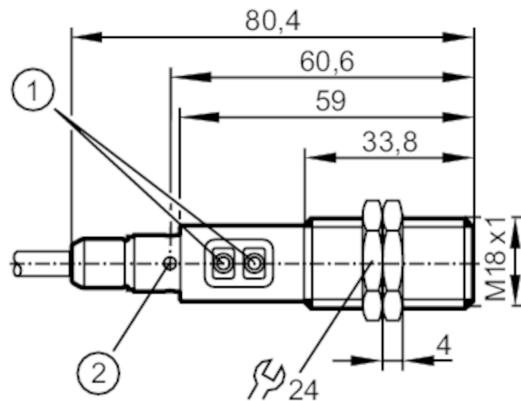


OGH501



Diffuse reflection sensor with background suppression

OGH-FPKG/2M



- 1 programming buttons
2 x LED 4 x 90°



Application

Function principle Diffuse reflection sensor

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/dark-on mode; (programmable)
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	pulsed
Overload protection	yes

OGH501



Diffuse reflection sensor with background suppression

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Detection zone		
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
Factory setting		\$Hellschaltung
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]	362
Mechanical data		
Weight	[g]	124.4
Housing		threaded type
Dimensions	[mm]	M18 x 1 / L = 80.4
Thread designation		M18 x 1
Materials		stainless steel (1.4404 / 316L); PA; LCP; EPDM; TPU
Lens material		PMMA
Displays / operating elements		
Display	switching status	1 x LED, yellow
Teach function		yes
Electronic lock		yes
Accessories		
Accessories (supplied)		lock nuts: 2 x
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.



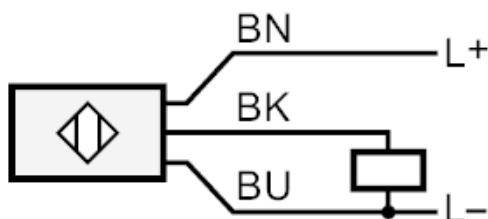
Diffuse reflection sensor with background suppression

OGH-FPKG/2M

Electrical connection

Cable: 2 m, PUR; 3 x 0.34 mm²

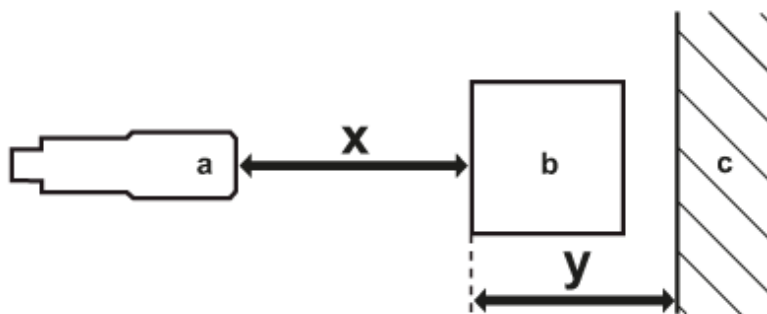
Connection



Core colours :

BK = black
BN = brown
BU = blue

Diagrams and graphs



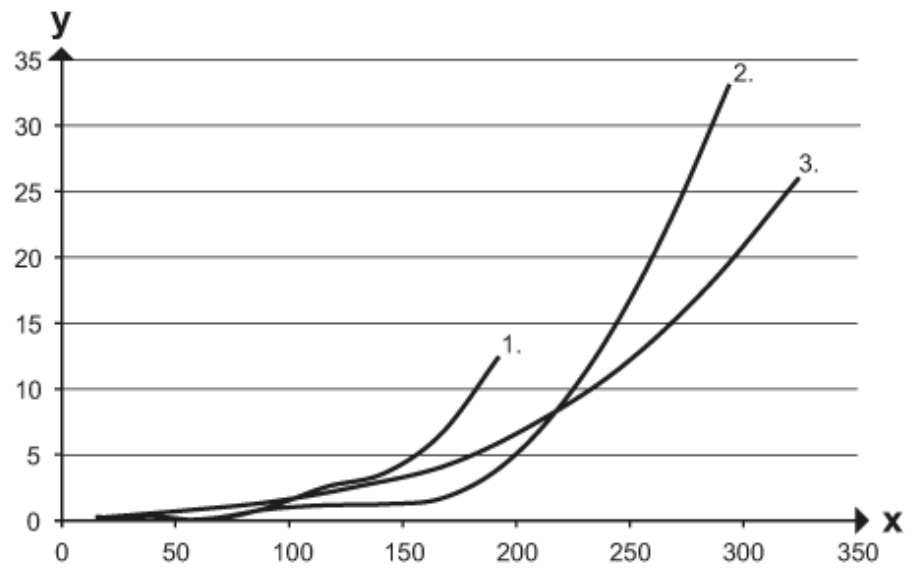
a: sensor
b: object
c: background
x: distance sensor/object [mm]
y: min. distance object/background [mm]



Diffuse reflection sensor with background suppression

OGH-FPKG/2M

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)