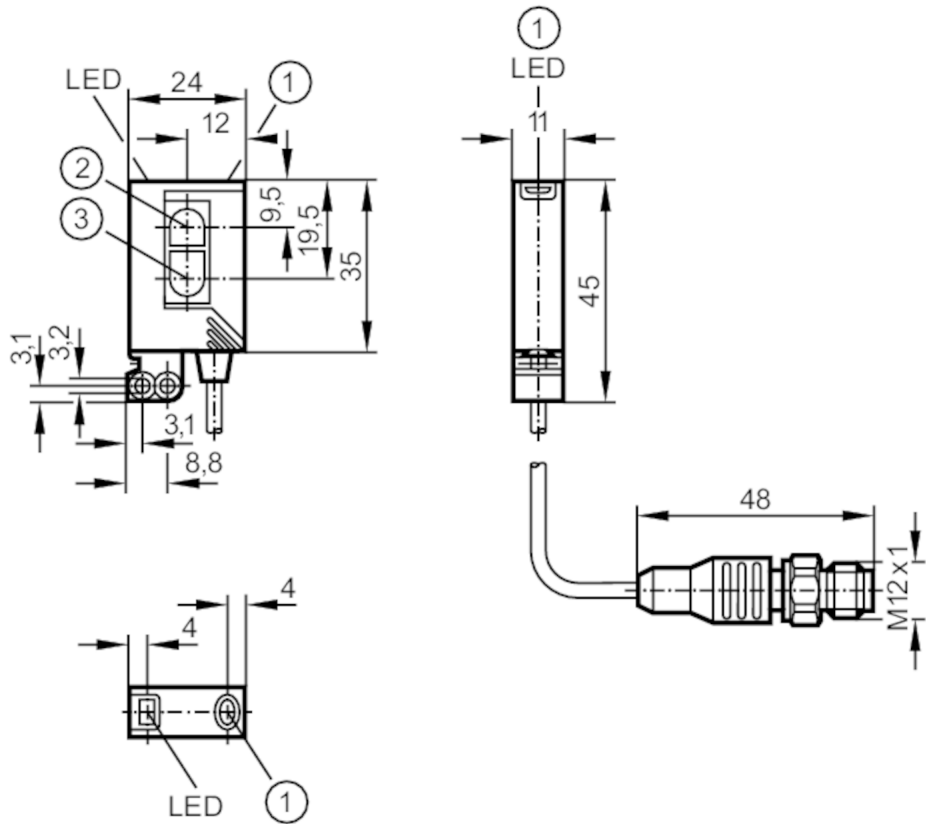




## Diffuse reflection sensors with background suppression

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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## Diffuse reflection sensors with background suppression

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

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.	



## Diffuse reflection sensors with background suppression

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

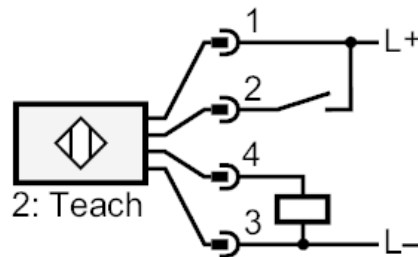
### Electrical connection

Cable: 0.15 m, PUR

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

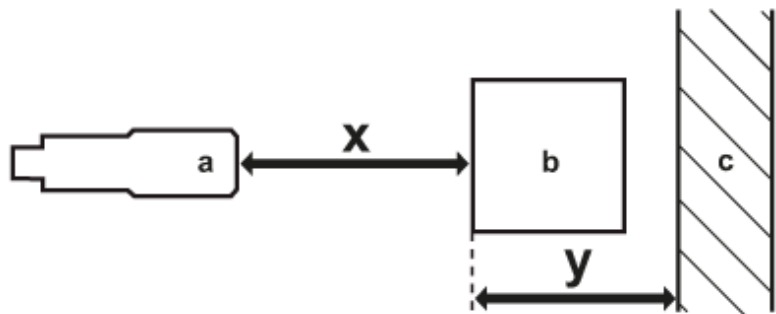


### Connection



2 Teach

### Diagrams and graphs



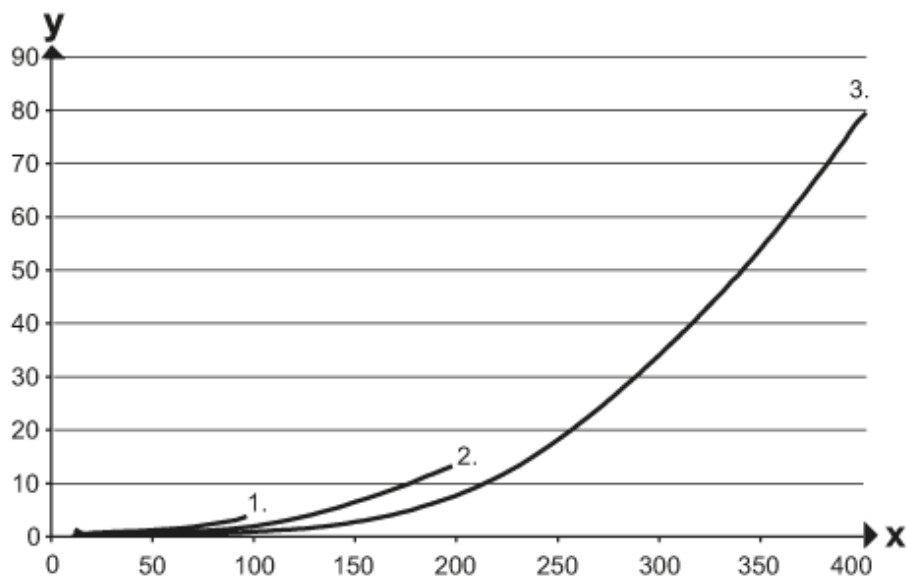
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



## Diffuse reflection sensors with background suppression

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

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)