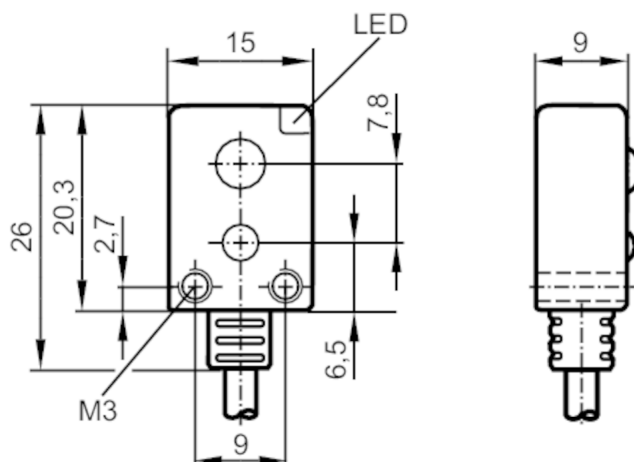


## Diffuse reflection sensor with background suppression

O7H-HPKG/2M/PH



receiver in upper lens  
transmitter in lower 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] | 20; ((24 V)) |
| Protection class            |      | III          |
| Reverse polarity protection |      | yes          |
| Type of light               |      | red light    |
| Wave length                 | [nm] | 633          |

## Outputs

|                                                 |      |               |
|-------------------------------------------------|------|---------------|
| Electrical design                               |      | PNP           |
| Output function                                 |      | light-on mode |
| Max. voltage drop switching output DC           | [V]  | 2.5           |
| Permanent current rating of switching output DC | [mA] | 100           |
| Switching frequency DC                          | [Hz] | 750           |
| Short-circuit protection                        |      | yes           |
| Type of short-circuit protection                |      | pulsed        |

## Detection zone

|                                        |      |                                     |
|----------------------------------------|------|-------------------------------------|
| Range                                  | [mm] | 3...100; (white paper 200 x 200 mm) |
| Range on white object (90 % remission) | [mm] | 3...100                             |



## Diffuse reflection sensor with background suppression

O7H-HPKG/2M/PH

|                                       |      |                  |
|---------------------------------------|------|------------------|
| Range on grey object (18 % remission) | [mm] | 6...80           |
| Range on black object (6 % remission) | [mm] | 7...46           |
| Range adjustable                      |      | no               |
| Max. light spot diameter              | [mm] | 7                |
| Light spot dimensions refer to        |      | at maximum range |
| Background suppression available      |      | yes              |

## Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...60 |
| Protection          |      | IP 65    |

## Tests / approvals

|      |       |              |
|------|-------|--------------|
| EMC  |       | EN 60947-5-2 |
| MTTF | [ANN] | 1610         |

## Mechanical data

|                |      |               |
|----------------|------|---------------|
| Weight         | [g]  | 31.2          |
| Housing        |      | rectangular   |
| Dimensions     | [mm] | 20.3 x 15 x 9 |
| Materials      |      | PA            |
| Lens material  |      | PMMA          |
| Lens alignment |      | side lens     |

## Displays / operating elements

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

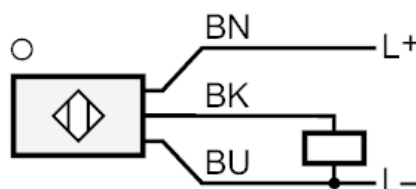
## Remarks

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

## Electrical connection

Cable: 2 m, PUR; 3 x 0.14 mm<sup>2</sup>

## Connection



Core colours :

BK = black

BN = brown

BU = blue