



Photoelectric sensors
W4S-3, Through-beam photoelectric sensor

WSE4S-3F2130



Model Name > [WSE4S-3F2130](#)
Part No. > [1052890](#)



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

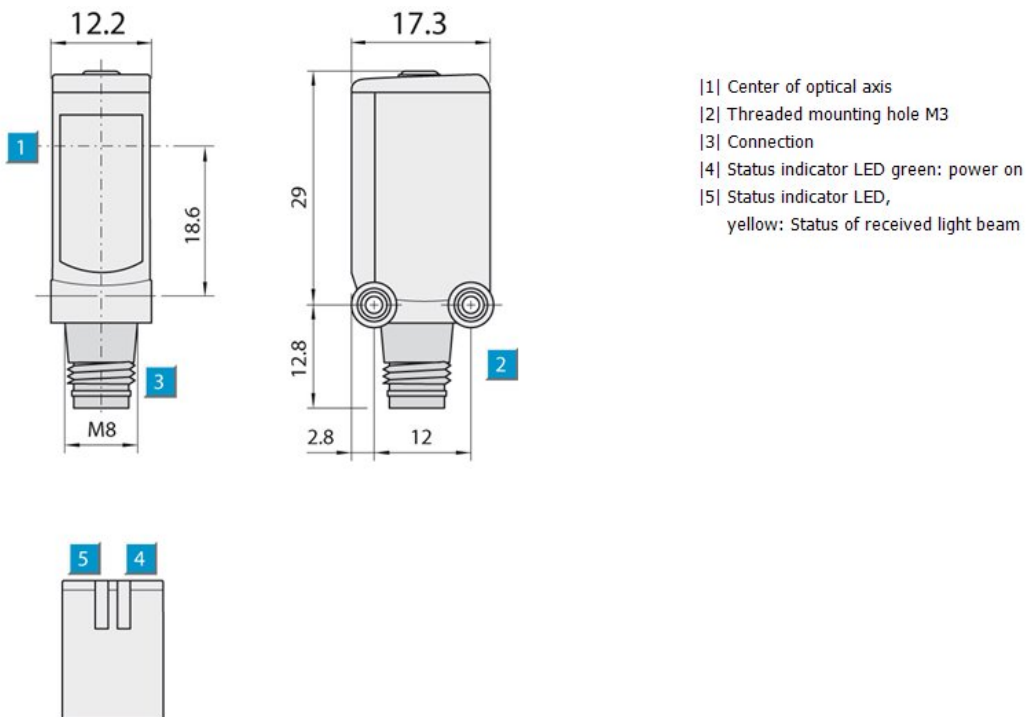
Mechanics/electronics

| | |
|------------------------------------|-----------------------------------|
| 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: | Connector M8, 3-pin |
| Circuit protection::: | A, C, D ^{8) 9) 10)} |

| | |
|---------------------------------------|--|
| 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-3F2130, 2058745, Sender, WS4S-3D2130, 2058636 |

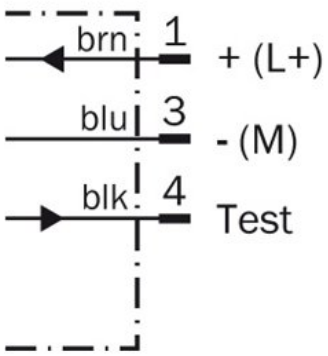
1) Limit values 2) May not exceed or fall short of V_S tolerances 3) Sender 4) 5) Receiver 6) Signal transit time with resistive load 7) With light/dark ratio 1:1 8) $A = V_S$
connections reverse-polarity protected 9) C = interference suppression 10) D = outputs overcurrent and short-circuit protected

Dimensional drawing

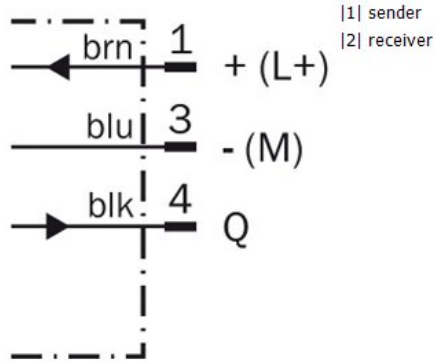


Connection diagram

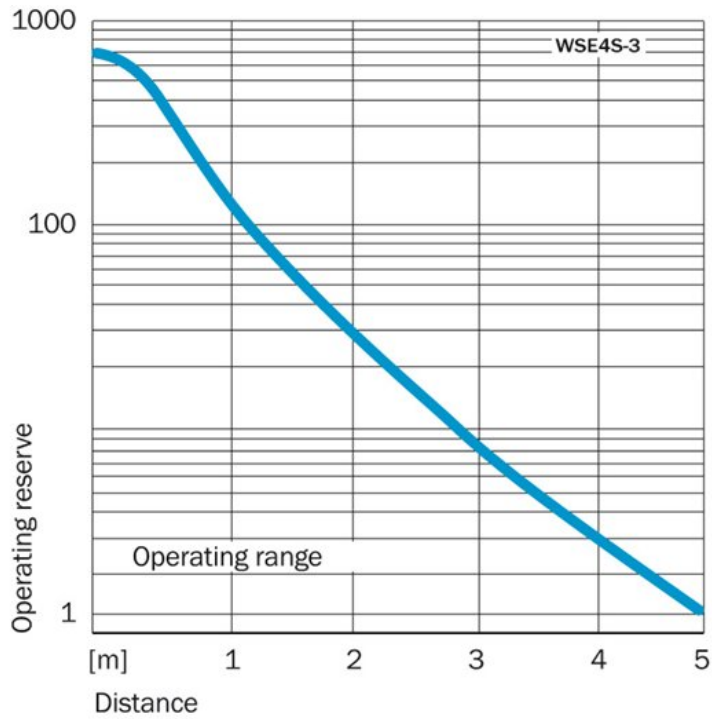
①



②



Characteristic curve

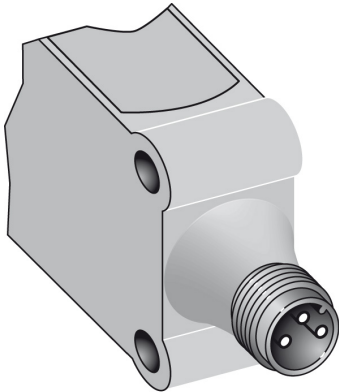


Sensing range diagram



■ Operating range ■ Scanning range typ. max

Connection type



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