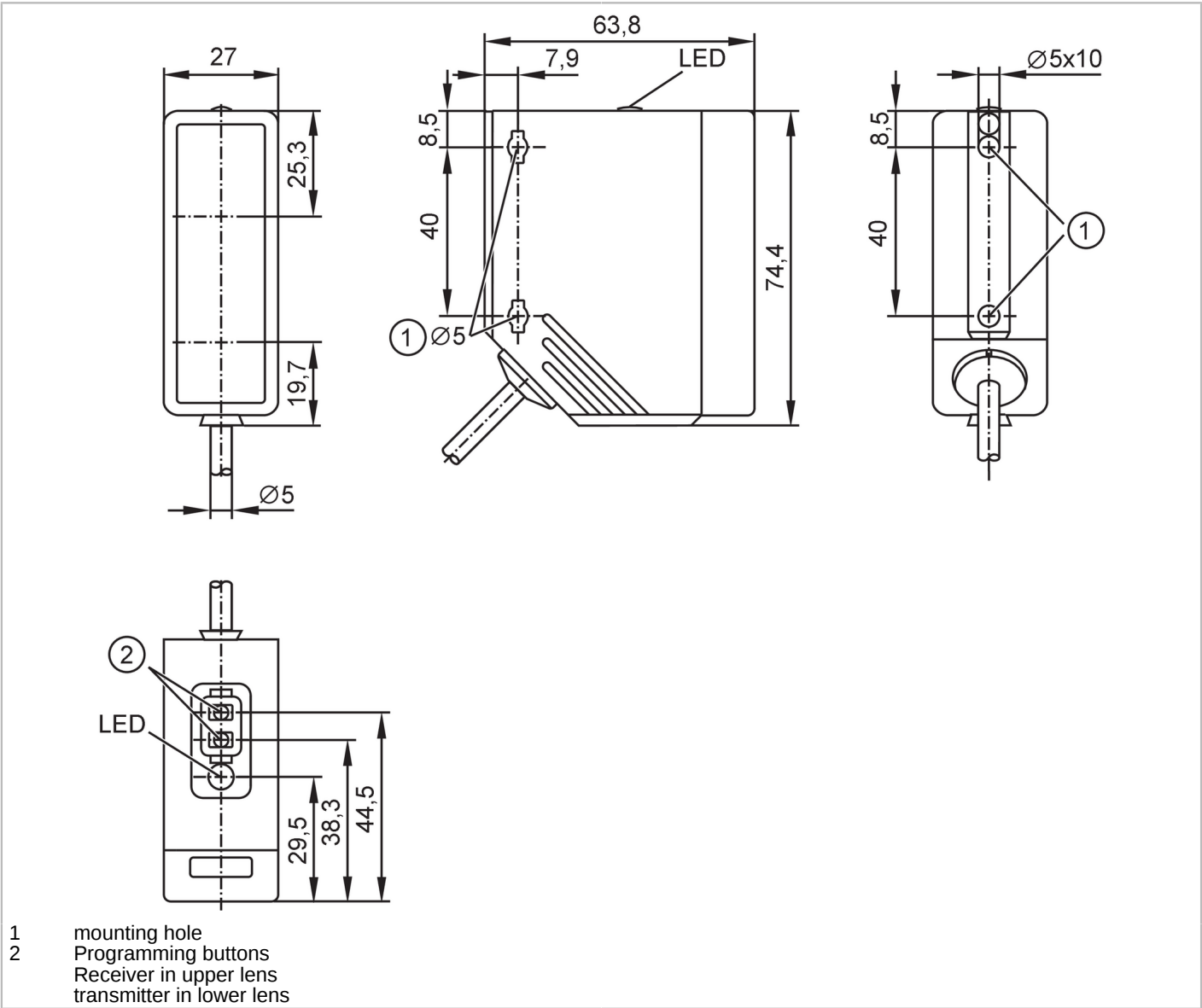


O4H501



Diffuse reflection sensors with background suppression

O4H-FPKG/2M



Product characteristics		
Type of light		red light
Housing		rectangular
Application		
Special feature		Background suppression
Function principle		Diffuse reflection sensor
Application		Industrial applications
Electrical data		
Operating voltage	[V]	10...36 DC
Current consumption	[mA]	25
Protection class		II
Reverse polarity protection		yes
Type of light		red light



Diffuse reflection sensors with background suppression

O4H-FPKG/2M

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]	209
Housing		rectangular
Dimensions	[mm]	74.4 x 27 x 63.8
Material		operator interface: TPE; housing: PA; Front framework: stainless steel
Lens material		front lens: 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

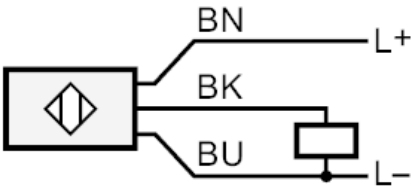


Diffuse reflection sensors with background suppression

O4H-FPKG/2M

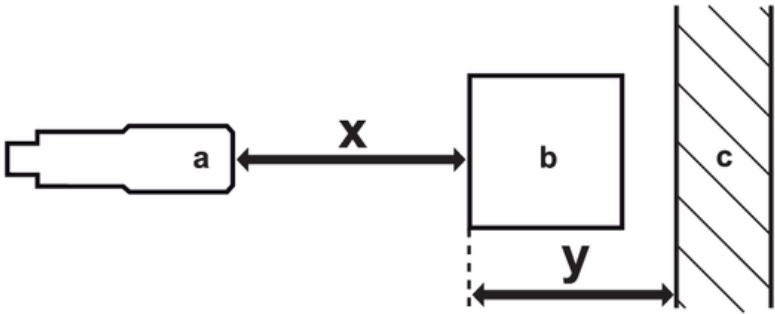
Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.

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



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

Diagrams and graphs



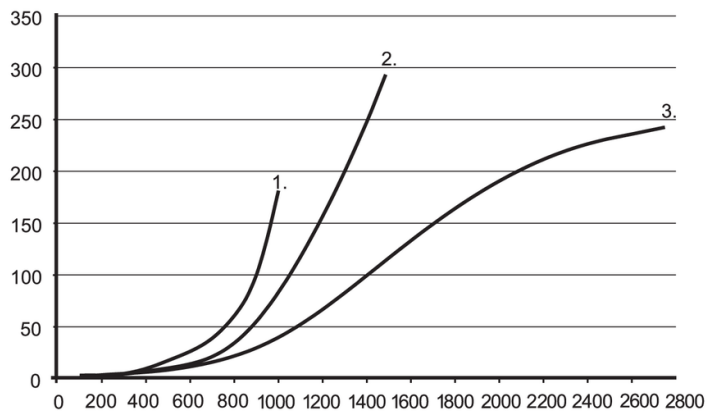
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensors with background suppression

O4H-FPKG/2M

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)