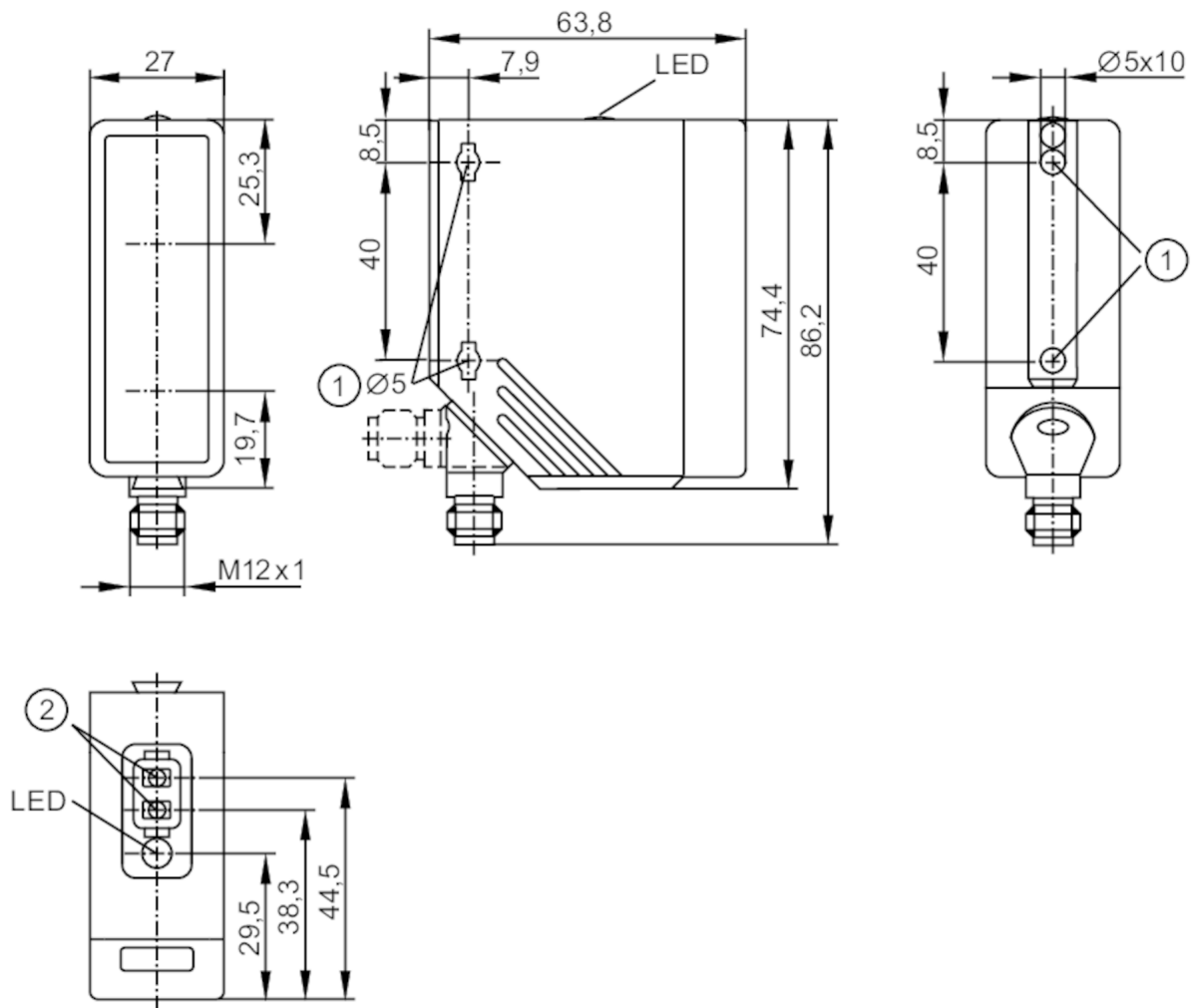


O4H500



Diffuse reflection sensors with background suppression

O4H-FPKG/US100



- 1 mounting hole
2 Programming buttons
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...36 DC; (cULus - Class 2 source required)
Current consumption	[mA]	25
Protection class		II
Reverse polarity protection		yes

O4H500



Diffuse reflection sensors with background suppression

O4H-FPKG/US100

Type of light	red light	
Wave length	[nm]	624
Outputs		
Electrical design	PNP	
Output function	light-on/dark-on mode; (programmable)	
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	200
Switching frequency DC	[Hz]	1000
Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	
Monitoring range		
Range	[mm]	100...2600; (white paper 200 x 200 mm 90 % remission)
Range on white object (90 % remission)	[mm]	100...2600
Range on grey object (18 % remission)	[mm]	100...1300
Range on black object (6 % remission)	[mm]	100...900
Range adjustable	yes	
Max. light spot diameter	[mm]	50
Light spot dimensions refer to	Range	
Background suppression available	yes	
Operating conditions		
Ambient temperature	[°C]	-25...60
Protection	IP 67	
Tests / approvals		
EMC	EN 60947-5-2	
MTTF	[years]	355
Mechanical data		
Weight	[g]	126.5
Housing	rectangular	
Dimensions	[mm]	74.4 x 27 x 63.8
Material	housing: PA; Front framework: stainless steel; operator interface: TPE	
Lens material	PMMA	
Lens alignment	Side sensing	
Mounting hole		
Tightening torque	[Nm]	< 2; (when using a mounting screw M5)
Displays / operating elements		
Display	Switching status	1 x LED, yellow
Teach function	yes	
Electronic lock	yes	

O4H500



Diffuse reflection sensors with background suppression

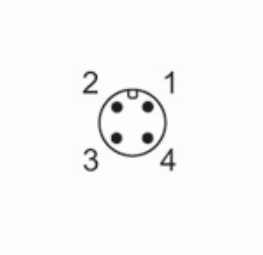
O4H-FPKG/US100

Remarks

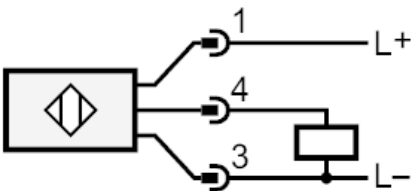
Pack quantity	1 pcs.
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Electrical connection

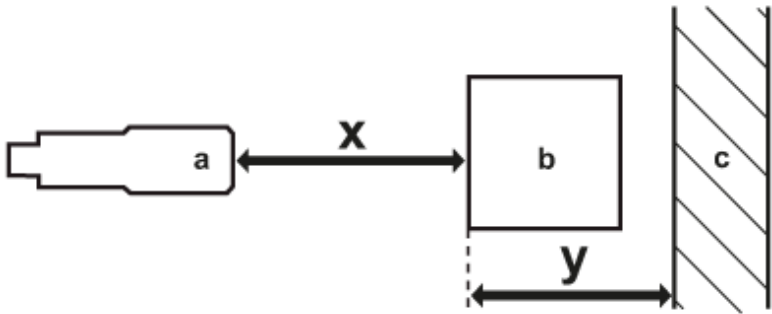
Connector: 1 x M12; coding: A



Connection



Diagrams and graphs



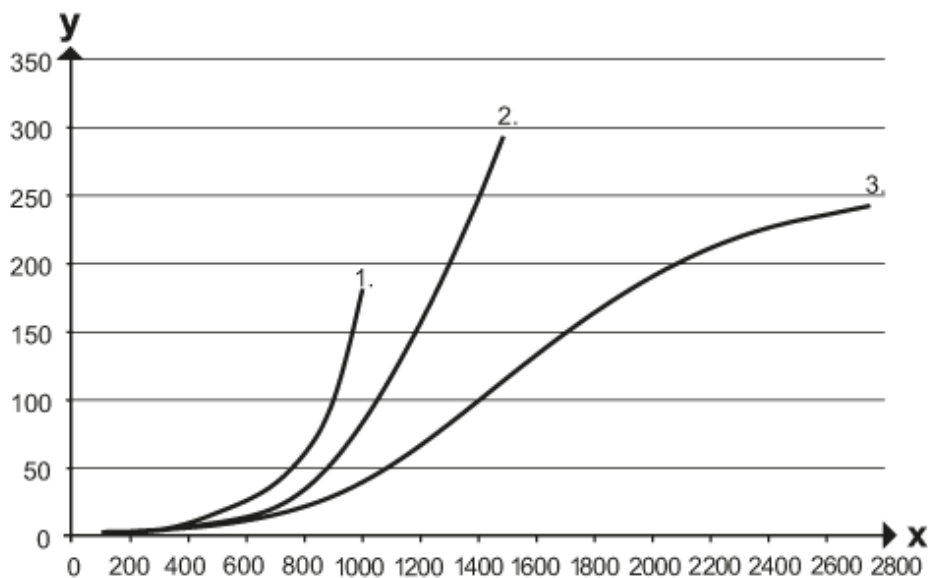
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensors with background suppression

O4H-FPKG/US100

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)