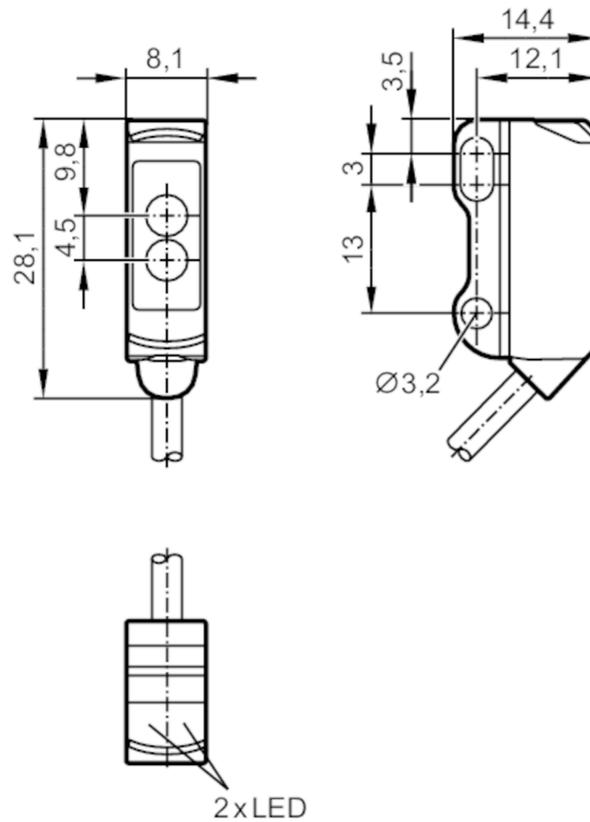


O8T201



Diffuse reflection sensor

O8T-HNKG/2,0M



Receiver in upper lens
transmitter in lower lens



Product characteristics

| | |
|---------------|-------------|
| Type of light | red light |
| Housing | rectangular |

Application

| | |
|--------------------|---------------------------|
| 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 | NPN |
| Output function | light-on mode |
| Max. voltage drop switching output DC [V] | 2.5 |

O8T201



Diffuse reflection sensor

O8T-HNKG/2,0M

| | |
|--|--------------------|
| Permanent current rating of switching output DC [mA] | 100 |
| Switching frequency DC [Hz] | 1000 |
| Short-circuit protection | yes |
| Type of short-circuit protection | yes (non-latching) |

Monitoring range

| | |
|--------------------------------|-------------------------------------|
| Range [mm] | 0...180; (white paper 200 x 200 mm) |
| Max. light spot diameter [mm] | 18 |
| Light spot dimensions refer to | at maximum range |

Operating conditions

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

Tests / approvals

| | | |
|--------------|--------------------|-------------------------|
| EMC | EN 60947-5-2 | |
| MTTF [years] | 1067 | |
| UL approval | Ta | -25...60 °C |
| | Enclosure type | Type 1 |
| | voltage supply | Limited Voltage/Current |
| | UL approval number | E014 |
| | File number UL | E174191 |

Mechanical data

| | |
|-----------------|---|
| Weight [g] | 40 |
| Housing | rectangular |
| Dimensions [mm] | 28.1 x 8.1 x 14.4 |
| Material | housing: ABS; stainless steel (1.4404 / 316L) |
| Lens material | PMMA |
| Lens alignment | Side sensing |

Displays / operating elements

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

Remarks

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

O8T201



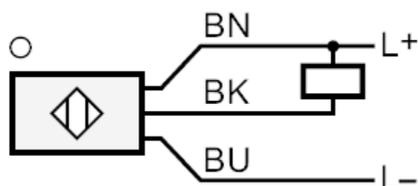
Diffuse reflection sensor

O8T-HNKG/2,0M

Electrical connection

Cable: 2 m, PVC, black, \varnothing 2.9 mm; 3 x 0.08 mm²

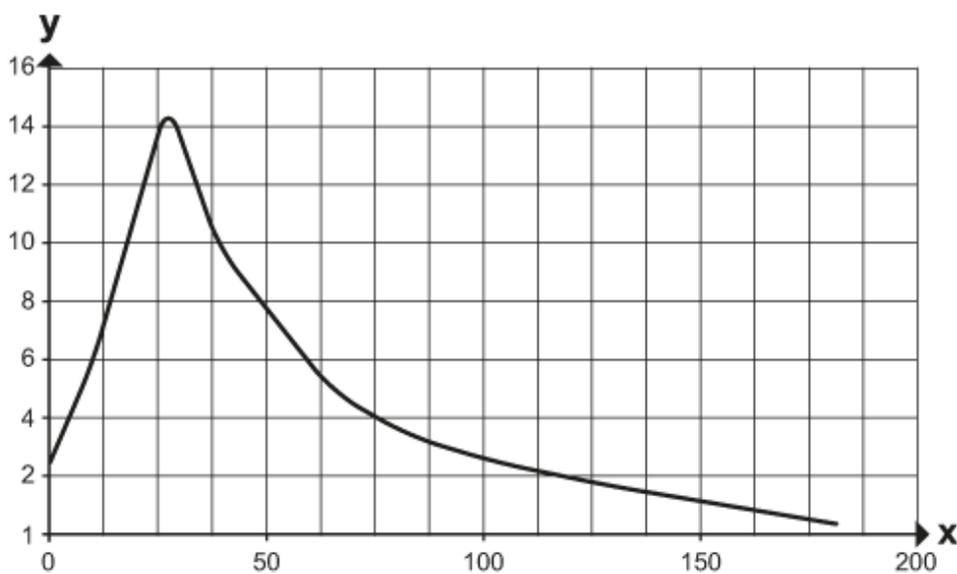
Connection



Core colors :
BN = brown
BK = black
BU = blue

Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor