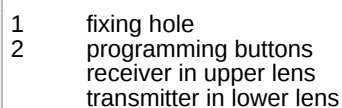


O4H-FPKG/US100



Type of light	red light
Housing	rectangular

Special feature	Background suppression
Function principle	Diffuse reflection sensor

Operating voltage	[V]	10...36 DC; ("supply class 2" to cULus)
Current consumption	[mA]	25
Protection class		II
Reverse polarity protection		yes

O4H500



Diffuse reflection sensor 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	pulsed	
Overload protection	yes	
Detection zone		
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
Materials	housing: PA; bezel: stainless steel; operator interface: TPE	
Lens material	PMMA	
Lens alignment	side lens	
Fixing 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	

Diffuse reflection sensor with background suppression

O4H-FPKG/US100

Remarks

Pack quantity

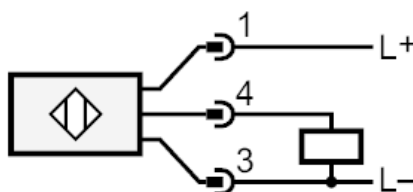
1 pcs.

Electrical connection

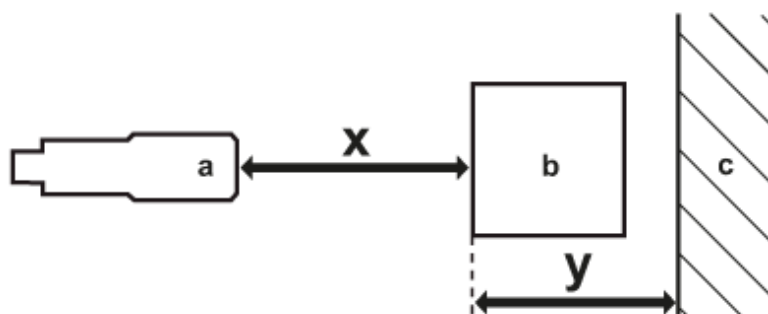
Connector: 1 x M12; coding: A



Connection



Diagrams and graphs



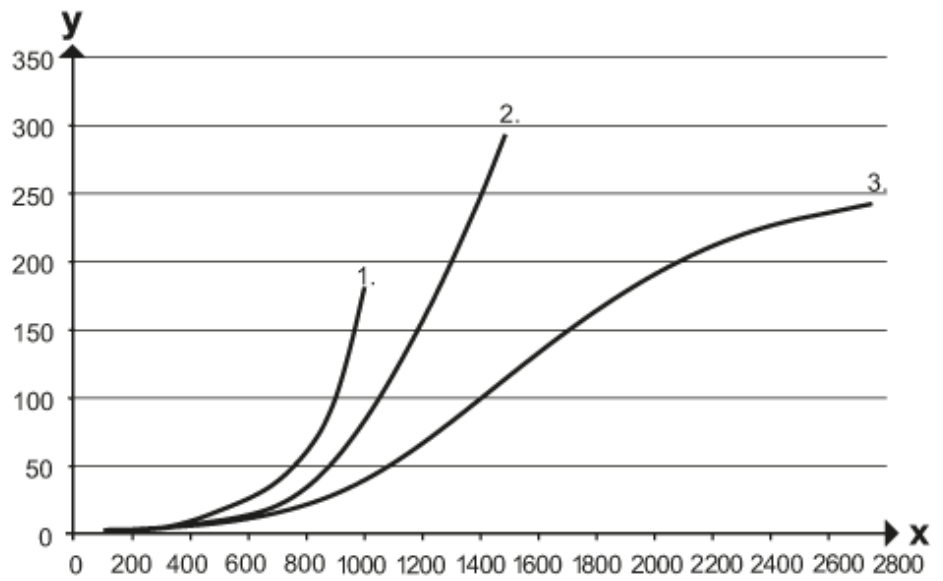
- a: sensor
 b: object
 c: background
 x: distance sensor/object [mm]
 y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

O4H-FPKG/US100

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)