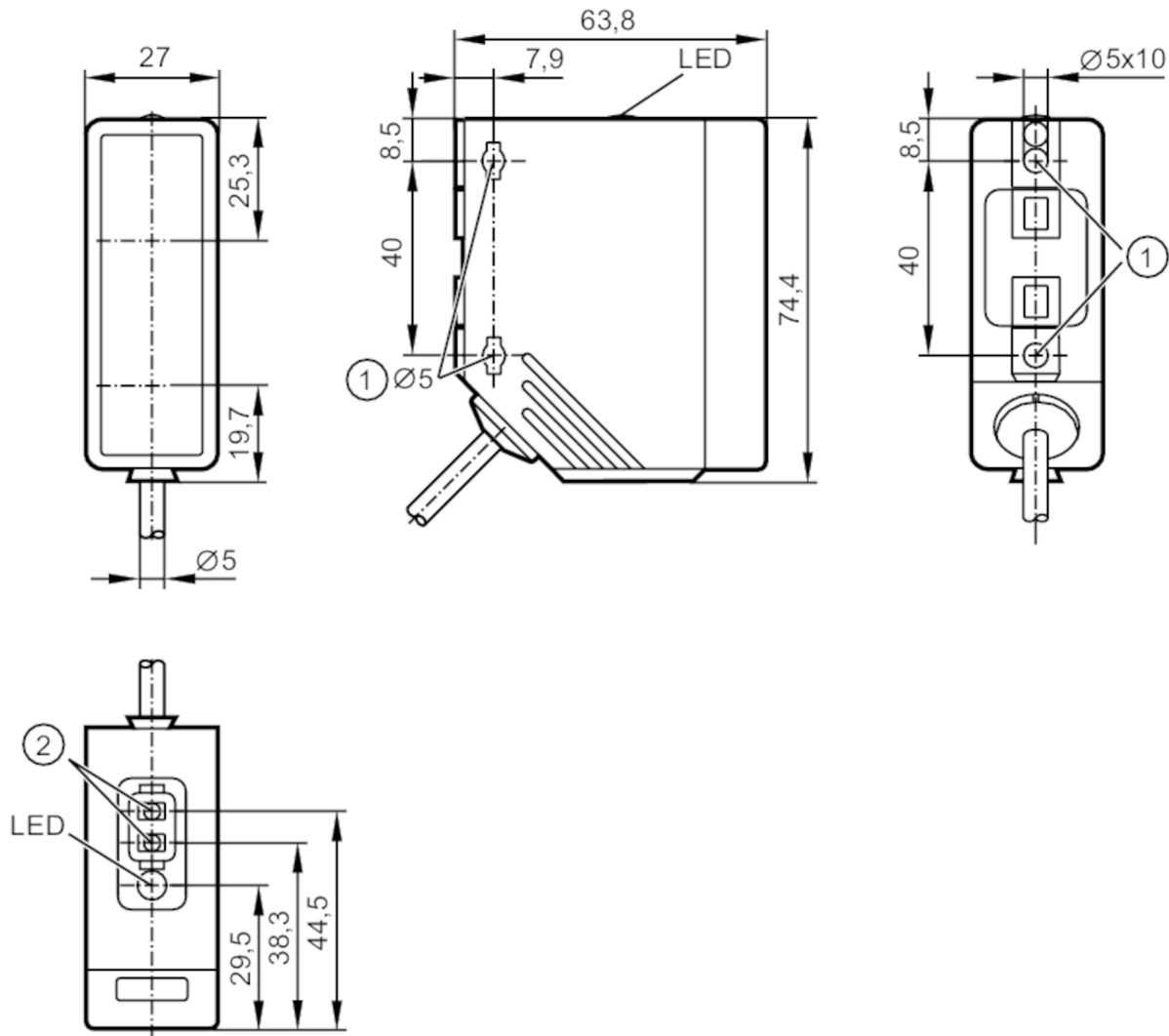


O4H501



Diffuse reflection sensors with background suppression

O4H-FPKG/2M



- 1 When a M5 mounting screw is used, the max. tightening torque is 2 Nm.
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



Diffuse reflection sensors with background suppression

O4H-FPKG/2M

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	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

Displays / operating elements

Display	Switching status	1 x LED, yellow
Teach function	yes	
Electronic lock	yes	

Remarks

Remarks	cULus - Class 2 source required
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Diffuse reflection sensors with background suppression

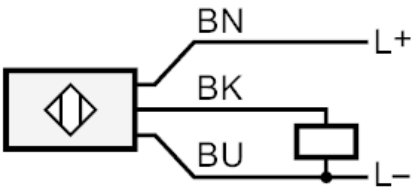
O4H-FPKG/2M

Pack quantity	1 pcs.
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Electrical connection

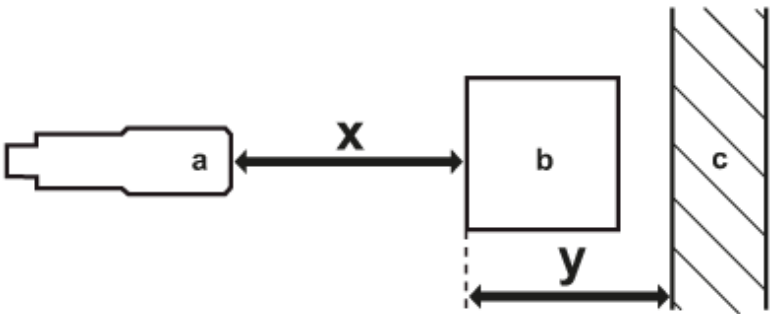
Cable: 2 m, PUR; 3 x 0.34 mm²

Connection

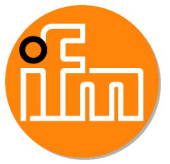


	Core colors :
BK =	black
BN =	brown
BU =	blue

Diagrams and graphs



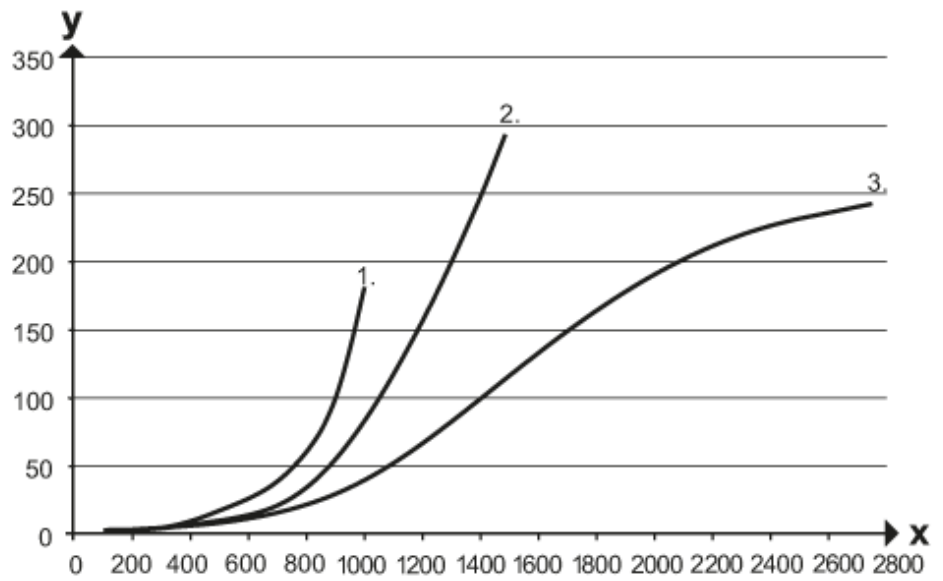
a: sensor
b: object
c: background
x: distance sensor/object [mm]
y: min. distance object/background [mm]



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)