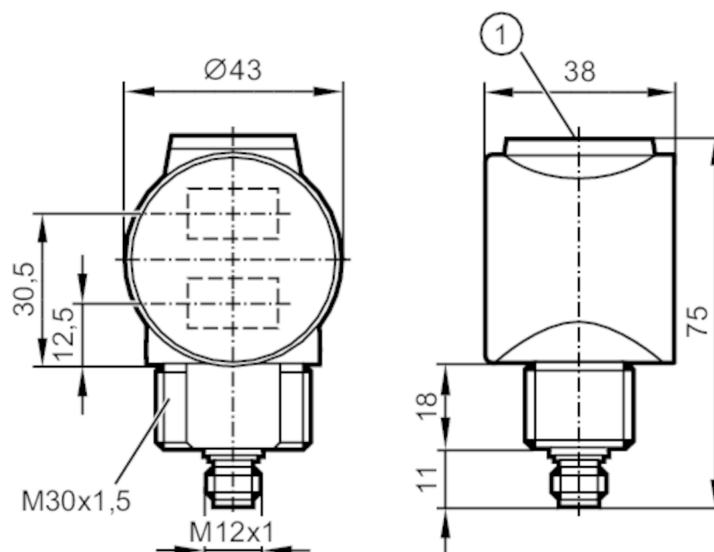




Diffuse reflection sensor with background suppression

OIH-HNKG/US/800MM

Status Archive



1 potentiometer



Application

Function principle	Diffuse reflection sensor
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Electrical data

Operating voltage	[V]	10...30 DC; ("supply class 2" to cULus)
Current consumption	[mA]	35
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	625

Outputs

Electrical design		NPN
Output function		light-on mode
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	200
Switching frequency DC	[Hz]	300
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes



Diffuse reflection sensor with background suppression

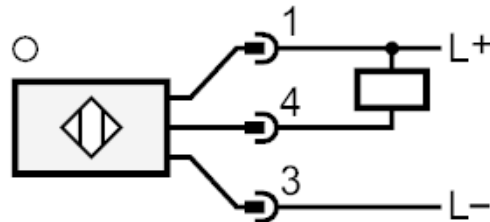
OIH-HNKG/US/800MM

Detection zone		
Range	[mm]	50...800; (white or black paper 200 x 200 mm +/- 6 %)
Range adjustable		no
Max. light spot diameter	[mm]	55
Light spot dimensions refer to		at maximum range
Background suppression available		yes
Operating conditions		
Ambient temperature	[°C]	-25...60
Protection		IP 67
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[years]	728
Mechanical data		
Weight	[g]	201.2
Dimensions	[mm]	M30 x 1.5
Thread designation		M30 x 1.5
Materials		diecast zinc nickel-plated
Lens material		PMMA
Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green
Accessories		
Accessories (supplied)		lock nut: 1 x
Remarks		
Notes		discontinued article
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12		
		

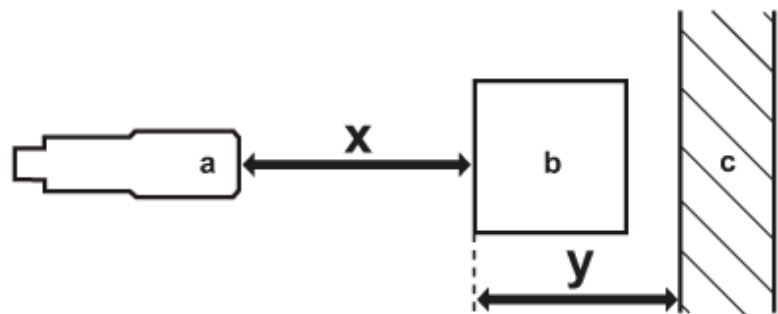
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Connection



Diagrams and graphs



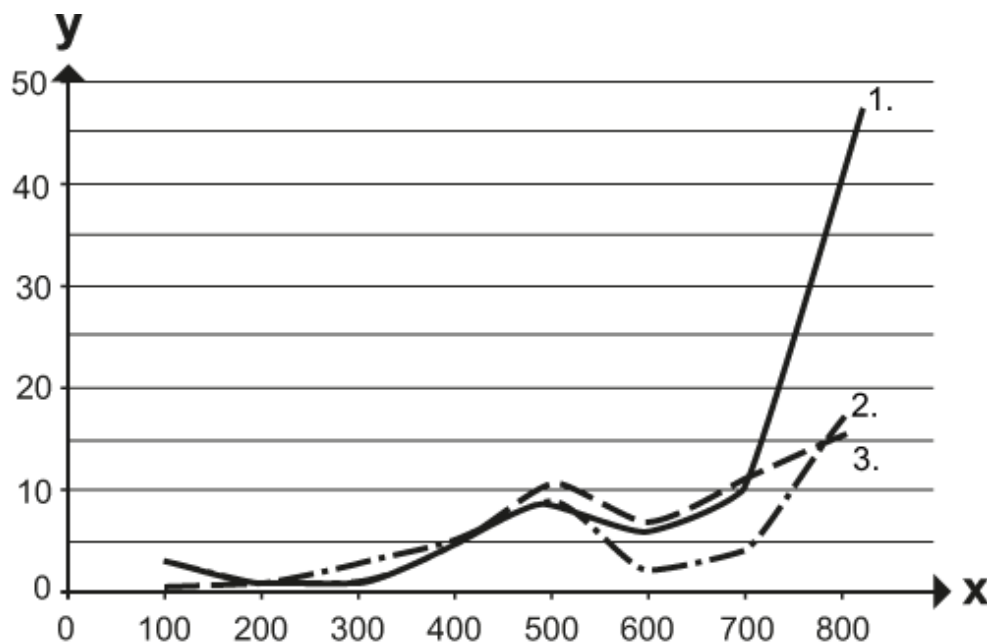
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



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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)

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