

## Diffuse reflection sensor with background suppression

OGH-FPKG/US-100

Article no longer available - archive entry

Alternative articles: OGH200 or OGH500

When selecting an alternative article and accessories please note that technical data may differ!



1 pushbutton

## Product characteristics

|               |               |
|---------------|---------------|
| Type of light | red light     |
| Housing       | threaded type |

## Application

|                    |                                              |
|--------------------|----------------------------------------------|
| Special feature    | Gold-plated contacts; Background suppression |
| Function principle | Diffuse reflection sensor                    |

## Electrical data

|                             |      |            |
|-----------------------------|------|------------|
| Operating voltage           | [V]  | 10...30 DC |
| Current consumption         | [mA] | < 60       |
| Protection class            |      | II         |
| Reverse polarity protection |      | yes        |
| Type of light               |      | red light  |
| Wave length                 | [nm] | 660        |

## Outputs

|                                                 |      |                                          |
|-------------------------------------------------|------|------------------------------------------|
| Electrical design                               |      | PNP                                      |
| Output function                                 |      | light-on/dark-on mode; (parameterisable) |
| Max. voltage drop switching output DC           | [V]  | 2.5                                      |
| Permanent current rating of switching output DC | [mA] | 150; (200 (...60 °C))                    |
| Switching frequency DC                          | [Hz] | 250                                      |
| Short-circuit protection                        |      | yes                                      |
| Type of short-circuit protection                |      | pulsed                                   |
| Overload protection                             |      | yes                                      |

## Detection zone

|                  |      |                                                    |
|------------------|------|----------------------------------------------------|
| Range            | [mm] | 30...130; (white paper 200 x 200 mm 90% remission) |
| Range adjustable |      | yes                                                |



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|                                  |                  |
|----------------------------------|------------------|
| Max. light spot diameter [mm]    | 12               |
| Light spot dimensions refer to   | at maximum range |
| Background suppression available | yes              |

## Operating conditions

|                          |          |
|--------------------------|----------|
| Ambient temperature [°C] | -25...80 |
| Protection               | IP 67    |

## Tests / approvals

|     |              |         |
|-----|--------------|---------|
| EMC | EN 60947-5-2 |         |
|     | EN 55011     | class B |

## Mechanical data

|                    |                    |
|--------------------|--------------------|
| Housing            | threaded type      |
| Dimensions [mm]    | M18 x 1 / L = 70.5 |
| Thread designation | M18 x 1            |
| Materials          | PBT                |
| Lens material      | PMMA               |

## Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | switching status | 1 x LED, yellow |
|         | operation        | 1 x LED, green  |

## Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

## Remarks

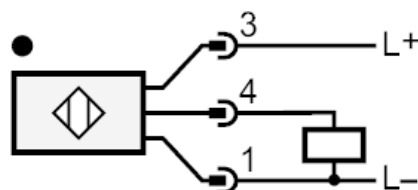
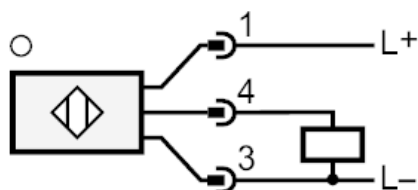
|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

## Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



## Connection





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## Diagrams and graphs

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)

Note : range % = setting in % of the range