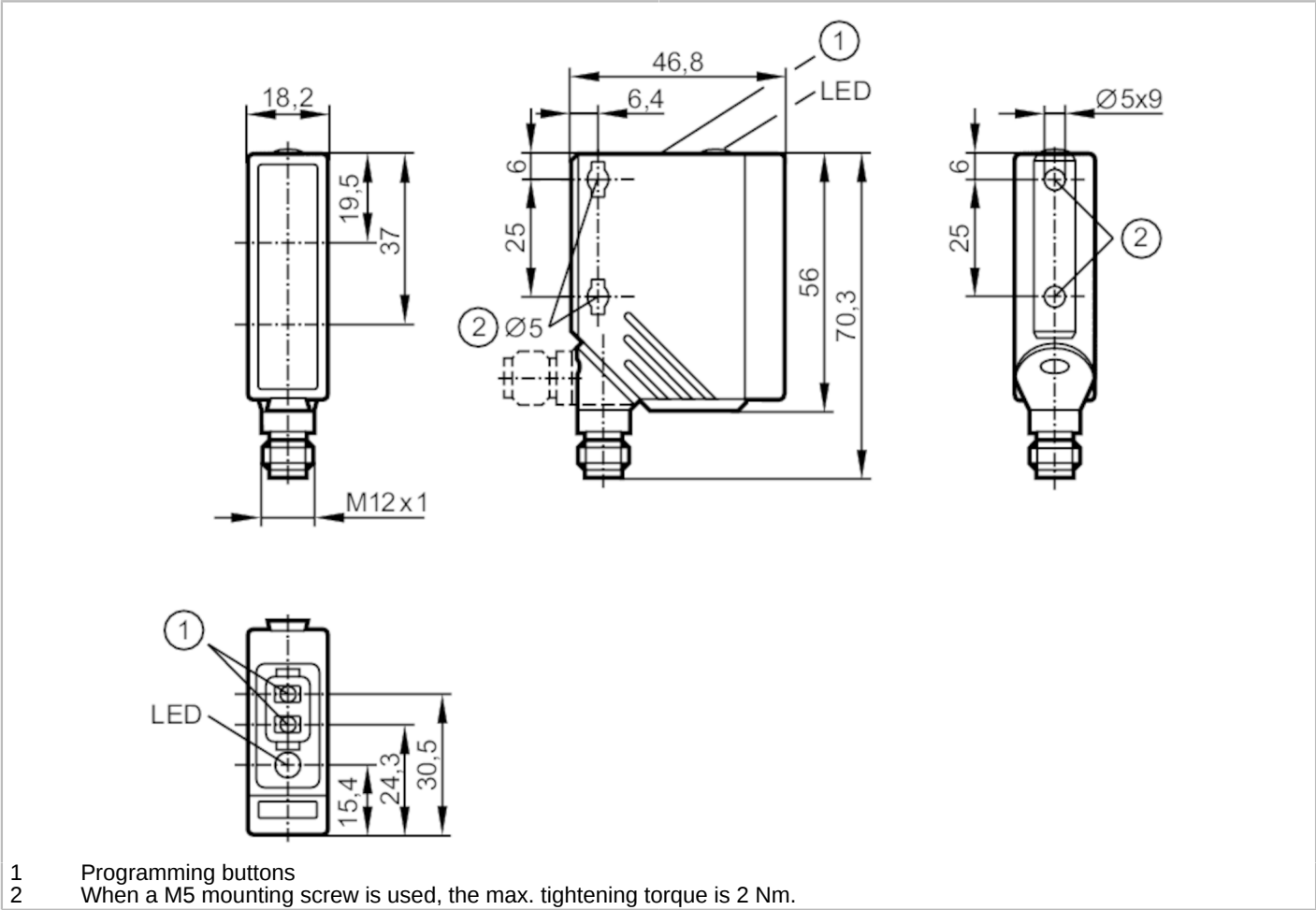


O5H500



Diffuse reflection sensors with background suppression

O5H-FPKG/US100



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
Outputs		
Electrical design		PNP
Output function		light-on/dark-on mode; (programmable)
Max. voltage drop switching output DC	[V]	2.5



Diffuse reflection sensors with background suppression

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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
MTTF [years]	360

Mechanical data

Weight [g]	67.5
Housing	rectangular
Dimensions [mm]	56 x 18.2 x 46.8
Material	housing: PA; Front framework: stainless steel; operator interface: TPU (urethane)
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
Pack quantity	1 pcs.



Diffuse reflection sensors with background suppression

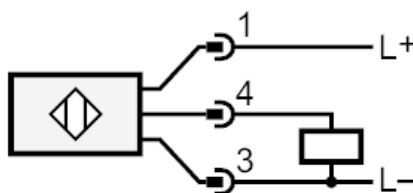
O5H-FPKG/US100

Electrical connection

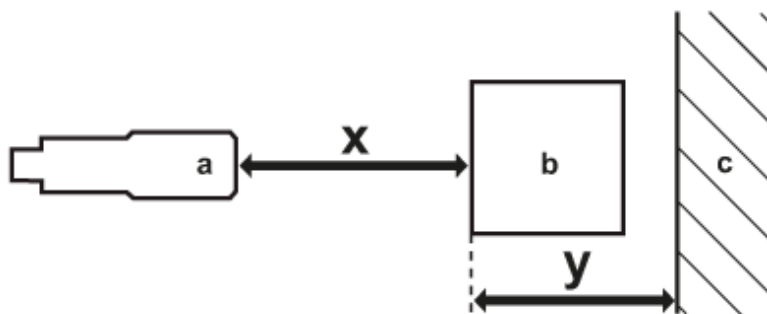
Connector: 1 x M12; coding: A



Connection



Diagrams and graphs



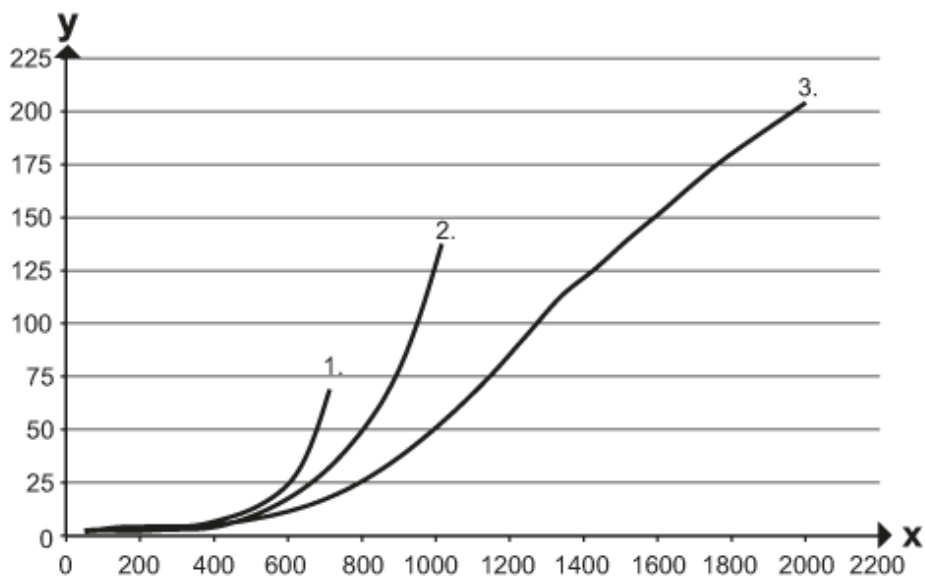
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensors with background suppression

O5H-FPKG/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)