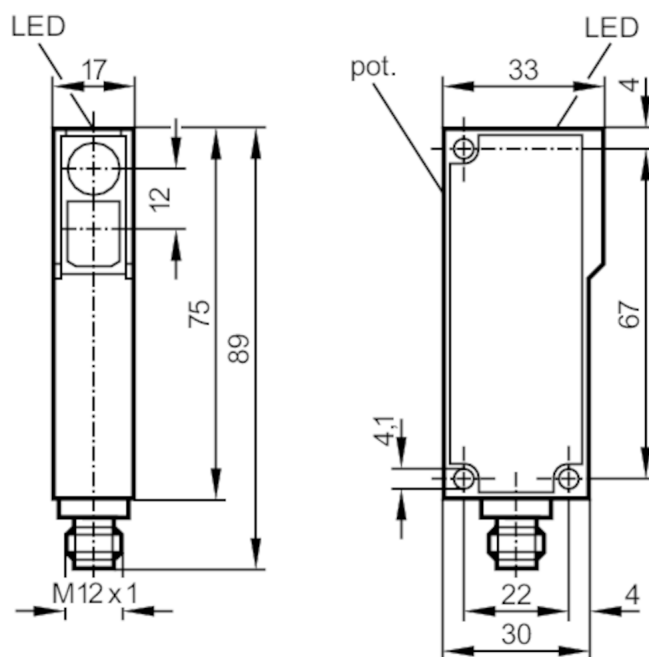




Diffuse reflection sensors with background suppression

OTH-CPKG/US-100-DPX

Article no longer available - archive entry



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		PNP
Output function		complementary
Max. voltage drop switching output DC	[V]	2.9
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	700
Short-circuit protection		yes



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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	
	EN 55011	class B

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

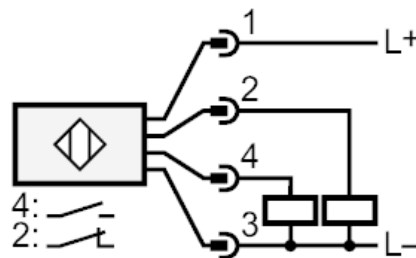
Connector: 1 x M12; coding: A



Diffuse reflection sensors with background suppression

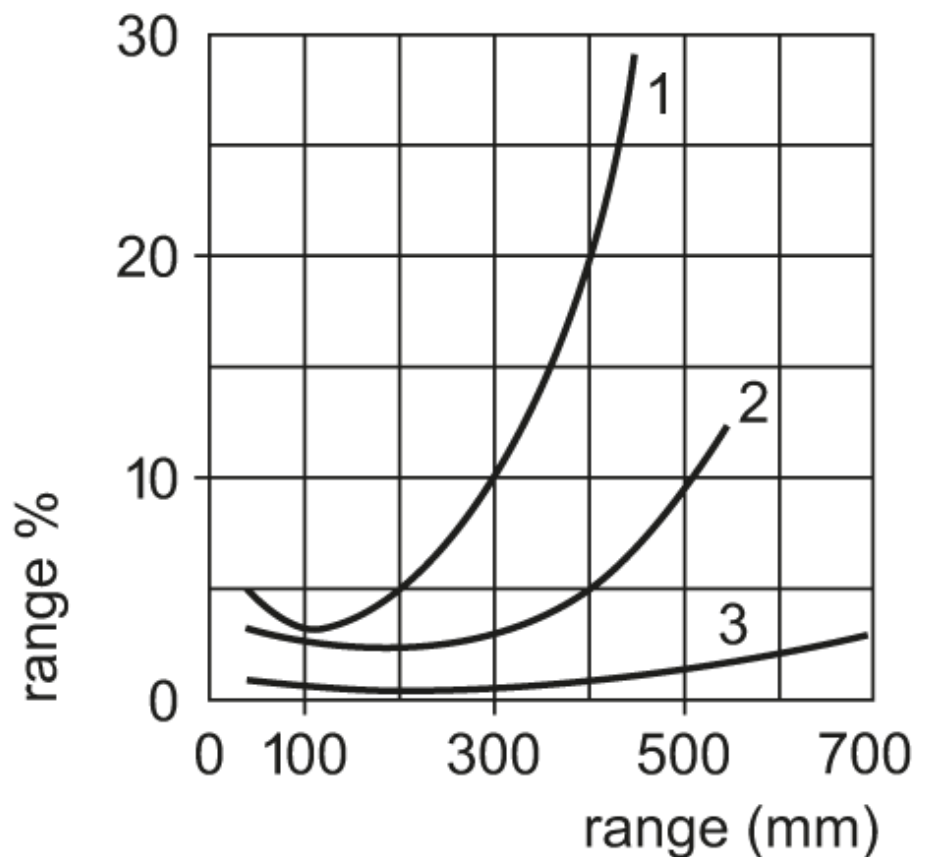
OTH-CPKG/US-100-DPX

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