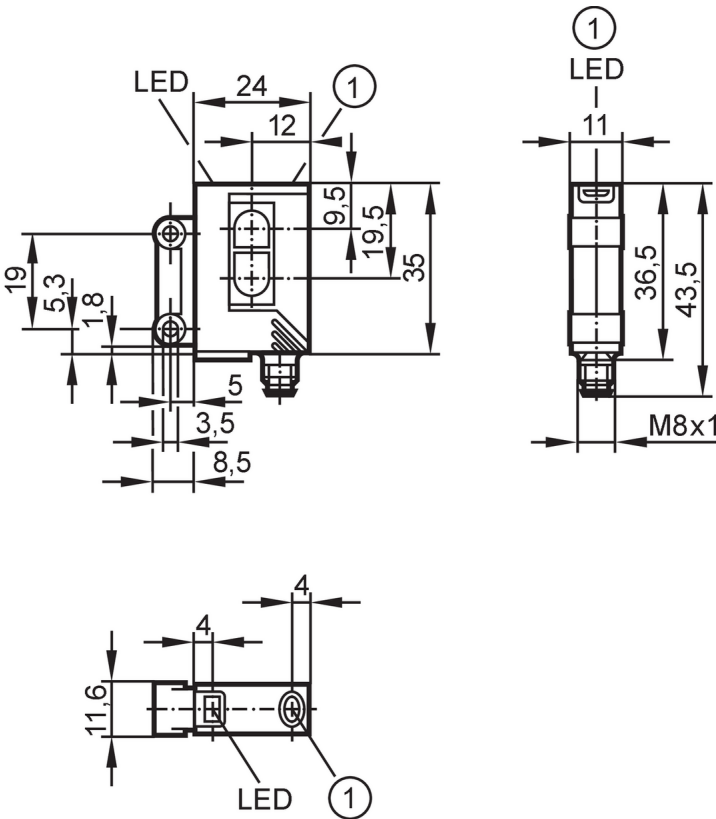




LASER diffuse reflection sensor

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	
Application		
Special feature	Background suppression	
Function principle	Diffuse reflection sensor	
Application	For applications in robotics, assembly and handling technology	
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)	



LASER diffuse reflection sensor

OJHLFPKG/FO/AS

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...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
		Complies with 21 CFR 1040.10 except for conformance with IEC 60825-1 Ed. 3, as described in Laser Notice No. 56, dated May 8, 2019.
MTTF	[years]	501
Mechanical data		
Weight	[g]	28.6
Housing		rectangular
Dimensions	[mm]	35 x 24 x 11
Material		housing: ABS; LED window: SEPS; pushbutton: SEPS
Lens material		front lens:PMMA
Lens alignment		Front sensing
Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green
Electronic lock		yes

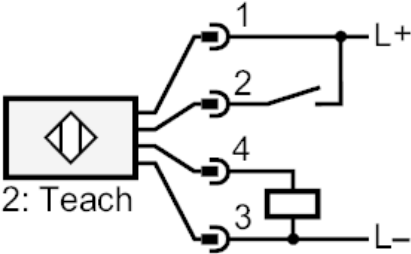


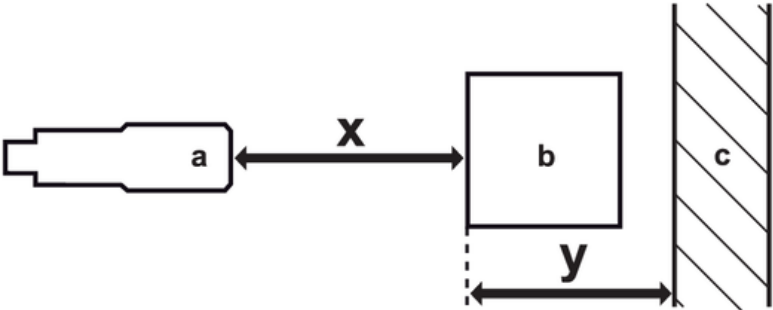
LASER diffuse reflection sensor

OJHLFPKG/FO/AS

Accessories	
Items supplied	screws: 2
	spring washers: 2
	Nuts: 2
Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.

Electrical connection	
Connector: 1 x M8; coding: A; Contacts: 4	
	

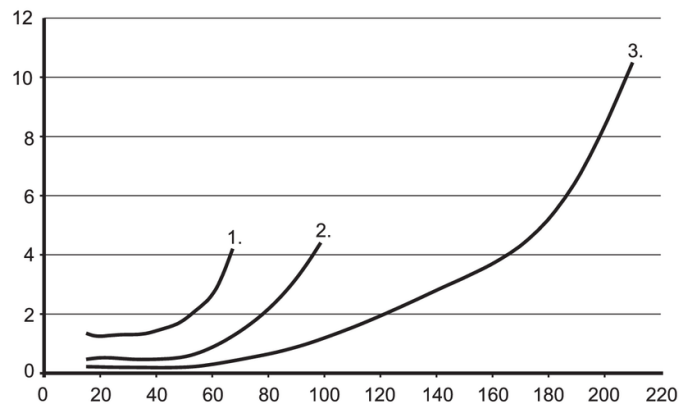
Connection	
	
2	Teach

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

**LASER diffuse reflection sensor**

OJHLFPKG/FO/AS

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)