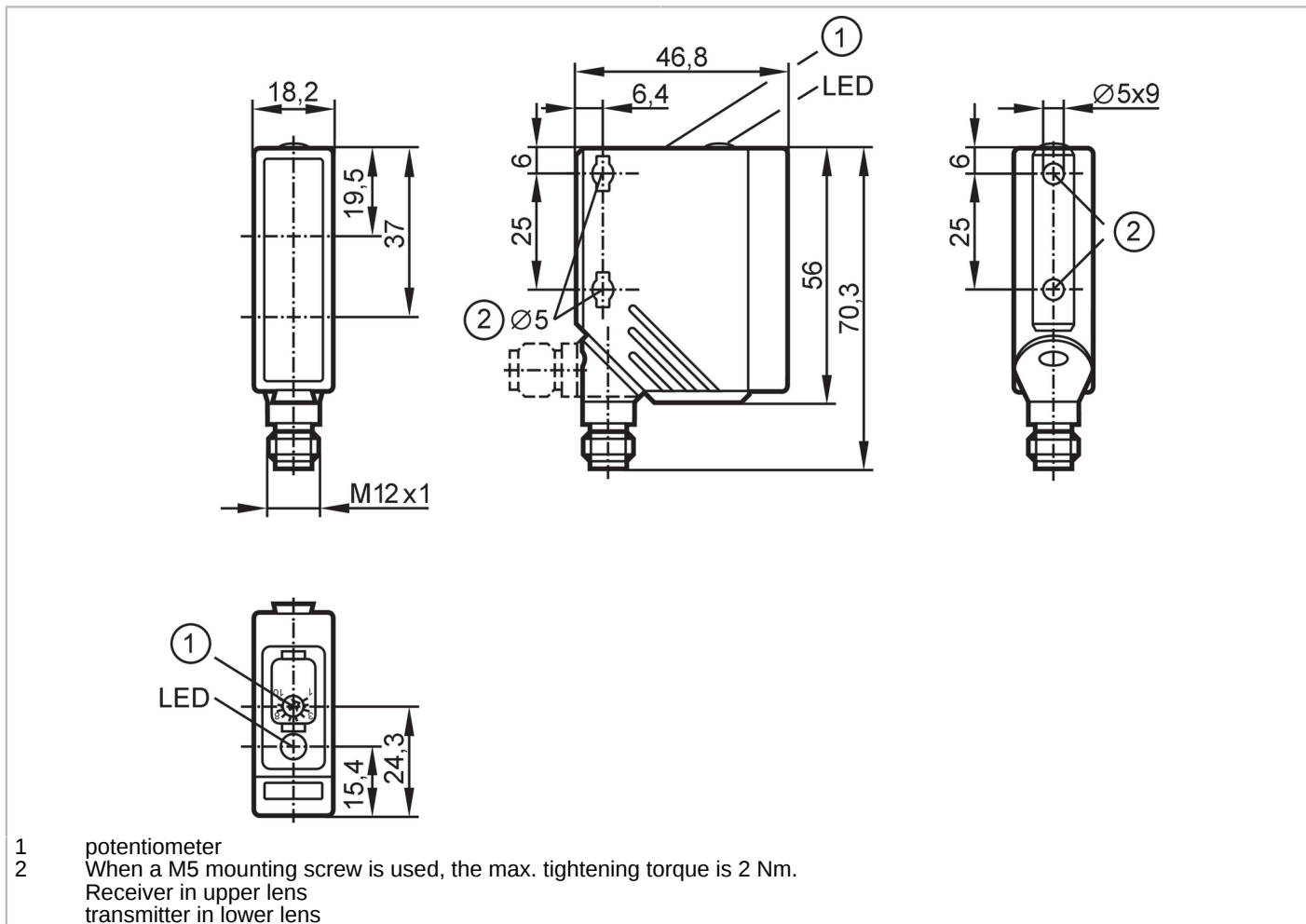


# O5H200



## Diffuse reflection sensors with background suppression

O5H-HPKG/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
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 mode

# O5H200



## Diffuse reflection sensors with background suppression

O5H-HPKG/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...1400; (white paper 200 x 200 mm 90 % remission)
Range on white object (90 % remission) [mm]	50...1400
Range on grey object (18 % remission) [mm]	50...800
Range on black object (6 % remission) [mm]	50...550
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 65

### Tests / approvals

EMC	EN 60947-5-2
MTTF [years]	331

### Mechanical data

Weight [g]	62.5
Housing	rectangular
Dimensions [mm]	56 x 18.2 x 46.8
Material	operator interface: TPE; housing: PA; Front framework: stainless steel
Lens material	front lens:PMMA
Lens alignment	Side sensing

### Displays / operating elements

Display	Switching status	1 x LED, yellow
Operating elements		potentiometer

### Remarks

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

### Electrical connection

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

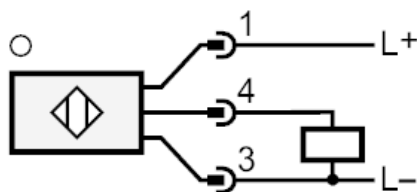




## Diffuse reflection sensors with background suppression

O5H-HPKG/US100

## Connection



## Diagrams and graphs



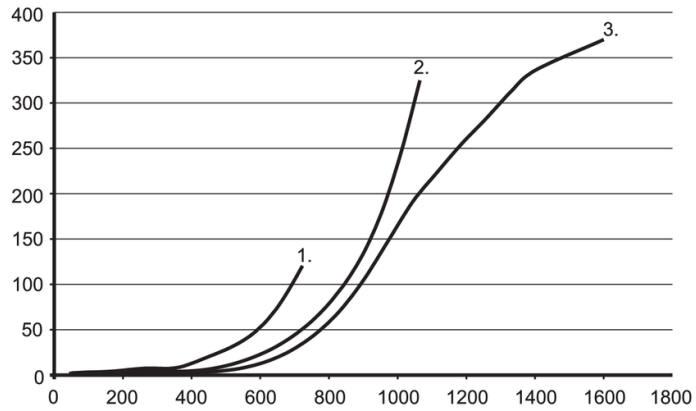
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



## Diffuse reflection sensors with background suppression

O5H-HPKG/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)