

OY5100



Measuring light grid

OYA0140-15-0-10-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



Measuring light grid

OYA0140-15-0-10-C-3-IO

Electrical data		
Operating voltage	[V]	19.2...28.8 DC
Protection class		III
Reverse polarity protection		yes
Max. power-on delay time	[ms]	300
Type of light		Infrared light
Wave length	[nm]	880
Receiver		
Current consumption	[mA]	85
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]	16
Short-circuit protection		yes
Overload protection		yes
Monitoring range		
Number of beams		15
Sensing field height	[mm]	140
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



Measuring light grid

OYA0140-15-0-10-C-3-IO

Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor: Device Identification; Multi-channel, two setpoint switching sensor, type 0 Generic Profiled Sensor; Process Data Variable; Device Diagnosis; Teach Channel	
SIO mode	yes	
Required master port class	A	
Min. process cycle time [ms]	10	
IO-Link process data (cyclical)	Function	bit length
	process value	80
	device status	4
	binary switching information	2
IO-Link functions (acyclical)	application specific tag; operating hours counter	
Supported DeviceIDs	Type of operation	DeviceID
	default	1399
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]	389	
Mechanical data		
Weight [g]	1079.1	
Housing	rectangular	
Dimensions [mm]	213 x 28 x 30	
Material	Housing: aluminum; front lens: PC	
Length L [mm]	213	
Displays / operating elements		
Display	transmitter	2 LED
	receiver	3 LED

OY5100



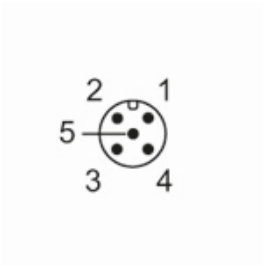
Measuring light grid

OYA0140-15-0-10-C-3-IO

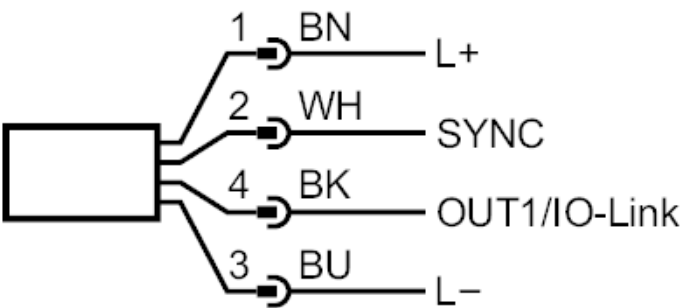
Accessories	
Items supplied	Assembly angle: 2
	Slot nuts: 2
	Nuts
Remarks	
Pack quantity	1 pcs.

Electrical connection - receiver

Connector: 1 x M12

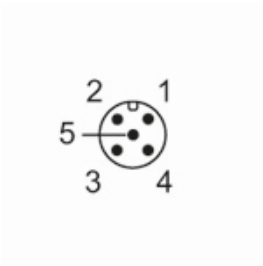


Connection



Electrical connection - transmitter

Connector: 1 x M12





Measuring light grid

OYA0140-15-0-10-C-3-IO

Connection

