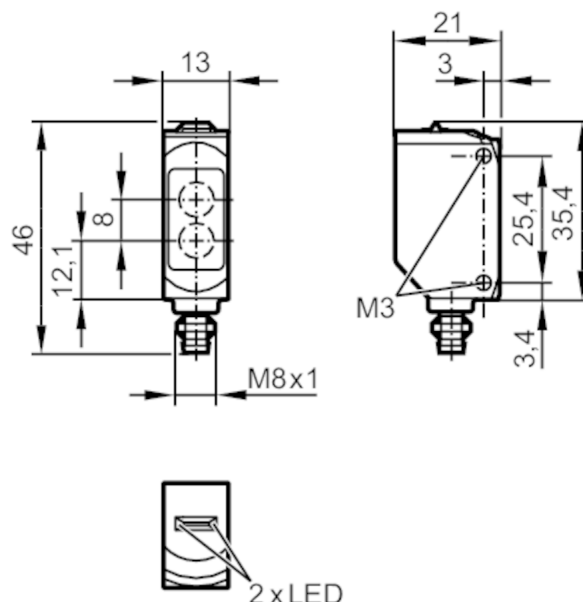


## Diffuse reflection sensor with background suppression

O6H-HNKG/AS/4P



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] | 22; ((24 V)) |
| Protection class            |      | III          |
| Reverse polarity protection |      | yes          |
| Type of light               |      | red light    |
| Wave length                 | [nm] | 633          |

## Outputs

|                                                 |      |               |
|-------------------------------------------------|------|---------------|
| Electrical design                               |      | NPN           |
| 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] | 1000          |
| Short-circuit protection                        |      | yes           |
| Type of short-circuit protection                |      | pulsed        |



## Diffuse reflection sensor with background suppression

O6H-HNKG/AS/4P

| Detection zone                         |      |                                   |
|----------------------------------------|------|-----------------------------------|
| Range                                  | [mm] | < 100; (white paper 200 x 200 mm) |
| Range on white object (90 % remission) | [mm] | < 100                             |
| Range on grey object (18 % remission)  | [mm] | 4...100                           |
| Range on black object (6 % remission)  | [mm] | 8...100                           |
| Max. light spot diameter               | [mm] | 6                                 |
| Light spot dimensions refer to         |      | at maximum range                  |
| Background suppression available       |      | yes                               |

| Operating conditions |      |              |
|----------------------|------|--------------|
| Ambient temperature  | [°C] | -25...60     |
| Protection           |      | IP 65; IP 67 |

| Tests / approvals |                 |      |
|-------------------|-----------------|------|
| EMC               | EN 60947-5-2    |      |
| MTTF              | [years]         | 1113 |
| UL approval       | UL Approval no. | E001 |

| Mechanical data   |      |                    |
|-------------------|------|--------------------|
| Weight            | [g]  | 13.1               |
| Housing           |      | rectangular        |
| Dimensions        | [mm] | 46 x 13 x 21       |
| Materials         |      | housing: ABS; PPSU |
| Lens material     |      | PMMA               |
| Lens alignment    |      | side lens          |
| Sealing material  |      | EPDM               |
| Tightening torque | [Nm] | 0.5                |

| Displays / operating elements |                  |                 |
|-------------------------------|------------------|-----------------|
| Display                       | switching status | 1 x LED, yellow |
|                               | operation        | 1 x LED, green  |

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

## Electrical connection

Connector: 1 x M8; coding: A; Locking: brass, coated; Sealing: EPDM



# O6H213



## Diffuse reflection sensor with background suppression

O6H-HNKG/AS/4P

### Connection

