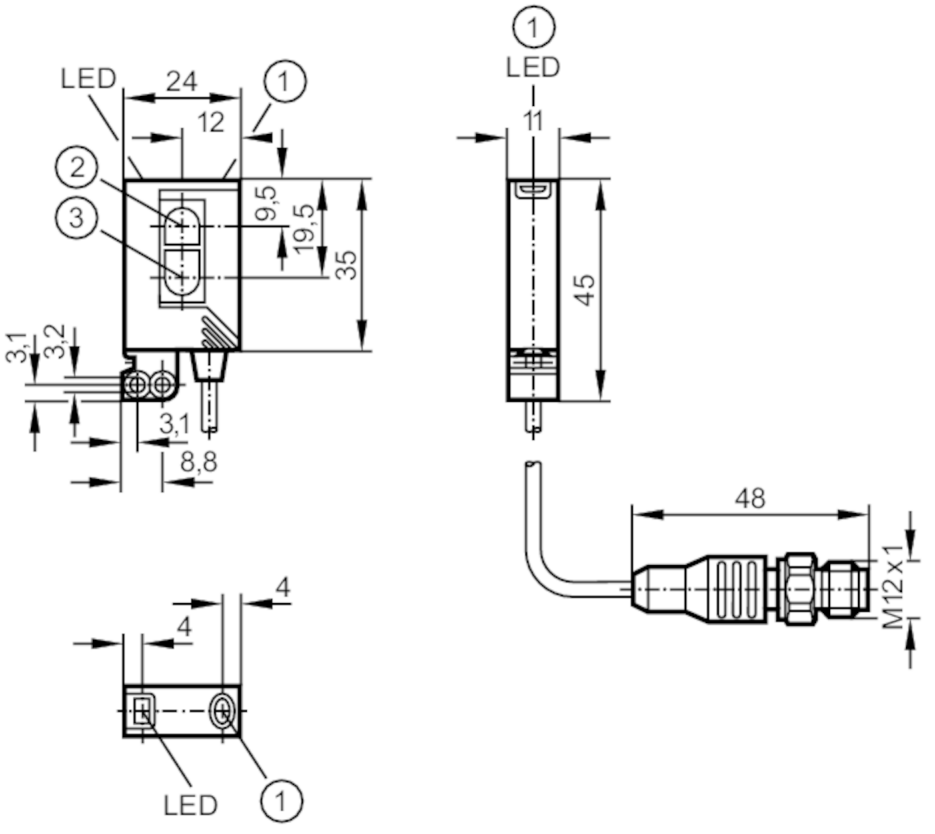
OJ5068

Diffuse reflection sensor with background suppression

OJH-FPKG/FO/0,15M/US



1 pushbutton
2 receiver
3 transmitter

Product characteristics		
Type of light		red light
Housing		rectangular
Application		
Special feature		Gold-plated contacts; 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

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Output function		light-on/dark-on mode; (programmable)
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		pulsed
Overload protection		yes
Detection zone		
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]	49.9
Housing		rectangular
Dimensions	[mm]	35 x 24 x 11
Materials		housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material		PMMA
Lens alignment		front lens
Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green
Electronic lock		yes
Accessories		
Items supplied		Basic clip: 1, E20964
		screws: 2 x M3 x 16
		spring washers: 2
		Nuts: 2
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.

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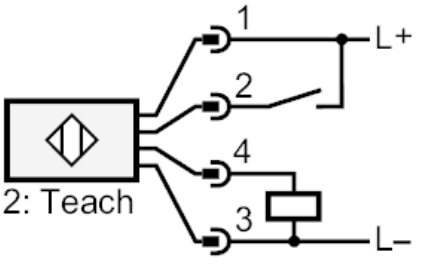
Electrical connection

Cable: 0.15 m, PUR

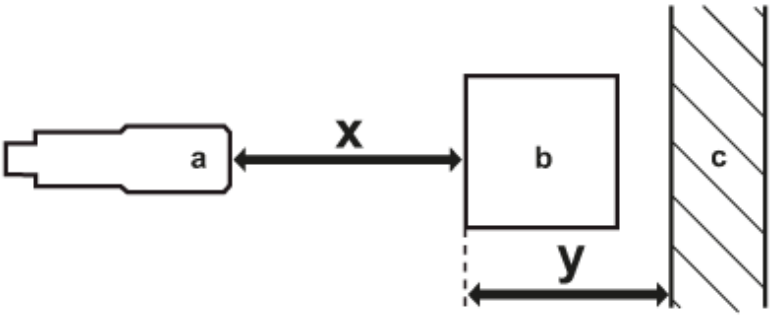
Connector: 1 x M12; coding: A; Moulded body: PUR; Locking: brass; Contacts: gold-plated

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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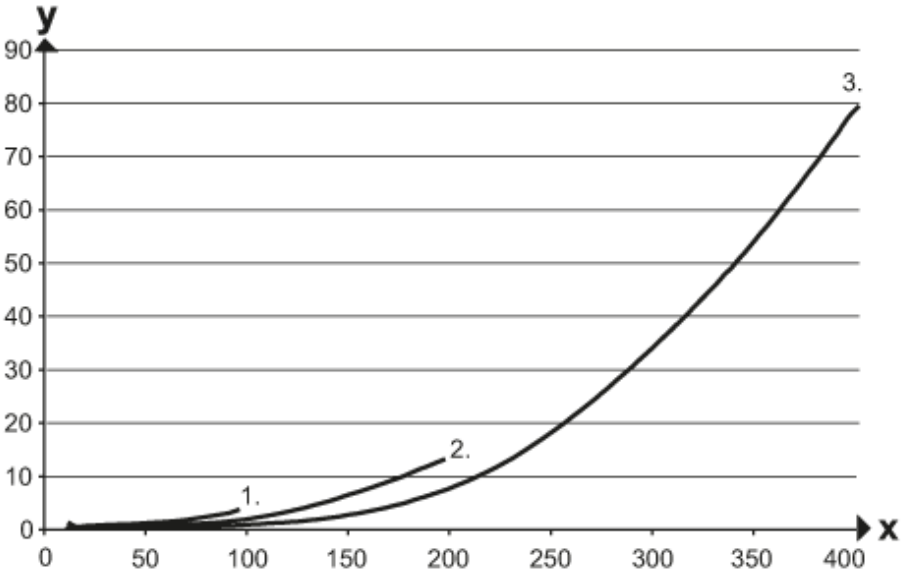
accuracy graph



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)