

Diffuse reflection sensor

OFB-FNKG/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

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	pulsed
Overload protection	yes

Detection zone

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

OF5060



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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	
	EN 55011	class B
MTTF	[years]	601

Mechanical data

Weight	[g]	52
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 74
Thread designation		M12 x 1
Materials		housing: brass white bronze coated
Lens material		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

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

