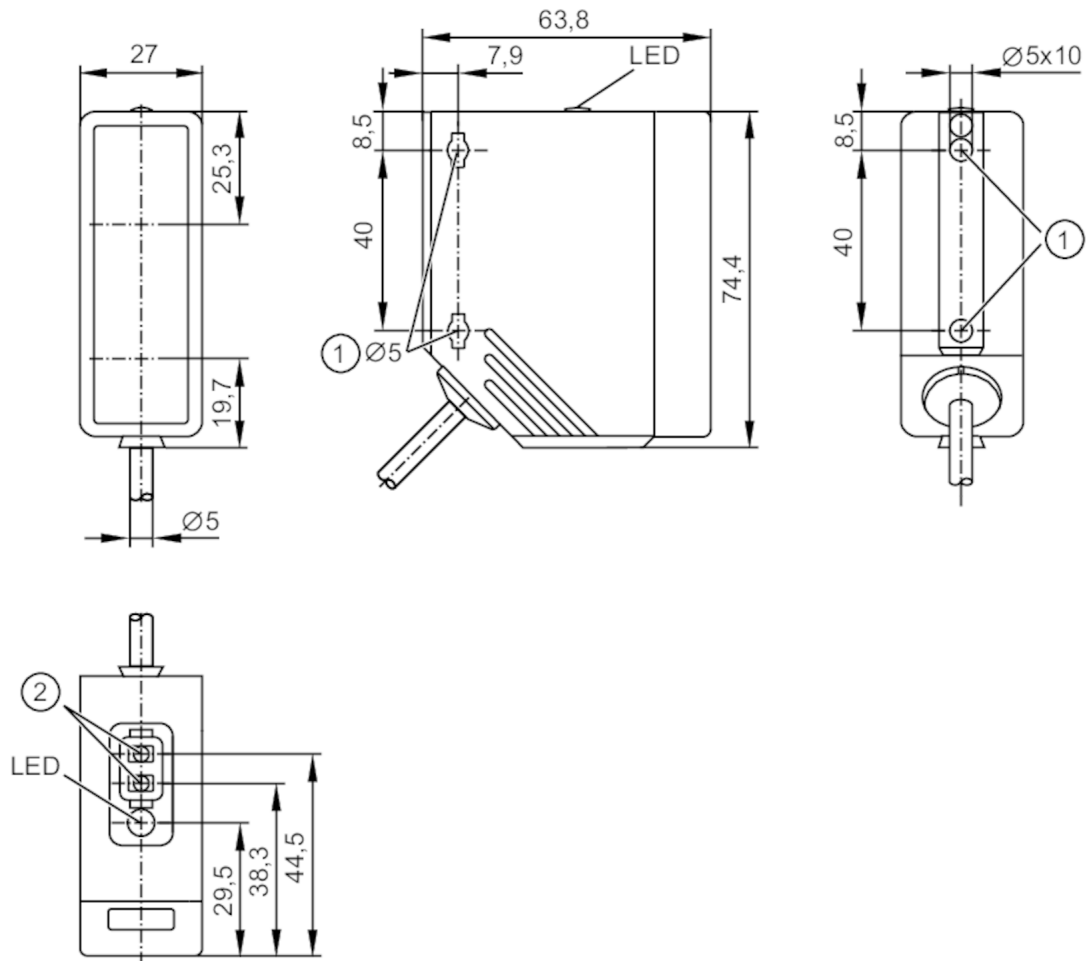


O4H501



Diffuse reflection sensors with background suppression

O4H-FPKG/2M



- 1 mounting hole
- 2 Programming buttons
Receiver in upper lens
transmitter in lower lens



Product characteristics

Type of light	red light
Housing	rectangular

Application

System	Background suppression
Function principle	Diffuse reflection sensor

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



Diffuse reflection sensors with background suppression

O4H-FPKG/2M

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	housing: PA; Front framework: stainless steel; operator interface: TPE	
Lens material	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	
Remarks		
Remarks	cULus - Class 2 source required	



Diffuse reflection sensors with background suppression

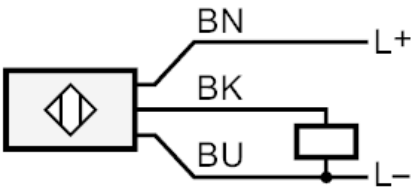
O4H-FPKG/2M

Pack quantity	1 pcs.
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Electrical connection

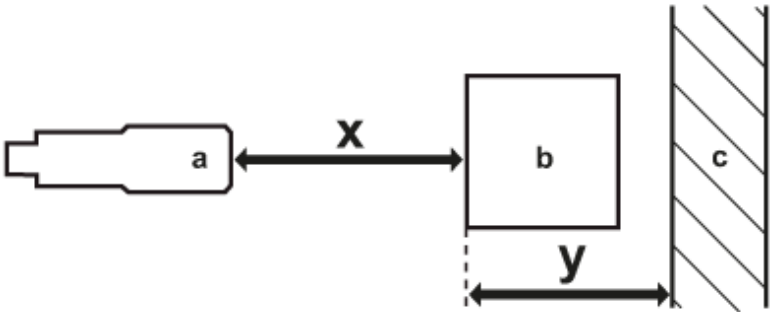
Cable: 2 m, PUR; 3 x 0.34 mm²

Connection



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

Diagrams and graphs



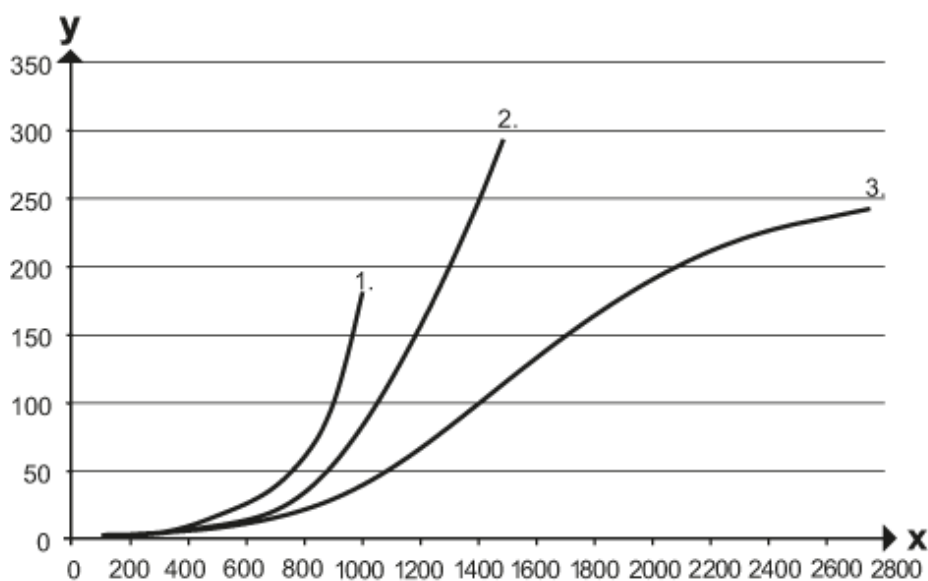
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



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)