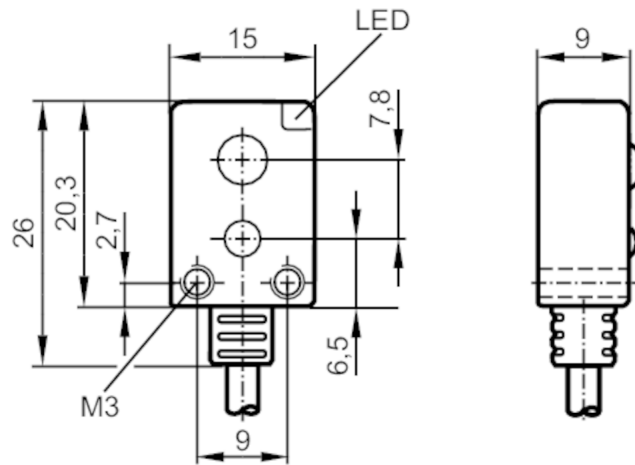


O7H209



Diffuse reflection sensor with background suppression

O7H-DNKG/0,20M/AS



receiver in upper lens
transmitter in lower lens



Application

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 |

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| Detection zone | | |
|--|------|------------------------------------|
| Range | [mm] | 5...50; (white paper 200 x 200 mm) |
| Range on white object (90 % remission) | [mm] | 5...50 |
| Range on grey object (18 % remission) | [mm] | 6...48 |
| Range on black object (6 % remission) | [mm] | 7...46 |
| Range adjustable | | no |
| Max. light spot diameter | [mm] | 2.5 |
| 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] | 14.8 |
| Housing | | rectangular |
| Dimensions | [mm] | 20.3 x 15 x 9 |
| Materials | | PA |
| Lens material | | PMMA |
| Lens alignment | | side lens |

| 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; Locking: snap-fit



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Connection

