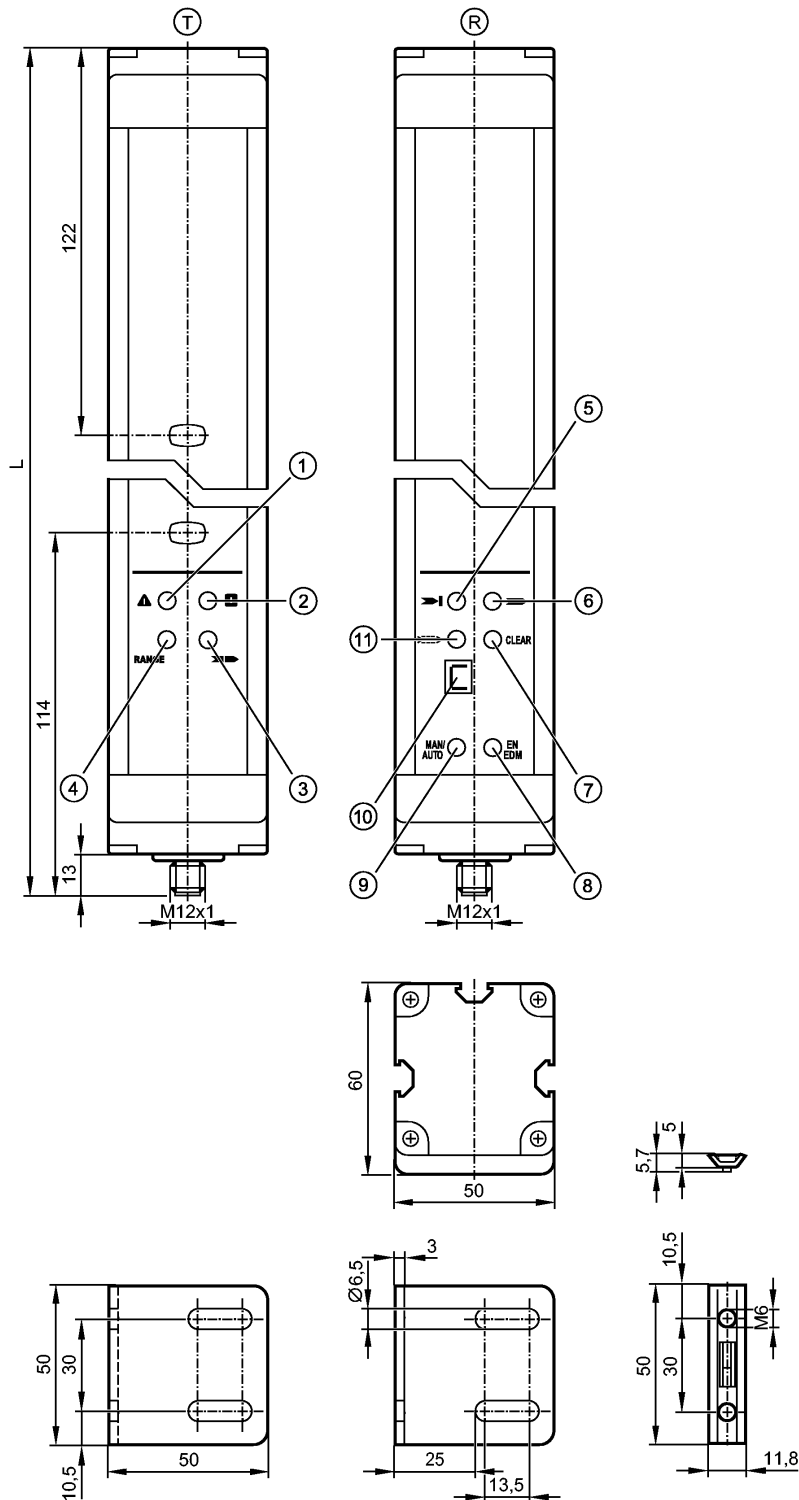


**OY951S**

OYA0510-02-4-60-P-1

Photoelectric sensors

Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.



- T: Transmitter
- R: Receiver
- 1: LED (red)
- 2: LED (green)
- 3: LED (yellow)
- 4: LED (orange)
- 5: LED (red)

- 6: LED (green)
- 7: LED (yellow)
- 8: LED (yellow)
- 9: LED (yellow)
- 10: display
- 11: LED (orange)

**OY951S**

OYA0510-02-4-60-P-1

Photoelectric sensors

Product characteristics		
Safety light grid		
Length L: 736 mm		
Connector		
Complies with the requirements:		
type 4 (IEC 61496-1)		
SIL 3 (IEC 61508)		
SILcl 3 (IEC 62061)		
PL e (EN ISO 13849-1)		
Electrical data		
Electrical design		DC PNP
Operating voltage	[V]	24 DC (19.2...28.8)
Current consumption		
- Transmitter	[mA]	125
- Receiver	[mA]	250
Type of light		Infrared light 950 nm
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 10
Outputs		
Outputs (OSSDs)		2 x PNP
Max. current load per output	[mA]	500 (24 V)
Short-circuit protection		yes
Range		
Protected area height	[mm]	510
Number of beams		2
Protected area width (range)	[m]	8...30 / 18...60
Reaction times		
Response time	[ms]	7
Environment		
Applications		Class C to EN 60654-1 weatherproof application
Ambient temperature	[°C]	-10...55
Max. relative air humidity	[%]	95
Protection		IP 65
Tests / approvals		
EMC		IEC 61496-1
Shock resistance		IEC 61496-1
Vibration resistance		IEC 61496-1
Safety classification		
Mission time TM	[h]	175200
Safety-related reliability PFHd	[1/h]	7.5E-09
MTTFd	[Years]	100
DC/CCF/Cat.		97.9 % / 80 % / 4
Mechanical data		
Length L	[mm]	736

## OY951S

OYA0510-02-4-60-P-1

Photoelectric sensors

Housing materials	housing: aluminium; window: PC
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Weight [kg]	5.15
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### Displays / operating elements

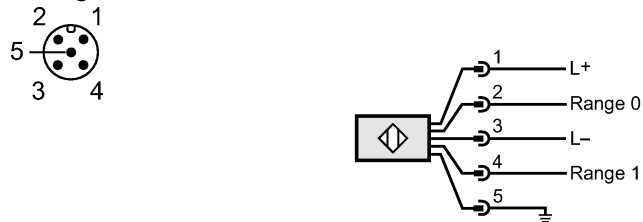
Display	LED yellow LED green LED Red LED orange
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### Electrical connection

Transmitter	
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Connection	M12 connector
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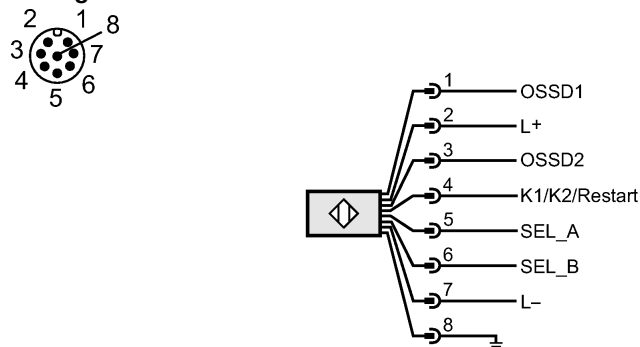
#### Wiring Transmitter



Receiver	
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Connection	M12 connector
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#### Wiring Receiver



Max. connection cable length [m]	100 *)
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### Accessories

Accessories (included)	4 mounting brackets; 4 mounting nuts
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### Remarks

Remarks	*) for wire cross-section 1 mm <sup>2</sup>
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Pack quantity [piece]	1
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ifm electronic gmbh • Friedrichstraße 1 • 45128 Essen — We reserve the right to make technical alterations without prior notice. — GB — OY951S — 07.09.2010

**Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.**