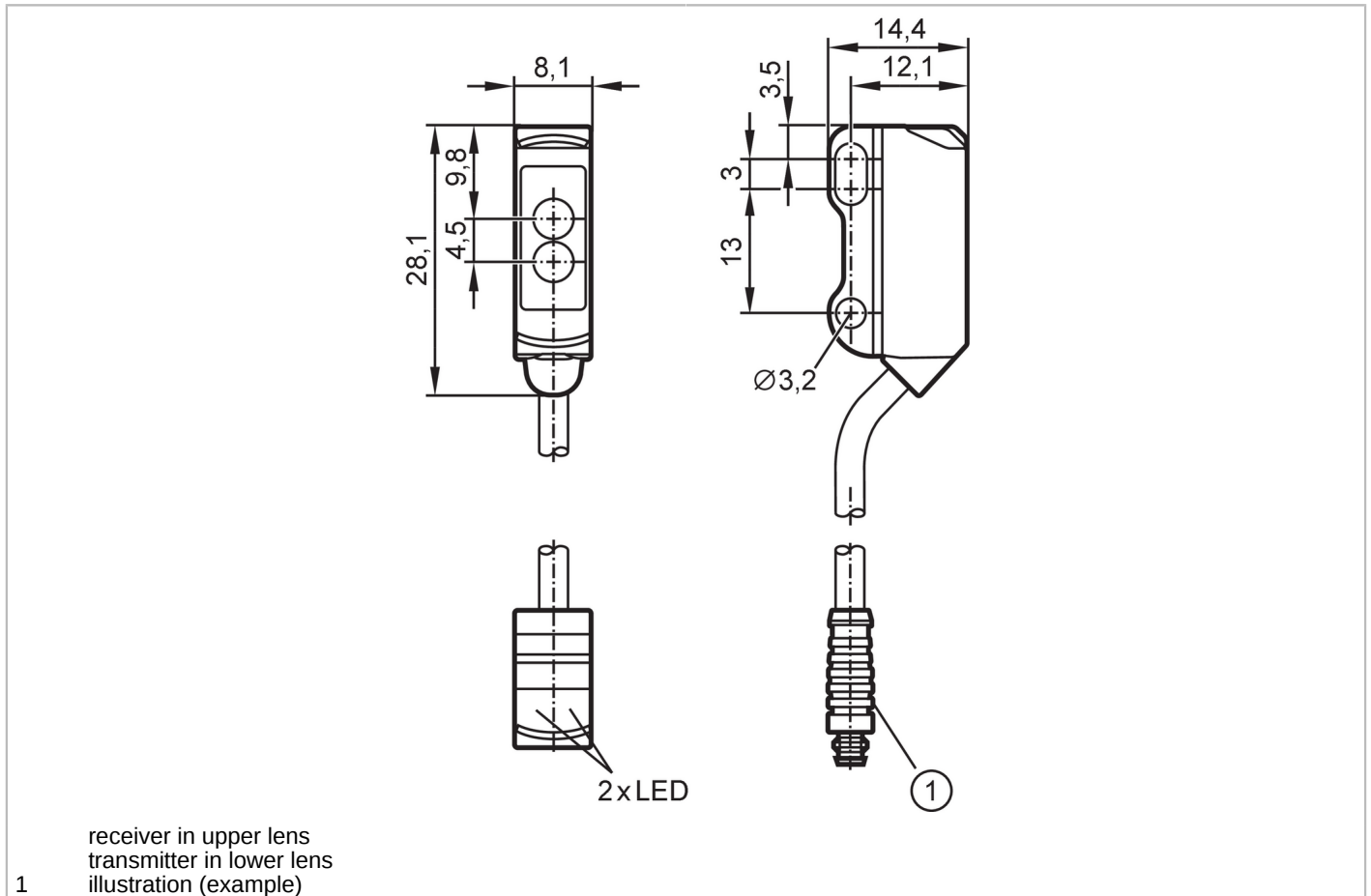


O8P203



Retro-reflective sensor

O8P-DNKG/0,30M/AS/3P



| Product characteristics | |
|---|--|
| Type of light | red light |
| Housing | rectangular |
| Application | |
| Special feature | polarisation filter |
| Function principle | Retro-reflective sensor |
| Application | For applications in robotics, assembly and handling technology |
| 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 | dark-on mode |
| Max. voltage drop switching output DC [V] | 2.5 |

O8P203



Retro-reflective sensor

O8P-DNKG/0,30M/AS/3P

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

Detection zone

| | |
|---|---|
| Range referred to prismatic reflector [m] | 0.02...1.8; (Prismatic reflector Ø 30 E20004) |
| Range adjustable | no |
| Max. light spot diameter [mm] | 120 |
| Light spot dimensions refer to | at maximum range |
| Polarisation filter available | yes |

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 |
| | power supply | Limited Voltage/Current |
| | UL approval no. | E015 |
| | File number UL | E174191 |

Mechanical data

| | |
|-----------------|--|
| Weight [g] | 21.2 |
| Housing | rectangular |
| Dimensions [mm] | 28.1 x 8.1 x 14.4 |
| Materials | housing: ABS; rear of the housing: stainless steel (316L/1.4404) |
| Lens material | front pane:PMMA |
| Lens alignment | side lens |

Displays / operating elements

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

Remarks

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

Electrical connection

Cable: 0.3 m, PVC, black, Ø 2.9 mm; 3 x 0.08 mm²

Connector: 1 x M8; coding: A; Contacts: 3

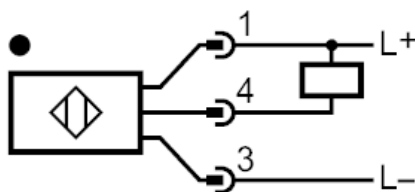




Retro-reflective sensor

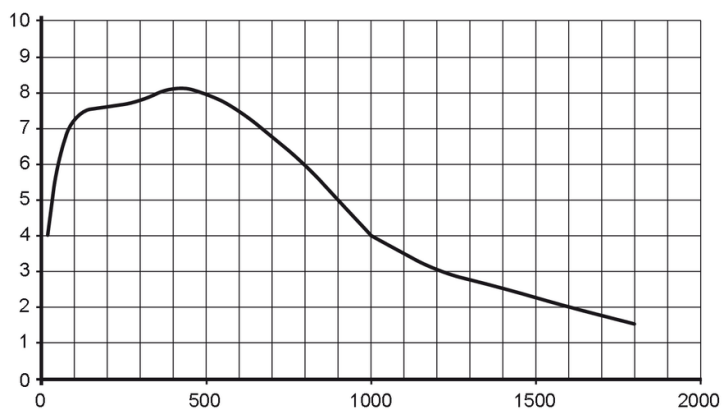
O8P-DNKG/0,30M/AS/3P

Connection



Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor