



**Model Number**

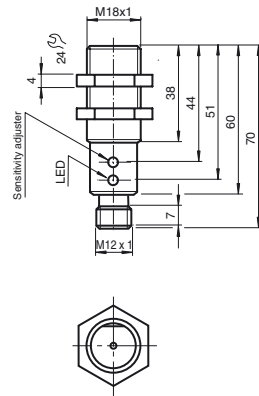
**OBT500-18GM60-E5-V1**

Diffuse mode sensor  
with 4-pin, M12 connector

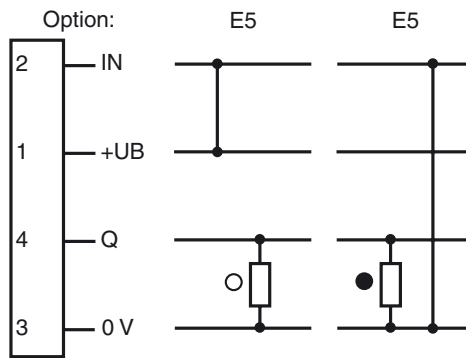
**Features**

- Dual color indication LED
- High switching frequency
- Light/dark ON, programmable
- Degree of protection IP67
- Strong metallic housing in cylindrical shape M18 x 1

**Dimensions**

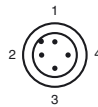


**Electrical connection**



○ = Light on  
● = Dark on

**Pinout**



Wire colors in accordance with EN 60947-5-2

- 1 | BN (brown)
- 2 | WH (white)
- 3 | BU (blue)
- 4 | BK (black)

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## Technical data

### General specifications

Detection range	0 ... 500 mm
Reference target	standard white 200 mm x 200 mm
Light source	IRET , 880 nm
Light type	infrared
Diameter of the light spot	approx. 80 mm at 500 mm
Ambient light limit	10000 Lux

### Indicators/operating means

Operation indicator	LED green
Function indicator	Dual color-LED, yellow/green yellow: switching state green: power on flashing: stability control
Control elements	Sensing range adjuster

### Electrical specifications

Operating voltage	$U_B$	10 ... 30 V DC , class 2
Ripple		10 %
No-load supply current	$I_0$	$\leq 25$ mA
Time delay before availability	$t_v$	$\leq 25$ ms

### Output

Switching type	light/dark on electrically switchable	
Signal output	1 PNP output, short-circuit protected, reverse polarity protected, open collector	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Voltage drop	$U_d$	$\leq 2.5$ V
Switching frequency	$f$	500 Hz
Response time		1 ms

### Standard conformity

Standards	EN 60947-5-2
Standards 2	UL 508

### Ambient conditions

Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

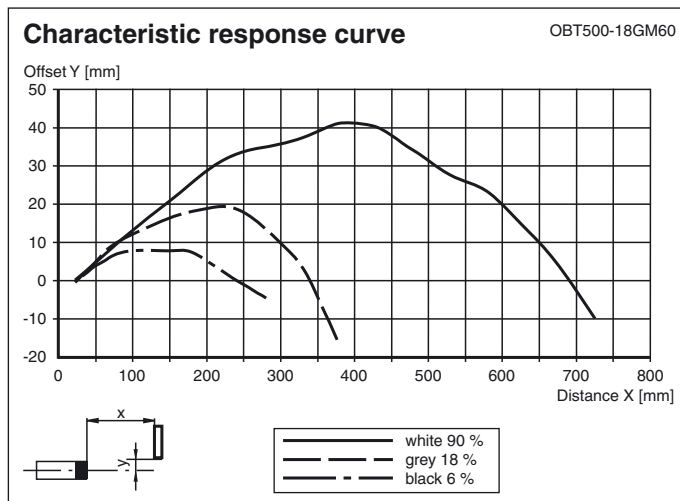
### Mechanical specifications

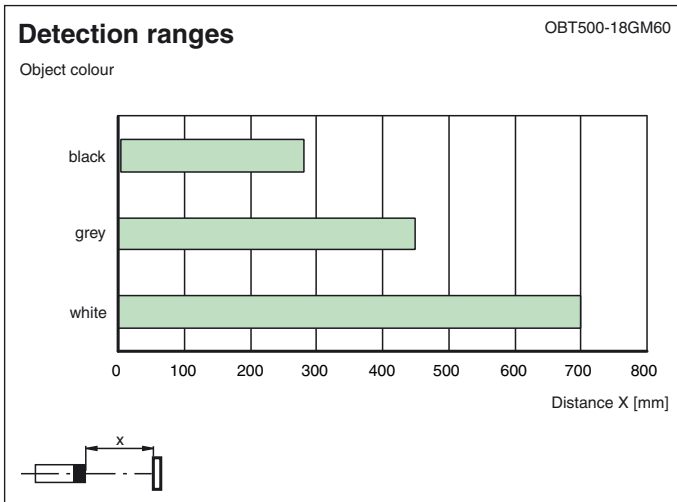
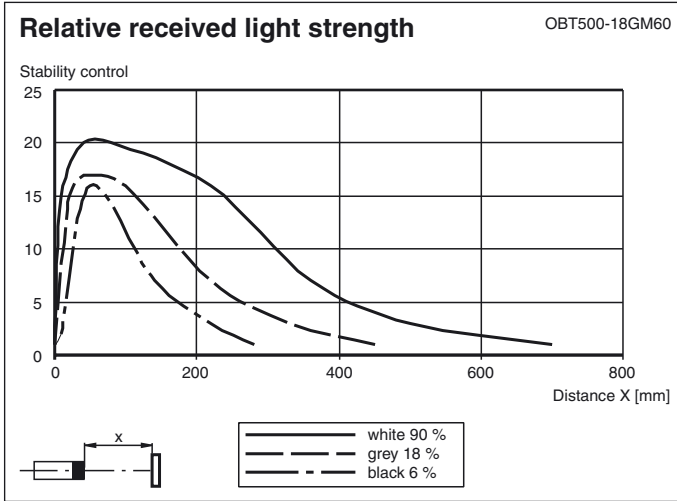
Degree of protection	IP67
Connection	4-pin, M12 x 1 connector
Material	
Housing	brass, nickel-plated
Optical face	PC
Mass	45 g

### Approvals and certificates

EAC conformity	TR CU 020/2011
UL approval	cULus Listed, Type 1 enclosure
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V
Approvals	CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)

## Curves/Diagrams





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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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