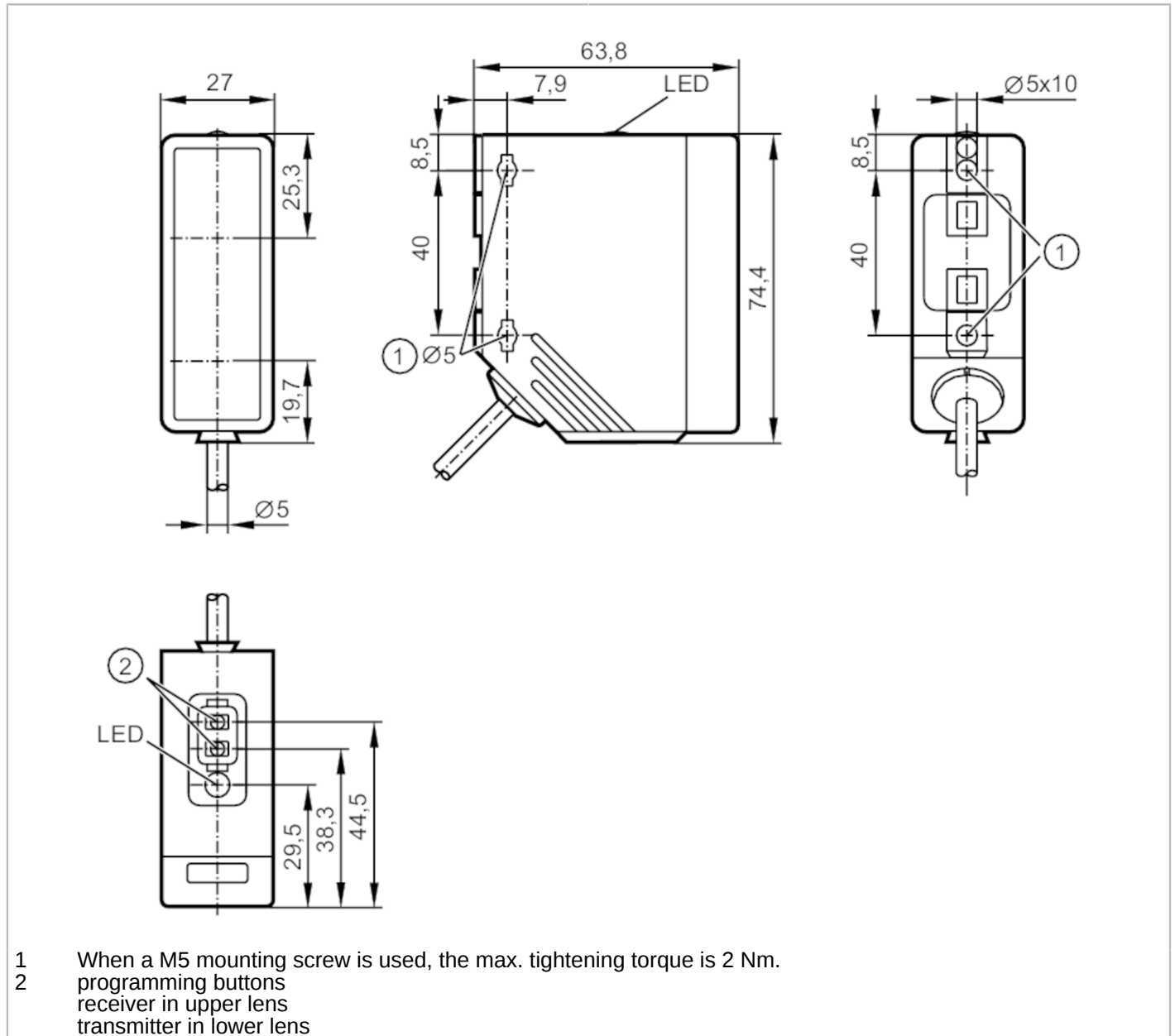


O4H501



Diffuse reflection sensor with background suppression

O4H-FPKG/2M



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

O4H501



Diffuse reflection sensor with background suppression

O4H-FPKG/2M

Electrical data		
Operating voltage	[V]	10...36 DC
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		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]	209
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

O4H501



Diffuse reflection sensor with background suppression

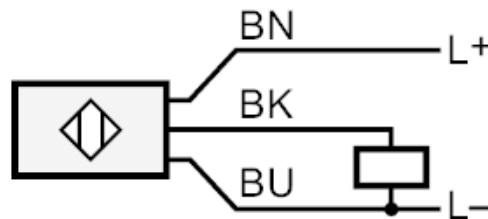
O4H-FPKG/2M

Displays / operating elements		
Display	switching status	1 x LED, yellow
Teach function		yes
Electronic lock		yes

Remarks	
Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.

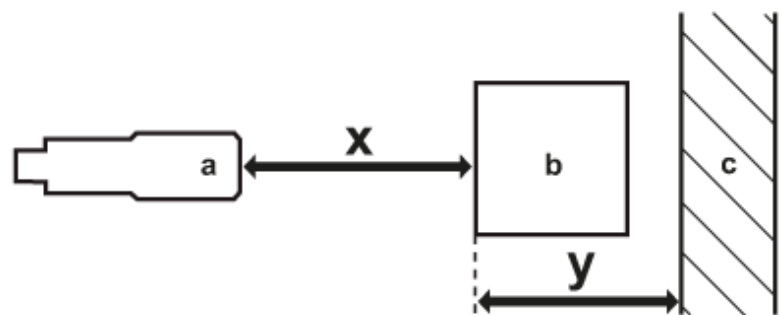
Electrical connection
Cable: 2 m, PUR; 3 x 0.34 mm²

Connection



Core colours :
BK = black
BN = brown
BU = blue

Diagrams and graphs



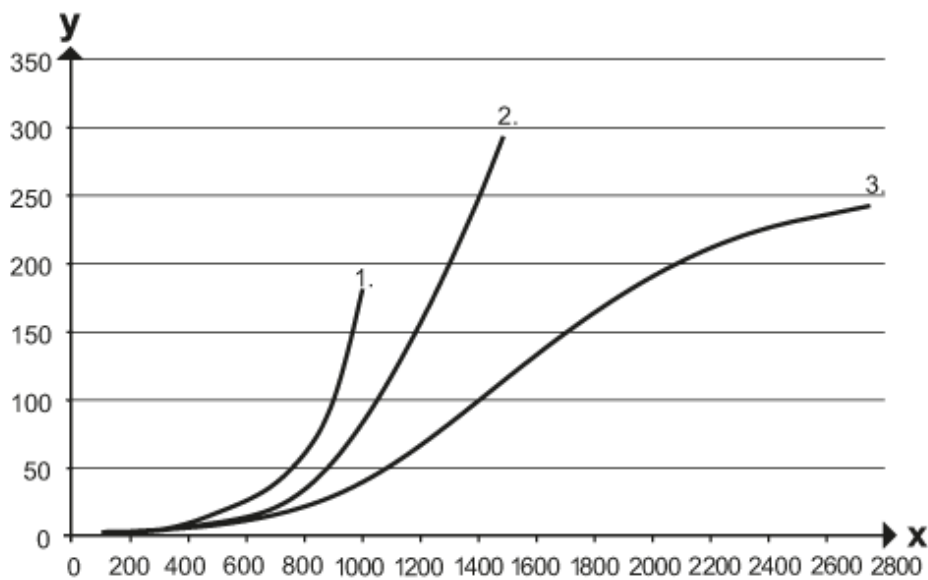
a: sensor
b: object
c: background
x: distance sensor/object [mm]
y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

O4H-FPKG/2M

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)