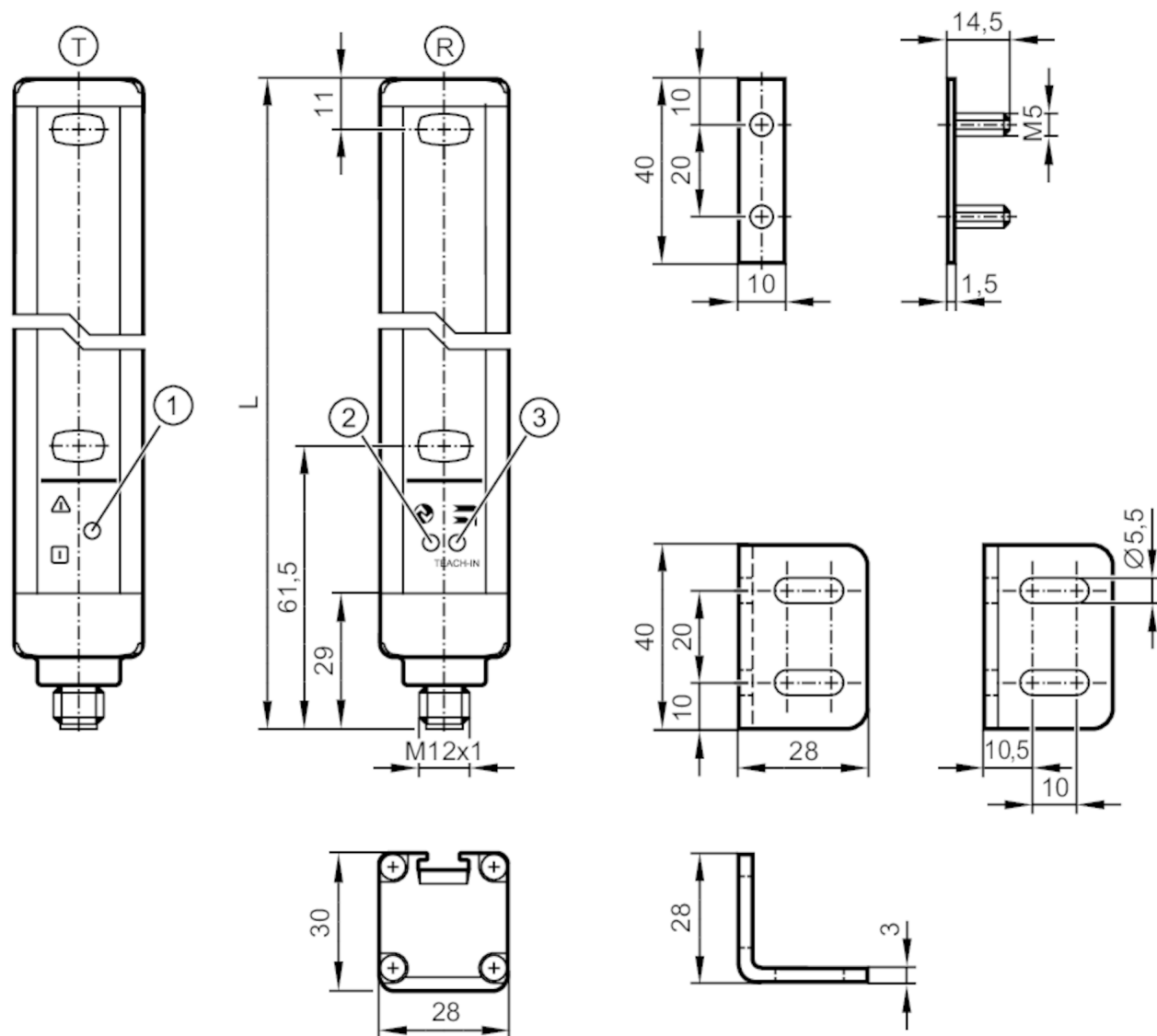


Measuring light grid

OYA2090-210-0-10-C-3-IO



- | | |
|---|-------------|
| | transmitter |
| 1 | LED green |
| 2 | LED red |
| | receiver |
| 3 | LED green |
| 4 | LED yellow |
| 5 | LED red |



Product characteristics

Type of light	Infrared light
Electrical design	PNP/NPN; (configurable)
Output function	normally open / closed; (configurable)
Protection	IP 65; IP 67

Electrical data

Operating voltage	[V]	19.2...28.8 DC
Protection class		III



Measuring light grid

OYA2090-210-0-10-C-3-IO

Reverse polarity protection	yes								
Max. power-on delay time [ms]	300								
Type of light	Infrared light								
Wave length [nm]	880								
Receiver									
Current consumption [mA]	100								
Transmitter									
Current consumption [mA]	15								
Inputs / outputs									
Number of inputs and outputs	Number of digital outputs: 1								
Outputs									
Electrical design	PNP/NPN; (configurable)								
Number of digital outputs	1								
Output function	normally open / closed; (configurable)								
Max. voltage drop switching output DC [V]	2								
Max. current load per output [mA]	100								
Switching frequency DC [Hz]	11								
Short-circuit protection	yes								
Overload protection	yes								
Monitoring range									
Number of beams	210								
Sensing field height [mm]	2090								
Sensing field width (low light intensity) [m]	0...2								
Sensing field width (high light intensity) [m]	1...10								
Distance between beams [mm]	10								
Software / programming									
Parameter setting options	hysteresis / window; second switch point; Switch-on and switch-off delay; switch-on operations; Teach function; light-on/dark-on mode								
Interfaces									
Communication interface	IO-Link								
Transmission type	COM2 (38,4 kBaud)								
IO-Link revision	1.1								
SDCI standard	IEC 61131-9								
Profiles	Common - I&D Function								
SIO mode	yes								
Required master port class	A								
Min. process cycle time [ms]	10.4								
IO-Link process data (cyclical)	<table> <tr> <th>Function</th><th>bit length</th></tr> <tr> <td>process value</td><td>80</td></tr> <tr> <td>device status</td><td>4</td></tr> <tr> <td>binary switching information</td><td>2</td></tr> </table>	Function	bit length	process value	80	device status	4	binary switching information	2
Function	bit length								
process value	80								
device status	4								
binary switching information	2								



Measuring light grid

OYA2090-210-0-10-C-3-IO

IO-Link functions (acyclical)	application specific tag; operating hours counter	
Supported DeviceIDs	Type of operation	DeviceID
	default	1403
Note	For further information please see the IODD PDF file at "Downloads"	

Operating conditions

Ambient temperature	[°C]	-10...55
Storage temperature	[°C]	-25...70
Protection		IP 65; IP 67
Max. immunity to extraneous light	[klx]	10

Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	3 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	3 V
	EN 55011	class A
Vibration resistance	EN 60068-2-6 Fc	(10-55) Hz 1 mm amplitude, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	30 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
MTTF	[years]	46

Mechanical data

Weight	[g]	6.5
Housing		rectangular
Dimensions	[mm]	2163 x 30 x 28
Material		housing: aluminum; front lens: PC
Length L	[mm]	2163

Displays / operating elements

Display	transmitter	2 LED
	receiver	3 LED

Accessories

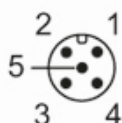
Items supplied	Assembly angle: 3	
	Slot nuts: 3	
	Nuts	

Remarks

Pack quantity	1 pcs.
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Electrical connection - receiver

Connector: 1 x M12; coding: A

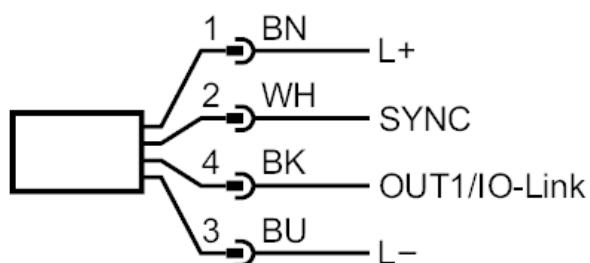




Measuring light grid

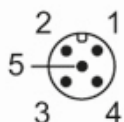
OYA2090-210-0-10-C-3-IO

Connection



Electrical connection - transmitter

Connector: 1 x M12; coding: A



Connection

