



Photoelectric sensors
W4-3, Through-beam photoelectric sensor

WSE4-3F3430



Model Name > [WSE4-3F3430](#)
Part No. > [1044346](#)



Illustration may differ

At a glance

- Sensing range from 0 - 4 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): | 16 mm x 39.5 mm x 12 mm |
| Housing design (light emission): | Rectangular |
| Sensing range max.: | 0 m ... 4 m |
| Sensing range: | 0 m ... 3.5 m |
| Type of light: | Visible red light |
| Light source: | PinPoint LED ¹⁾ |
| Wave length: | 650 nm |
| Light spot size (distance): | Ø 210 mm (2 m) |

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

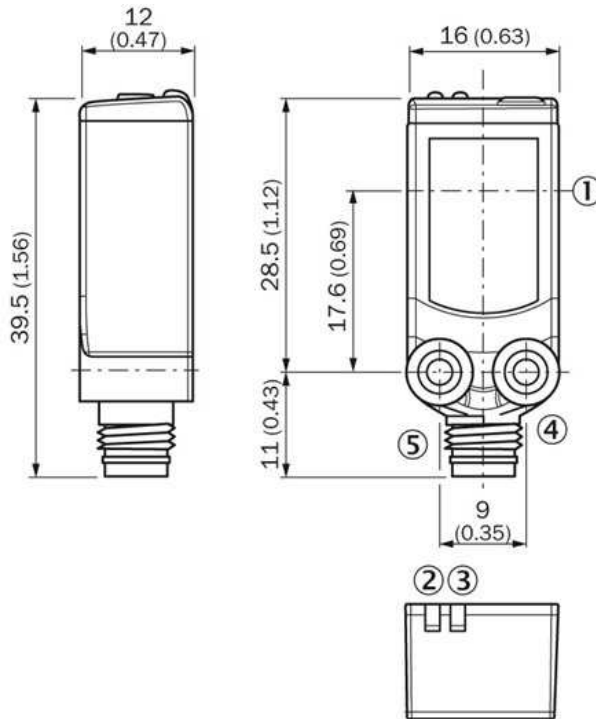
Mechanics/electronics

| | |
|------------------------------------|---|
| Supply voltage: | 10 V DC ... 30 V DC ¹⁾ |
| Ripple:: | < 5 Vpp ^{2) 3)} |
| Power consumption:: | ≤ 20 mA ^{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 M12, 4-pin, 150 mm ⁸⁾ |
| Cable material: | PVC |

| | |
|---------------------------------------|--|
| Conductor cross-section: | 0.14 mm ² |
| Cable diameter: | 3.4 mm |
| Circuit protection::: | A, C, D ⁹⁾ 10) 11) |
| Protection class: | III |
| Weight: | 60 g |
| 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, WE4-3F3430, 2046394, Sender, WS4-3D3430, 2046393 |
| UL File No.: | NRKH.E181493 & NRKH7.E181493 |
| Housing material: | ABS, Plastic |

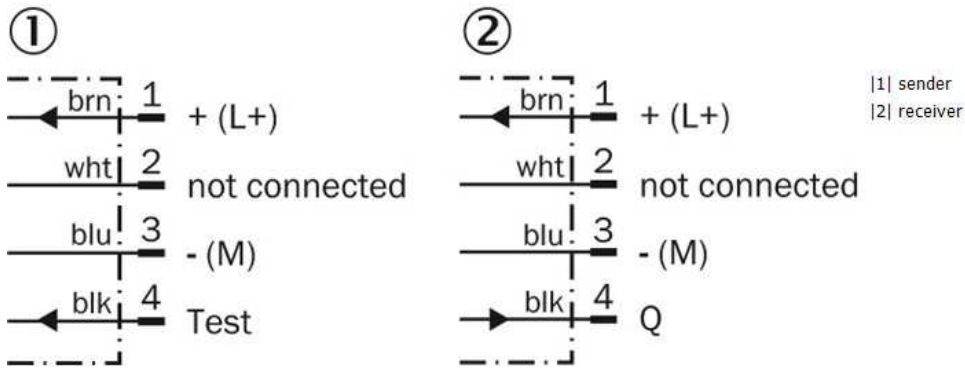
1) Limit values 2) 3) May not exceed or fall short of V_S tolerances 4) Sender 5) Receiver 6) Signal transit time with resistive load 7) With light/dark ratio 1:1 8) Do not bend below 0 °C 9) A = V_S connections reverse-polarity protected 10) C = interference suppression 11) D = outputs overcurrent and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

Dimensional drawing

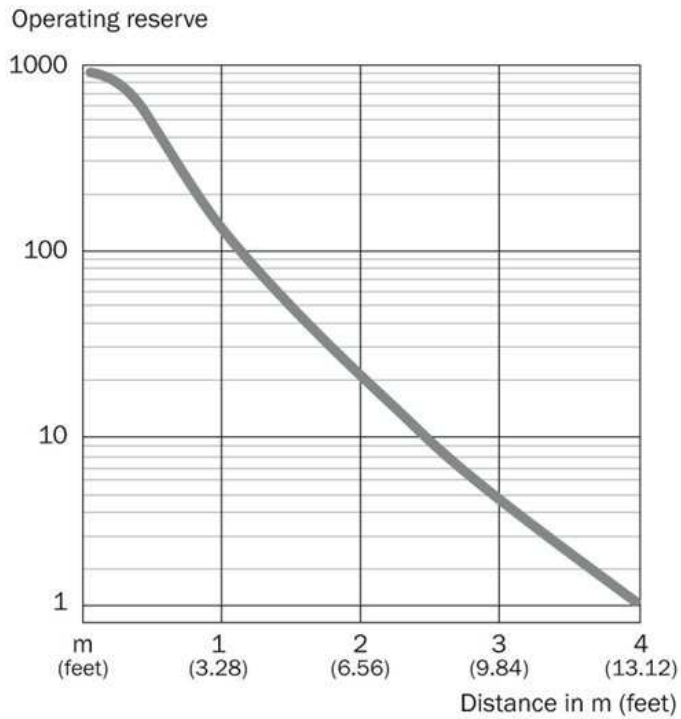


- [1] Center of optical axis
- [2] LED indicator orange: status of received light beam
- [3] Status indicator LED green: supply voltage on
- [4] Threaded mounting hole M3
- [5] Connection

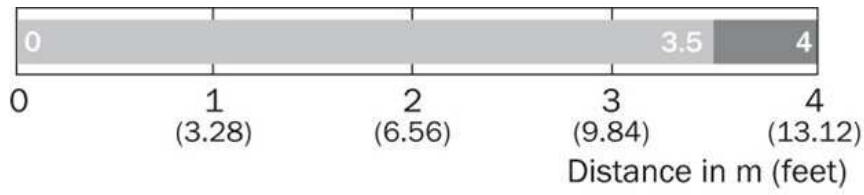
Connection diagram



Characteristic curve



Sensing range diagram



■ Sensing range typ. max ■ Sensing range

Connection type



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