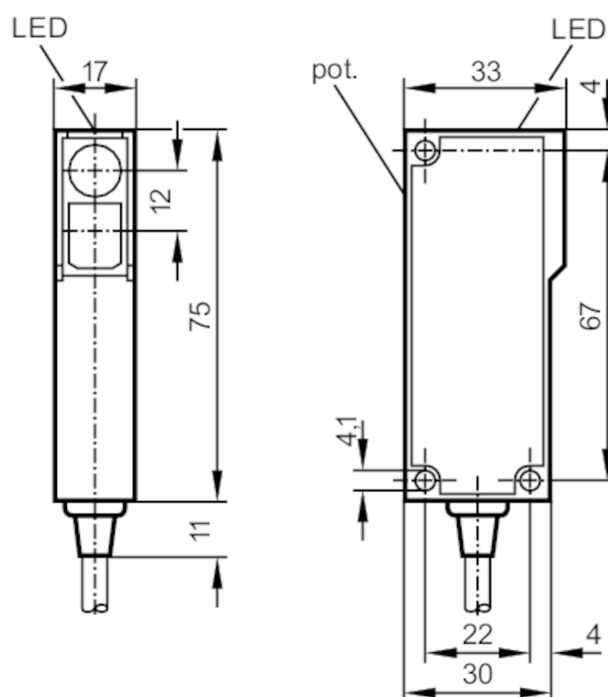


Diffuse reflection sensor with background suppression

OTH-CNKG

Article no longer available - archive entry



receiver in lower lens
transmitter in upper lens

Product characteristics

Type of light	infrared light
Housing	rectangular

Application

Special feature	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
Switching frequency DC	[Hz]	700
Short-circuit protection		yes



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Type of short-circuit protection	pulsed	
Overload protection	yes	
Detection zone		
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 67	
Tests / approvals		
EMC	EN 60947-5-2	
	EN 55011	class B
Mechanical data		
Housing	rectangular	
Dimensions [mm]	75 x 17 x 33	
Materials	Polycarbonat	
Lens material	PMMA	
Displays / operating elements		
Display	switching status	1 x LED, yellow
Accessories		
Items supplied	Angle bracket: 1, E20441	
	screwdrivers	
Remarks		
Pack quantity	1 pcs.	



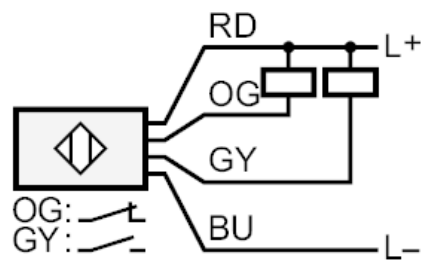
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Electrical connection

Cable: 2 m, PVC; 4 x 0.34 mm²

Connection



BU =	Core colours :
GY =	blue
RD =	grey
OG =	red
	orange

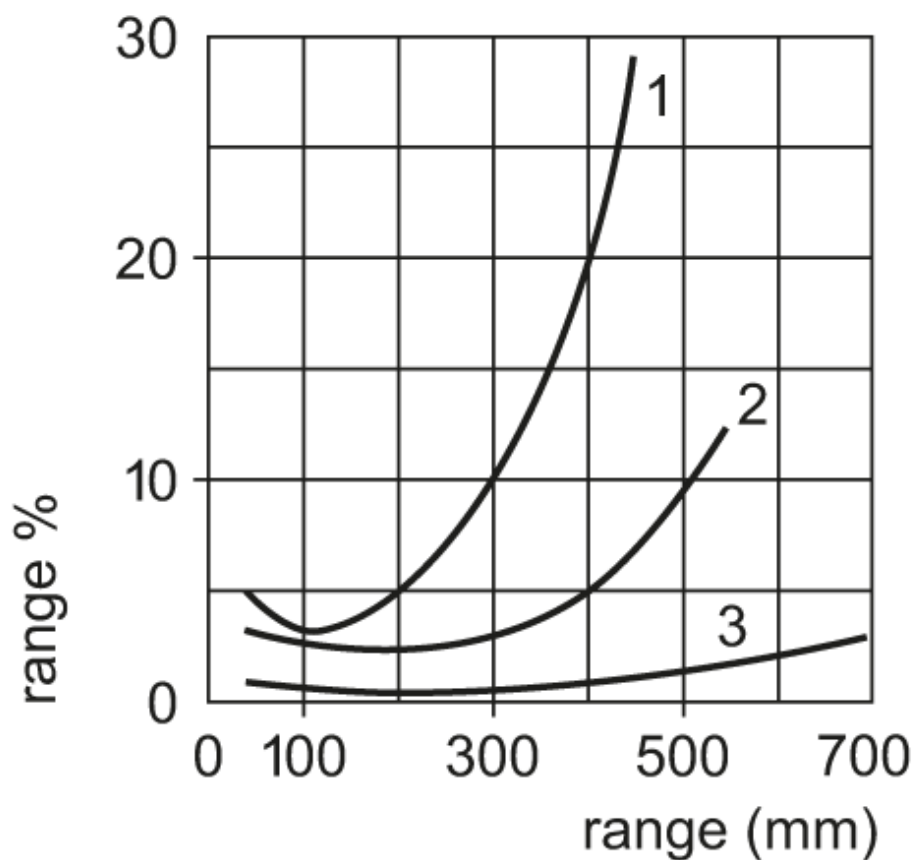


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Diagrams and graphs

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