



Photoelectric sensors
W4S-3, Through-beam photoelectric sensor

WSE4S-3F3130



Model Name > [WSE4S-3F3130](#)
Part No. > [1052881](#)



Illustration may differ

At a glance

- Sensing range from 0 - 5 m
- PinPoint LED technology for highly visible, brilliant light spot
- Rugged plastic housing with M3 metal inserts

Your benefits

- The PinPoint LED's sharply defined, intense light spot makes alignment quick and easy
- Low-cost machine integration due to small dimensions that enable mounting in areas with space restrictions
- Rugged mounting system with M3 threaded metal inserts reduces maintenance costs due to a long service life



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	12.2 mm x 41.8 mm x 17.3 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 5 m
Sensing range:	0 m ... 4.5 m
Type of light:	Visible red light
Light source:	PinPoint LED ¹⁾
Wave length:	650 nm
Light spot size (distance):	Ø 50 mm (2 m)

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

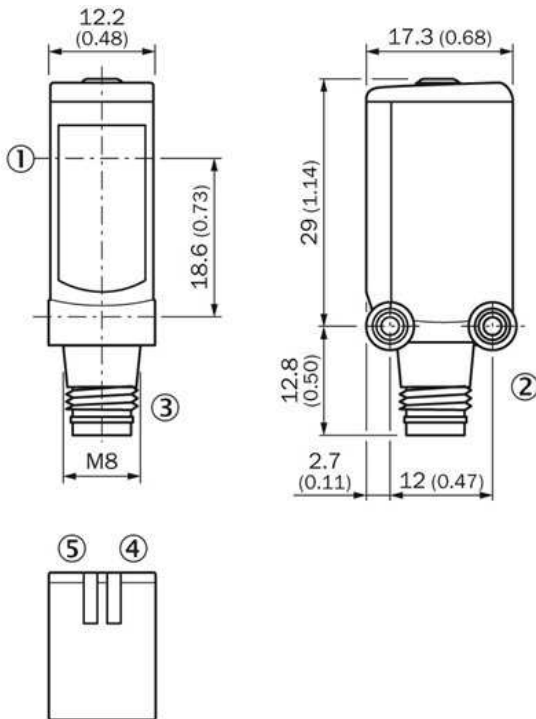
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	< 5 Vpp ²⁾
Power consumption:::	≤ 20 mA ^{3) 4) 5)}
Output type:	PNP
Switching mode:	Dark switching
Output current I _{max.} :	≤ 100 mA ⁶⁾
Response time:	< 0.5 ms ⁶⁾
Switching frequency:	1,000 Hz ⁷⁾
Connection type:	Cable with connector M8, 3-pin, 100 mm ⁸⁾
Cable material:	PVC

Conductor cross-section:	0.14 mm ²
Cable diameter:	Ø 3.4 mm
Circuit protection:::	A, C, D ⁹⁾ 10) 11)
Protection class:	III
Weight:	40 g
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67 IP 66
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, WE4S-3F3130, 2058690, Sender, WS4S-3D3130, 2058689

1) Limit values 2) May not exceed or fall short of V_S tolerances 3) Sender 4) 5) Receiver 6) Signal transit time with resistive load 7) With light/dark ratio 1:1 8) Do not bend below 0 °C 9) A = V_S connections reverse-polarity protected 10) C = interference suppression 11) D = outputs overcurrent and short-circuit protected

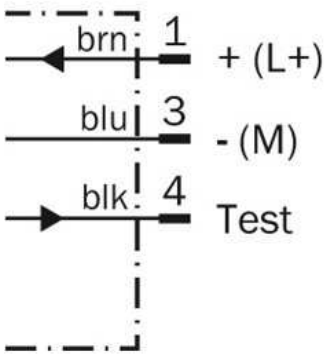
Dimensional drawing



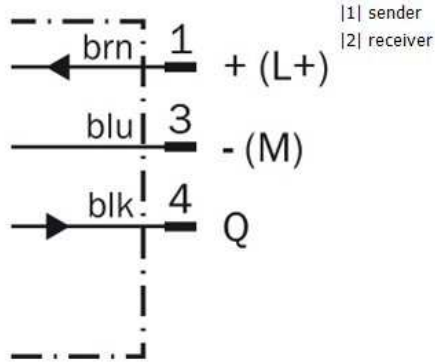
- [1] Center of optical axis
- [2] Threaded mounting hole M3
- [3] Connection
- [4] Status indicator LED green: power on
- [5] Status indicator LED, yellow: Status of received light beam

Connection diagram

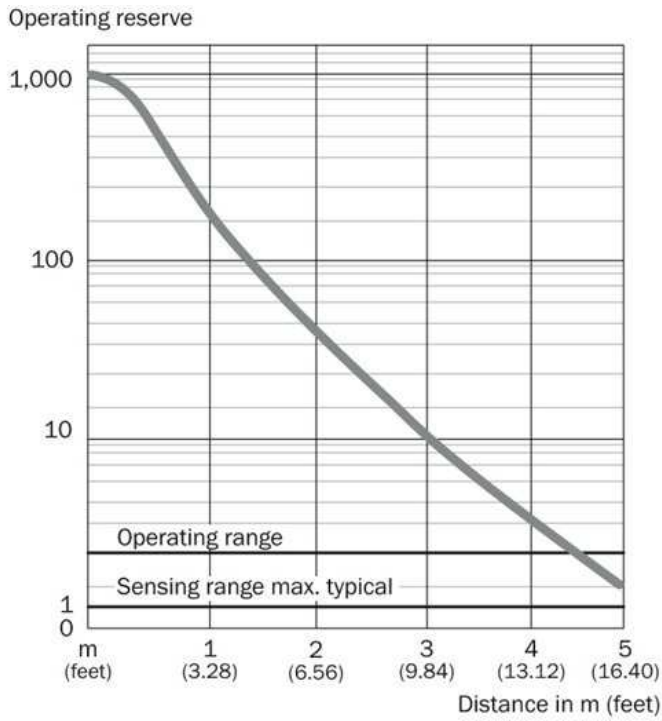
①



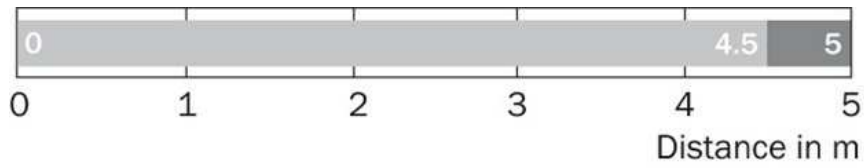
②



Characteristic curve



Sensing range diagram



■ Sensing range typ. max ■ Sensing range

Connection type



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