



Diffuse reflection sensor with background suppression

OJH-FPKG/FO/AS



- 1 pushbutton
receiver in upper lens
transmitter in lower lens



Product characteristics		
Type of light		red light
Housing		rectangular
Application		
Special feature		Background suppression
Function principle		Diffuse reflection sensor
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	25
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	660
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]	15...400; (white paper 200 x 200 mm 90% remission)	
Range adjustable	yes	
Max. light spot diameter [mm]	18	
Light spot dimensions refer to	Range	
Background suppression available	yes	
Operating conditions		
Ambient temperature [°C]	-25...60	
Protection	IP 67	
Tests / approvals		
EMC	EN 60947-5-2	
MTTF [years]	556	
Mechanical data		
Weight [g]	35	
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		
Items supplied	Basic clip: 1, E20964	
	screws: 2 x M3 x 16	
	spring washers: 2	
	Nuts: 2	
Remarks		
Remarks	operating voltage "supply class 2" according to cULus	
Pack quantity	1 pcs.	

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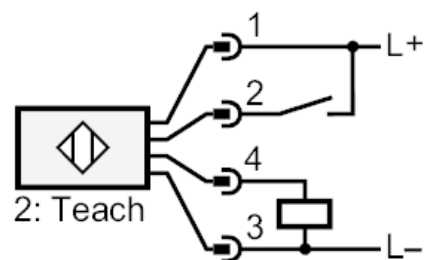
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Electrical connection

Connector: 1 x M8; coding: A

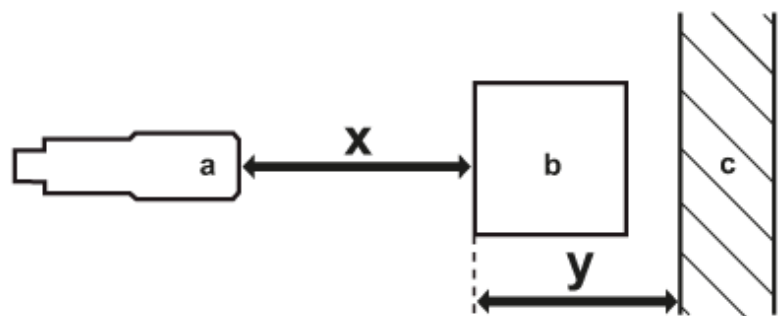


Connection



2 Teach

Diagrams and graphs



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



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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)