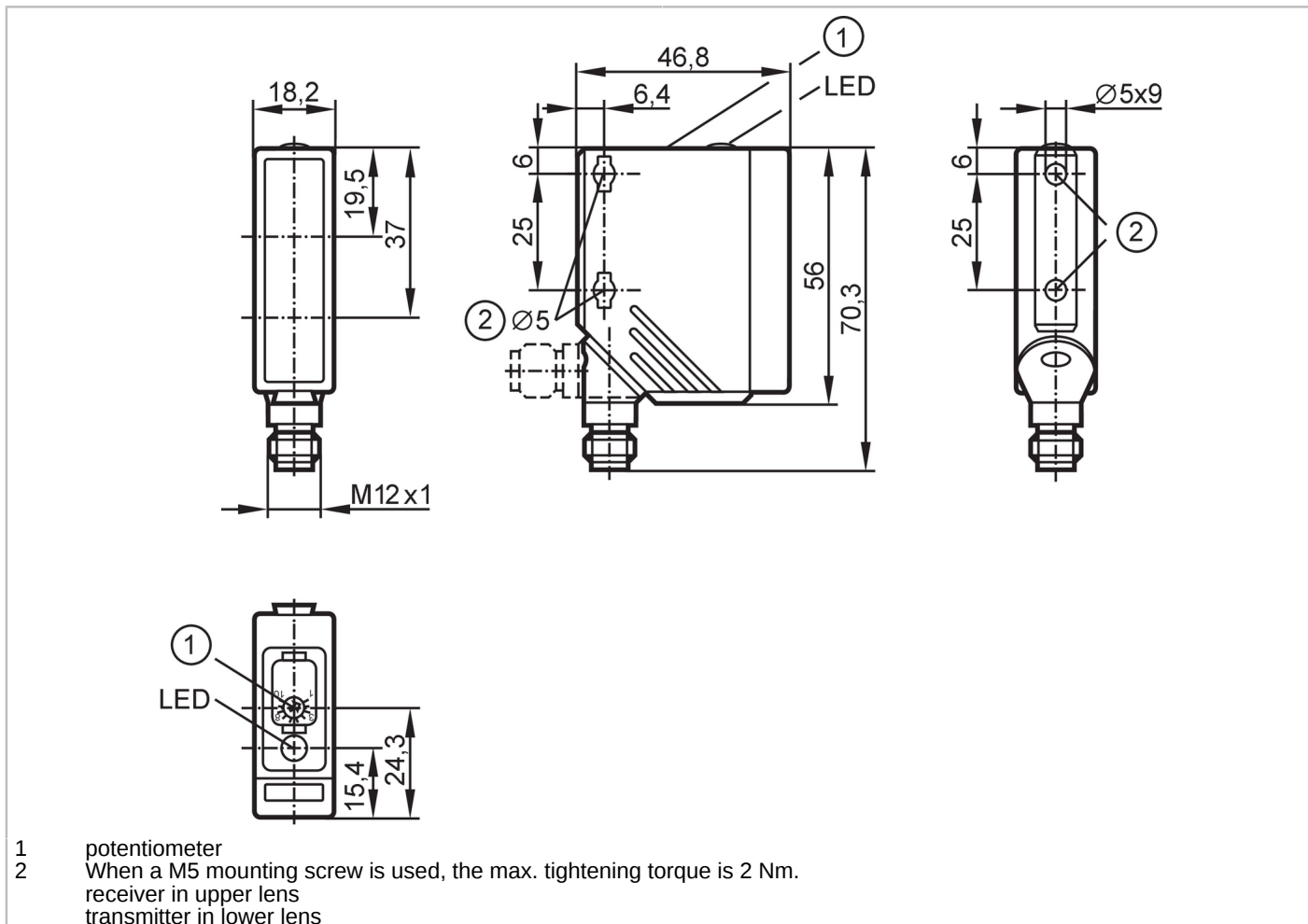


O5H201



Diffuse reflection sensor with background suppression

O5H-HNKG/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		NPN
Output function		light-on mode

O5H201



Diffuse reflection sensor with background suppression

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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 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]	336

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

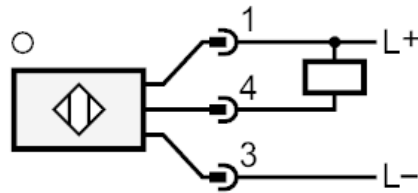
Connector: 1 x M12; coding: A; Contacts: 4



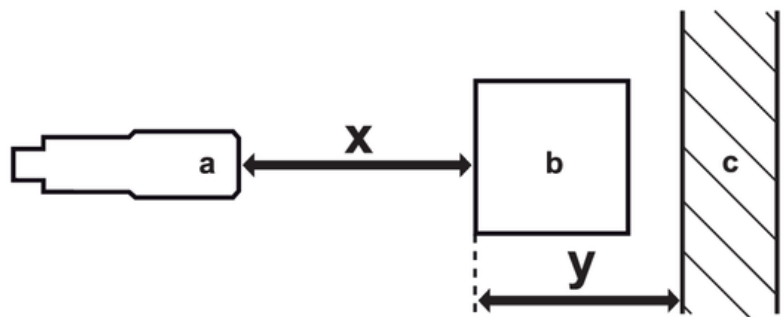
Diffuse reflection sensor with background suppression

O5H-HNKG/US100

Connection



Diagrams and graphs



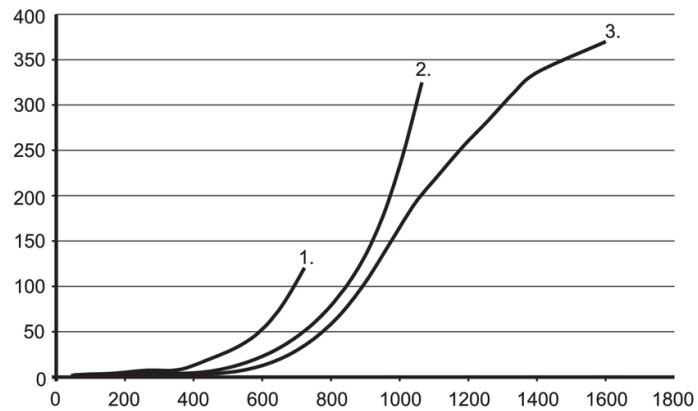
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

O5H-HNKG/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)