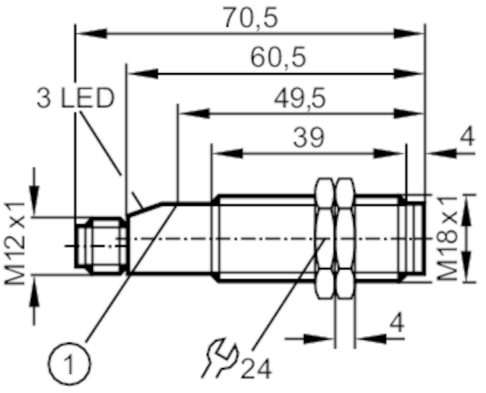
OG5121

Diffuse reflection sensor with background suppression

OGH-FPKG/US-100



1 pushbutton

Application			
Function principle		Diffuse reflection sensor	
Electrical data			
Operating voltage	[V]	10...30 DC	
Current consumption	[mA]	< 60	
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]	200	
Short-time current rating of switching output	[mA]	200	
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)	
Factory setting		Range	: 40 mm
Background suppression available		yes	
Operating conditions			
Ambient temperature	[°C]	-20...60	
Protection		IP 67	

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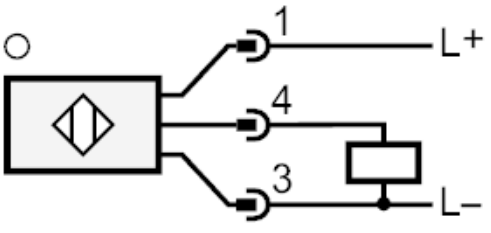
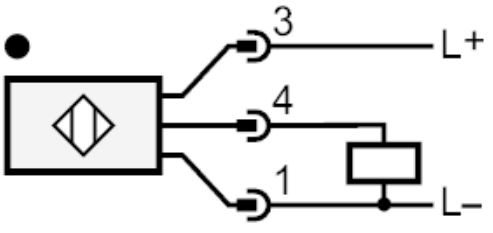
Tests / approvals			
EMC		EN 60947-5-2	
		EN 55011	class B
MTTF	[years]	521	
Mechanical data			
Weight	[g]	35.3	
Housing		threaded type	
Dimensions	[mm]	M18 x 1 / L = 70.5	
Thread designation		M18 x 1	
Materials		PBT	
Lens material		PMMA	
Displays / operating elements			
Display		switching status	1 x LED, yellow
		operation	1 x LED, green
		function	1 x LED, red
Accessories			
Accessories (supplied)		lock nuts: 2 x	
Remarks			
Pack quantity		1 pcs.	
Electrical connection			

Connector: 1 x M12; Contacts: gold-plated

Connection





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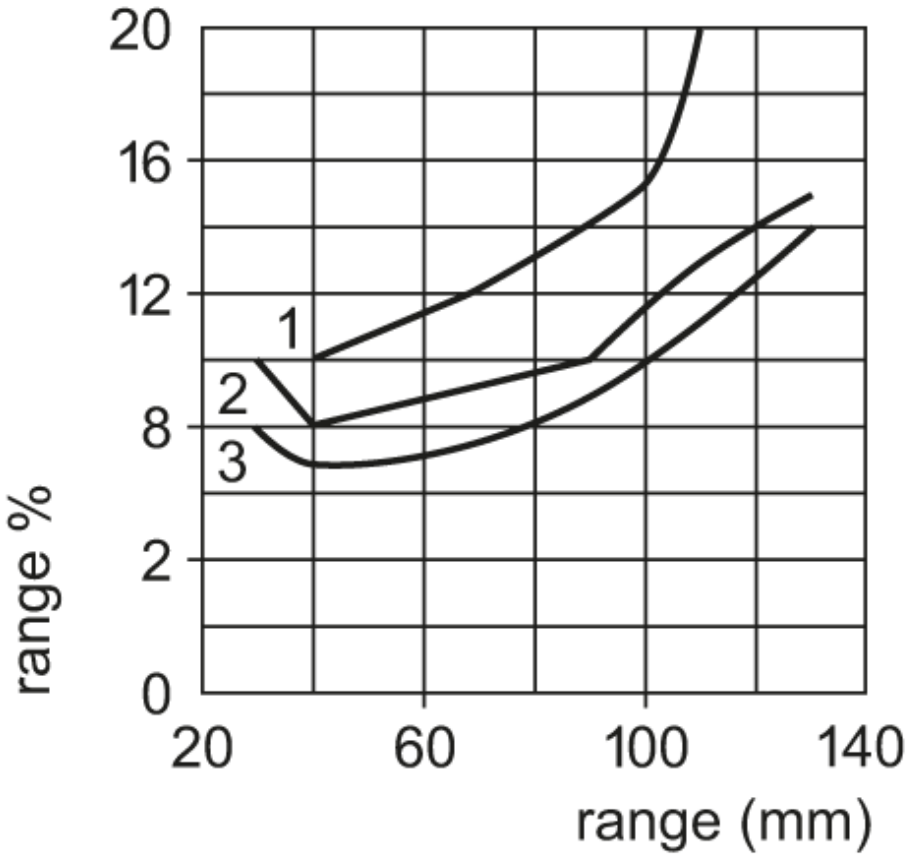
Diagrams and graphs

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