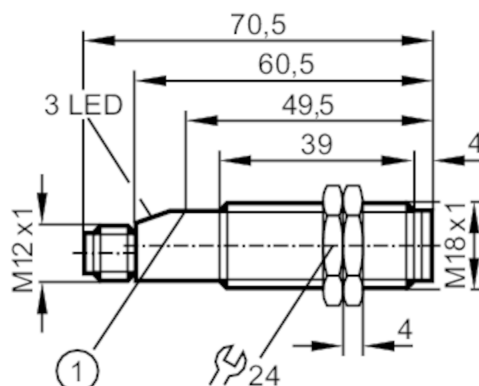


Diffuse reflection sensors with background suppression

OGH-FPKG/V4A/US-100



1 pushbutton



Product characteristics

Type of light	red light
Housing	Threaded type

Application

System	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	yes (non-latching)
Overload protection	yes

Monitoring range

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 sensors with background suppression

OGH-FPKG/V4A/US-100

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
Material		stainless steel (1.4404 / 316L); PBT
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
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Remarks

Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.

Electrical connection

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



Diffuse reflection sensors with background suppression

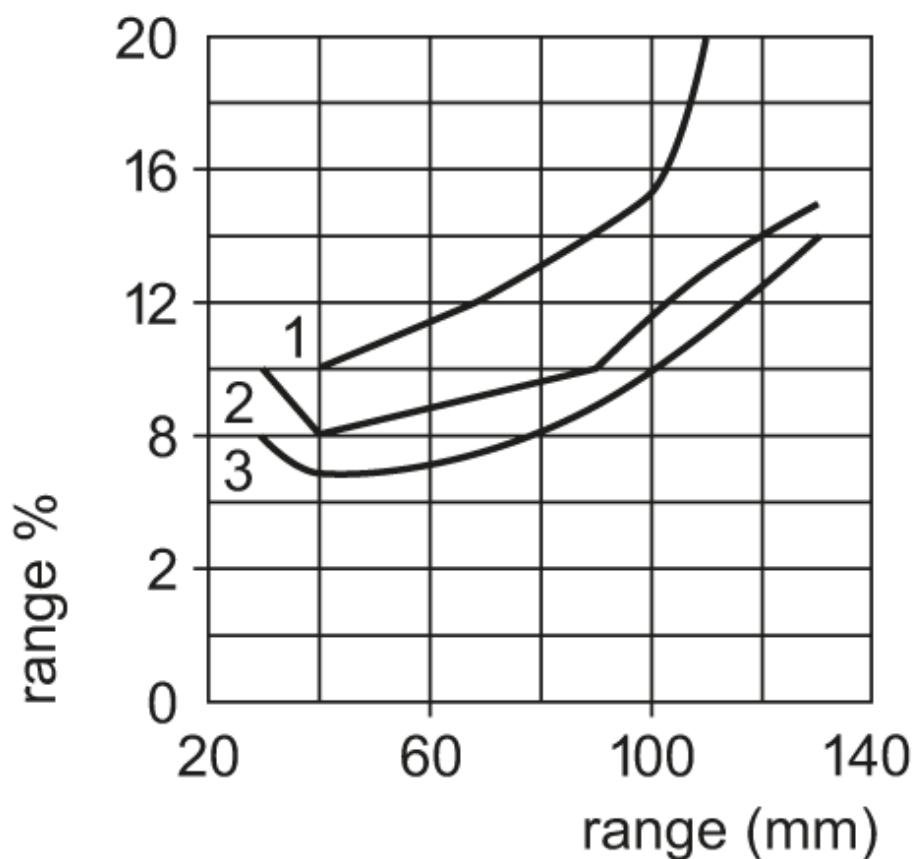
OGH-FPKG/V4A/US-100

Connection



Diagrams and graphs

Background suppression chart



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