



Photoelectric sensors  
W4-3, Photoelectric retro-reflective sensor

WL4-3N1310S25



**Model Name** > [WL4-3N1310S25](#)  
**Part No.** > [1029959](#)



*Illustration may differ*

**At a glance**

- Sensing range from 0.4 ... 9 m
- Outstanding size/performance value
- Rugged plastic housing with M3 threaded metal inserts
- IR LED light

**Your benefits**

- Sensor can be hidden behind a non-transparent window, which normally blocks visible light
- Less contamination due to a high operating reserve on small reflectors
- Reliable operation in harsh environments



**Features**

Sensor/detection principle:	Photoelectric retro-reflective sensor
Dimensions (W x H x D):	16 mm x 39.5 mm x 12 mm
Housing design (light emission):	Rectangular
Sensing range max.:	≤ 4.5 m
Sensing range:	0.4 m ... 9 m <sup>1)</sup>
Type of light:	Infrared light
Light source:	LED <sup>2)</sup>
Wave length:	850 nm
Light spot size (distance):	Ø 75 mm (1.5 m)

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

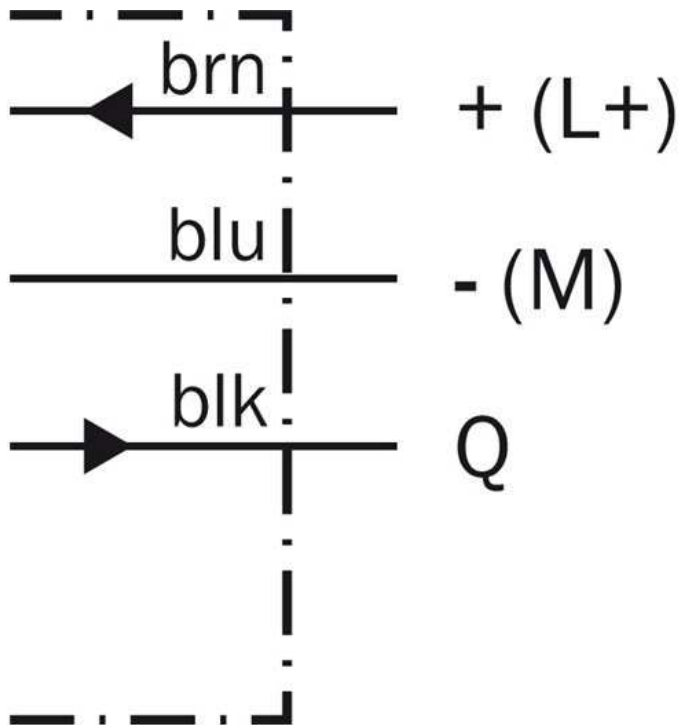
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:::	< 5 Vpp <sup>2) 3)</sup>
Power consumption:	≤ 20 mA <sup>4)</sup>
Output type:	NPN
Switching mode:	Light switching
Output current I <sub>max</sub> :::	≤ 100 mA
Response time:	< 0.5 ms <sup>5)</sup>
Switching frequency:	1,000 Hz <sup>6)</sup>
Connection type:	Cable, 3-wire <sup>7)</sup>
Circuit protection:::	A, C, D <sup>8) 9) 10)</sup>
Protection class:	III

Weight: 30 g  
 Polarisation filter: -  
 Special device: -  
 Optics material: PMMA  
 Enclosure rating: IP 67  
 IP 66  
 Ambient operating temperature: -40 °C ... +60 °C  
 Ambient storage temperature: -40 °C ... +75 °C  
 UL File No.: NRKH.E181493 & NRKH7.E181493  
 Housing material: ABS, Plastic

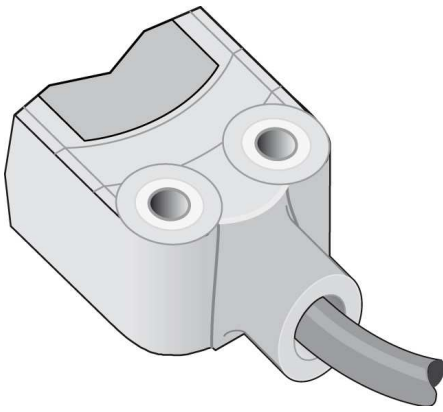
1) Limit values 2) 3) May not exceed or fall short of  $V_S$  tolerances 4) Without load 5) Signal transit time with resistive load 6) With light/dark ratio 1:1 7) Do not bend below 0 °C 8) A = V connections reverse-polarity protected 9) C = interference suppression 10) D = outputs overcurrent and short-circuit protected

**Connection diagram**



Connection type

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