

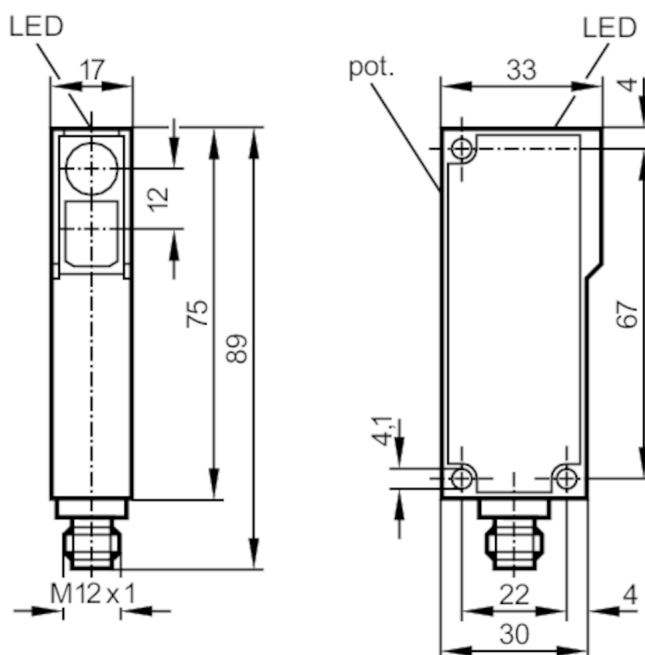
## Diffuse reflection sensor with background suppression

OTH-CPKG/US-100-DPX

Article no longer available - archive entry

Alternative articles: O5H200 or O5H201 or O5H202 or O5H500 or O5H501

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



receiver in lower lens  
transmitter in upper lens

## 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; ((24 V)) |
| Protection class            |      | II           |
| Reverse polarity protection |      | yes          |
| Type of light               |      | red light    |
| Wave length                 | [nm] | 660          |

## Outputs

|                                                 |      |               |
|-------------------------------------------------|------|---------------|
| Electrical design                               |      | PNP           |
| Output function                                 |      | complementary |
| Max. voltage drop switching output DC           | [V]  | 2.9           |
| Permanent current rating of switching output DC | [mA] | 100           |



## Diffuse reflection sensor with background suppression

OTH-CPKG/US-100-DPX

|                                  |      |        |
|----------------------------------|------|--------|
| Switching frequency DC           | [Hz] | 700    |
| Short-circuit protection         |      | yes    |
| Type of short-circuit protection |      | pulsed |
| Overload protection              |      | yes    |

## Detection zone

|                                  |      |                                      |
|----------------------------------|------|--------------------------------------|
| Range                            | [mm] | 50...600; (white paper 200 x 200 mm) |
| Range adjustable                 |      | yes                                  |
| Max. light spot diameter         | [mm] | 30                                   |
| Light spot dimensions refer to   |      | at maximum range                     |
| Background suppression available |      | yes                                  |

## Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -40...60 |
| Protection          |      | IP 65    |

## Tests / approvals

|     |              |  |
|-----|--------------|--|
| EMC | EN 60947-5-2 |  |
|-----|--------------|--|

## Mechanical data

|               |      |              |
|---------------|------|--------------|
| Housing       |      | rectangular  |
| Dimensions    | [mm] | 75 x 17 x 33 |
| Materials     |      | Polycarbonat |
| Lens material |      | PMMA         |

## Displays / operating elements

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

## Accessories

|                |                          |
|----------------|--------------------------|
| Items supplied | Angle bracket: 1, E20461 |
|                | screwdrivers             |

## Remarks

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

## Electrical connection

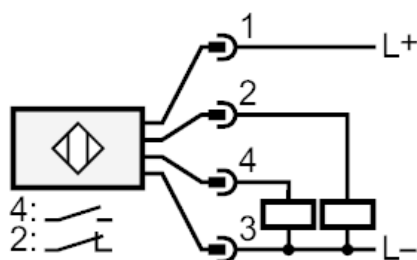
Connector: 1 x M12; coding: A



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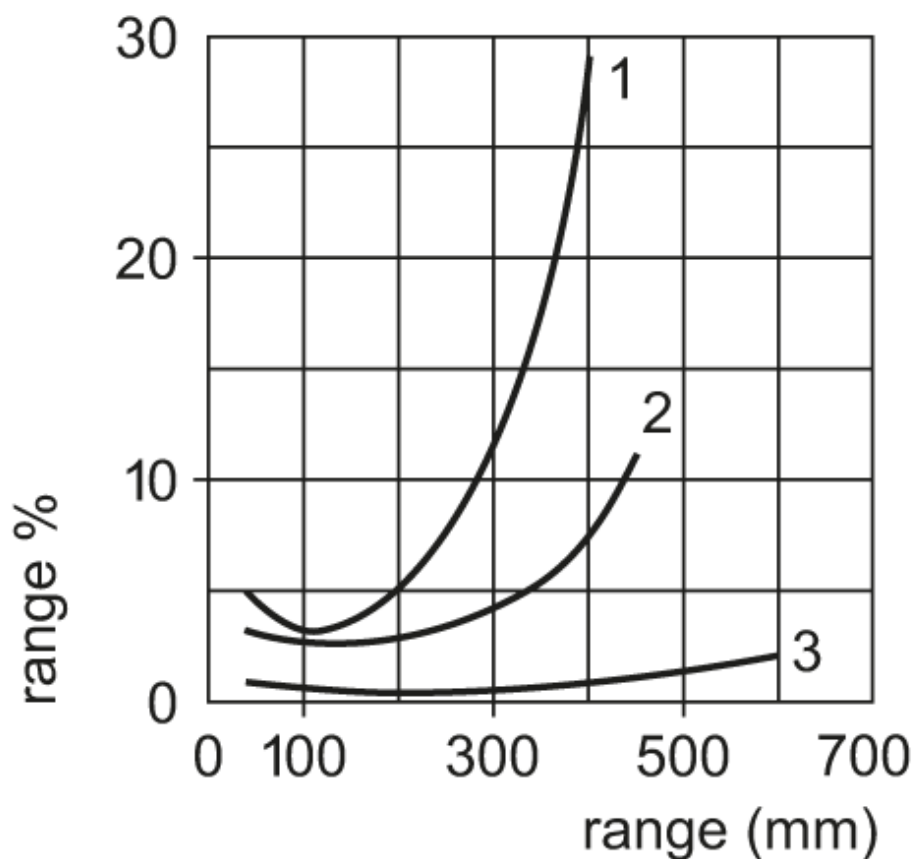
OTH-CPKG/US-100-DPX

### Connection



### 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