

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

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.

Electrical connection		
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Connector: 1 x M12; coding: A



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Connection



2 Function check output

Diagrams and graphs

excess gain graph

