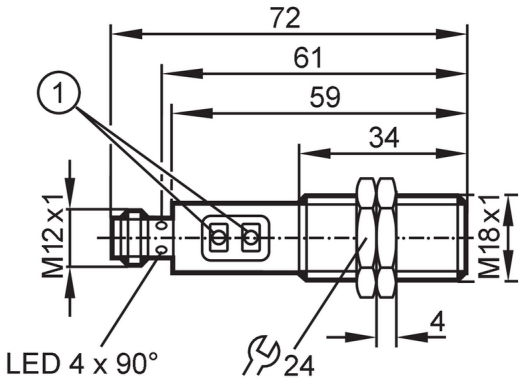
OGH500

Diffuse reflection sensor with background suppression

OGH-FPKG/US100



1 programming buttons

Product characteristics		
Type of light		red light
Housing		threaded type
Application		
Special feature		Background suppression
Function principle		Diffuse reflection sensor
Application		Industrial applications / factory automation
Electrical data		
Operating voltage	[V]	10...36 DC
Current consumption	[mA]	25
Protection class		II
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	624
Outputs		
Electrical design		PNP
Output function		light-on/dark-on mode; (programmable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	150; (200 (...60 °C))
Switching frequency DC	[Hz]	1000
Factory setting		light-on mode
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Detection zone		
Range	[mm]	15...300; (white paper 200 x 200 mm 90% remission)
Range on white object (90 % remission)	[mm]	15...300

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Range on grey object (18 % remission) [mm]		15...290
Range on black object (6 % remission) [mm]		15...190
Range adjustable		yes
Max. light spot diameter [mm]		25
Light spot dimensions refer to		at maximum range
Background suppression available		yes
Operating conditions		
Ambient temperature [°C]		-25...80
Protection		IP 67
Tests / approvals		
EMC	EN 60947-5-2	
MTTF [years]		362
Mechanical data		
Weight [g]		61.1
Housing		threaded type
Dimensions [mm]		M18 x 1 / L = 72
Thread designation		M18 x 1
Materials		stainless steel (316L/1.4404); PA; LCP; EPDM; TPU
Lens material		front pane:PMMA
Displays / operating elements		
Display	switching status	1 x LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.
Electrical connection		

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

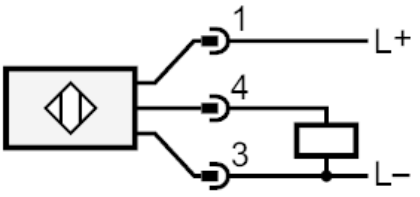


OGH500

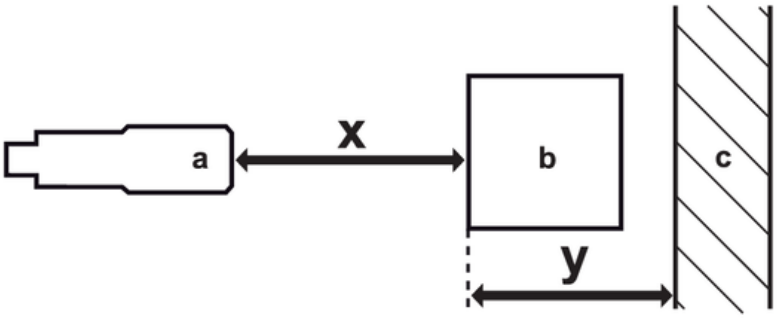
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Connection



Diagrams and graphs



a: sensor

b: object

c: background

x: distance sensor/object [mm]

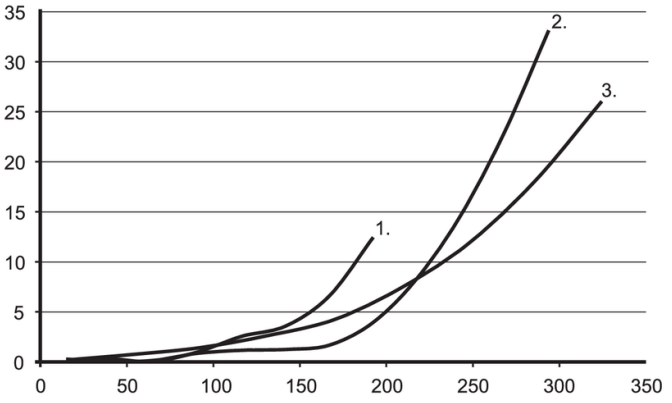
y: min. distance object/background [mm]

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Diffuse reflection sensor with background suppression

OGH-FPKG/US100

accuracy graph



x: distance sensor/object [mm]

y: min. distance object/background [mm]

1 = object black (6 % remission) , background white (90 % remission)

2 = object grey (18 % remission) , background white (90 % remission)

3 = object white (90 % remission) , background white (90 % remission)