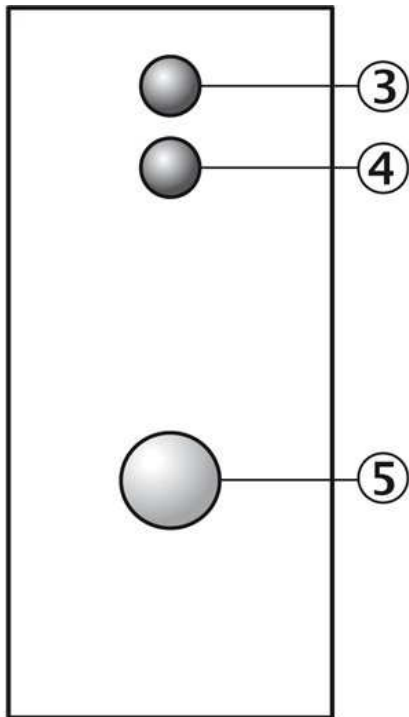
Switching mode:	Light/dark switching
Output current I <sub>max</sub> ..:	≤ 100 mA
Response time:	≤ 2.5 ms <sup>4)</sup>
Switching frequency:	200 Hz <sup>5)</sup>
Connection type:	Cable with connector M12, 4-pin, 270 mm <sup>6)</sup>
Cable material:	PVC
Circuit protection:::	A, B, C <sup>7) 8) 9)</sup>
Protection class:	II <sup>10)</sup>
Weight:	130 g
Special device:	-
Optics material:	PMMA
Enclosure rating:	IP 67
Special feature:	Light band
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:	Approx. VS - 2.5 V/0 V
Housing material:	ABS, Plastic

1) Limit values, operation in short-circuit protected network max. 8 A<sup>2)</sup> May not exceed or fall short of V<sub>S</sub> tolerances<sup>3)</sup> Without load<sup>4)</sup> Signal transit time with resistive load<sup>5)</sup> With light/dark ratio 1:1<sup>6)</sup> Do not bend below 0 °C<sup>7)</sup> A = V<sub>S</sub> connections reverse-polarity protected<sup>8)</sup> B = inputs and output reverse-polarity protected<sup>9)</sup> C = interference suppression<sup>10)</sup> Reference voltage: 50 V DC

## Dimensional drawing

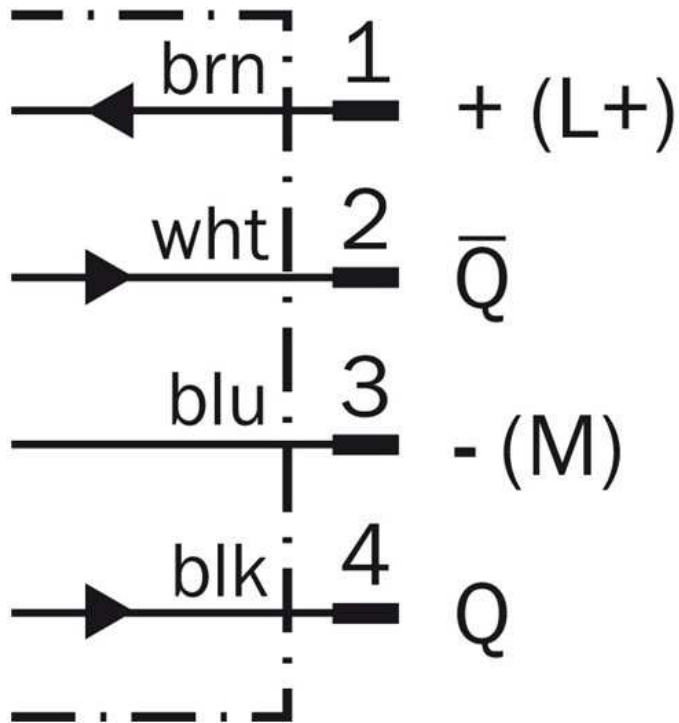


## Adjustments possible



- |3| Status indicator LED green: supply voltage on
- |4| Status indicator LED, yellow: Status of received light beam
- |5| Sensitivity setting: single teach-in button

## Connection diagram



**Connection type**

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