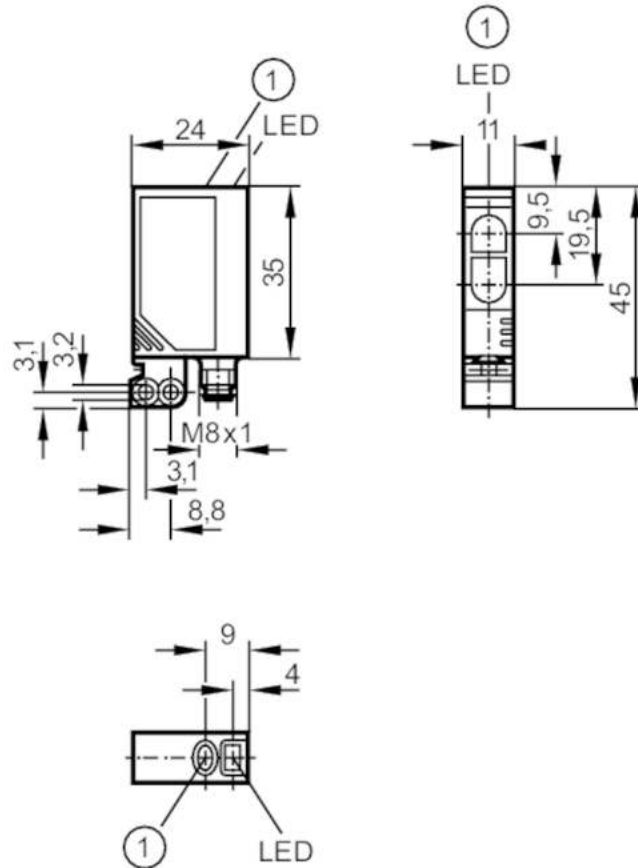




## Diffuse reflection sensor with background suppression

OJH-FPKG/SO/AS



1 pushbutton



### 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
Output function	light-on/dark-on mode; (programmable)



## Diffuse reflection sensor with background suppression

OJH-FPKG/SO/AS

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]	35.3
Housing		rectangular
Dimensions	[mm]	35 x 11 x 24
Materials		housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material		PMMA
Lens alignment		side 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.

## Diffuse reflection sensor with background suppression

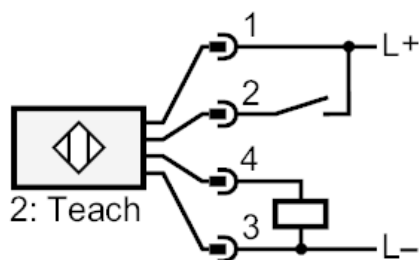
OJH-FPKG/SO/AS

### Electrical connection

Connector: 1 x M8; coding: A

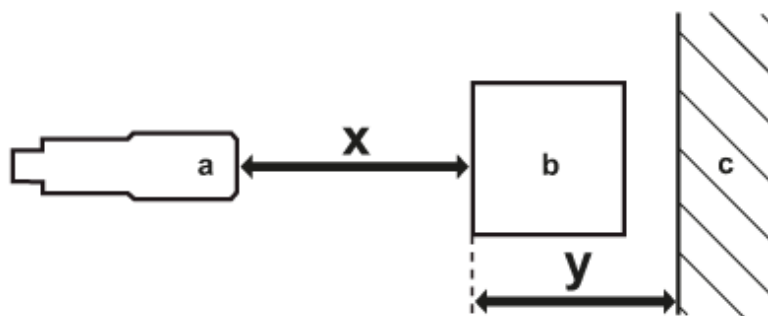


### Connection



2 Teach

### Diagrams and graphs



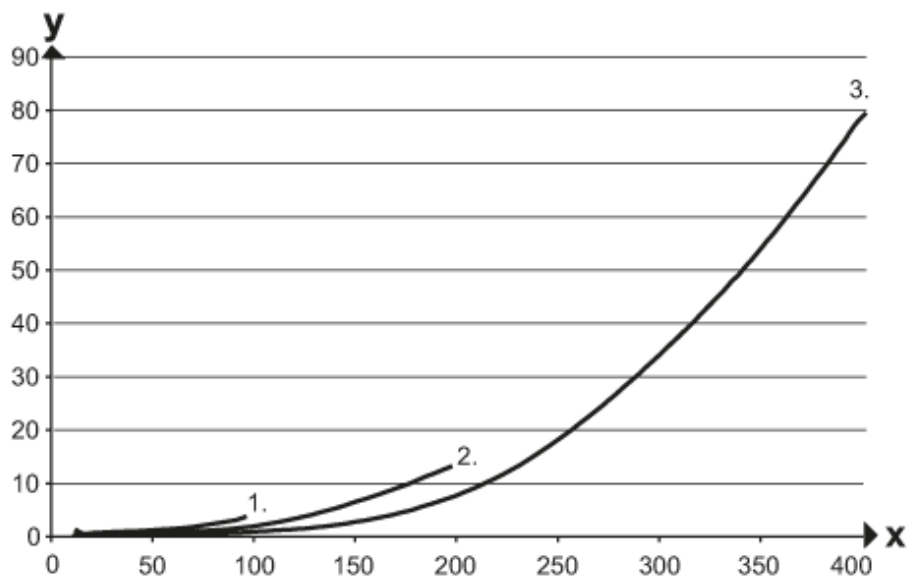
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



## Diffuse reflection sensor with background suppression

OJH-FPKG/SO/AS

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)