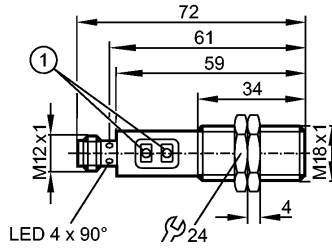


**OGH503**

OGH-FPKG/US100

Photoelectric sensors



1: Programming buttons



**Product characteristics**

Diffuse reflection sensor
Threaded type
M18 x 1
Connector
Background suppression
Range 15...300mm (Range referred to white paper 200 x 200 mm, 90 % remission)
adjustable

**Electrical data**

Electrical design	DC PNP
Operating voltage [V]	10...36 DC
Current consumption [mA]	25
Type of light	Red light 624 nm
Protection class	II
Reverse polarity protection	yes

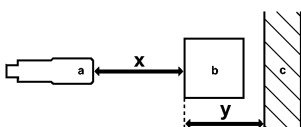
**Outputs**

Output function	light-on / dark-on programmable via pushbutton
Factory setting	light-on mode
Voltage drop [V]	< 2.5
Current rating [mA]	150; 200 (...60 °C)
Short-circuit protection	pulsed
Overload protection	yes
Switching frequency [Hz]	1000

**Detection range**

Range [mm]	15...300 (Range referred to white paper 200 x 200 mm, 90 % remission)
Range [mm]	15...300 (Range referred to white paper 200 x 200 mm, 90 % remission)
- Object white (90 % remission)	15...300
- Object grey (18 % remission)	15...290
- Object black (6 % remission)	15...190
Light spot diameter [mm]	25 ( at maximum range )

**Accuracy graph**



a: sensor  
b: object

## OGH503

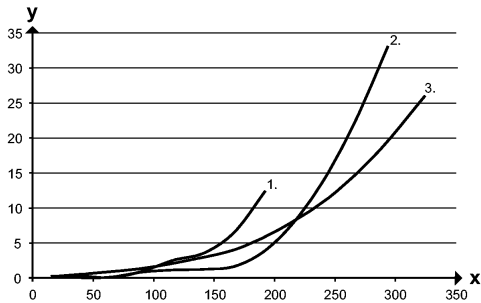
OGH-FPKG/US100

Photoelectric sensors

c: background

x: distance sensor / object

y: min. distance object / background



Values in [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)

### Environment

Ambient temperature	[°C]	-25...80
Protection		IP 65 / IP 67

### Tests / approvals

EMC		EN 60947-5-2
MTTF	[Years]	362

### Mechanical data

Housing materials		stainless steel 316L / 1.4404; PA; LCP; FPM; TPU
Lens material		glass
Weight	[kg]	0.062

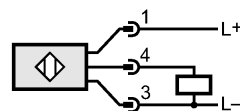
### Displays / operating elements

Output status indication	LED	yellow
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### Electrical connection

Connection		M12 connector
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### Wiring



### Accessories

Accessories (included)		2 lock nuts
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### Remarks

Remarks		cULus - Class 2 source required
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Pack quantity	[piece]	1
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