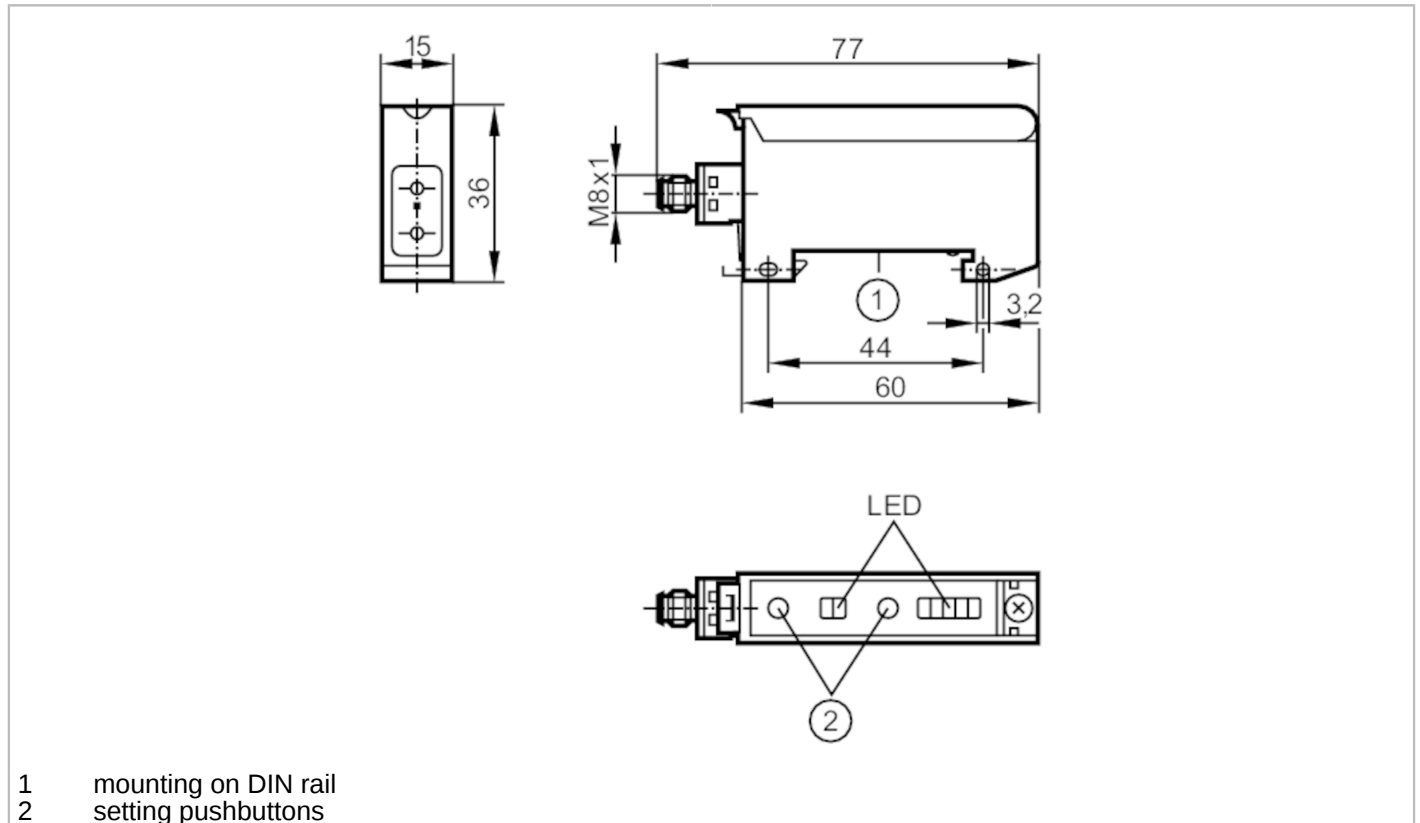


OBF503



Fibre-optic amplifier

OBF-FAKG/TIAS



Product characteristics

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

Application

Design	Fibre-optic amplifiers for acrylic fibre optics
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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

OBF503



Fibre-optic amplifier

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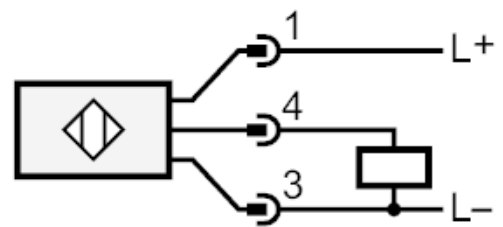
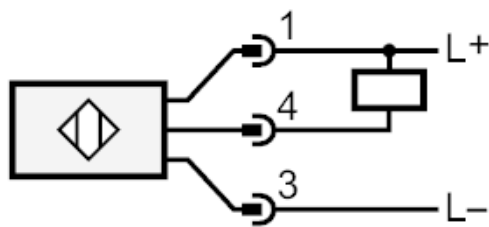
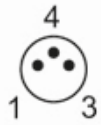
Outputs		
Electrical design	PNP/NPN; (automatic load detection PNP/NPN)	
Output function	light-on/dark-on mode; (programmable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Switching frequency DC [Hz]	3000	
Short-circuit protection	yes	
Type 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]	837	
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	
	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.	
Electrical connection		
Connector: 1 x M8		

OBF503



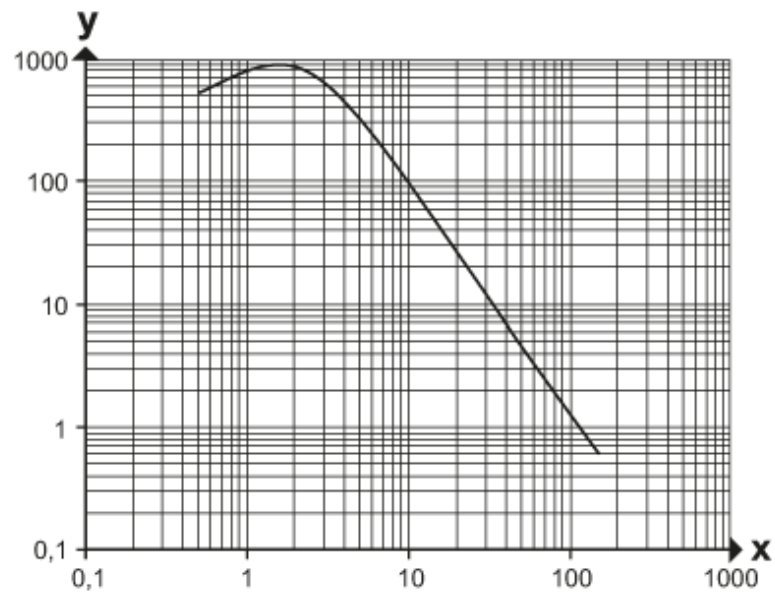
Fibre-optic amplifier

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Diagrams and graphs

excess gain graph



x: Abstand [mm]

y: Funktionsreservefaktor