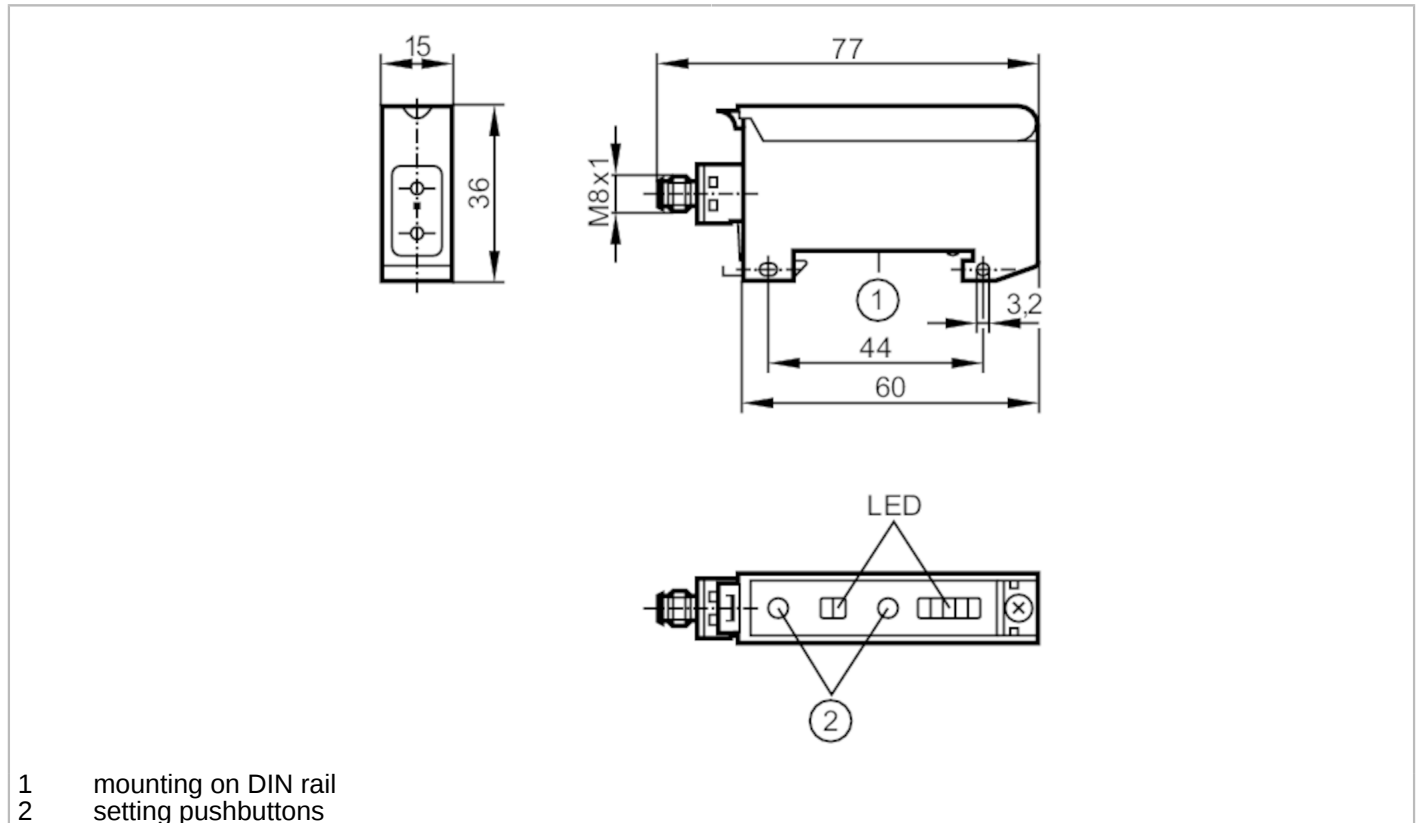


# OBF501



## Fibre-optic amplifier

OBF-FAKG/TIAS



- 1 mounting on DIN rail  
2 setting pushbuttons



### Product characteristics

|                 |              |
|-----------------|--------------|
| Type of light   | red light    |
| Housing         | rectangular  |
| Dimensions [mm] | 36 x 15 x 60 |

### Application

|                 |   |
|-----------------|---|
| Special feature | Function check output                           |
| Design          | Fibre-optic amplifiers for acrylic fibre optics |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 50       |
| Protection class            | III        |
| Reverse polarity protection | yes        |
| Type of light               | red light  |
| Wave length [nm]            | 630        |

# OBF501



## Fibre-optic amplifier

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| Outputs   |   |   |
|---|---|---|
| Electrical design                               |   | PNP/NPN; (automatic load detection PNP/NPN) |
| Output function                                 |   | light-on/dark-on mode; (programmable)       |
| Max. voltage drop switching output DC           | [V]   | 2.5   |
| Function check output                           |   | yes   |
| Max. voltage drop of function check output      | [V]   | 2.5   |
| Max. current load for function check output     | [mA]  | 10  |
| Permanent current rating of switching output DC | [mA]  | 100   |
| Switching frequency DC                          | [Hz]  | 3000  |
| Short-circuit protection                        |   | yes   |
| Type of short-circuit protection                |   | pulsed                                      |
| Overload protection                             |   | yes   |
| Time function                                   | [s]   | 0.001...0.09                                |
| Detection zone                                  |   |   |
| Range   | [m]   | 0...2; (Through-beam sensor)                |
| Range   | [mm]  | 0...100; (Diffuse reflection sensor)        |
| Range adjustable                                |   | yes   |
| Operating conditions                            |   |   |
| Ambient temperature                             | [°C]  | -25...60                                    |
| Protection                                      |   | IP 65                                       |
| Tests / approvals                               |   |   |
| EMC   |   | EN 60947-5-2                                |
| MTTF  | [years]   | 806   |
| Mechanical data                                 |   |   |
| Weight  | [g]   | 67  |
| Housing   |   | rectangular                                 |
| Dimensions                                      | [mm]  | 36 x 15 x 60                                |
| Materials                                       |   | PPE modified                                |
| Lens alignment                                  |   | side lens                                   |
| Displays / operating elements                   |   |   |
| Display   | switching status  | 1 x LED, yellow                             |
|   | operation   | 1 x LED, green                              |
|   | unsafe zone   | 1 x LED, red                                |
|   | excess gain   | 4 x LED, green                              |
| Remarks   |   |   |
| Remarks   | light-on mode corresponds to the NC output function for through-beam fibre optics |   |
|   | corresponds to the NO output function for diffuse-reflection fibre optics         |   |
| Remarks   | dark-on mode corresponds to the NO output function for through-beam fibre optics  |   |
|   | corresponds to the NC output function for diffuse-reflection fibre optics         |   |
| Pack quantity                                   | operating voltage "supply class 2" according to cULus                             |   |
|   | 1 pcs.  |   |

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## Fibre-optic amplifier

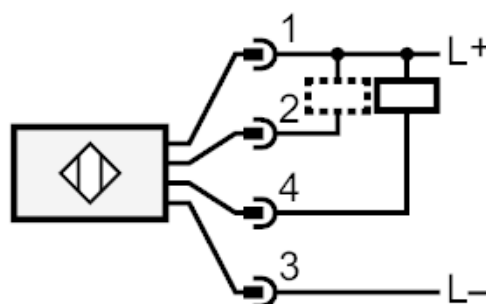
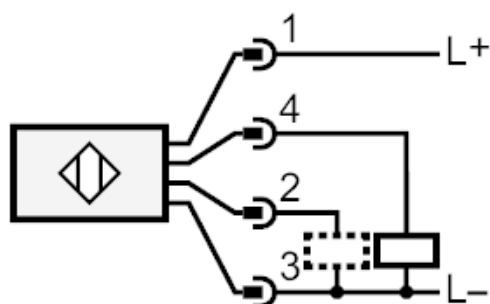
OBF-FAKG/TIAS

### Electrical connection

Connector: 1 x M8



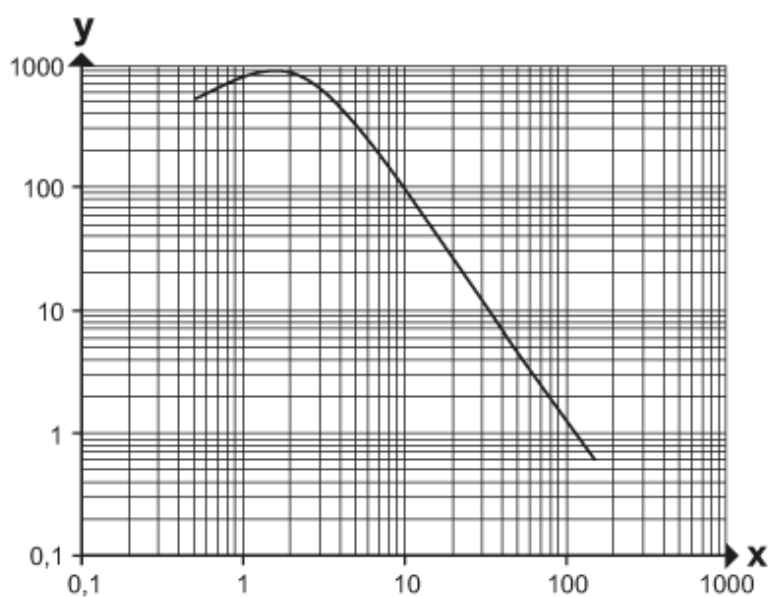
### Connection



2 Function check output

### Diagrams and graphs

excess gain graph



x: Abstand [mm]

y: Funktionsreservfaktor