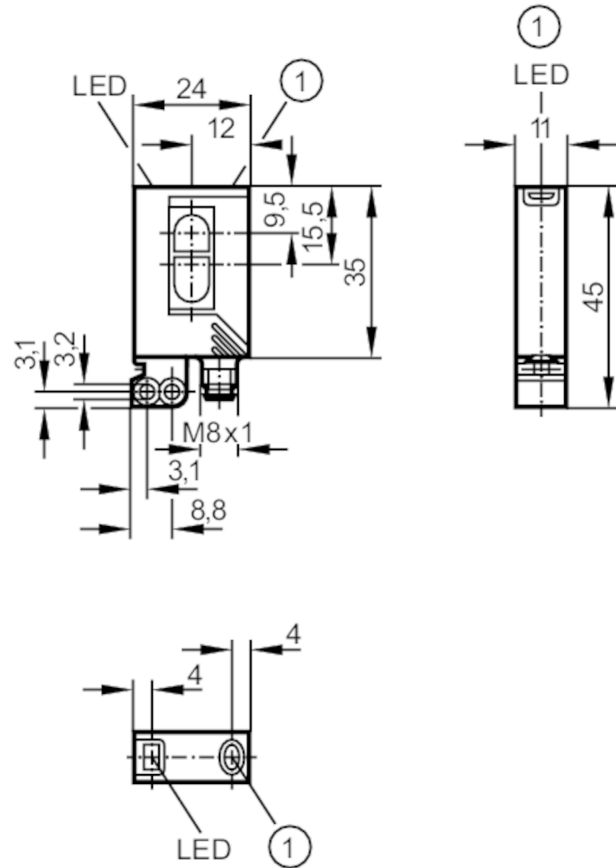




Laser diffuse reflection sensor

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

OJ5056



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]	7...150; (white paper 200 x 200 mm 90% remission)	
Range adjustable	yes	
Diameter of the smallest detectable object [mm]	0.8	
Max. light spot diameter [mm]	0.8	
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 class:	laser light 1
		EN / IEC60825-1:2007
		EN / IEC60825-1:2014
		Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.
MTTF [years]	501	



Laser diffuse reflection sensor

OJHLFPKG/FO/AS

Mechanical data

Weight	[g]	40.8
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

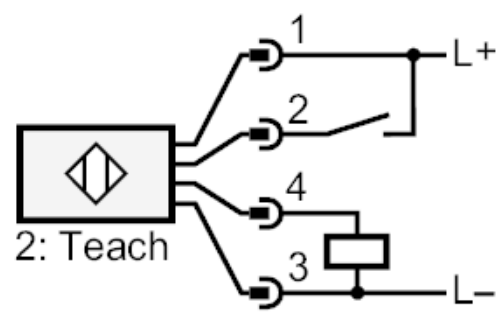
Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M8

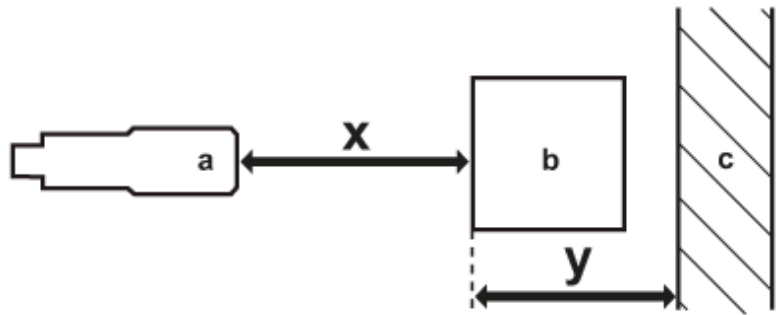


Connection



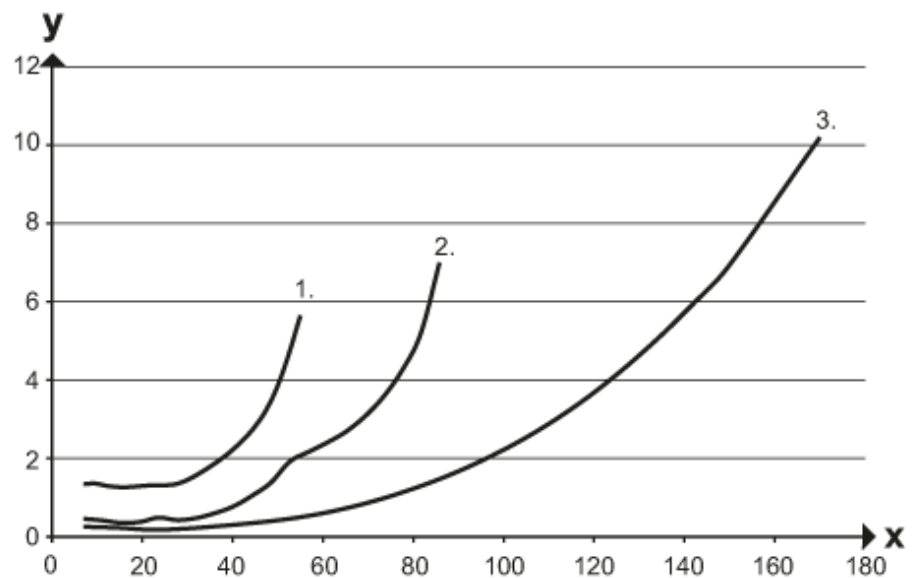
2 Teach

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)