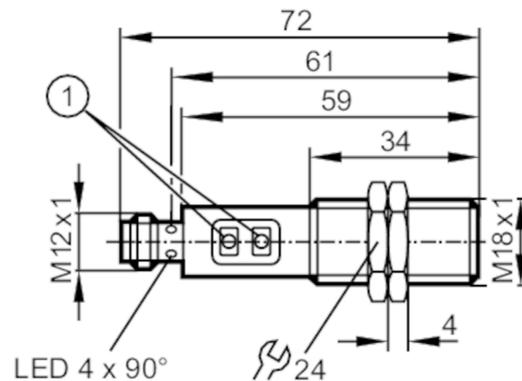




## Diffuse reflection sensors with background suppression

OGH-CPKG/US100



1 Programming buttons



### Product characteristics

Type of light	red light
Housing	Threaded type

### Application

System	Background suppression
Function principle	Diffuse reflection sensor

### 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	complementary
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	150; (200 (...60 °C))
Switching frequency DC [Hz]	1000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

# OGH509



## Diffuse reflection sensors with background suppression

OGH-CPKG/US100

Monitoring range		
Range	[mm]	15...300; (white paper 200 x 200 mm 90 % remission)
Range on white object (90 % remission)	[mm]	15...300
Range on grey object (18 % remission)	[mm]	15...290
Range on black object (6 % remission)	[mm]	15...190
Range adjustable		yes
Max. light spot diameter	[mm]	25
Light spot dimensions refer to		at maximum range
Background suppression available		yes

Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 67

Tests / approvals		
EMC		EN 60947-5-2
MTTF	[years]	575
	Ta	-25...80 °C
UL approval	Enclosure type	Type 1
	voltage supply	Class 2
	File number UL	E174191

Mechanical data		
Weight	[g]	61.2
Housing		Threaded type
Dimensions	[mm]	M18 x 1 / L = 72
Thread designation		M18 x 1
Material		stainless steel (1.4404 / 316L); PA; LCP; EPDM; TPU (urethane)
Lens material		PMMA

Displays / operating elements		
Display	Switching status	1 x LED, yellow

Accessories		
Items supplied		lock nuts: 2 x

Remarks		
Pack quantity		1 pcs.

### Electrical connection

Connector: 1 x M12; coding: A

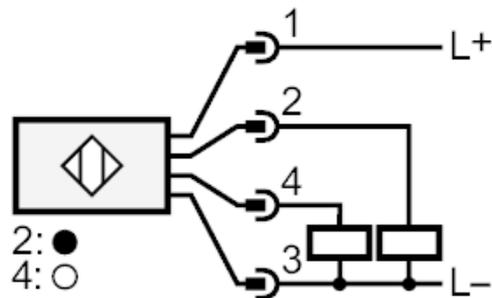




## Diffuse reflection sensors with background suppression

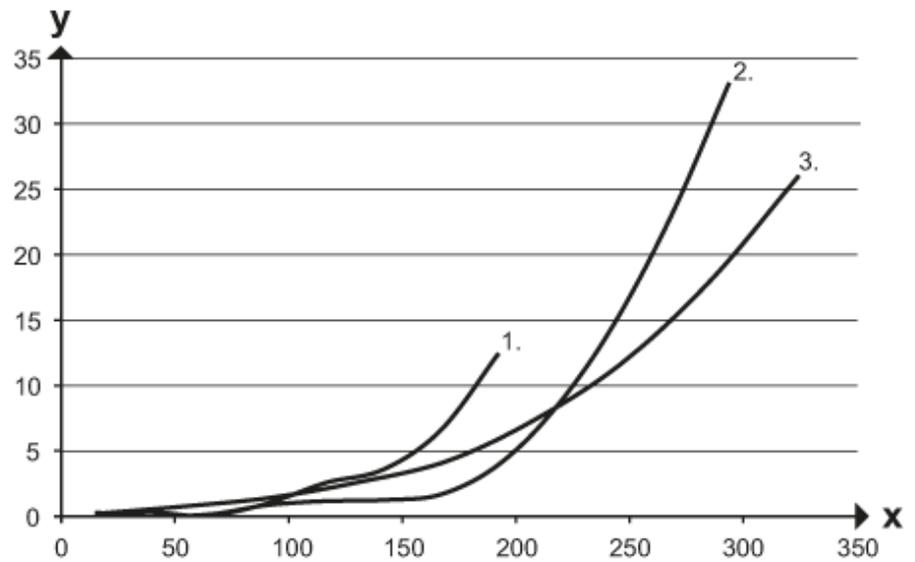
OGH-CPKG/US100

### Connection



### Diagrams and graphs

#### Background suppression chart



x: distance sensor/object [mm]

y: min. distance object/background [mm]

1 = object black (6 % remission) , background (white 90 % remission)

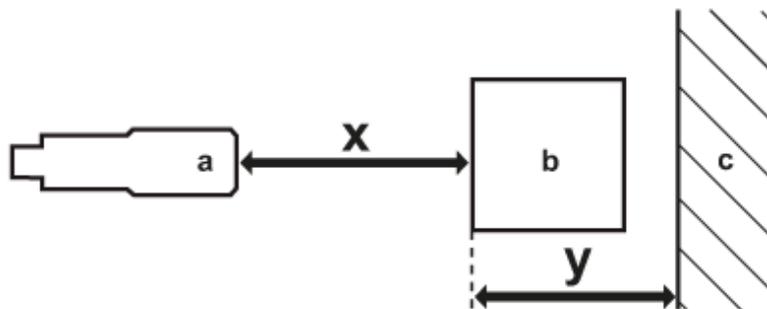
2 = object grey (18 % remission) , background (white 90 % remission)

3 = object white (90 % remission) , background (white 90 % remission)



## Diffuse reflection sensors with background suppression

OGH-CPKG/US100



a: sensor

b: object

c: background

x: distance sensor/object [mm]

y: min. distance object/background [mm]