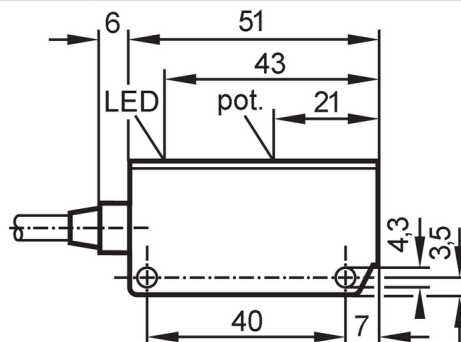
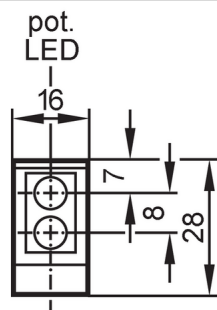




## Diffuse reflection sensor

OUT-HPKG



Receiver in upper lens  
transmitter in lower lens



## Product characteristics

|               |                |
|---------------|----------------|
| Type of light | Infrared light |
| Housing       | rectangular    |

## Application

|                    |                           |
|--------------------|---------------------------|
| Function principle | Diffuse reflection sensor |
| Application        | Industrial applications   |

## Electrical data

|                             |                |
|-----------------------------|----------------|
| Operating voltage [V]       | 10...55 DC     |
| Current consumption [mA]    | 35; ((24 V))   |
| Protection class            | II             |
| Reverse polarity protection | yes            |
| Type of light               | Infrared light |
| Wave length [nm]            | 880            |

## 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] | 250                |
| Switching frequency DC [Hz]                          | 160                |
| Short-circuit protection                             | yes                |
| Type of short-circuit protection                     | yes (non-latching) |
| Overload protection                                  | yes                |

## Monitoring range

|                                |                                     |
|--------------------------------|-------------------------------------|
| Range [mm]                     | 1...200; (white paper 200 x 200 mm) |
| Range adjustable               | yes                                 |
| Max. light spot diameter [mm]  | 180                                 |
| Light spot dimensions refer to | at maximum range                    |

## Operating conditions

|                          |          |
|--------------------------|----------|
| Ambient temperature [°C] | -25...80 |
|--------------------------|----------|



Diffuse reflection sensor

OUT-HPKG

|            |       |
|------------|-------|
| Protection | IP 67 |
|------------|-------|

Tests / approvals

|              |              |
|--------------|--------------|
| EMC          | EN 60947-5-2 |
| MTTF [years] | 685          |

Mechanical data

|                    |                       |
|--------------------|-----------------------|
| Weight [g]         | 150                   |
| Housing            | rectangular           |
| Dimensions [mm]    | 28 x 16 x 51          |
| Number of channels | 1                     |
| Material           | housing: PPO modified |
| Lens material      | front lens:glass      |

Displays / operating elements

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

Accessories

|                |                          |
|----------------|--------------------------|
| Items supplied | Angle bracket: 1, E20211 |
|----------------|--------------------------|

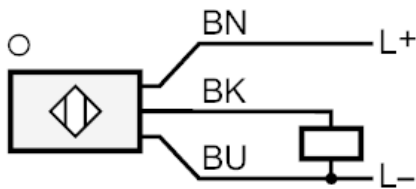
Remarks

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

Electrical connection

Cable: 2 m, PVC; 3 x 0.34 mm²

Connection



|    |       |
|----|-------|
| BN | brown |
| BU | blue  |
| BK | black |



Diffuse reflection sensor

OUT-HPKG

Diagrams and graphs

excess gain graph

