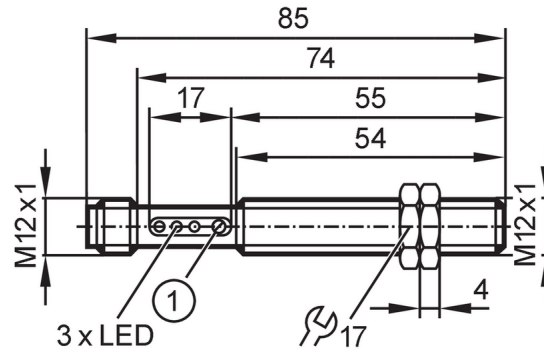


# OF5012



## Diffuse reflection sensor

OFT-FPKG/US-100



1 potentiometer



### Product characteristics

Type of light	infrared light
Housing	threaded type

### Application

Special feature	Function check output
Function principle	Diffuse reflection sensor
Application	Industrial applications / factory automation

### 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	PNP
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	pulsed
Overload protection	yes

### Detection zone

Range [mm]	1...200; (white paper 200 x 200 mm)
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# OF5012



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Range adjustable	yes
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]	607	
UL approval	Ta	< 40 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval no.	E030
	File number UL	E174191

### Mechanical data

Weight [g]	30
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 74
Thread designation	M12 x 1
Materials	housing: brass nickel-plated
Lens material	front pane:PMMA

### Displays / operating elements

Display	switching status	1 x LED, yellow
	operation	1 x LED, green
	function	1 x LED, red

### Accessories

Items supplied	lock nuts: 2 screwdrivers
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### Remarks

Pack quantity	1 pcs.
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### Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4



# OF5012



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### Connection



### 2 Function check output

#### Diagrams and graphs

excess gain graph

