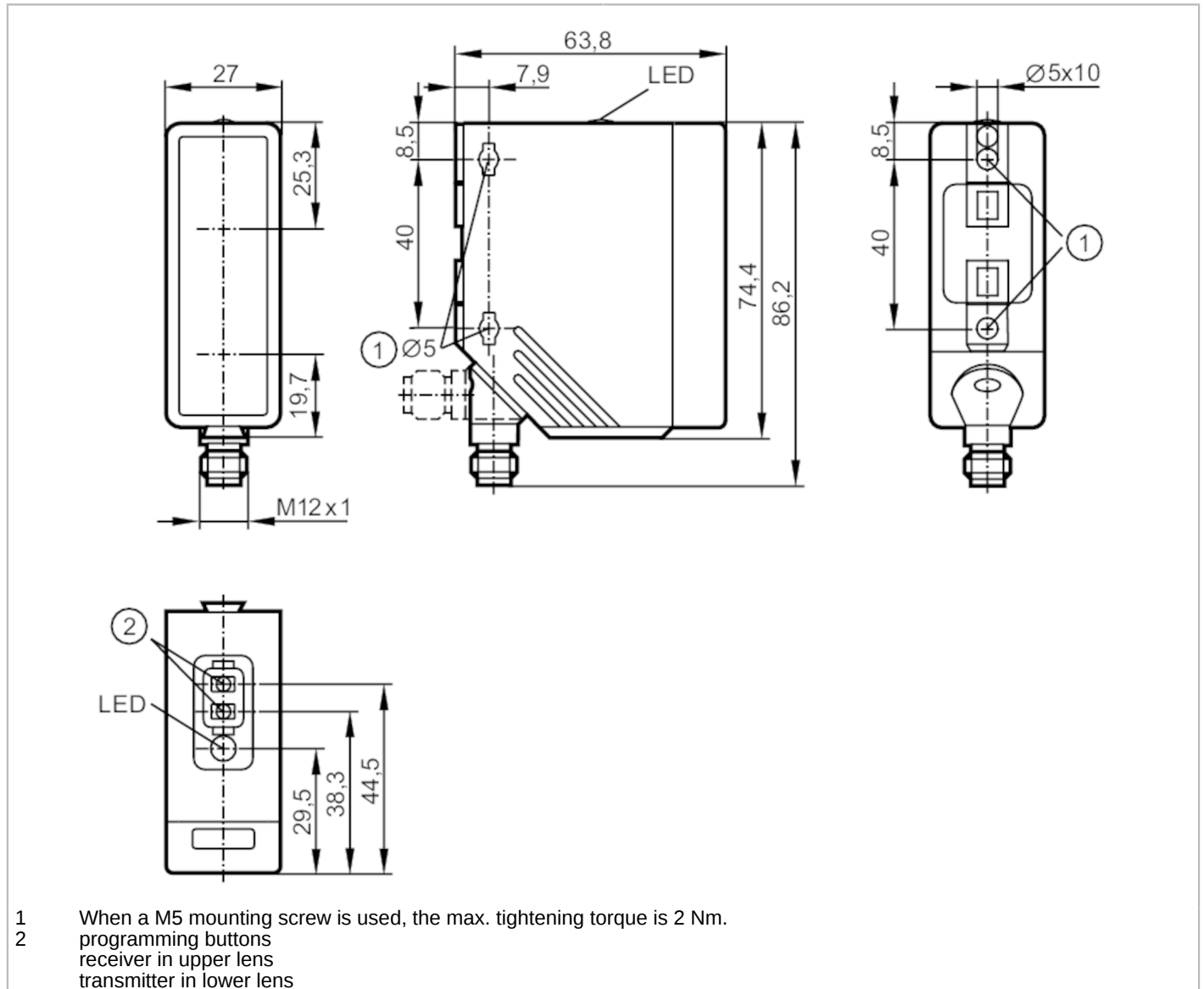


O4H500



Diffuse reflection sensor with background suppression

O4H-FPKG/US100



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...36 DC; ("supply class 2" to cULus)
Current consumption [mA]	25
Protection class	II
Reverse polarity protection	yes
Type of light	red light
Wave length [nm]	624

O4H500



Diffuse reflection sensor with background suppression

O4H-FPKG/US100

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
Displays / operating elements		
Display	switching status	1 x LED, yellow
Teach function		yes
Electronic lock		yes
Remarks		
Pack quantity		1 pcs.

Diffuse reflection sensor with background suppression

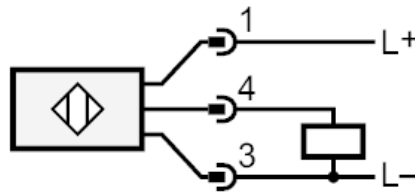
O4H-FPKG/US100

Electrical connection

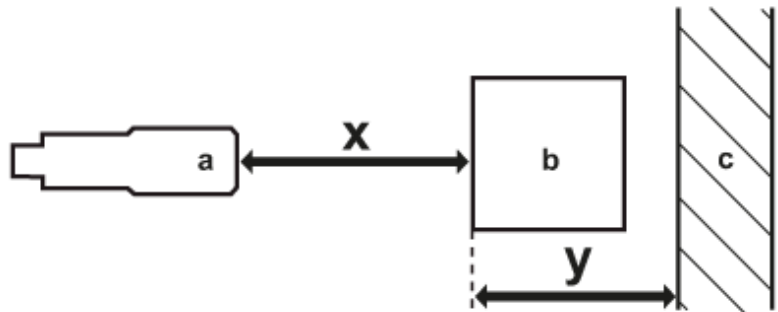
Connector: 1 x M12; coding: A



Connection



Diagrams and graphs



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

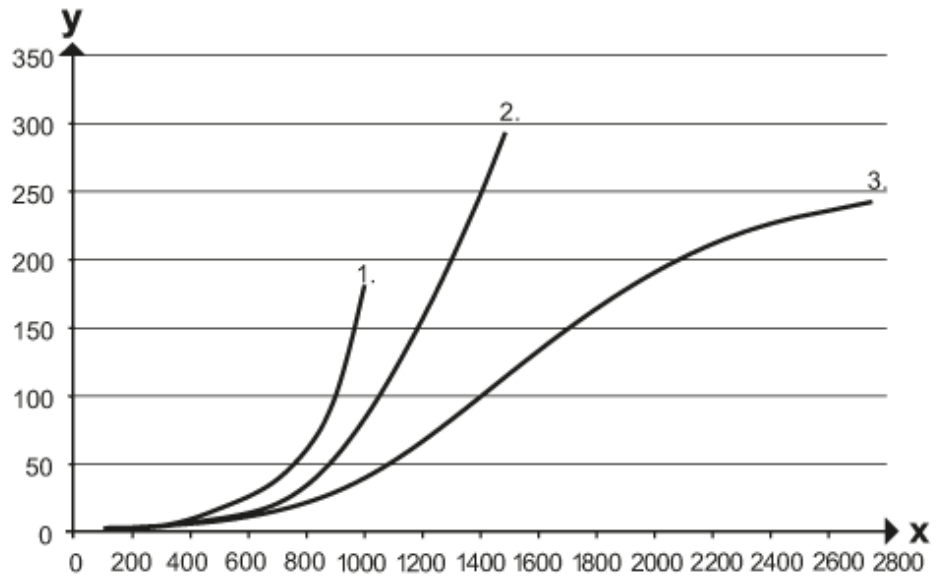
O4H500



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) , \$Hintergrund_weiss_90_Remission

2 = object grey (18 % remission) , \$Hintergrund_weiss_90_Remission

3 = object white (90 % remission) , \$Hintergrund_weiss_90_Remission