



Photoelectric sensors W12-3, Through-beam photoelectric sensor

WSE12-3V1111S01



Model Name > WSE12-3V1111S01
Part No. > 1058190



Illustration may differ

At a glance

- Through-beam variant
- Rugged die-cast zinc housing optional Teflon® coating
- PinPoint LED technology with highly visible light spot
- Chemically, thermally and mechanically resistant metal housing
- Dovetail mounting - mounting holes and oblong holes
- Highly visible status LEDs
- Operating range up to 20 m

Your benefits

- Outstanding sensor performance in small housings
- Reliable object detection of difficult targets using best-in-class technology
- A wide range of different sensor housings and connection systems ensures optimal integration of sensors in the system
- Many options for protective housings - super tough VISTAL™, metal or highly resistant plastic, ensures that the sensor can be installed without damage
- Wide range of accessories ensures easy installation, quick commissioning and maximum sensor performance for varying application needs



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	15.6 mm x 48.5 mm x 42 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 20 m
Sensing range:	0 m ... 15 m
Type of light:	Infrared light
Light source:	LED ¹⁾
Wave length:	850 nm
Angle of dispersion:	Ca. 1.5 °
Special features:	Alarm output
Adjustment:	Potentiometer, 5 turns

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

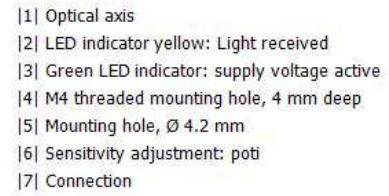
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	≤ 5 Vpp ²⁾

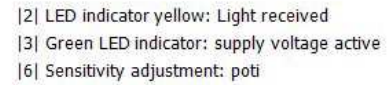
Power consumption, sender:	$\leq 30 \text{ mA}$ ³⁾
Power consumption, receiver:	$\leq 15 \text{ mA}$ ⁴⁾
Output type:	PNP
Output function:	Complementary
Switching mode:	Dark switching
Signal voltage PNP HIGH/LOW:	$> U_v - 2,5 \text{ V} / \text{ca. } 0 \text{ V}$
Output current I _{max} :	100 mA
Response time:	$\leq 330 \mu\text{s}$ ⁵⁾
Switching frequency:	1,500 Hz ⁶⁾
Connection type:	Cable, 4-wire, 2 m ⁷⁾
Cable material:	PVC
Conductor cross-section:	0.25 mm ²
Circuit protection:::	A, C, D ⁸⁾ ⁹⁾ ¹⁰⁾
Protection class:	II
Weight:	200 g
Housing material:	Metal
Enclosure rating:	IP 66 IP 67 IP 69K
Test input sender off:	TE to 0 V
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
Part number of individual components:	Receiver, WE12-3V1111S01, 2064081Receiver, WE12-3V1111S01, 2064081, Sender, WS12-3D1110, 2046739Sender, WS12-3D1110, 2046739

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

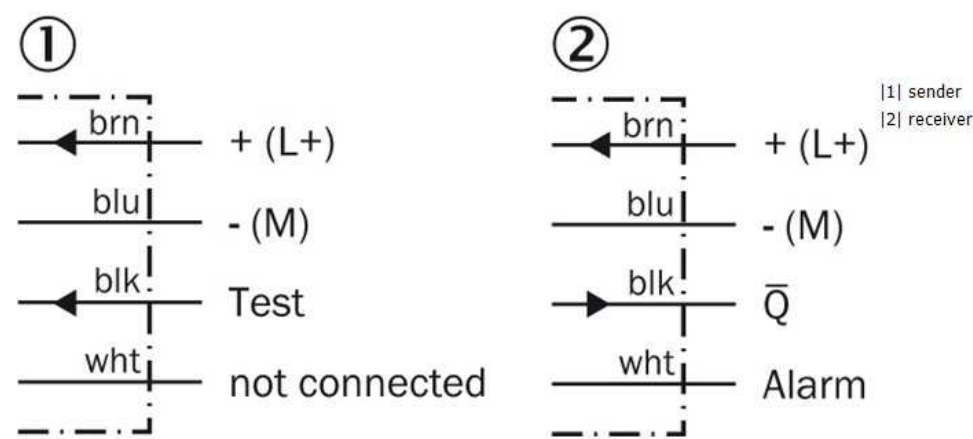
Adjustments possible



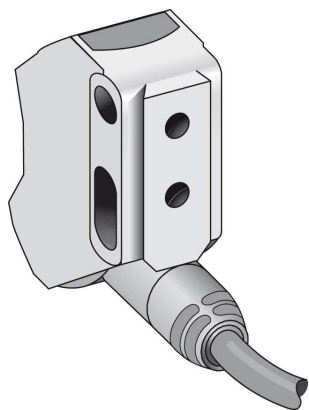
Adjustments possible



Connection diagram



Connection type



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