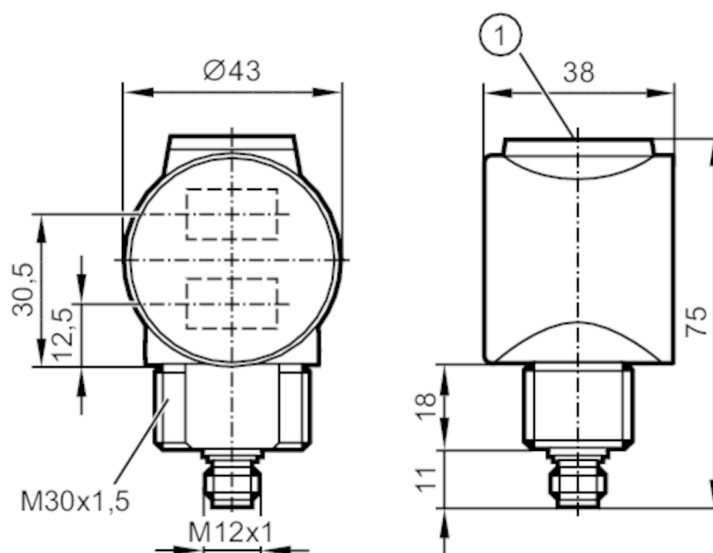




Diffuse reflection sensors with background suppression

OIH-HNKG/US/800MM

Article no longer available - archive entry



1 potentiometer



Product characteristics

Type of light	red light
---------------	-----------

Application

System	Background suppression
Function principle	Diffuse reflection sensor

Electrical data

Operating voltage	[V]	10...30 DC; (cULus - Class 2 source required)
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		yes (non-latching)
Overload protection		yes



Diffuse reflection sensors with background suppression

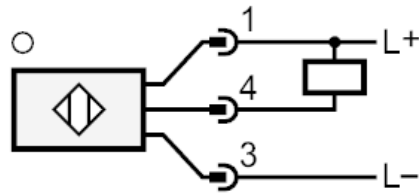
OIH-HNKG/US/800MM

Monitoring range		
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	
Mechanical data		
Weight	[g]	201.2
Dimensions	[mm]	64 x 43 x 38
Thread designation		M30 x 1.5
Material		diecast zinc nickel-plated
Lens material		PMMA
Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green
Accessories		
Items supplied	lock nut: 1	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; coding: A		
		

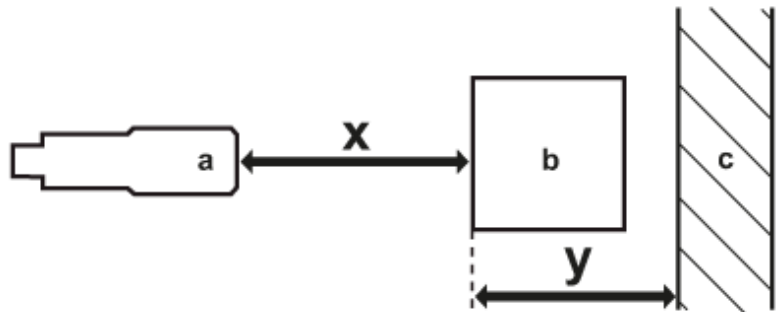
Diffuse reflection sensors with background suppression

OIH-HNKG/US/800MM

Connection



Diagrams and graphs



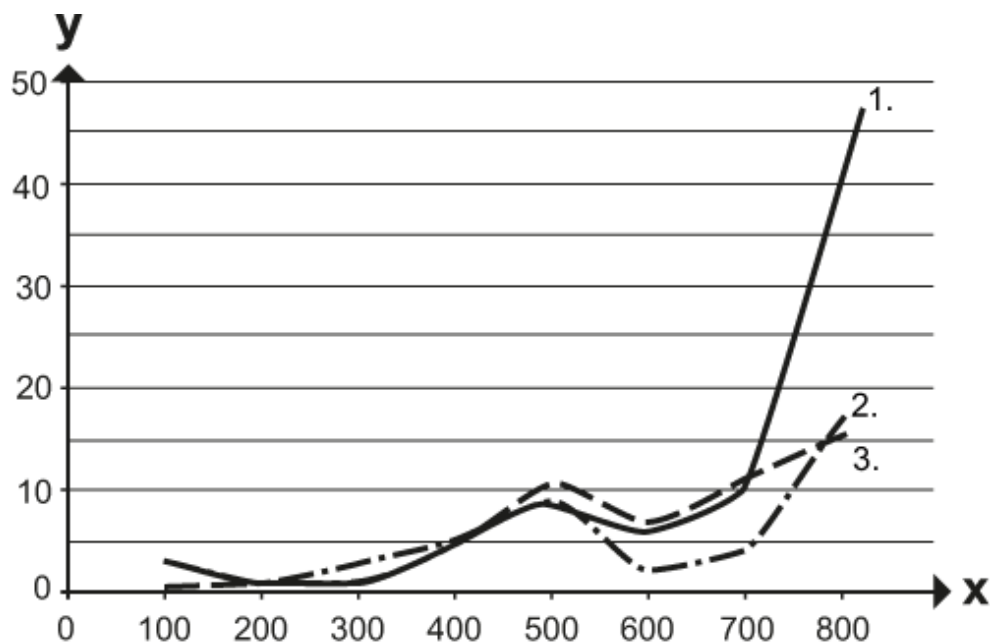
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensors with background suppression

OIH-HNKG/US/800MM

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)