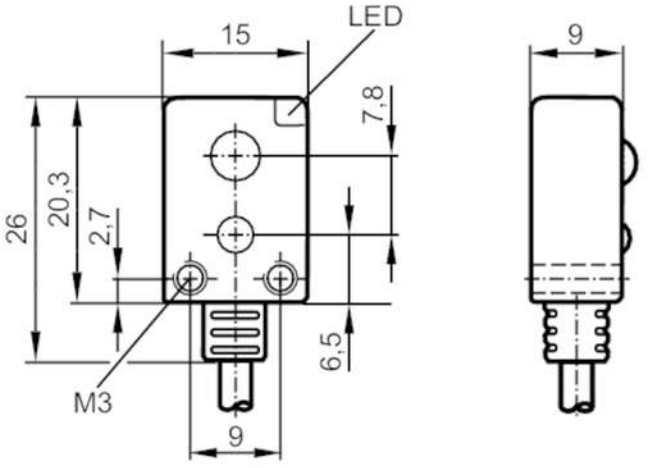
# O7H211

## Diffuse reflection sensor with background suppression

O7H-DNKG/0,20M/AS




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;  ("supply class 2" according to UL) |
| 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 |
| 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 |

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| | | | |
|---|---|---|---|
| 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 | [years] | 1610 | |
| **Mechanical data** | | | |
| Weight | [g] | 14.2 | |
| Housing | | rectangular | |
| Dimensions | [mm] | 20.3 x 15 x 9 | |
| Materials | | PA | |
| Lens material | | PMMA | |
| Lens alignment | | side lens | |
| Tightening torque | [Nm] | 0.5 | |
| **Displays / operating elements** | | | |
| Display | | switching status | 1 x LED, yellow |
| **Remarks** | | | |
| Pack quantity | | 1 pcs. | |
| **Electrical connection** | | | |

Cable: 0.2 m, PUR; 3 x 0.14 mm²

Connector: 1 x M8; coding: A; Locking: snap-fit



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### Connection

