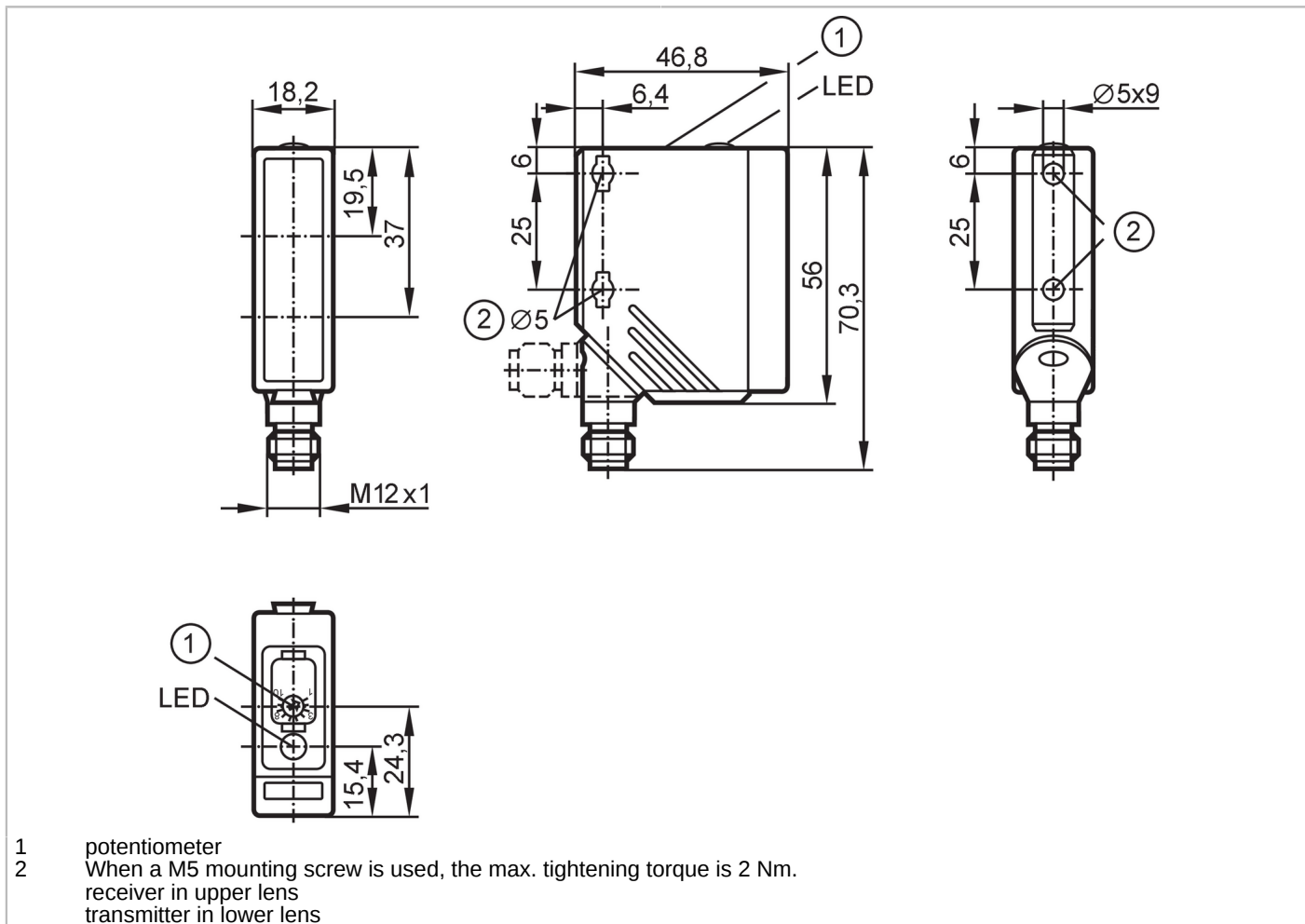


O5H200



Diffuse reflection sensor 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 / factory automation

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 sensor 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		pulsed
Overload protection		yes

Detection zone

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
Materials		operator interface: TPE; housing: PA; bezel: stainless steel
Lens material		front pane:PMMA
Lens alignment		side lens

Displays / operating elements

Display	switching status	1 x LED, yellow
Operating elements		potentiometer

Remarks

Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.

Electrical connection

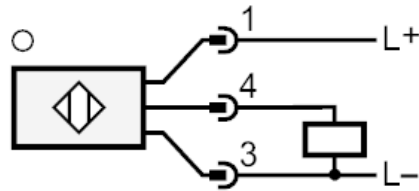
Connector: 1 x M12; coding: A; Contacts: 4



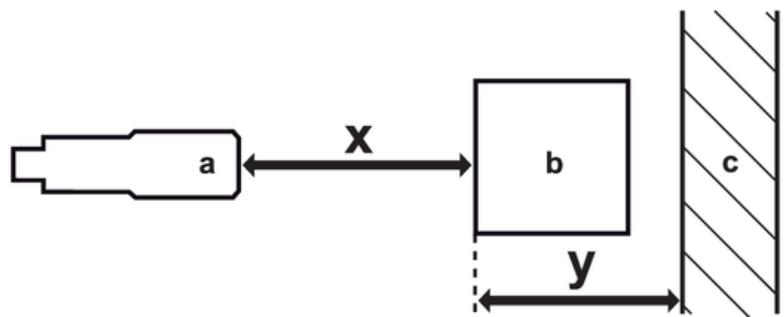
Diffuse reflection sensor with background suppression

O5H-HPKG/US100

Connection



Diagrams and graphs



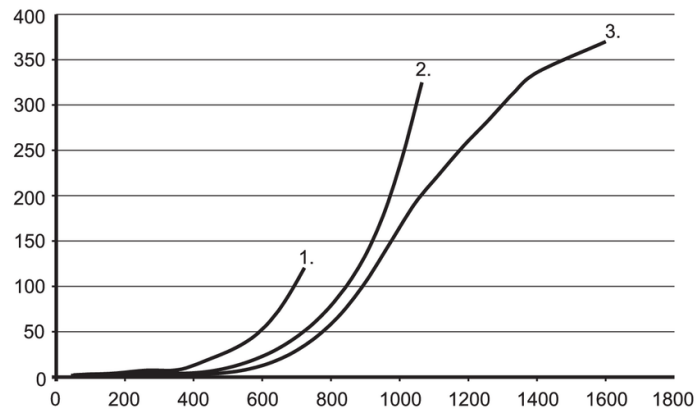
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

O5H-HPKG/US100

accuracy graph



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)