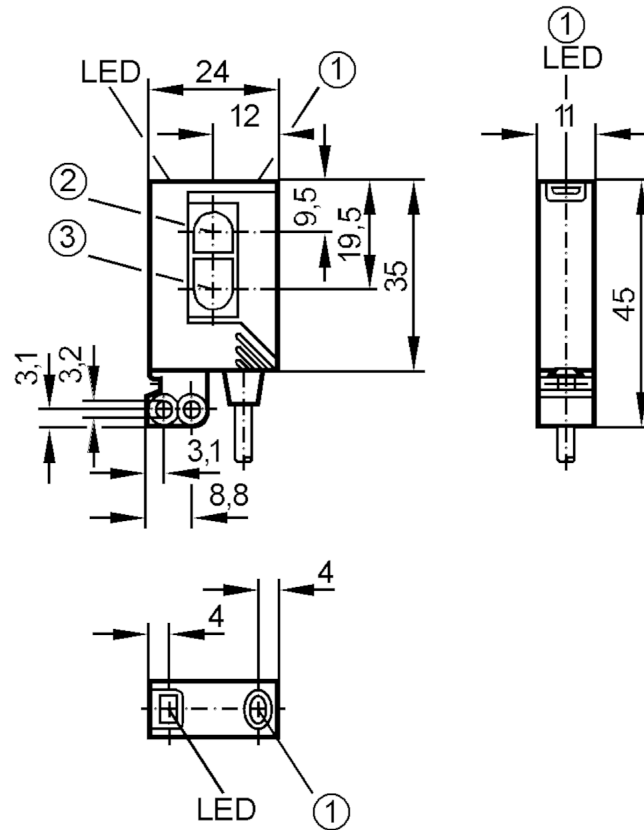




## Diffuse reflection sensor with background suppression

OJH-FPKG/FO/2M



- 1 pushbutton
- 2 receiver
- 3 transmitter



Product characteristics	
Type of light	red light
Housing	rectangular
Application	
Special feature	Background suppression
Function principle	Diffuse reflection sensor
Application	For applications in robotics, assembly and handling technology
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/FO/2M

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]	68.5
Housing		rectangular
Dimensions	[mm]	35 x 24 x 11
Materials		housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material		front pane: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 mm)
	spring washers: 2
	Nuts: 2

## Remarks

Pack quantity	1 pcs.
---------------	--------



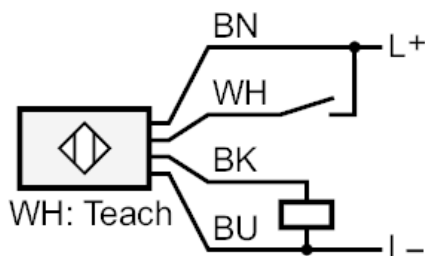
## Diffuse reflection sensor with background suppression

OJH-FPKG/FO/2M

### Electrical connection

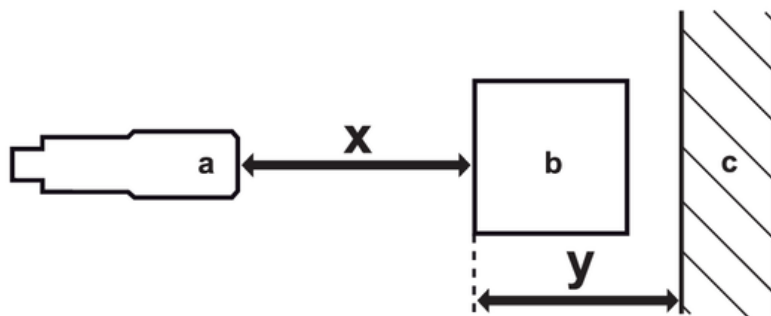
Cable: 2 m, PVC

### Connection



Core colours :  
 BK = black  
 BN = brown  
 BU = blue  
 WH = white

### Diagrams and graphs



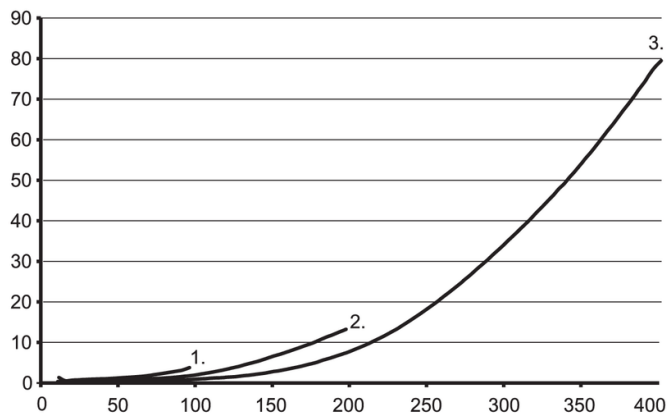
a: sensor  
 b: object  
 c: background  
 x: distance sensor/object [mm]  
 y: min. distance object/background [mm]



## Diffuse reflection sensor with background suppression

OJH-FPKG/FO/2M

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)