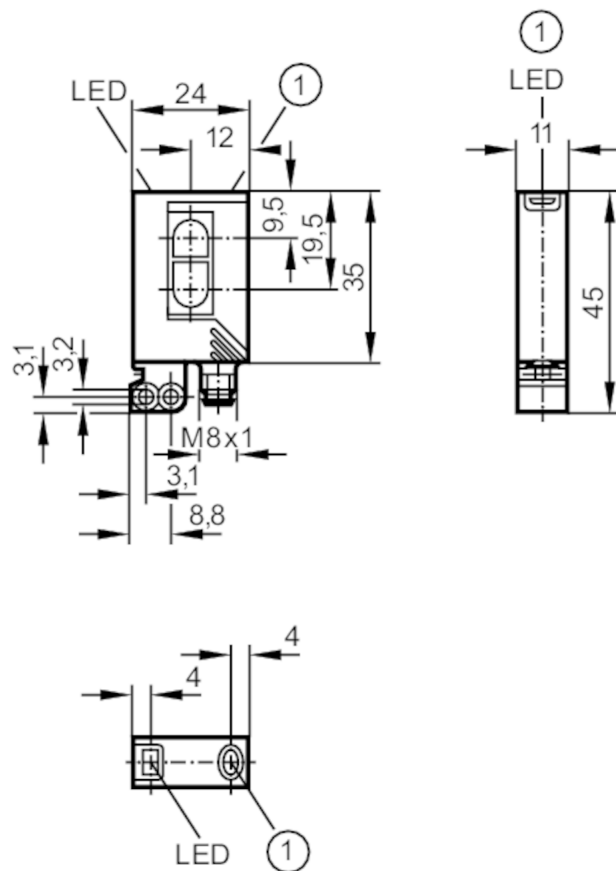




Laser diffuse reflection sensor

OJHLFPKG/FO/AS



- 1 pushbutton receiver in upper lens transmitter in lower lens



Product characteristics

Type of light	red light
Laser protection class	1
Housing	rectangular
Dimensions [mm]	35 x 24 x 11

Application

Special feature	Background suppression
Function principle	Diffuse reflection sensor

OJ5052



Laser diffuse reflection sensor

OJHLFPKG/FO/AS

Electrical data		
Operating voltage [V]	10...30 DC	
Current consumption [mA]	13	
Protection class	III	
Reverse polarity protection	yes	
Type of light	red light	
Wave length [nm]	650	
Typ. lifetime [h]	50000	
Outputs		
Electrical design	PNP	
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...200; (white paper 200 x 200 mm 90% remission)	
Range adjustable	yes	
Diameter of the smallest detectable object [mm]	2	
Max. light spot width [mm]	2	
Max. light spot height [mm]	1	
Background suppression available	yes	
Operating conditions		
Ambient temperature [°C]	-10...60	
Protection	IP 67	
Tests / approvals		
EMC	EN 60947-5-2	
Laser protection class	1	
Notes on laser protection	Caution:	laser light
	laser class:	1
		EN / IEC60825-1:2007
		EN / IEC60825-1:2014
MTTF [years]	501	
	Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.	



Laser diffuse reflection sensor

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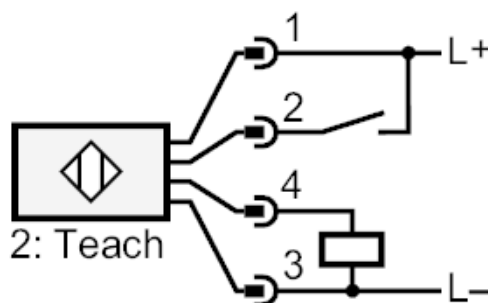
Mechanical data		
Weight	[g]	40.7
Housing		rectangular
Dimensions	[mm]	35 x 24 x 11
Materials		housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material		PMMA
Lens alignment		front lens
Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green
Electronic lock		yes
Accessories		
Accessories (supplied)		Basic clip: 1 x, E20964
		screws: 2 x x M3 x 16
		spring washers: 2 x
		Nuts: 2 x
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.

Electrical connection

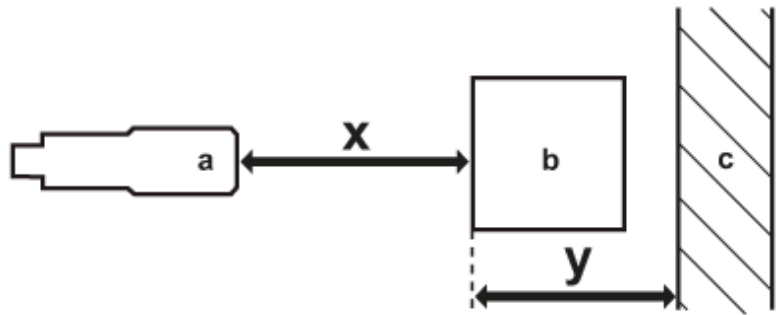
Connector: 1 x M8



Connection

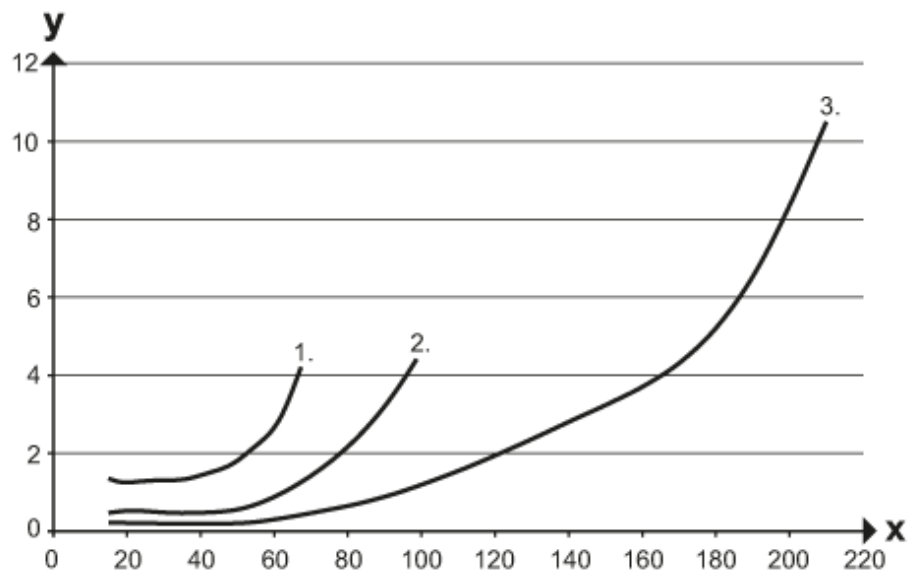


Diagrams and graphs



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

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)