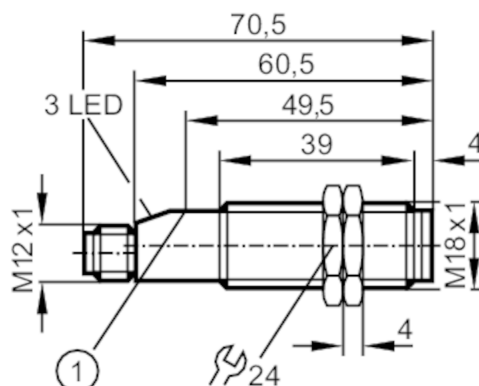


Diffuse reflection sensor with background suppression

OGH-FPKG/V4A/US-100



1 pushbutton



Application

Function principle	Diffuse reflection sensor
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Electrical data

Operating voltage	[V]	10...36 DC
Current consumption	[mA]	< 40
Protection class		II
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	660

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]	250
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Detection zone

Range	[mm]	30...130; (white paper 200 x 200 mm 90 % remission)
Range adjustable		yes
Max. light spot diameter	[mm]	12
Light spot dimensions refer to		at maximum range
Background suppression available		yes



Diffuse reflection sensor with background suppression

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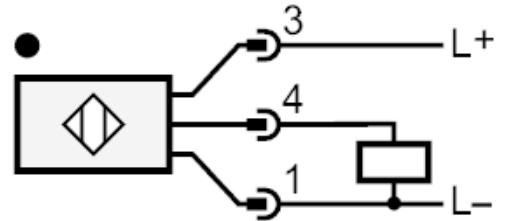
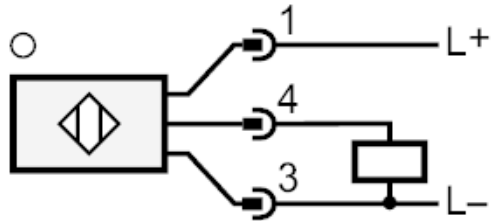
Operating conditions		
Ambient temperature	[°C]	-20...80
Protection		IP 68; IP 69K
Tests / approvals		
EMC	EN 60947-5-2	
	EN 55011	class B
MTTF	[years]	521
Mechanical data		
Weight	[g]	67.6
Housing		threaded type
Dimensions	[mm]	M18 x 1 / L = 70.5
Thread designation		M18 x 1
Materials		stainless steel (1.4404 / 316L); PBT
Lens material		PMMA
Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green
	function	1 x LED, red
Accessories		
Accessories (supplied)		lock nuts: 2 x
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		
		



Diffuse reflection sensor with background suppression

OGH-FPKG/V4A/US-100

Connection



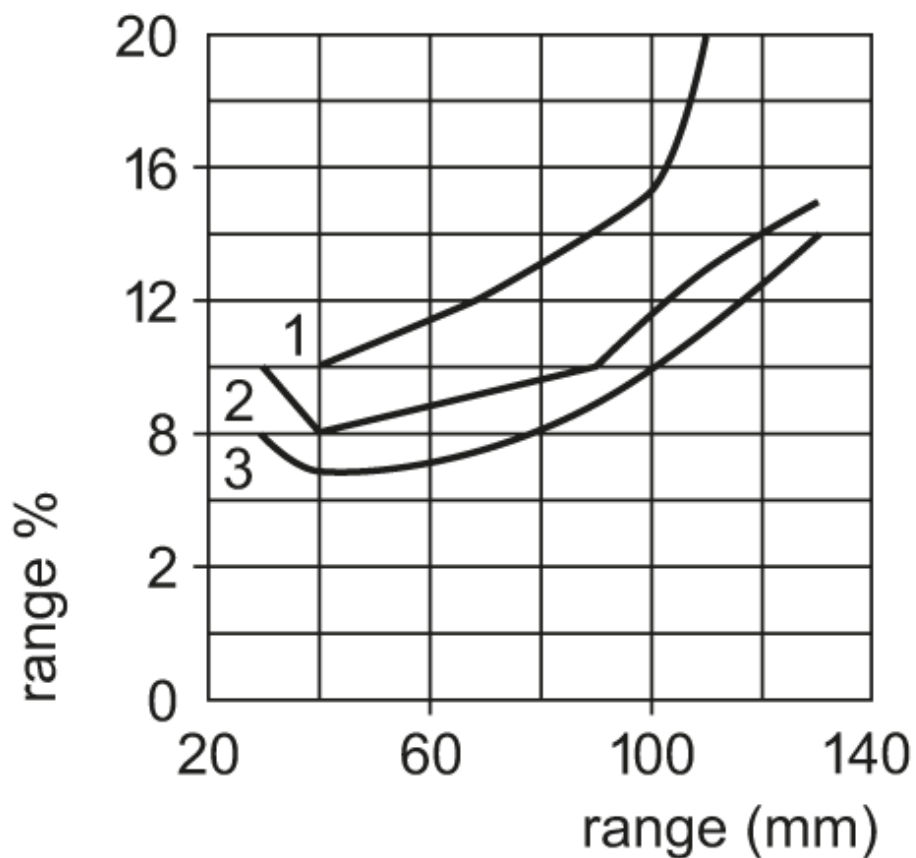


Diffuse reflection sensor with background suppression

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Diagrams and graphs

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)

Note : range % = setting in % of the range