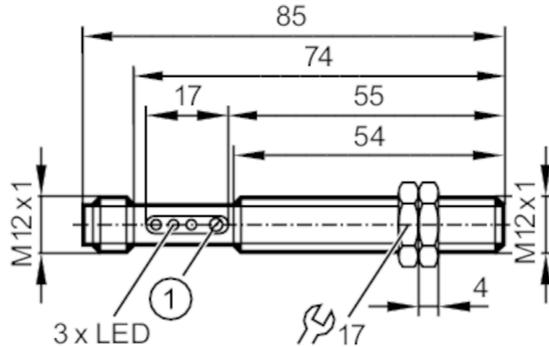


OF5049



Diffuse reflection sensor

OFT-FNKG/US-100



1 potentiometer



Product characteristics

Type of light	Infrared light
Housing	Threaded type

Application

System	Function check output
Function principle	Diffuse reflection sensor

Electrical data

Operating voltage [V]	10...36 DC
Current consumption [mA]	< 35
Protection class	II
Reverse polarity protection	yes
Type of light	Infrared light
Wave length [nm]	880

Outputs

Electrical design	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]	3.5
Max. current load for function check output [mA]	10
Permanent current rating of switching output DC [mA]	200
Switching frequency DC [Hz]	320
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Range [mm]	1...200; (white paper 200 x 200 mm)
Range adjustable	yes

OF5049



Diffuse reflection sensor

OFT-FNKG/US-100

Max. light spot diameter [mm]	92
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	
	EN 55011	class B
MTTF [years]		601
UL approval	Ta	< 40 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	E030
	File number UL	E174191

Mechanical data

Weight [g]	43.3
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 74
Thread designation	M12 x 1
Material	brass nickel-plated
Lens material	PMMA

Displays / operating elements

Display	Switching status	1 x LED, yellow
	Power	1 x LED, green
	Function	1 x LED, red

Accessories

Items supplied	lock nuts: 2 screwdrivers
----------------	------------------------------

Remarks

Pack quantity	1 pcs.
---------------	--------

Electrical connection

Connector: 1 x M12; coding: A



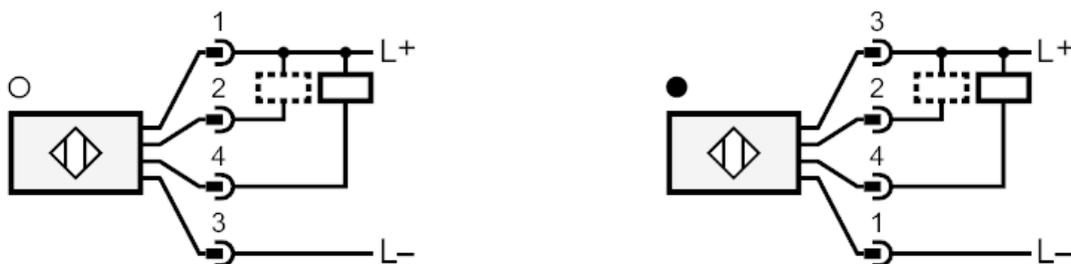
OF5049



Diffuse reflection sensor

OFT-FNKG/US-100

Connection



2 Function check output

Diagrams and graphs

excess gain graph

