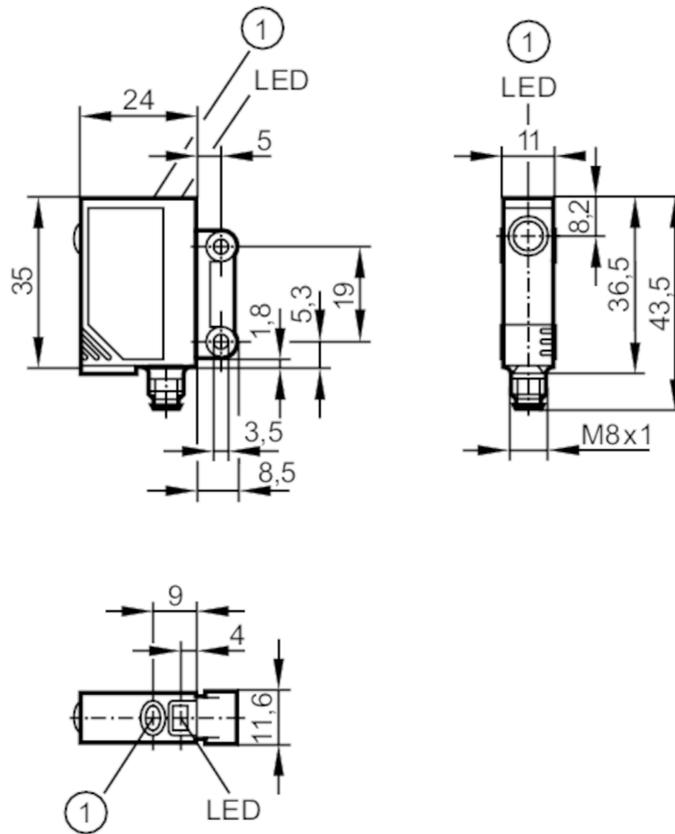# OJ5136

Retro-reflective LASER sensor

OJPLFPKG/SO/AS

1　　　pushbutton

Product characteristics

Type of light	red light
Laser protection class	1
Housing	rectangular

Application

System	polarization filter
Function principle	Retro-reflective sensor

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 15
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)

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Max. voltage drop switching output DC	[V]	2.5	
Permanent current rating of switching output DC	[mA]	200	
Switching frequency DC	[Hz]	2000	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	

Monitoring range			
Range referred to prismatic reflector	[m]	8; (Prismatic reflector 50 x 50 mm E20722)	
Range adjustable		yes	
Diameter of the smallest detectable object	[mm]	2.5; (0,1 m; 2,5 m: 4; 5 m: 8)	
Max. light spot diameter	[mm]	12	
Light spot dimensions refer to		at maximum range	
Polarization filter 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]	697	

Mechanical data			
Weight	[g]	28.1	
Housing		rectangular	
Dimensions	[mm]	35 x 11 x 24	
Material		housing: ABS; LED window: SEPS; pushbutton: SEPS	
Lens material		glass	
Lens alignment		Side sensing	

Displays / operating elements			
Display		Switching status	1 x LED, yellow
		Power	1 x LED, green
		Function	1 x LED, red
Electronic lock		yes	

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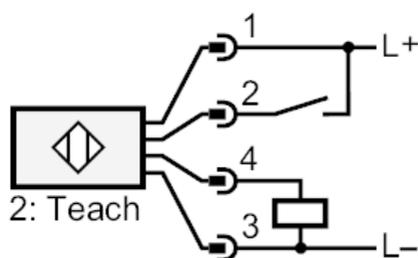| Accessories	
Items supplied	screws: 2
	spring washers: 2
	Nuts: 2

Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M8; coding: A

Connection

2   Teach

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Diagrams and graphs

excess gain graph