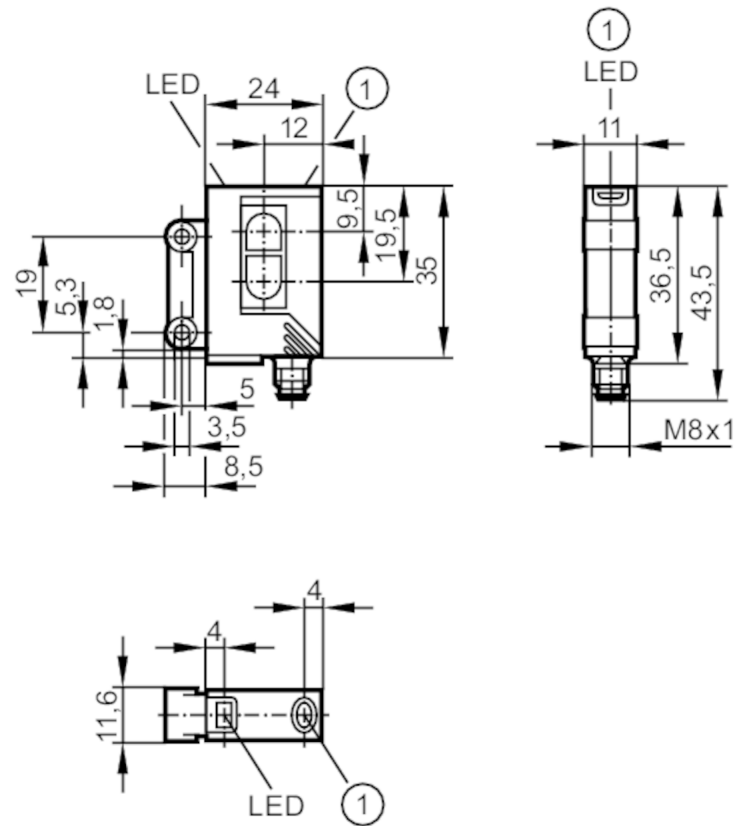




Laser diffuse reflection sensor

OJHLFPKG/FO/AS



- 1 pushbutton receiver in upper lens transmitter in lower lens



Product characteristics

| | |
|------------------------|--------------|
| Type of light | red light |
| Laser protection class | 1 |
| Housing | rectangular |
| Dimensions [mm] | 35 x 24 x 11 |

Application

| | |
|--------------------|---------------------------|
| Special feature | Background suppression |
| Function principle | Diffuse reflection sensor |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | 13 |
| Protection class | III |
| Reverse polarity protection | yes |
| Type of light | red light |
| Wave length [nm] | 650 |
| Typ. lifetime [h] | 50000 |



Laser diffuse reflection sensor

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| Outputs | | |
|---|------------------|---|
| Electrical design | | PNP |
| 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...200; (white paper 200 x 200 mm 90% remission) |
| Range adjustable | | yes |
| Diameter of the smallest detectable object | [mm] | 2 |
| Max. light spot width | [mm] | 2 |
| Max. light spot height | [mm] | 1 |
| Background suppression available | | yes |
| Operating conditions | | |
| Ambient temperature | [°C] | -10...60 |
| Protection | | IP 67 |
| Tests / approvals | | |
| EMC | | EN 60947-5-2 |
| Laser protection class | | 1 |
| Notes on laser protection | Caution: | laser light |
| | laser class: | 1 |
| | | EN / IEC60825-1:2007 |
| | | EN / IEC60825-1:2014 |
| | | Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007. |
| MTTF | [years] | 501 |
| Mechanical data | | |
| Weight | [g] | 41 |
| Housing | | rectangular |
| Dimensions | [mm] | 35 x 24 x 11 |
| Materials | | housing: ABS; 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 |

OJ5152



Laser diffuse reflection sensor

OJHLFPKG/FO/AS

Accessories

| | |
|----------------|-------------------|
| Items supplied | screws: 2 |
| | spring washers: 2 |
| | Nuts: 2 |

Remarks

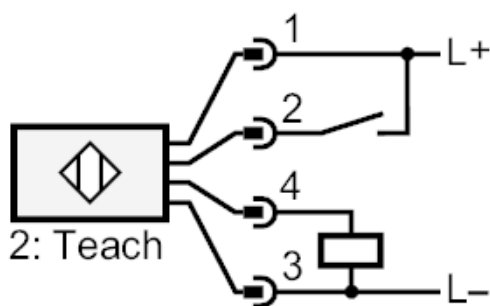
| | |
|---------------|---|
| Remarks | operating voltage "supply class 2" according to cULus |
| Pack quantity | 1 pcs. |

Electrical connection

Connector: 1 x M8

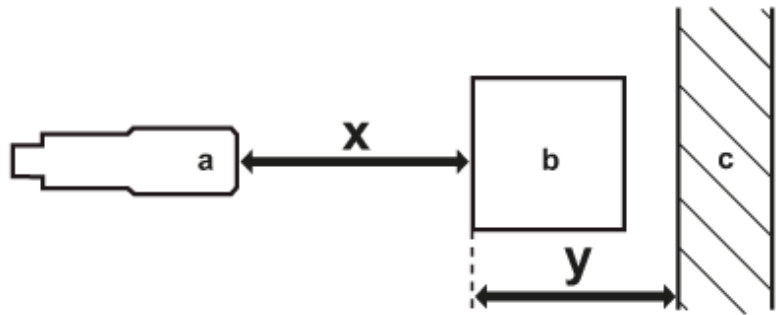


Connection



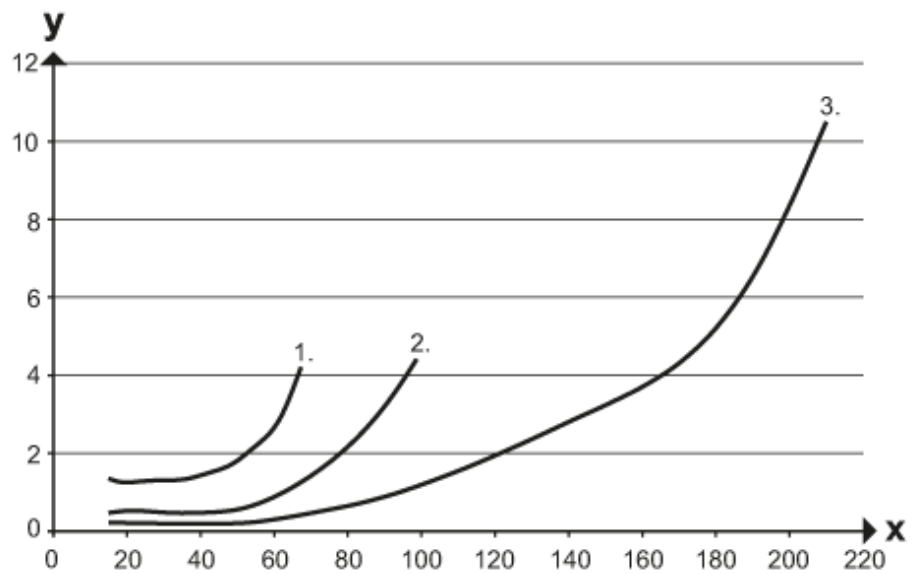
2 Teach

Diagrams and graphs



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

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)