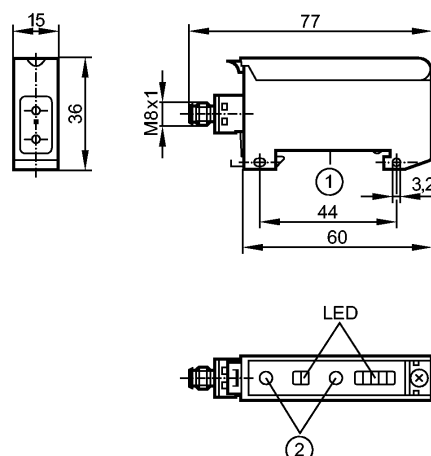


# **OBF505**

OBF-FAKG/T/AS

Photoelectric sensors



- 1: Mounting on DIN rail  
2: setting pushbuttons



Made in Germany

## **Product characteristics**

Fibre-optic amplifier

Rectangular, plastics

Connector

For fibre optics with metal sheath

for FE/FT-50 fibres

Function check output

Automatic detection PNP/NPN

Sensing range 0...1000mm (Through-beam sensor)

Range 0...150mm (Diffuse reflection sensor)

adjustable

## **Electrical data**

|                             |            |
|-----------------------------|------------|
| Electrical design           | DC PNP/NPN |
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 50       |
| Type of light               | Red light  |
| Protection class            | III        |
| Reverse polarity protection | yes        |

## **Outputs**

|                              |                                 |
|------------------------------|---------------------------------|
| Output function              | light-on / dark-on programmable |
| <b>Voltage drop</b>          |                                 |
| - Switching output [V]       | < 2.5                           |
| - Function check output [V]  | < 2.5                           |
| <b>Current rating</b>        |                                 |
| - Switching output [mA]      | 100                             |
| - Function check output [mA] | 10                              |
| Short-circuit protection     | pulsed                          |
| Overload protection          | yes                             |
| Switching frequency [Hz]     | 1000                            |
| Timer [s]                    | 0.001...0.09                    |

## **Range**

# OBF505

OBF-FAKG/T/AS

Photoelectric sensors

|               |      |                                     |
|---------------|------|-------------------------------------|
| Sensing range | [m]  | 0...1 (Through-beam sensor)         |
| Range         | [mm] | 0...150 (Diffuse reflection sensor) |

## Environment

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

## Tests / approvals

|      |         |              |
|------|---------|--------------|
| EMC  |         | EN 60947-5-2 |
| MTTF | [Years] | 806          |

## Mechanical data

|                   |      |              |
|-------------------|------|--------------|
| Housing materials |      | modified PPE |
| Weight            | [kg] | 0.066        |

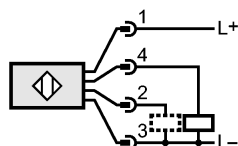
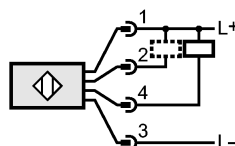
## Displays / operating elements

|                          |     |           |
|--------------------------|-----|-----------|
| Output status indication | LED | yellow    |
| Operation                | LED | green     |
| Unsafe zone              | LED | Red       |
| Excess gain              | LED | 4 x green |

## Electrical connection

|            |  |              |
|------------|--|--------------|
| Connection |  | M8 connector |
|------------|--|--------------|

### Wiring



2 : function check

## Remarks

|         |                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remarks | <p>When through-beam fibre optics are connected light-on mode means the output function "NC" and when diffuse reflection fibre optics are connected the output function "NO".</p> <p>When through-beam fibre optics are connected dark-on mode means the output function "NO" and when diffuse reflection fibre optics are connected the output function "NC"</p> <p>cULus - Class 2 source required</p> |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|               |         |   |
|---------------|---------|---|
| Pack quantity | [piece] | 1 |
|---------------|---------|---|