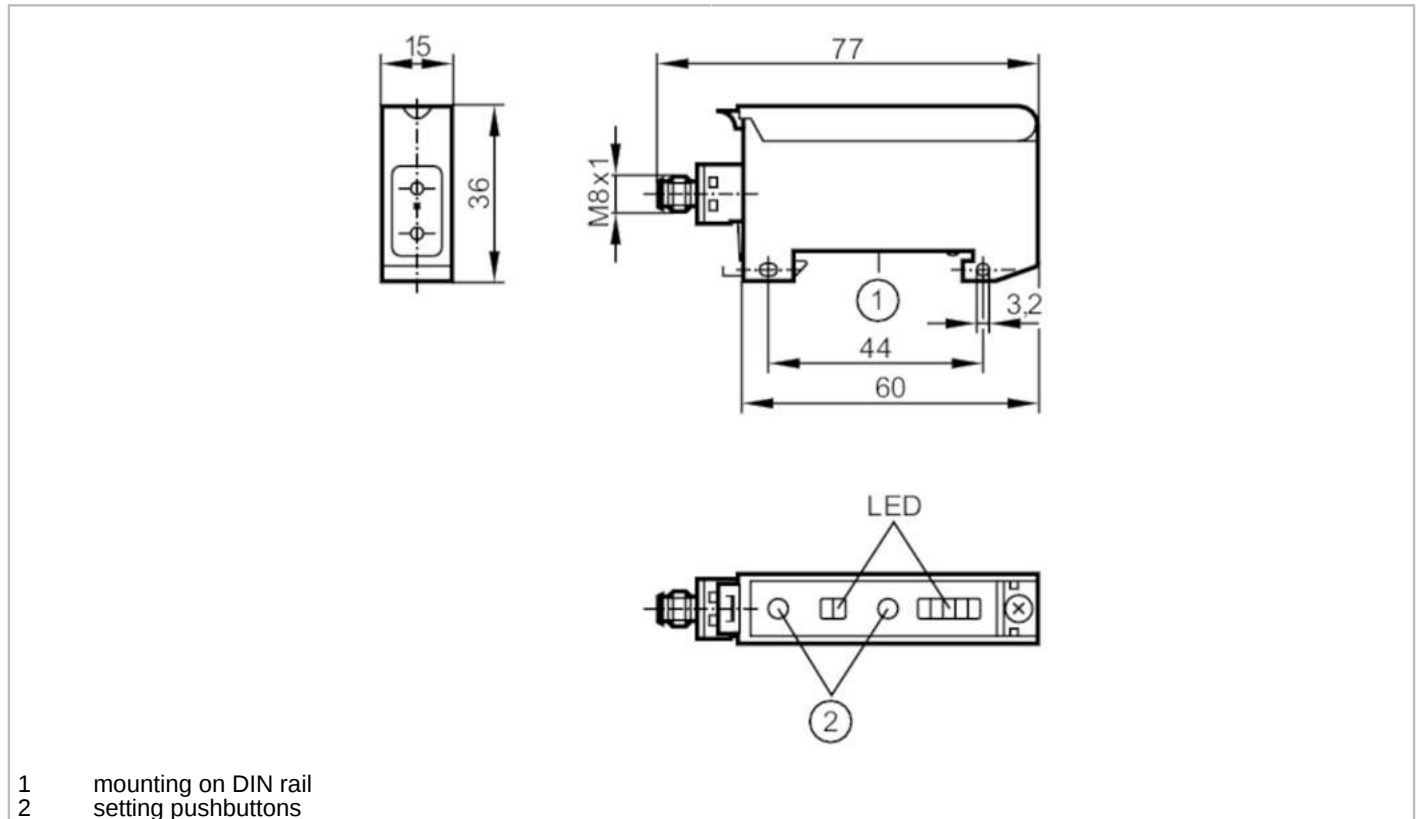


OBF503



Fibre-optic amplifier

OBF-FAKG/TIAS



Product characteristics

| | |
|---------------|-------------|
| Type of light | red light |
| Housing | rectangular |

Application

| | |
|--------|---|
| 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 |

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 |
| Permanent current rating of switching output DC | [mA] | 100 |
| Switching frequency DC | [Hz] | 3000 |
| Short-circuit protection | | yes |

OBF503



Fibre-optic amplifier

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| | | |
|--------------------------------------|---|--------------------------------------|
| 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] | 837 |
| Mechanical data | | |
| Weight | [g] | 48 |
| 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 | |
| | 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 | |
| | operating voltage "supply class 2" according to cULus | |
| Pack quantity | | 1 pcs. |

OBF503

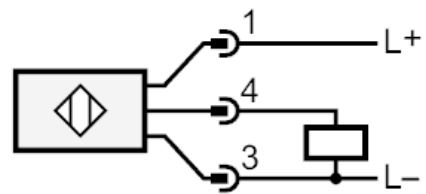
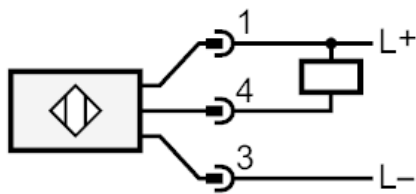


Fibre-optic amplifier

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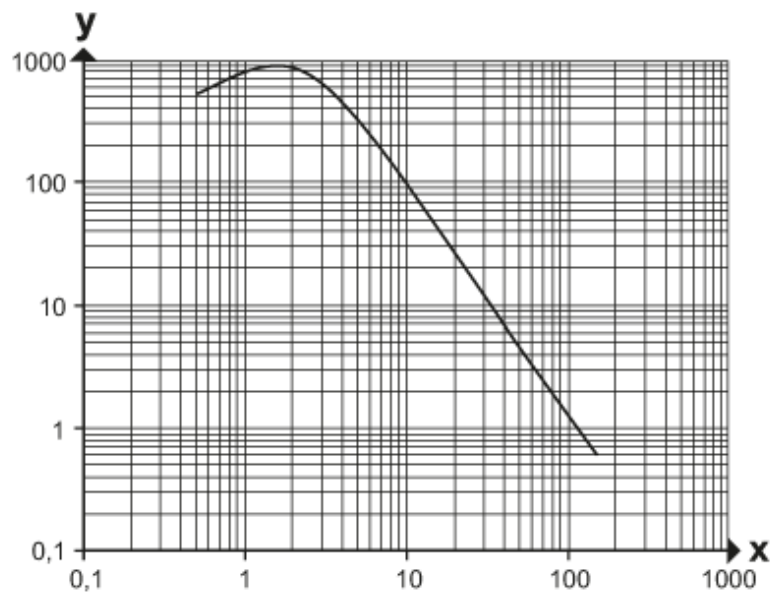
Electrical connection

Connector: 1 x M8; coding: A



Diagrams and graphs

excess gain graph



x: Abstand [mm]

y: Funktionsreservfaktor