



Photoelectric sensors  
W2 Slim, Through-beam photoelectric sensor

WS/WE2S-F213



**Model Name** > [WS/WE2S-F213](#)  
**Part No.** > [1023650](#)



*Illustration may differ*

**At a glance**

- Durable, overmolded housing with metal sleeves for 3 mm fixing bolts
- Background suppression proximity sensor with laser-like light spot
- PinPoint LED in all models provides small, bright, uniform light spot
- Fast response time of 0.6 ms

**Your benefits**

- PinPoint LED generates a sharply defined, highly visible light spot for quick and easy alignment
- Compact design saves space while providing long sensing ranges
- High immunity to crosstalk with another device enables the installation of several sensors in a single area

**Note: This product will be discontinued and replaced by a successor - orders will be accepted until January 31st 2015**



**Features**

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	7.6 mm x 25.1 mm x 12.5 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 1.2 m
Type of light:	Visible red light
Light source:	PinPoint LED <sup>1)</sup>
Wave length:	660 nm
Focus adjustable:	-
Light spot size (distance):	Ø 10 mm (100 mm)

<sup>1)</sup> Average service life 75,000 h at T<sub>A</sub> = +25 °C

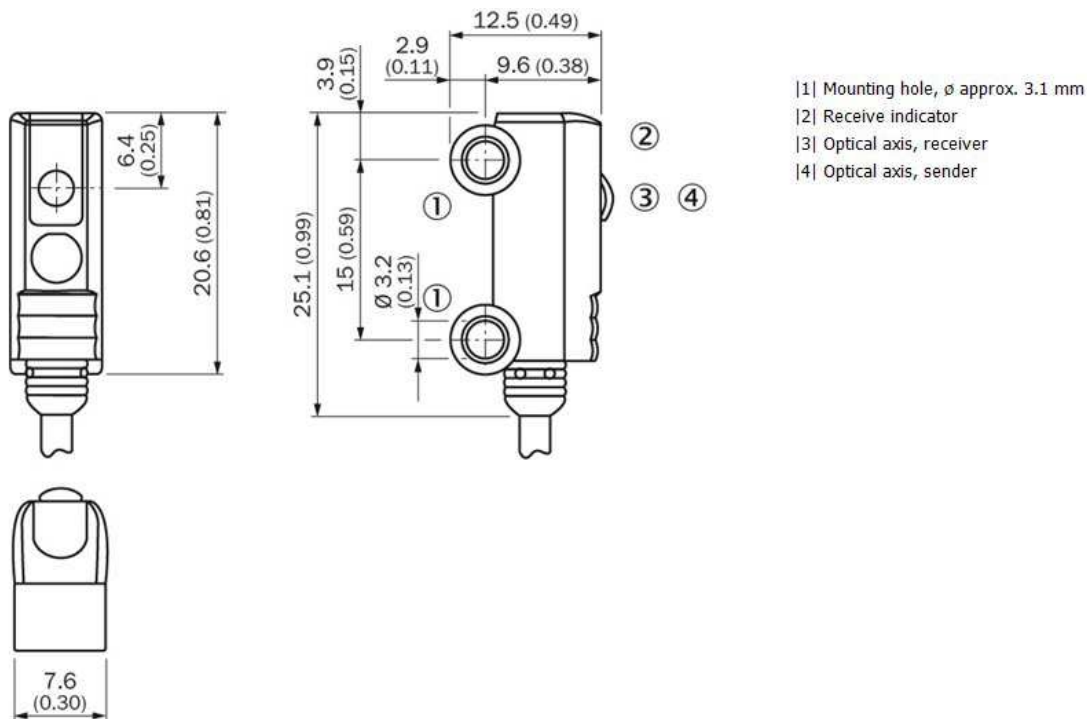
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:	≤ 5 Vpp <sup>2)</sup>
Output type:	PNP
Switching mode:	Dark switching
Output current I <sub>max.</sub> :	≤ 50 mA
Response time:	< 2.4 ms <sup>3)</sup>
Switching frequency:	200 Hz <sup>4)</sup>
Connection type:	Cable with connector M8, 3-pin, 200 mm <sup>5)</sup>

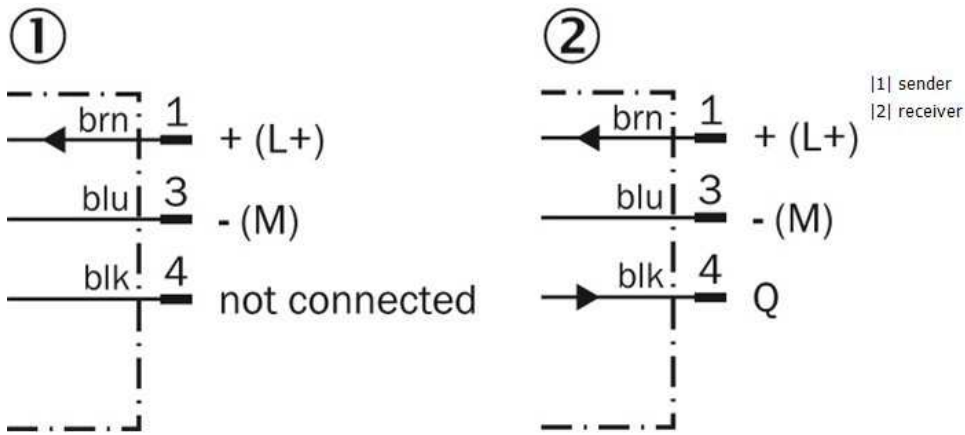
Cable material:	PVC
Cable diameter:	Ø 2.4 mm
Circuit protection:::	A, C, D <sup>6) 7) 8)</sup>
Weight:	40 g
Polarisation filter:	-
Special device:	-
Reverse polarity protection:	✓
Short-circuit protection:	✓
Optics material:	PMMA
Enclosure rating:	IP 67 IP 69K
Ambient operating temperature:	-20 °C ... +50 °C
Ambient storage temperature:	-40 °C ... +75 °C
Part number of individual components:	Receiver, WE2S-F213, 2027050, Sender, WS2S-D213, 2027047
Housing material:	ABS, Plastic

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

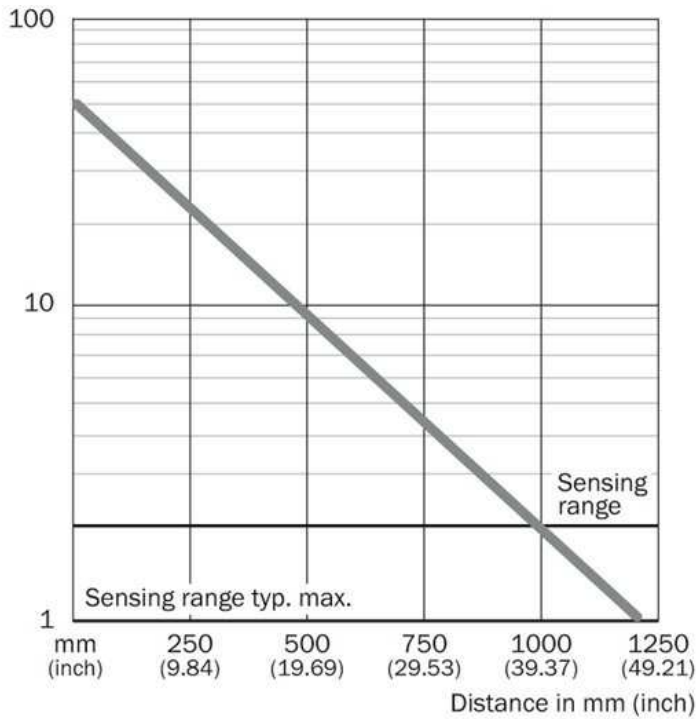
## Dimensional drawing



Connection diagram

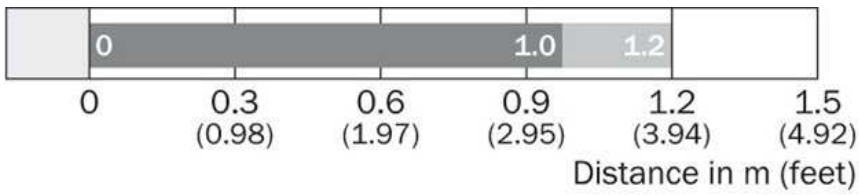


Characteristic curve



### Sensing range diagram

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■ Sensing range

■ Sensing range typ. max.

### Connection type

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