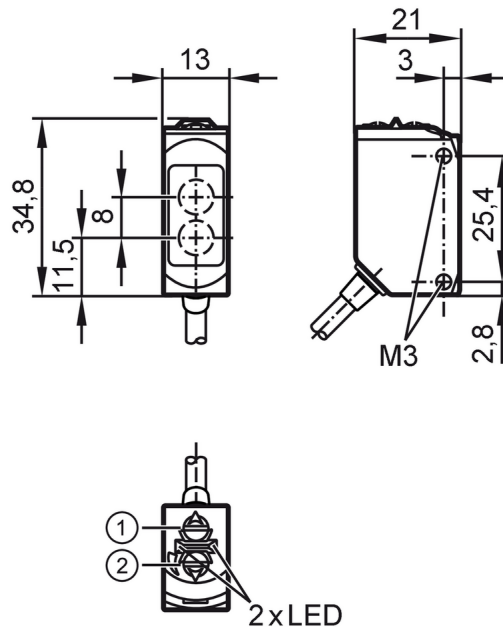


# O6H300



## Diffuse reflection sensors with background suppression

O6H-FPKG



- 1 output function switch
- 1 potentiometer sensitivity
- Receiver in upper lens
- transmitter in lower lens



### Product characteristics

Type of light	red light
Housing	rectangular

### Application

Special feature	Background suppression
Function principle	Diffuse reflection sensor

### Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	22; ((24 V))
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	633

### Outputs

Electrical design		PNP
Output function		light-on/dark-on mode; (selectable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	1000
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)

# O6H300



## Diffuse reflection sensors with background suppression

O6H-FPKG

Monitoring range		
Range	[mm]	2...200; (white paper 200 x 200 mm)
Range on white object (90 % remission)	[mm]	2...200
Range on grey object (18 % remission)	[mm]	4...200
Range on black object (6 % remission)	[mm]	8...200
Range adjustable		yes
Max. light spot diameter	[mm]	8
Light spot dimensions refer to		at maximum range
Background suppression available		yes
Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 65; IP 67; IP 68; IP 69K
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[years]	708
UL approval	Ta	-25...80 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	UL approval number	E003
Mechanical data		
Weight	[g]	81.1
Housing		rectangular
Dimensions	[mm]	34.8 x 13 x 21
Material		housing: stainless steel (1.4404 / 316L); sealing: EPDM; plastics: PPSU
Lens material		front lens:PMMA
Lens alignment		Side sensing
Tightening torque	[Nm]	1; (screws)
Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green
Remarks		
Remarks		cULus - Class 2 source required
Pack quantity		1 pcs.

# O6H300



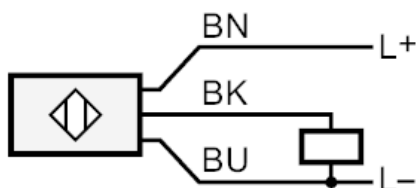
## Diffuse reflection sensors with background suppression

O6H-FPKG

### Electrical connection

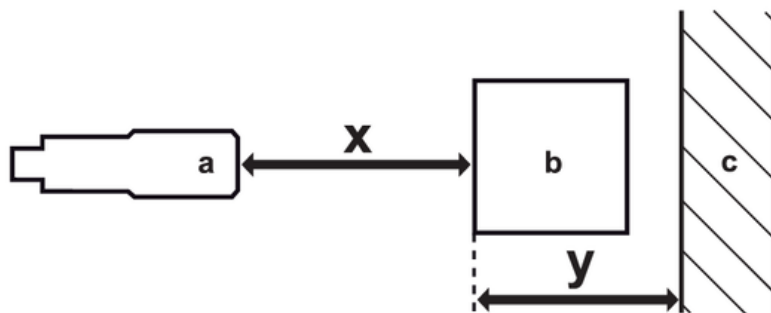
Cable: 2 m, PVC; 3 x 0.25 mm<sup>2</sup>

### Connection



Core colors :  
BN = brown  
BK = black  
BU = blue

### Diagrams and graphs



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

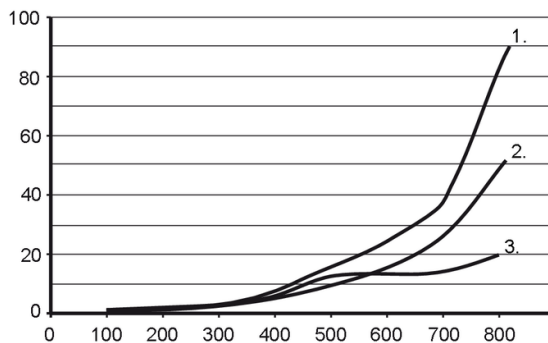
# O6H300



## Diffuse reflection sensors with background suppression

O6H-FPKG

### 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)