



Photoelectric sensors W4-3, Photoelectric retro-reflective sensor

WL4-3P1310S31



Model Name > [WL4-3P1310S31](#)
Part No. > [1044668](#)



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 ¹⁾
Type of light:	Infrared light
Light source:	LED ²⁾
Wave length:	850 nm
Light spot size (distance):	Ø 75 mm (1.5 m)

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

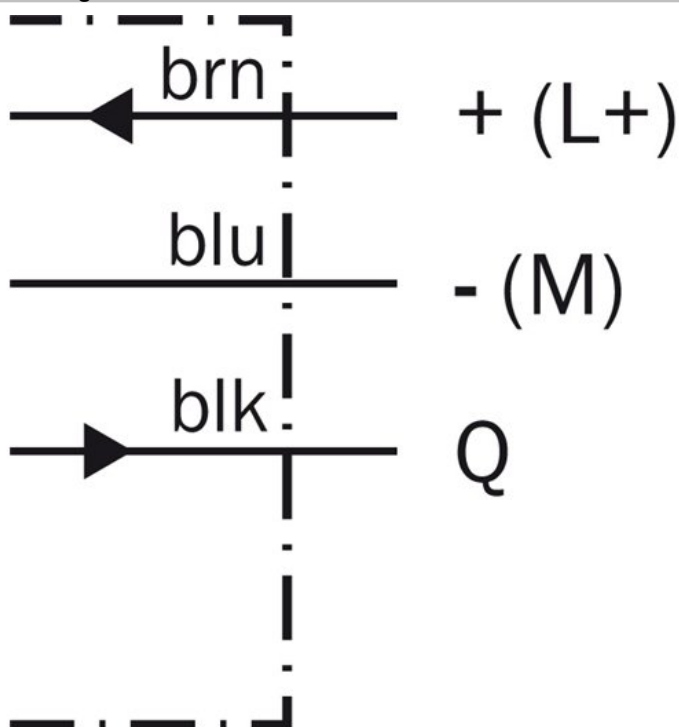
Mechanics/electronics

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

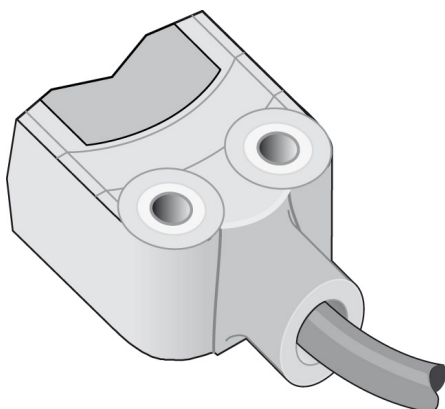
Weight:	30 g
Polarisation filter:	-
Special device:	-
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67 IP 66
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C

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

Connection diagram



Connection type



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