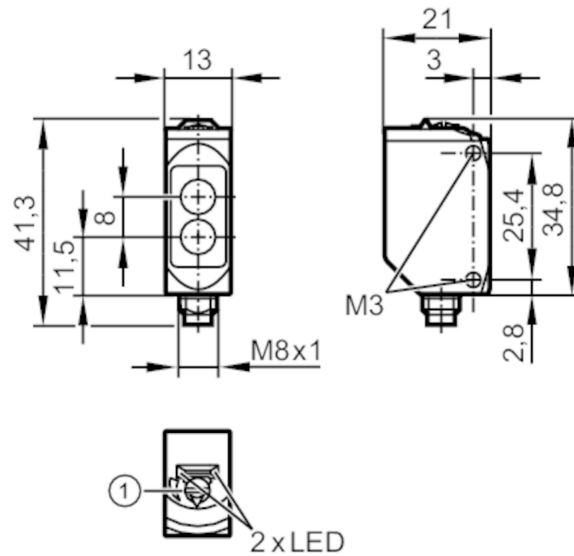


O6H310



Diffuse reflection sensors with background suppression

O6H-CPKG/AS/4P



- 1 potentiometer sensitivity
Receiver in upper lens
transmitter in lower lens



Product characteristics

Type of light	red light
Housing	rectangular

Application

System	Background suppression
Function principle	Diffuse reflection sensor

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	22; ((24 V))
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	633

Outputs

Electrical design		PNP
Output function		complementary
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	1000
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)

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Monitoring range	
Range [mm]	2...200; (white paper 200 x 200 mm)
Range on white object (90 % remission) [mm]	2...200
Range on grey object (18 % remission) [mm]	4...200
Range on black object (6 % remission) [mm]	8...200
Range adjustable	yes
Max. light spot diameter [mm]	8
Light spot dimensions refer to	at maximum range
Background suppression available	yes

Operating conditions	
Ambient temperature [°C]	-25...80
Protection	IP 65; IP 67; IP 68; IP 69K

Tests / approvals		
EMC	EN 60947-5-2	
MTTF [years]	850	
UL approval	Ta	-25...40 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	UL approval number	E009

Mechanical data	
Weight [g]	31.6
Housing	rectangular
Dimensions [mm]	34.8 x 13 x 21
Material	housing: stainless steel (1.4404 / 316L); plastics: PPSU; sealing: EPDM
Lens material	PMMA
Lens alignment	Side sensing
Tightening torque [Nm]	1; (screws)

Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green

Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M8; coding: A

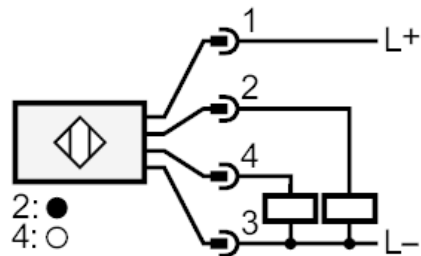




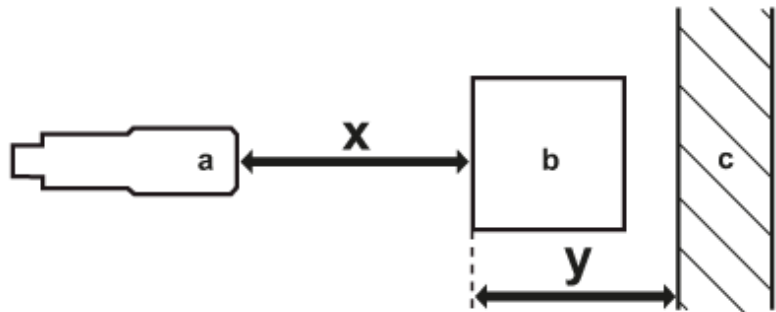
Diffuse reflection sensors with background suppression

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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]

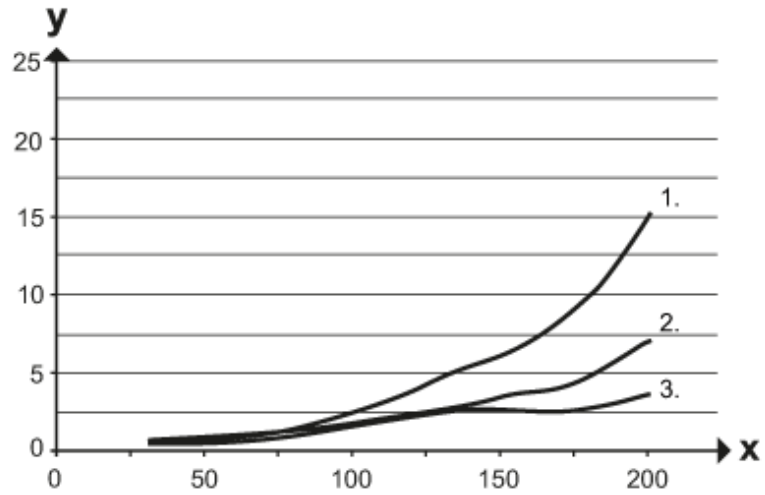
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Diffuse reflection sensors with background suppression

O6H-CPKG/AS/4P

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)