

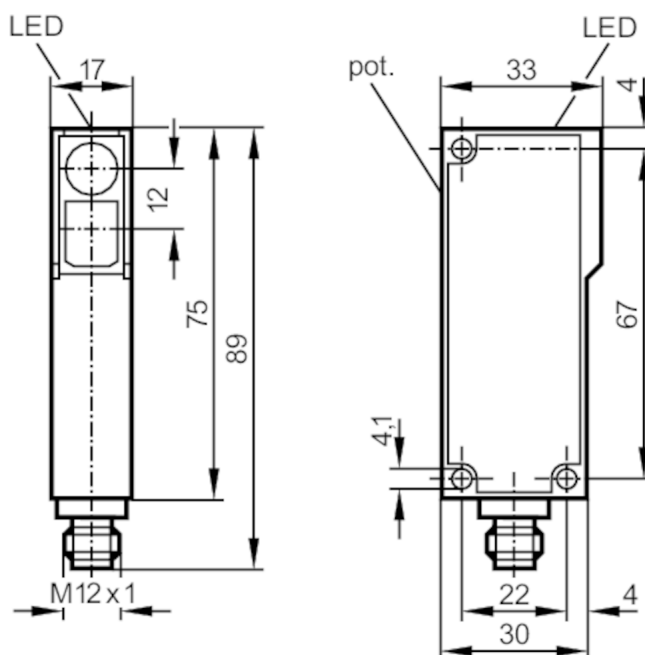
Diffuse reflection sensors with background suppression

OTH-CNKG/US-100-DNX

Article no longer available - archive entry

Alternative articles: OT5214

When selecting an alternative article and accessories please note that technical data may differ!



Receiver in lower lens
Transmitter in upper lens

Product characteristics

Type of light	Infrared light
Housing	rectangular

Application

System	Background suppression
Function principle	Diffuse reflection sensor

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	25; ((24 V))
Protection class		II
Reverse polarity protection		yes
Type of light		Infrared light
Wave length	[nm]	950

Outputs

Electrical design		NPN
Output function		complementary
Max. voltage drop switching output DC	[V]	1.5
Permanent current rating of switching output DC	[mA]	100



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Switching frequency DC	[Hz]	700
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes

Monitoring range

Range	[mm]	50...700; (white paper 200 x 200 mm)
Range adjustable		yes
Max. light spot diameter	[mm]	35
Light spot dimensions refer to		at maximum range
Background suppression available		yes

Operating conditions

Ambient temperature	[°C]	-40...60
Protection		IP 65

Tests / approvals

EMC	EN 60947-5-2	
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Mechanical data

Housing		rectangular
Dimensions	[mm]	75 x 17 x 33
Material		Polycarbonat
Lens material		PMMA

Displays / operating elements

Display	Switching status	1 x LED, yellow
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Accessories

Items supplied	Angle bracket: 1, E20461
	screwdrivers

Remarks

Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; coding: A

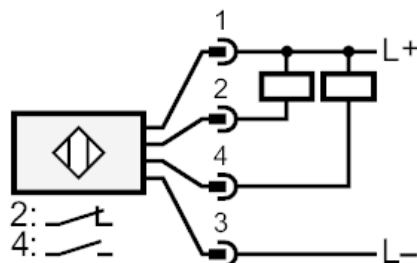




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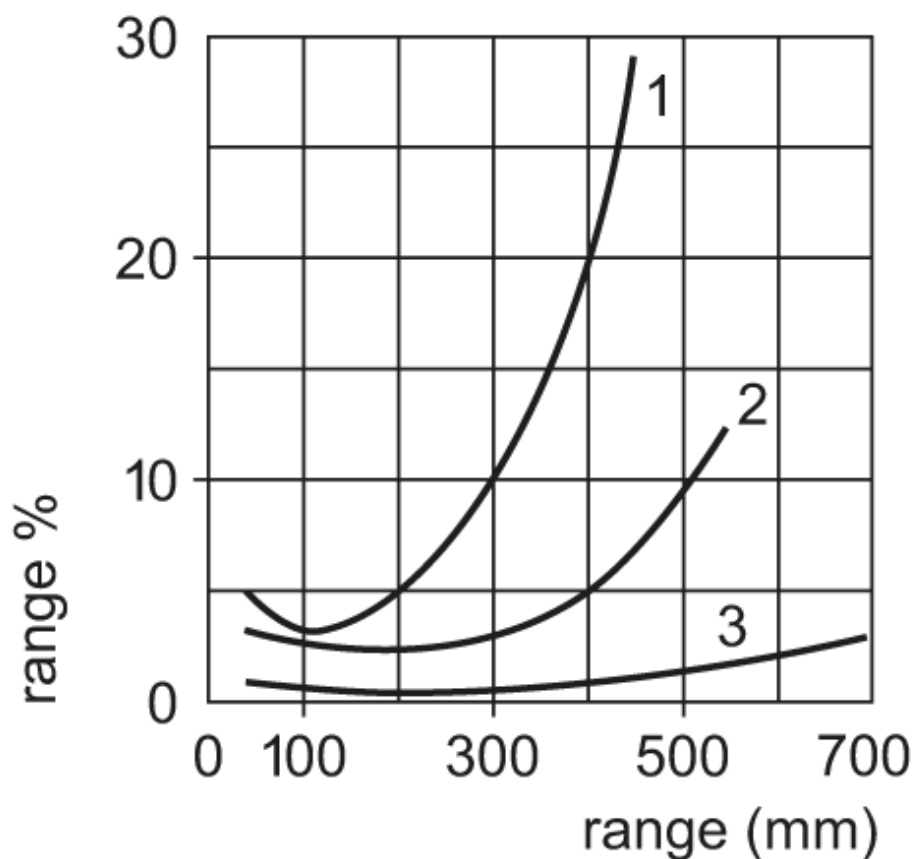
OTH-CNKG/US-100-DNX

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