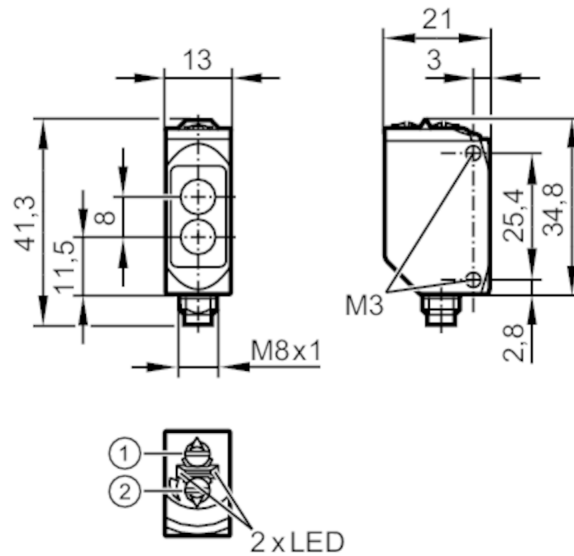


O6H400



Diffuse reflection sensors with background suppression

O6H-FPKG/AS/4P



- 1: output function switch
2: potentiometer sensitivity



Product characteristics

Type of light	red light
Housing	rectangular

Application

System	Background suppression
Function principle	Diffuse reflection sensor
Application	suited for use in the machine tool industry

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/dark-on mode; (selectable)
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)

O6H400



Diffuse reflection sensors with background suppression

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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...60
Protection	IP 65; IP 67; IP 68

Tests / approvals	
EMC	EN 60947-5-2
MTTF [years]	706
UL approval	UL approval number E001

Mechanical data	
Weight [g]	35.1
Housing	rectangular
Dimensions [mm]	41.3 x 13 x 21
Material	housing: stainless steel (1.4404 / 316L); plastics: PPSU; sealing: FKM
Lens material	PMMA
Lens alignment	Side sensing

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

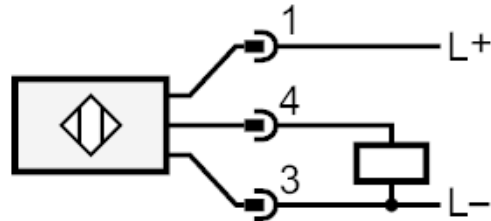




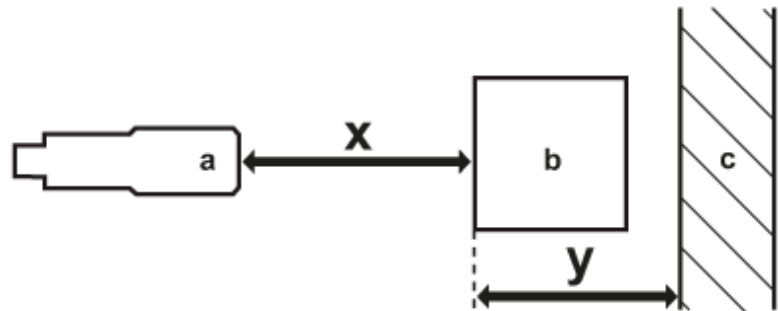
Diffuse reflection sensors with background suppression

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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]

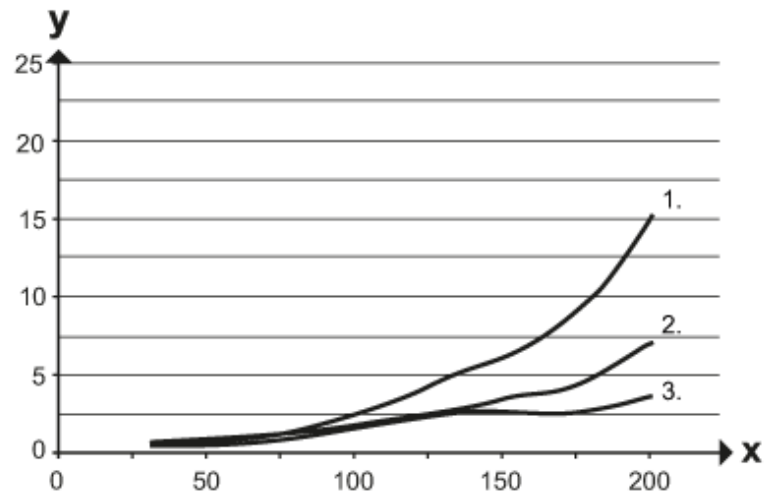
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Diffuse reflection sensors with background suppression

O6H-FPKG/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)