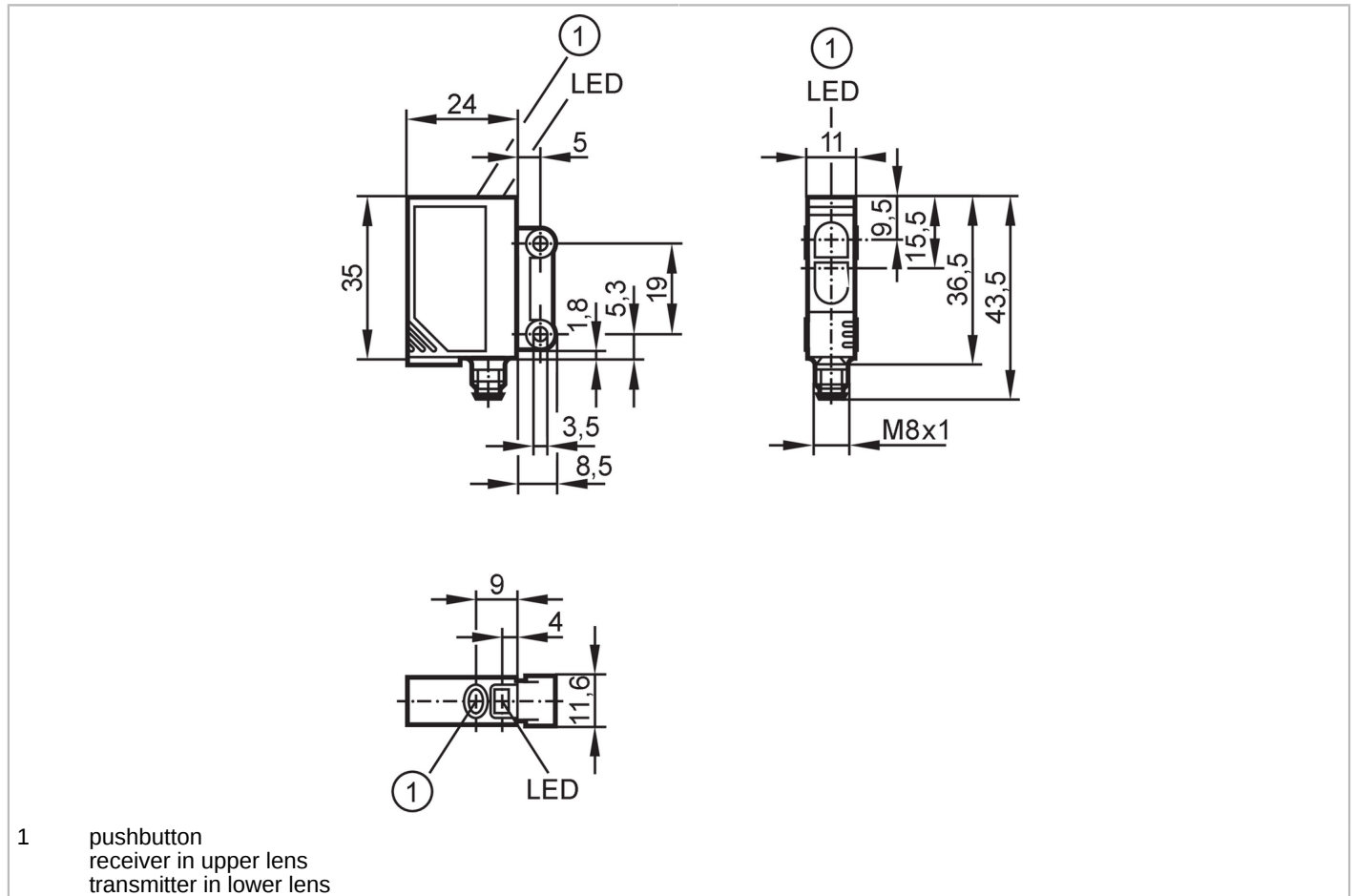




Laser diffuse reflection sensor

OJHLFPKG/SO/AS



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



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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]	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 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]	28.25	
Housing	rectangular	
Dimensions [mm]	35 x 11 x 24	
Materials	housing: ABS; LED window: SEPS; pushbutton: SEPS	
Lens material	front pane:PMMA	
Lens alignment	side lens	

Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green
Electronic lock	yes	

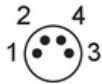


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Accessories	
Items supplied	screws: 2 spring washers: 2 Nuts: 2
Remarks	
Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.
Electrical connection	

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]

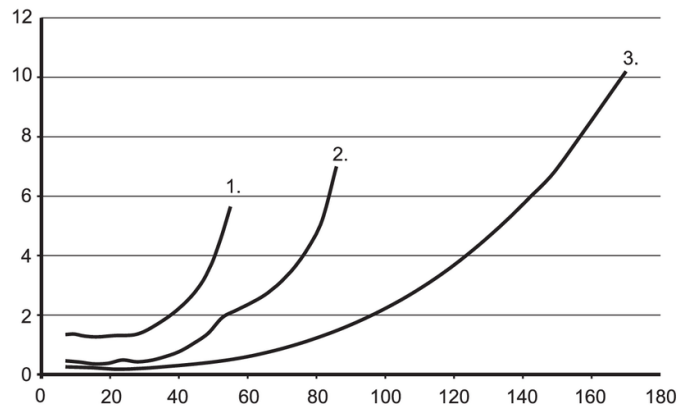
OJ5158



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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)