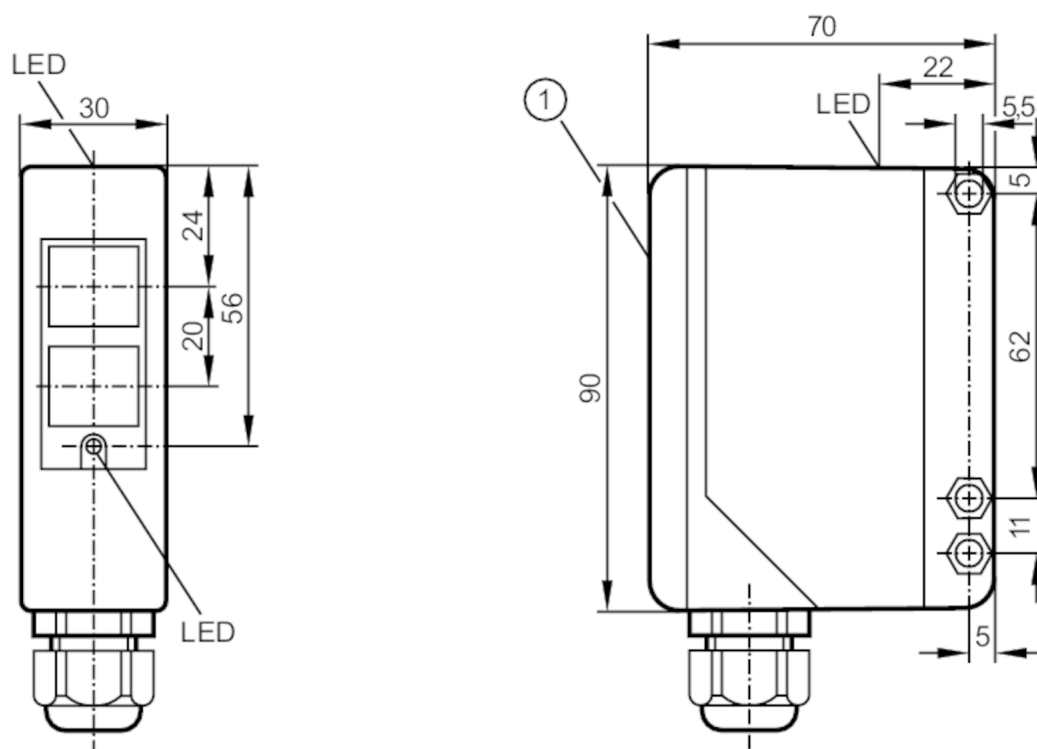


# OA5108

## Diffuse reflection sensor

OAT-FCKG



- 1 selection switch and potentiometer under cover  
Receiver in upper lens  
transmitter in lower lens



### Product characteristics

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

### Application

|                    |                           |
|--------------------|---------------------------|
| System             | Function check output     |
| Function principle | Diffuse reflection sensor |

### Electrical data

|                             |                |
|-----------------------------|----------------|
| Operating voltage [V]       | 10...36 DC     |
| Current consumption [mA]    | < 50           |
| Protection class            | II             |
| Reverse polarity protection | yes            |
| Type of light               | Infrared light |
| Wave length [nm]            | 880            |

### Outputs

|                                                  |                                       |
|--------------------------------------------------|---------------------------------------|
| Electrical design                                | PNP/NPN                               |
| Output function                                  | light-on/dark-on mode; (programmable) |
| Function check output                            | yes                                   |
| Max. current load for function check output [mA] | 10                                    |



## Diffuse reflection sensor

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|                                                 |      |                    |
|-------------------------------------------------|------|--------------------|
| Permanent current rating of switching output DC | [mA] | 250                |
| Max. current load in dual output mode           | [mA] | 100                |
| Switching frequency DC                          | [Hz] | 300                |
| Short-circuit protection                        |      | yes                |
| Type of short-circuit protection                |      | yes (non-latching) |
| Overload protection                             |      | yes                |

| Monitoring range               |      |                                      |
|--------------------------------|------|--------------------------------------|
| Range                          | [mm] | 5...1500; (white paper 200 x 200 mm) |
| Range adjustable               |      | yes                                  |
| Max. light spot diameter       | [mm] | 370                                  |
| Light spot dimensions refer to |      | at maximum range                     |

| Operating conditions |      |          |
|----------------------|------|----------|
| Ambient temperature  | [°C] | -25...60 |
| Protection           |      | IP 65    |

| Tests / approvals |         |              |
|-------------------|---------|--------------|
| EMC               |         | EN 60947-5-2 |
| MTTF              | [years] | 402          |

| Mechanical data |      |              |
|-----------------|------|--------------|
| Weight          | [g]  | 287          |
| Housing         |      | rectangular  |
| Dimensions      | [mm] | 90 x 30 x 70 |
| Material        |      | PPO modified |
| Lens material   |      | PMMA         |
| Lens alignment  |      | Side sensing |

| Displays / operating elements |                  |                 |
|-------------------------------|------------------|-----------------|
| Display                       | Switching status | 1 x LED, yellow |
|                               | Power            | 1 x LED, green  |
|                               | Function         | 1 x LED, red    |

| Accessories    |                          |  |
|----------------|--------------------------|--|
| Items supplied | Angle bracket: 1, E20514 |  |
|                | screwdrivers             |  |

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



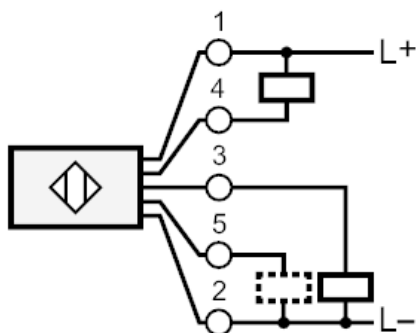
## Diffuse reflection sensor

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### Electrical connection

terminals: ...1.5 mm<sup>2</sup>; Cable sheath: Ø 4.5...10 mm; Cable gland: M16 X 1.5

### Connection



5 Function check output

### Diagrams and graphs

excess gain graph

