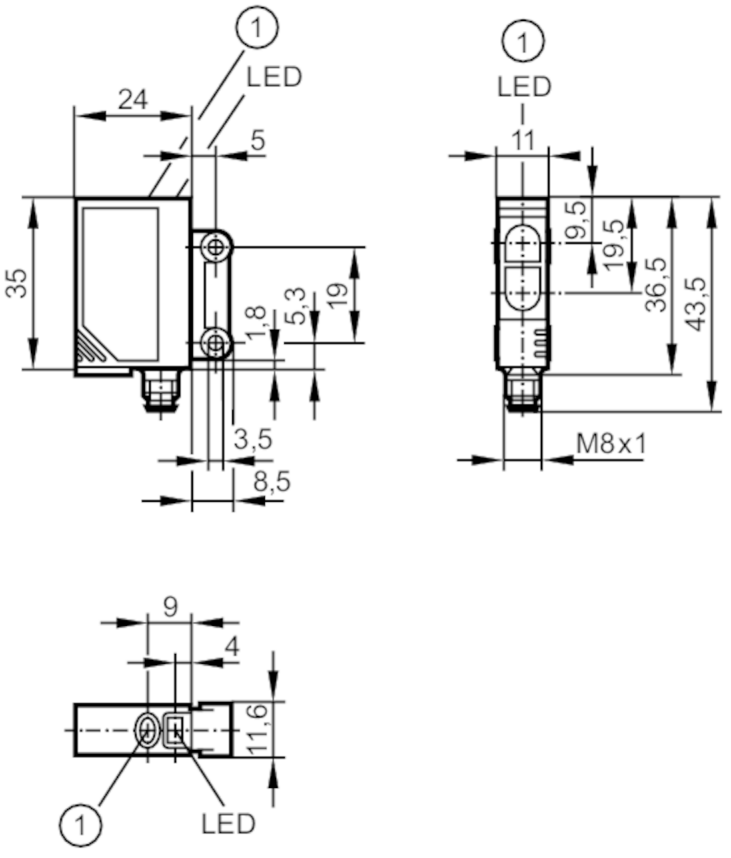
OJ5148

Diffuse reflection sensors with background suppression

OJH-FPKG/SO/AS



1 pushbutton
Receiver in upper lens
transmitter in lower lens

Product characteristics		
Type of light		red light
Housing		rectangular
Application		
System		Background suppression
Function principle		Diffuse reflection sensor
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	25
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	660
Outputs		
Electrical design		PNP
Output function		light-on/dark-on mode; (programmable)

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Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	200
Switching frequency DC	[Hz]	1000
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Monitoring range		
Range	[mm]	15...400; (white paper 200 x 200 mm 90 % remission)
Range adjustable		yes
Max. light spot diameter	[mm]	18
Light spot dimensions refer to		Range
Background suppression available		yes
Operating conditions		
Ambient temperature	[°C]	-25...60
Protection		IP 67
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[years]	556
Mechanical data		
Weight	[g]	34.9
Housing		rectangular
Dimensions	[mm]	35 x 11 x 24
Material		housing: ABS; LED window: SEPS; pushbutton: SEPS
Lens material		PMMA
Lens alignment		Side sensing
Displays / operating elements		
Display		Switching status: 1 x LED, yellow
		Power: 1 x LED, green
Electronic lock		yes
Accessories		
Items supplied		screws: 2
		spring washers: 2
		Nuts: 2
Remarks		
Remarks		cULus - Class 2 source required
Pack quantity		1 pcs.

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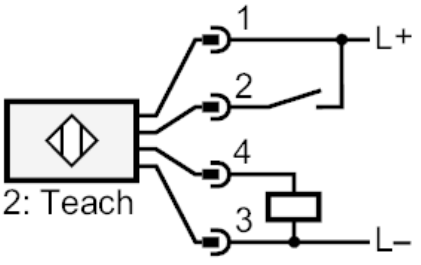
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Electrical connection

Connector: 1 x M8; coding: A

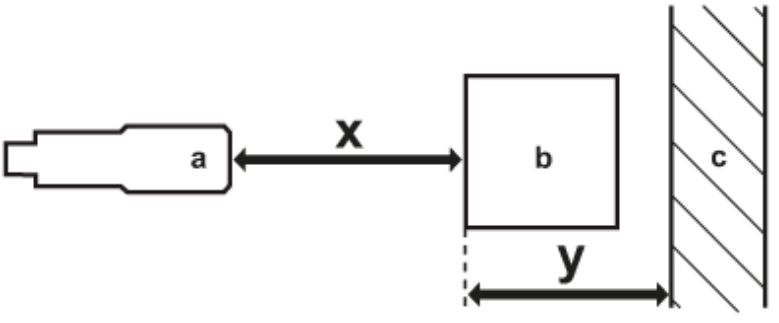


Connection



2	Teach

Diagrams and graphs



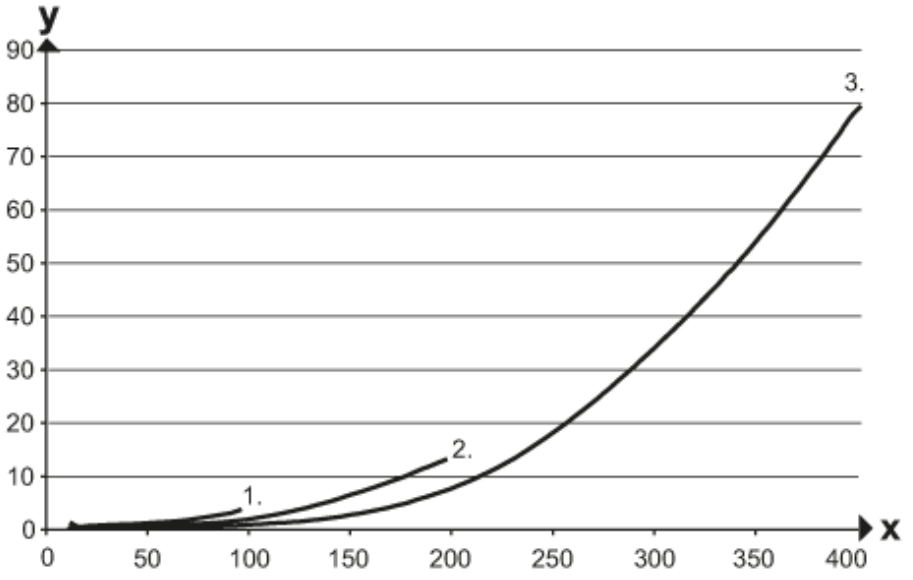
a: sensor
b: object
c: background
x: distance sensor/object [mm]
y: min. distance object/background [mm]

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Background suppression chart



x: distance sensor/object [mm]

y: min. distance object/background [mm]

1 = object black (6 % remission) , Background white (90 % remission)

2 = object grey (18 % remission) , Background white (90 % remission)

3 = object white (90 % remission) , Background white (90 % remission)