



Photoelectric sensors W24-2 Ex, Photoelectric retro-reflective sensor

WL24-2V530S06



Model Name > [WL24-2V530S06](#)
Part No. > [1027613](#)



Illustration may differ

At a glance

- Marking: EX II 3D IP67 T70°C, EX II 3G EEx nA II T4 X according to Directive 94/9/EC (ATEX)
- Corresponds to 3D/3G category
- Large scanning range
- Red
- M12 plug or M16 screw connection: rotatable about 90°
- Durable zinc die-cast housing

Your benefits

- High level of operating reserves
- Metal housing for very high resistance and a long service life
- Flexible in installation thanks to rotatable connector concept



Features

Sensor/detection principle:	Photoelectric retro-reflective sensor
Dimensions (W x H x D):	38 mm x 154.5 mm x 77 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 22 m ¹⁾
Sensing range:	0 mm ... 15 mm ²⁾
Type of light:	Visible red light
Light source:	LED ³⁾
Adjustment:	Sensitivity adjustment
Light spot size (distance):	Ø 250 mm (15 m)

^{1) 2)} PL80A ³⁾ Average service life 100,000 h at Ta = +25 °C

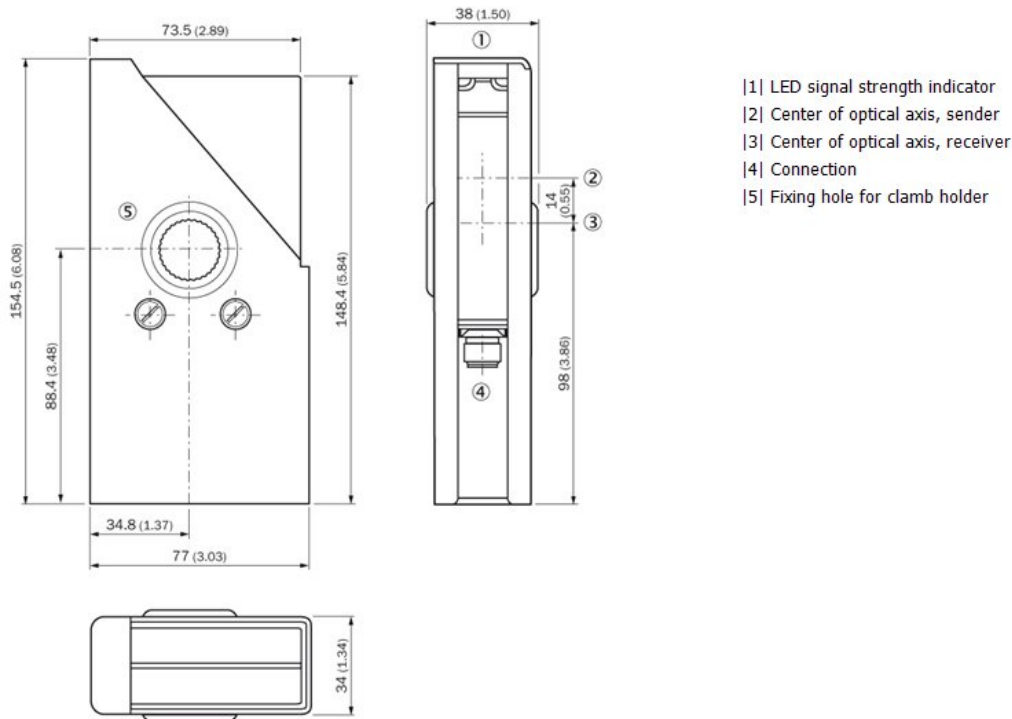
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	< 5 Vpp ²⁾
Power consumption:	≤ 50 mA ³⁾
Output type:	PNP
Switching mode:	Light/dark-switching
Switching mode selector:	Selectable via NPN/PNP selector
Output current I _{max} ..:	100 mA
Response time:	≤ 500 µs ⁴⁾
Switching frequency:	1,000 Hz ⁵⁾

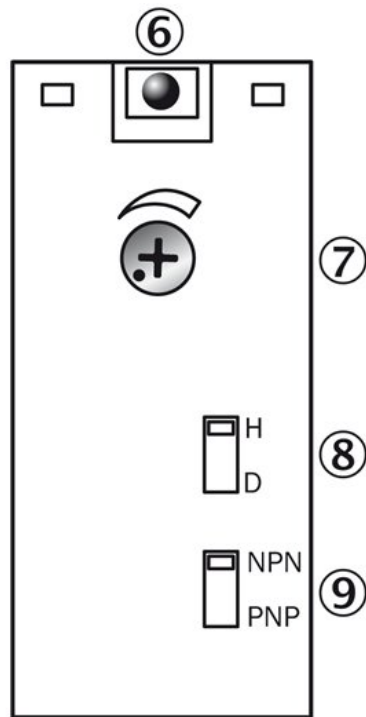
Connection type:	Connector M12, 5-pin ⁶⁾
Circuit protection:::	D ^{7) 8) 9)}
Protection class:	II ¹⁰⁾
Weight:	800 g
Polarisation filter:	✓
Front screen heating:	-
Special device:	✓
Housing material:	Zinc diecast
Enclosure rating:	IP 67
Test input sender off:	TE to 0 V
ATEX marking:	EX II 3D IP67 T70°, EX II 3G EEx nA II T4 X according to directive 94/9/EG (ATEX)
Hazardous area category:	3D
Ambient operating temperature:	-20 °C ... 50 °C
Ambient storage temperature:	-40 °C ... 75 °C

¹⁾ Limit values ²⁾ May not exceed or fall short of V_S ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ Connection rotatable by 90° ⁷⁾ A = V_S connections reverse-polarity protected ⁸⁾ C = interference suppression ⁹⁾ D = outputs overcurrent and short-circuit protected ¹⁰⁾ Reference voltage 50 V DC

Dimensional drawing

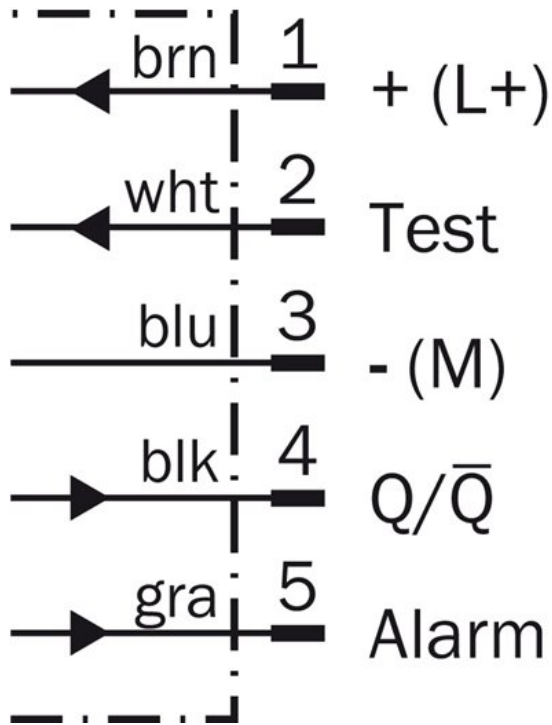


Adjustments possible

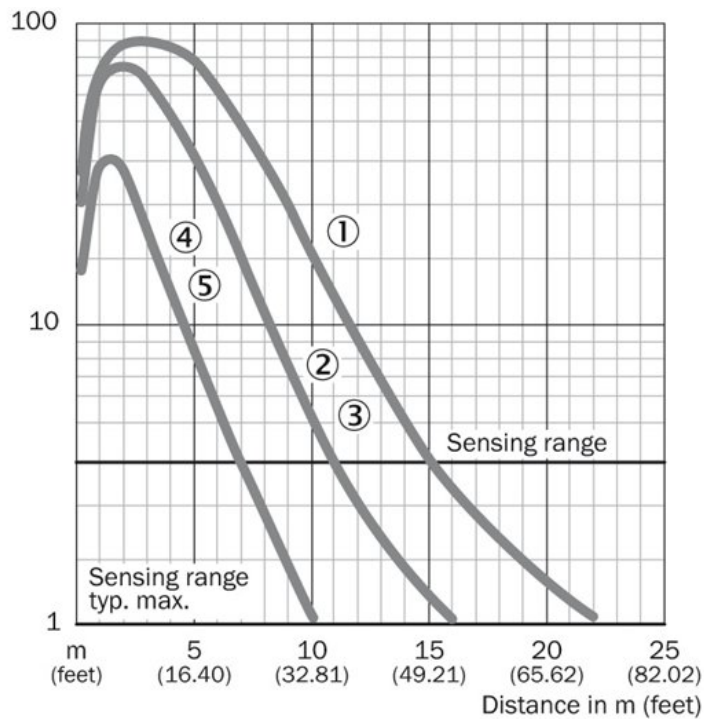


- |2| LED signal strength indicator
- |7| Sensitivity adjustment
- |8| Light/dark selector
- |9| NPN/ PNP selector

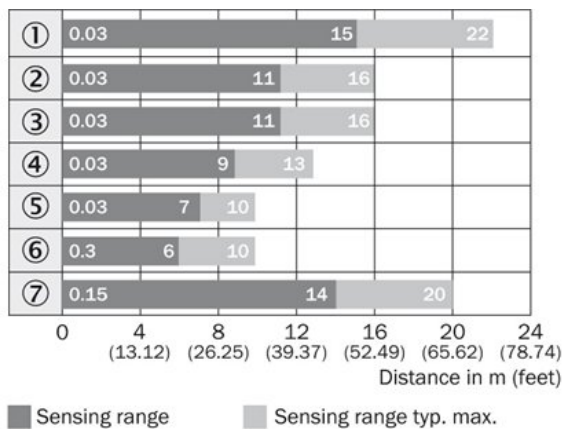
Connection diagram



Characteristic curve



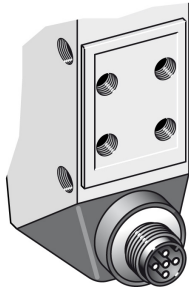
Sensing range diagram



Reflector type

- ① PL80A
- ② PL50A
- ③ PL40A
- ④ PL30A
- ⑤ PL20A
- ⑥ Diamond Grade (20 cm x 20 cm)
- ⑦ C110

Connection type



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