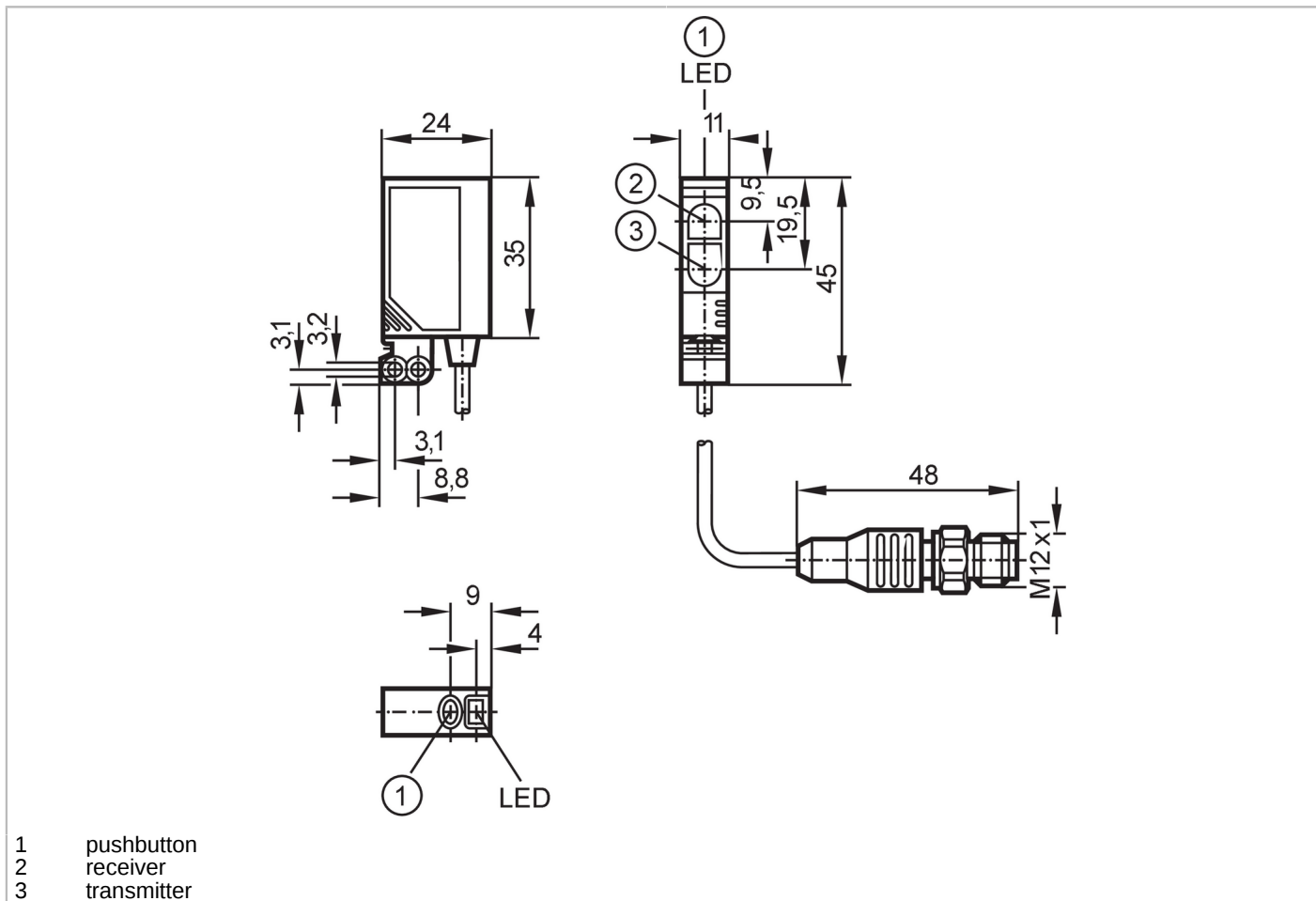




Diffuse reflection sensor with background suppression

OJH-FPKG/SO/0,15M/US



Product characteristics	
Type of light	red light
Housing	rectangular
Application	
Special feature	Gold-plated contacts; Background suppression
Function principle	Diffuse reflection sensor
Application	For applications in robotics, assembly and handling technology
Electrical data	
Operating voltage [V]	10...30 DC
Current consumption [mA]	25
Protection class	III
Reverse polarity protection	yes
Type of light	red light
Wave length [nm]	660
Outputs	
Electrical design	PNP
Output function	light-on/dark-on mode; (programmable)

OJ5078



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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]	15...400; (white paper 200 x 200 mm 90% remission)
Range adjustable		yes
Max. light spot diameter	[mm]	18
Light spot dimensions refer to		Range
Background suppression available		yes

Operating conditions

Ambient temperature	[°C]	-25...60
Protection		IP 67

Tests / approvals

EMC		EN 60947-5-2
MTTF	[years]	556

Mechanical data

Weight	[g]	40.6
Housing		rectangular
Dimensions	[mm]	35 x 11 x 24
Materials		housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material		front pane:PMMA
Lens alignment		side lens

Displays / operating elements

Display	switching status	1 x LED, yellow
	operation	1 x LED, green
Electronic lock		yes

Accessories

Items supplied	Basic clip: 1, E20964
	screws: 2 x (M3 x 16 mm)
	spring washers: 2
	Nuts: 2

Remarks

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



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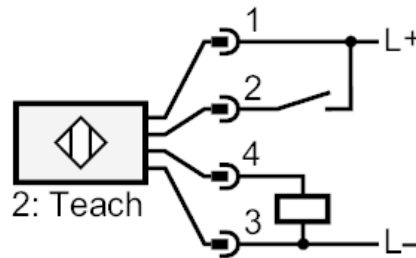
Electrical connection

Cable: 0.15 m, PVC

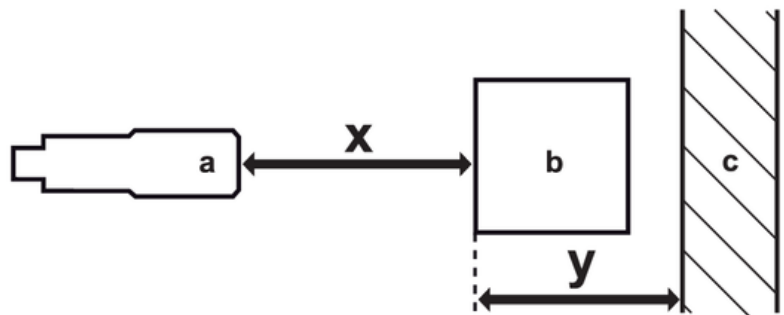
Connector: 1 x M12; coding: A; Contacts: 4, gold-plated; Moulded body: Hytrel 8068; Locking: stainless steel (316L/1.4404)



Connection



Diagrams and graphs



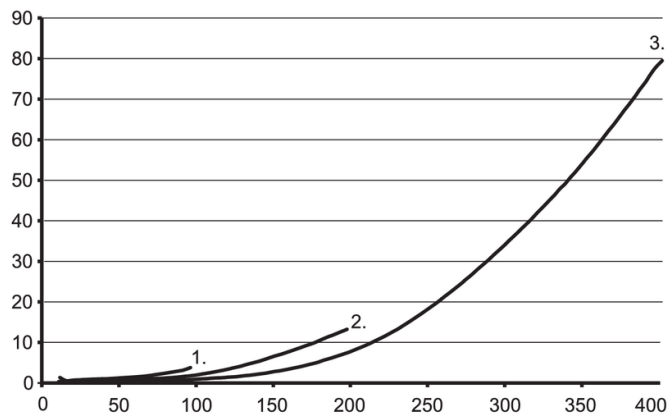
- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]



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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)