

OF5027



Diffuse reflection sensor

OFB-FPKG/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	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	yes (non-latching)
Overload protection	yes

Monitoring range

Range [mm]	1...400; (white paper 200 x 200 mm)
Range adjustable	yes

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Max. light spot diameter	[mm]	185
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
MTTF	[years]	607
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]	40
Housing		Threaded type
Dimensions	[mm]	M12 x 1 / L = 74
Thread designation		M12 x 1
Material		housing: brass white bronze coated
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.
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Electrical connection

Connector: 1 x M12; coding: A



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Connection



2 Function check output

Diagrams and graphs

excess gain graph

