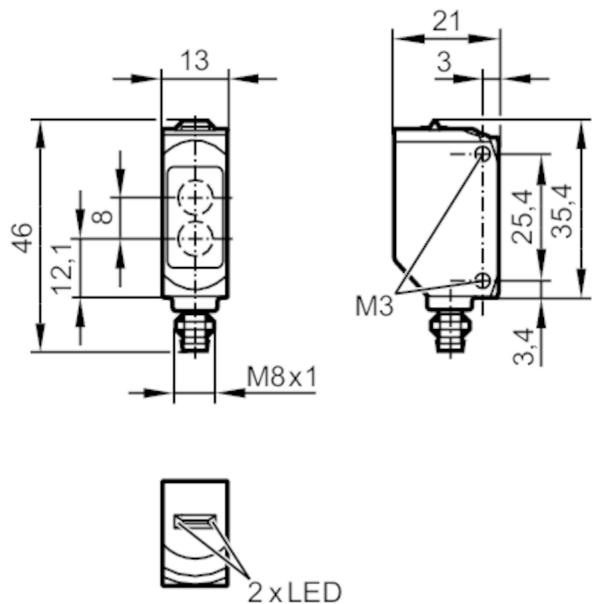


O6H212



Diffuse reflection sensor with background suppression

O6H-HPKG/AS/4P



receiver in upper lens
transmitter in lower lens



Product characteristics		
Type of light		red light
Housing		rectangular
Application		
Special feature		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		light-on mode
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		pulsed



Diffuse reflection sensor with background suppression

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

Operating conditions		
Ambient temperature	[°C]	-25...60
Protection		IP 65; IP 67

Tests / approvals		
EMC	EN 60947-5-2	
MTTF	[years]	1113
UL approval	UL Approval no.	E001

Mechanical data		
Weight	[g]	13
Housing		rectangular
Dimensions	[mm]	46 x 13 x 21
Materials		housing: ABS; PPSU
Lens material		PMMA
Lens alignment		side lens
Sealing material		EPDM
Tightening torque	[Nm]	0.5

Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green

Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.

Electrical connection

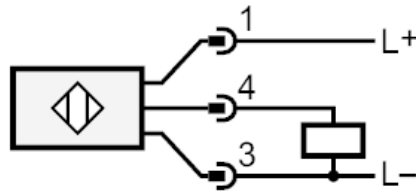
Connector: 1 x M8; coding: A; Locking: brass, coated; Sealing: EPDM



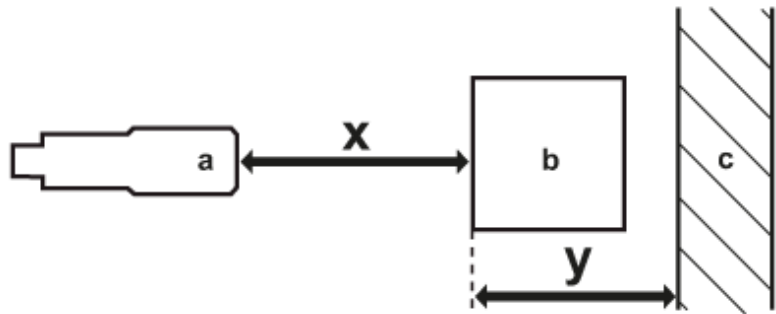
Diffuse reflection sensor with background suppression

O6H-HPKG/AS/4P

Connection



Diagrams and graphs



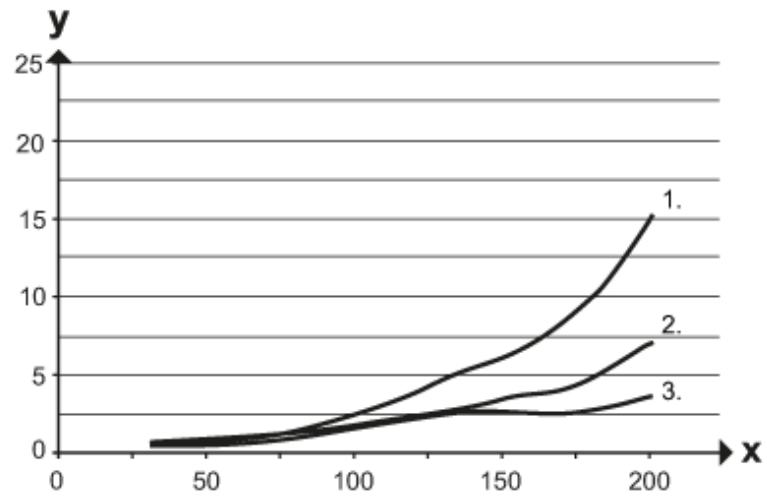
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

O6H-HPKG/AS/4P

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)