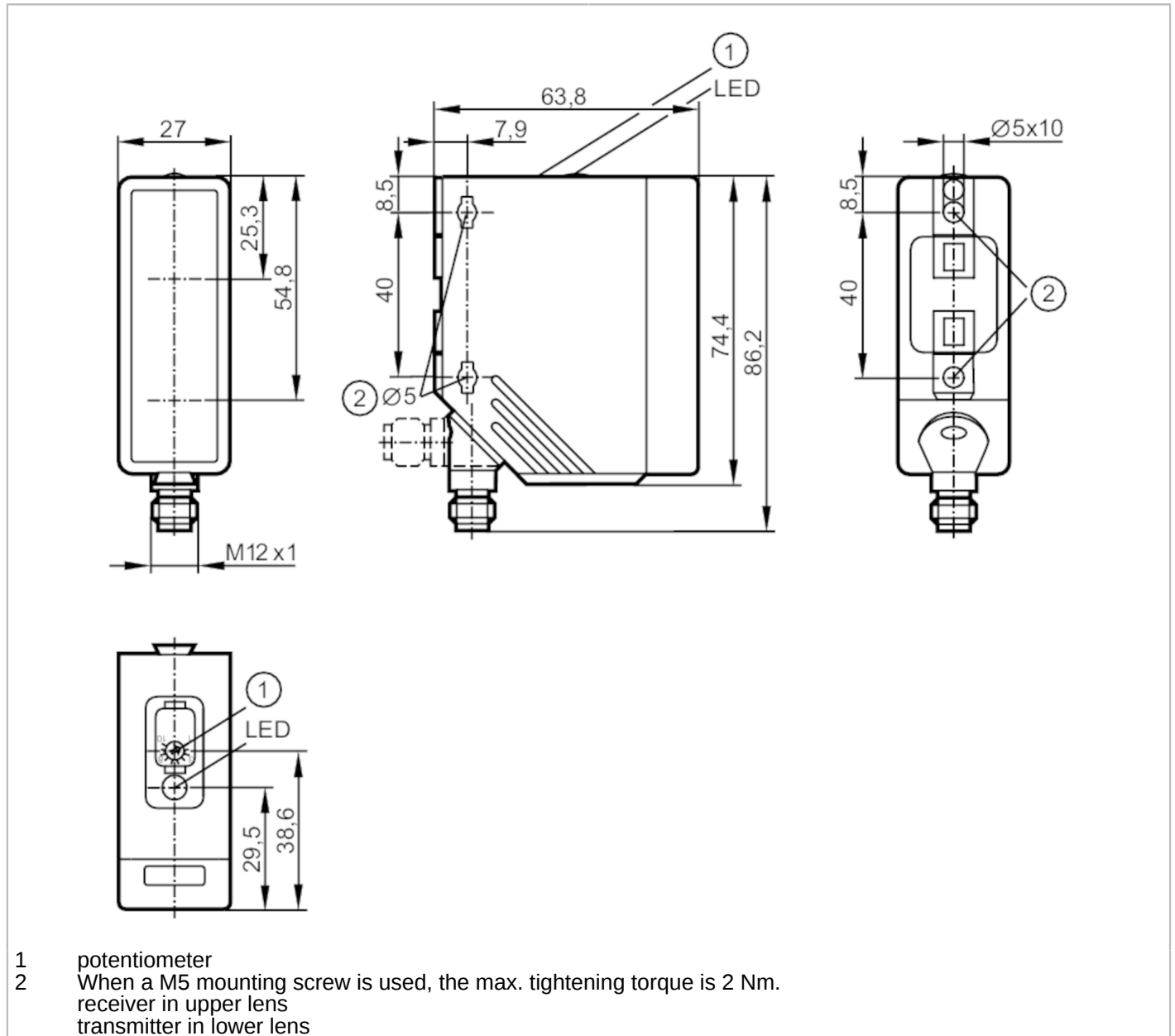


O4H201



Diffuse reflection sensor with background suppression

O4H-DPKG/US100



Product characteristics	
Type of light	red light
Housing	rectangular
Dimensions [mm]	74.4 x 27 x 63.8
Application	
Special feature	Background suppression
Function principle	Diffuse reflection sensor



Diffuse reflection sensor with background suppression

O4H-DPKG/US100

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
Outputs		
Electrical design		PNP
Output function		dark-on mode
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...2000; (white paper 200 x 200 mm 90% remission)
Range on white object (90 % remission)	[mm]	100...2000
Range on grey object (18 % remission)	[mm]	100...1100
Range on black object (6 % remission)	[mm]	100...700
Range adjustable		yes
Max. light spot diameter	[mm]	100
Light spot dimensions refer to		at maximum range
Background suppression available		yes
Operating conditions		
Ambient temperature	[°C]	-25...60
Protection		IP 65
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[years]	326
Mechanical data		
Weight	[g]	121.5
Housing		rectangular
Dimensions	[mm]	74.4 x 27 x 63.8
Materials		housing: PA; bezel: stainless steel; operator interface: TPE / PC
Lens material		PMMA
Lens alignment		side lens

O4H201



Diffuse reflection sensor with background suppression

O4H-DPKG/US100

Displays / operating elements		
Display	switching status	1 x LED, yellow
Operating elements		potentiometer

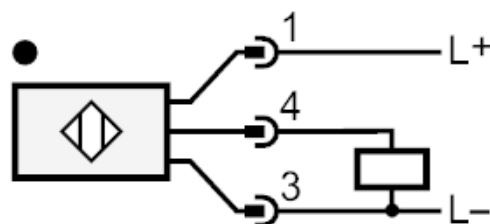
Remarks	
Pack quantity	1 pcs.

Electrical connection

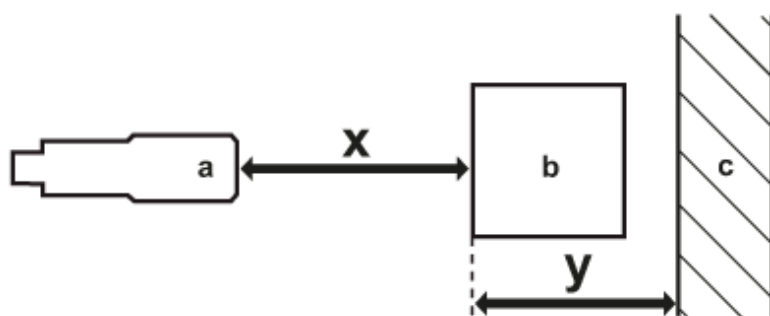
Connector: 1 x M12



Connection



Diagrams and graphs



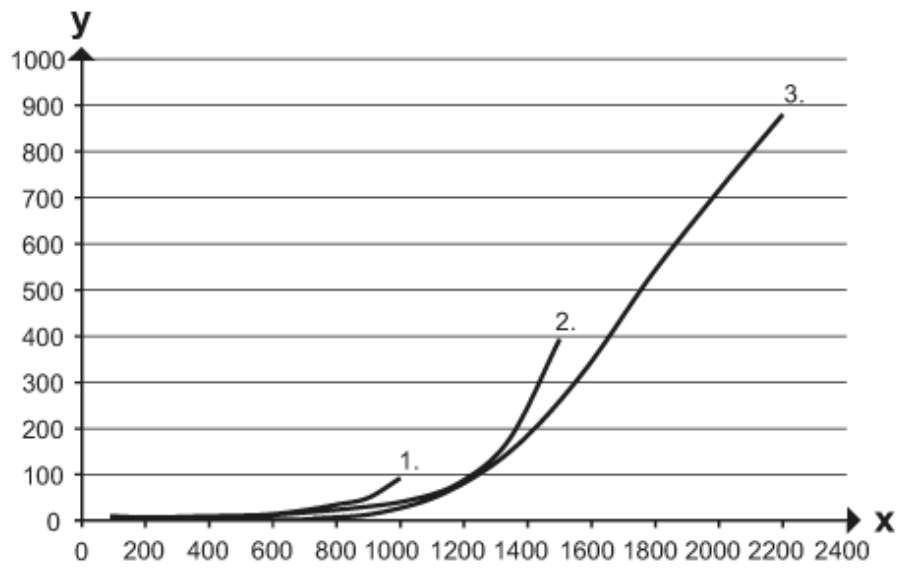
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

O4H-DPKG/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)