



Photoelectric sensors W4-3, Through-beam photoelectric sensor

WSE4-3F3130F20



Model Name > [WSE4-3F3130F20](#)
Part No. > [1042520](#)



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

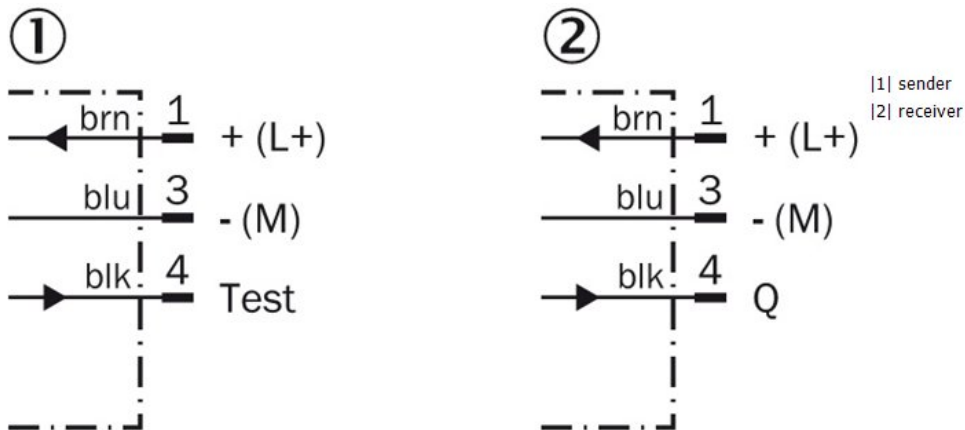
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Power consumption:	≤ 20 mA ^{2) 3)}
Output type:	PNP
Switching mode:	Dark-switching
Output current I _{max} :	≤ 100 mA
Response time:	< 0.5 ms ⁴⁾
Switching frequency:	1,000 Hz ⁵⁾
Connection type:	Cable with connector M8, 3-pin, 100 mm ⁶⁾
Cable material:	PVC
Conductor cross-section:	0.14 mm ²

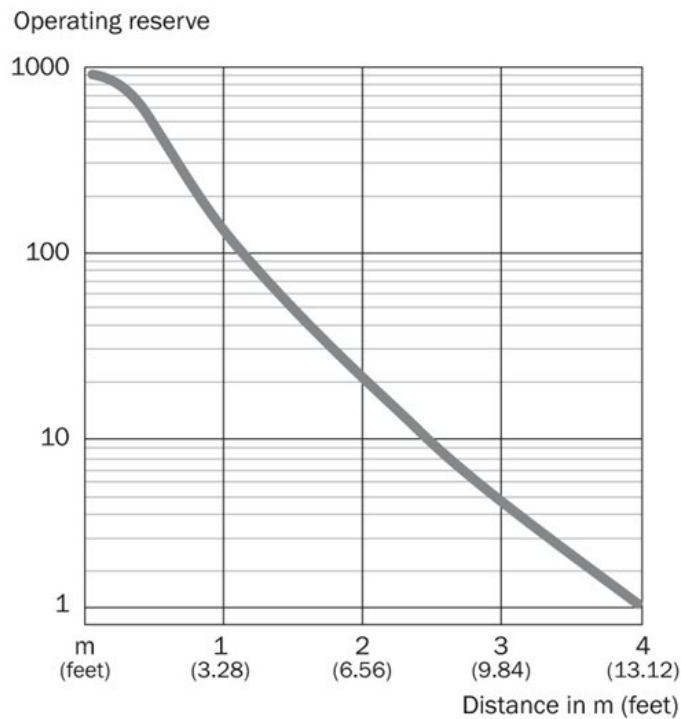
Cable diameter:	3.4 mm
Circuit protection:::	A, C, D ^{7) 8) 9)}
Protection class:	III
Weight:	60 g
Special device:	-
Housing material:	ABS, Plastic
Optics material:	PMMA
Enclosure rating:	IP 67 IP 66
Test input sender off:	TE to 0 V
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
Part number of individual components:	Receiver, WE4-3F3130F20, 2043944, Sender, WS4-3D3130F20, 2043943

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

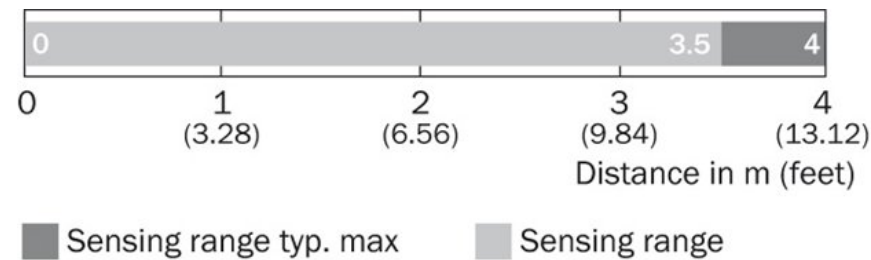
Connection diagram



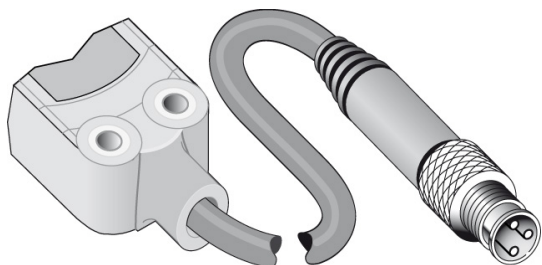
Characteristic curve



Sensing range diagram



Connection type



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