



Diffuse reflection sensors with background suppression

OJH-FPKG/FO/0,15M/US



- 1 pushbutton
- 2 receiver
- 3 transmitter



Product characteristics		
Type of light		red light
Housing		rectangular
Application		
System		gold-plated contacts; 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	yes (non-latching)	
Overload protection	yes	
Monitoring range		
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]	49.9	
Housing	rectangular	
Dimensions [mm]	35 x 24 x 11	
Material	housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS	
Lens material	PMMA	
Lens alignment	Front sensing	
Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	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	cULus - Class 2 source required	
Pack quantity	1 pcs.	



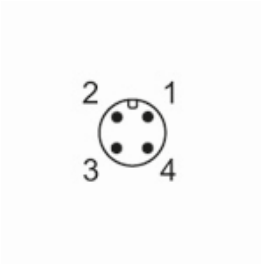
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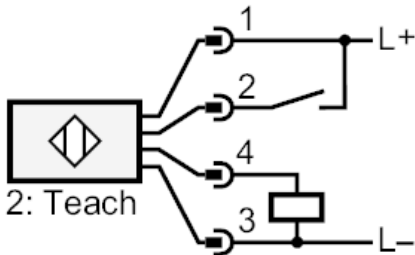
Electrical connection

Cable: 0.15 m, PUR

Connector: 1 x M12; coding: A; Moulded body: PUR; Locking: brass; Contacts: gold-plated

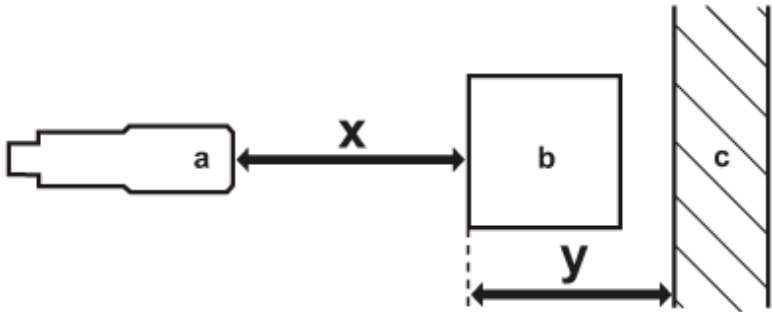


Connection



2 Teach

Diagrams and graphs



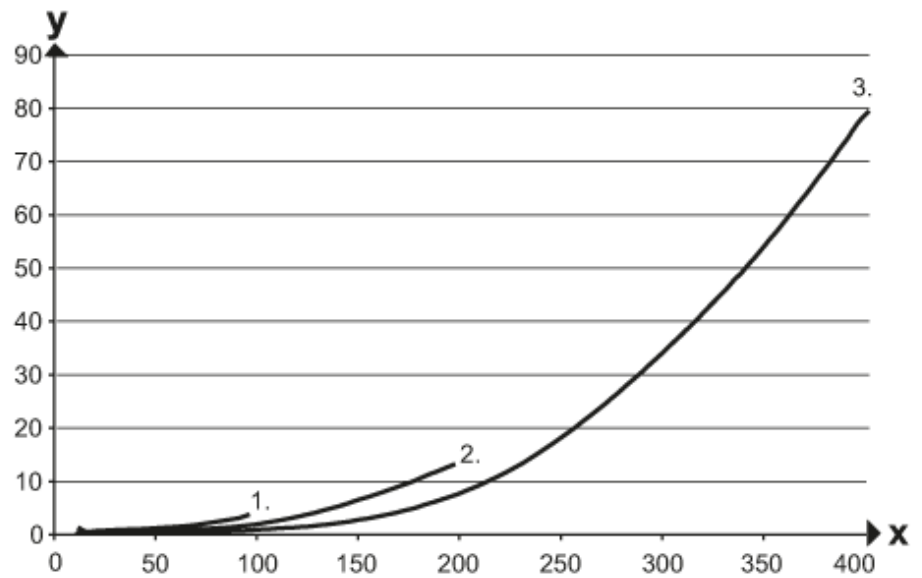
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



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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)