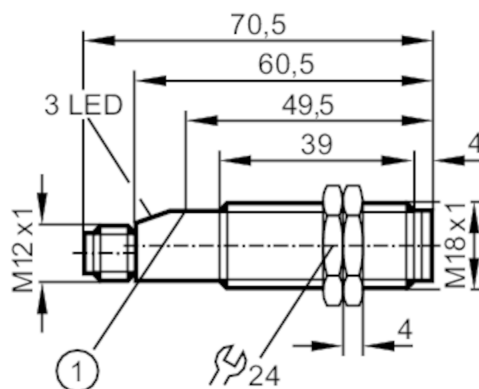


Diffuse reflection sensor with background suppression

OGH-FPKG/V4A/US-100



1 pushbutton



Product characteristics

Type of light	red light
Housing	threaded type

Application

Special feature	Gold-plated contacts; Background suppression
Function principle	Diffuse reflection sensor

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



Diffuse reflection sensor with background suppression

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Background suppression available	yes
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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]	60
Housing		threaded type
Dimensions	[mm]	M18 x 1 / L = 70.5
Thread designation		M18 x 1
Materials		stainless steel (316L/1.4404); 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

Items supplied	lock nuts: 2
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Remarks

Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Diffuse reflection sensor with background suppression

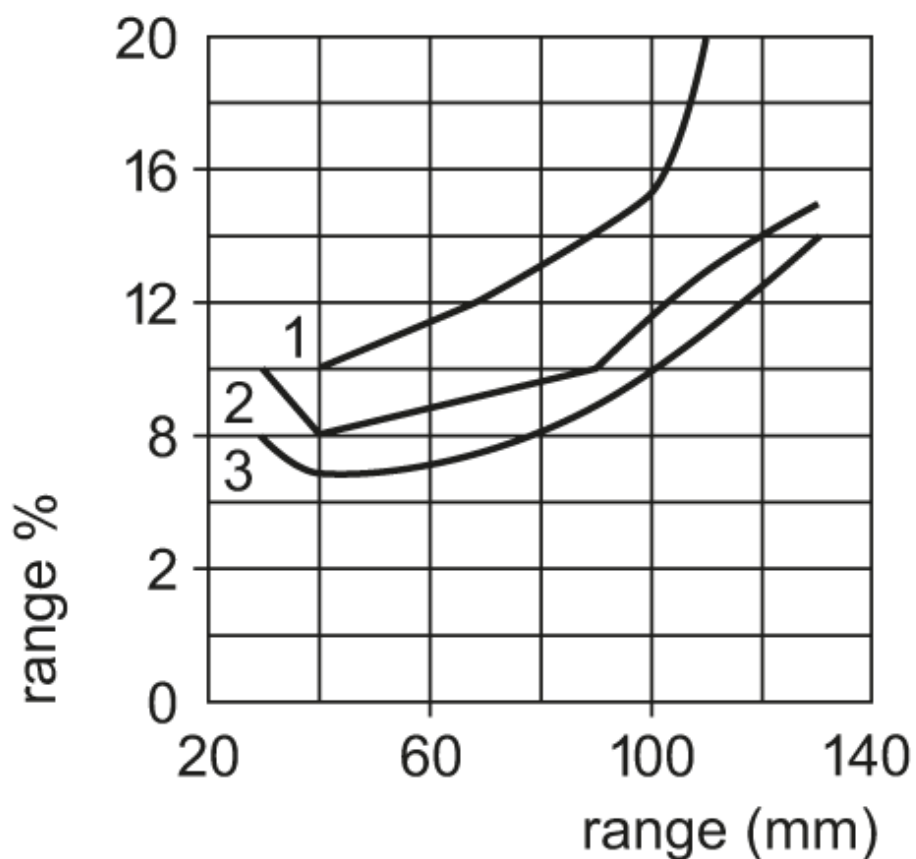
OGH-FPKG/V4A/US-100

Connection



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