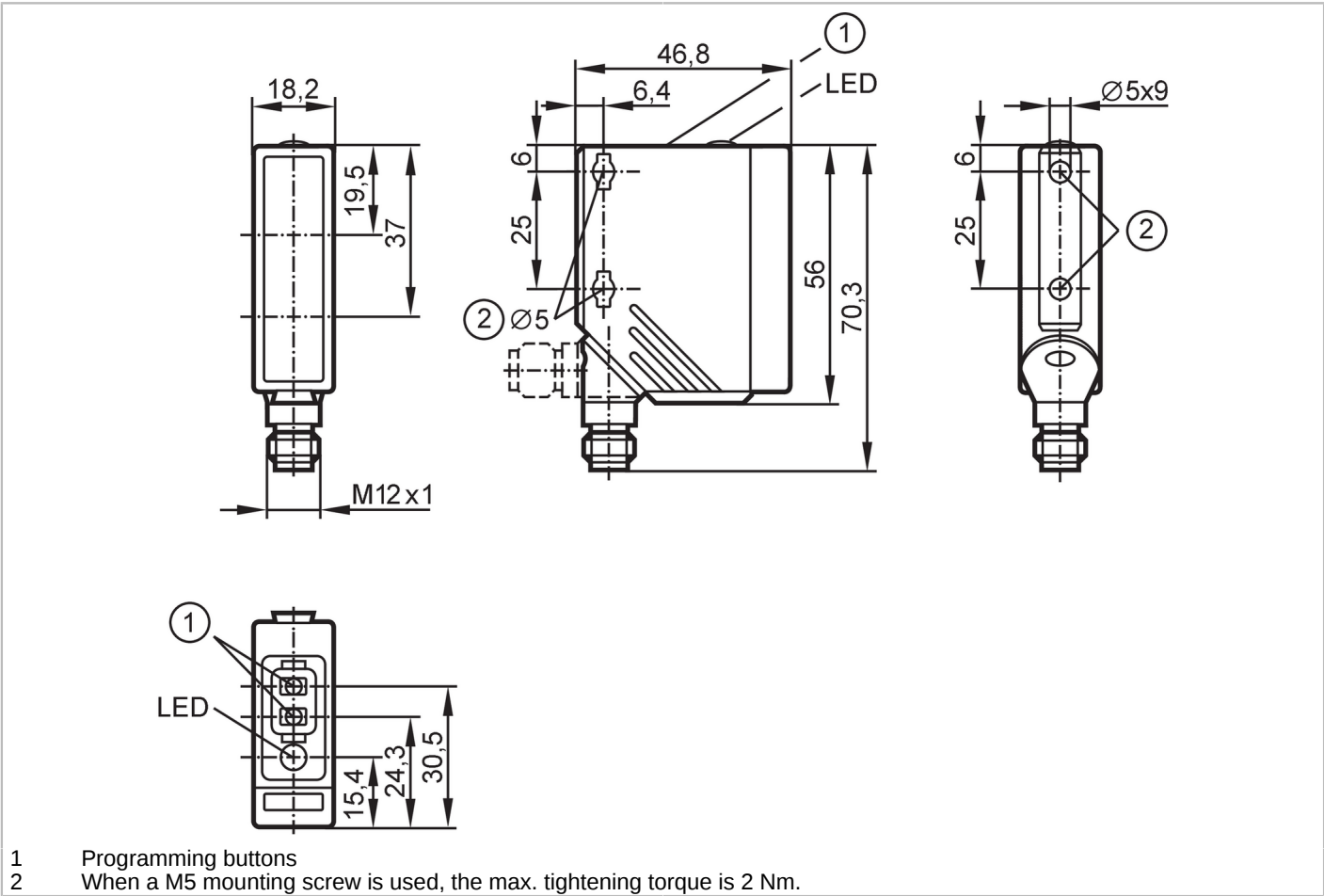


O5H505



Diffuse reflection sensors with background suppression

O5H-CPKG/US100



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; (cULus - Class 2 source required)
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; (complementary)

O5H505



Diffuse reflection sensors with background suppression

O5H-CPKG/US100

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]	50...1800; (white paper 200 x 200 mm 90 % remission)
Range on white object (90 % remission)	[mm]	50...1800
Range on grey object (18 % remission)	[mm]	50...900
Range on black object (6 % remission)	[mm]	50...600
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	
UL approval	Ta	-25...60 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	File number UL	E174191

Mechanical data		
Weight	[g]	58.1
Housing		rectangular
Dimensions	[mm]	56 x 18.2 x 46.8
Material		housing: PA; Front framework: stainless steel; operator interface: TPU (urethane)
Lens material		front lens:PMMA
Lens alignment		Side sensing

Displays / operating elements		
Display	Switching status	1 LED, yellow
	Operating voltage	1 LED, green
Teach function		yes
Electronic lock		yes

Remarks		
Pack quantity		1 pcs.



Diffuse reflection sensors with background suppression

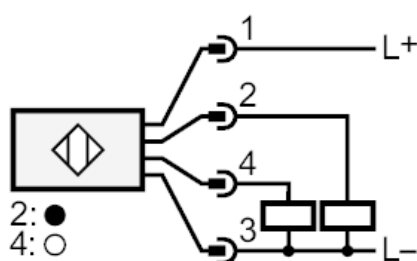
O5H-CPKG/US100

Electrical connection

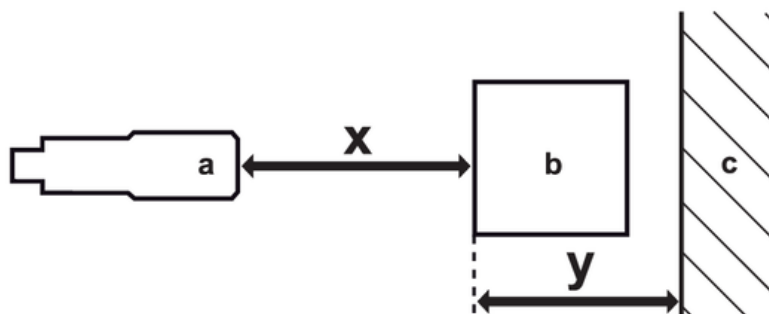
Connector: 1 x M12; coding: A; Contacts: 4



Connection



Diagrams and graphs



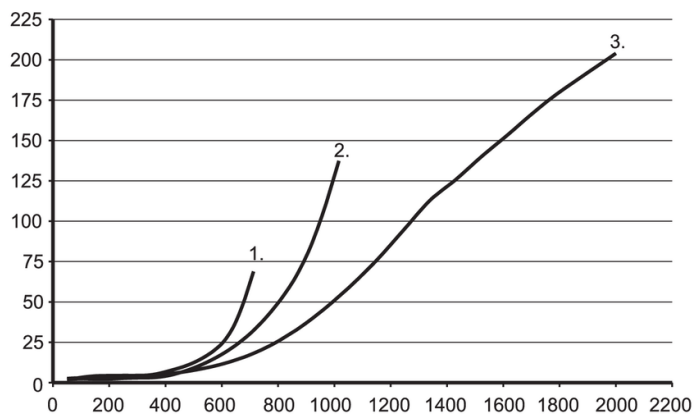
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensors with background suppression

O5H-CPKG/US100

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)