



**Model Number**

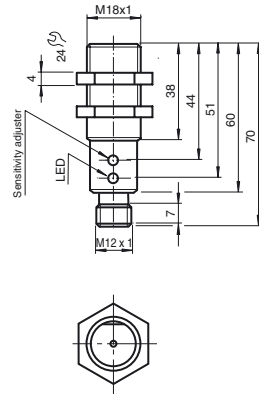
**OBT500-18GM60-E5-V1**

Diffuse mode sensor  
with 4-pin, M12 connector

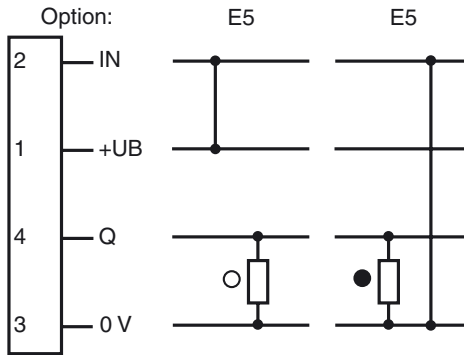
**Features**

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

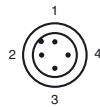
**Dimensions**



**Electrical connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

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

Release date: 2019-11-25 10:15 Date of issue: 2019-11-25 087797\_eng.xml

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**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

**Conformity**

Product standard	EN 60947-5-2
------------------	--------------

**Standard conformity**

Standards 2	UL 508
-------------	--------

**Ambient conditions**

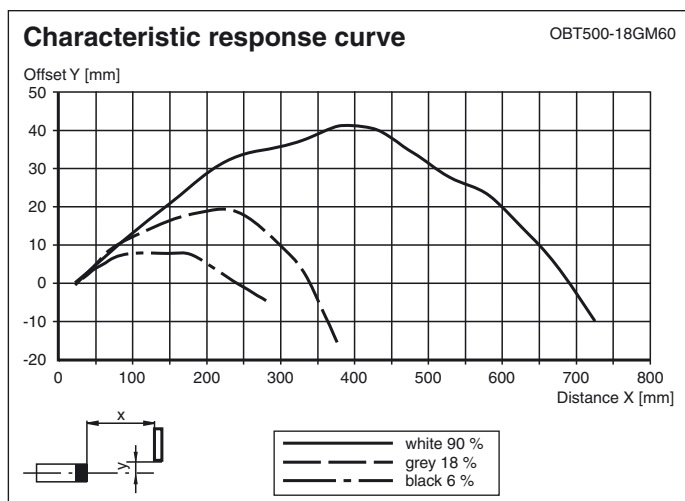
Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

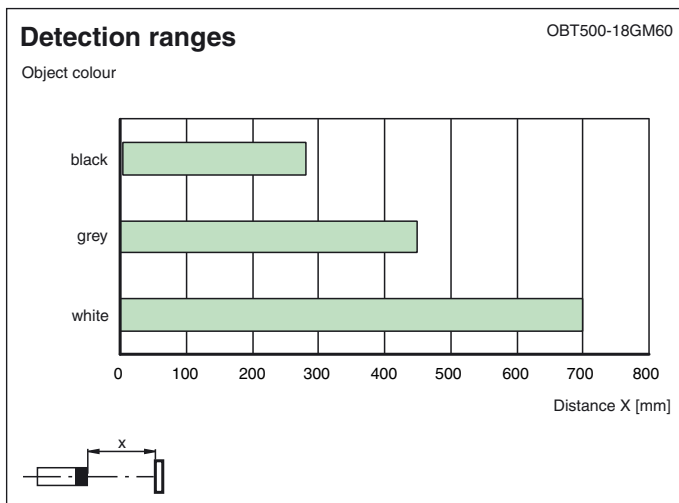
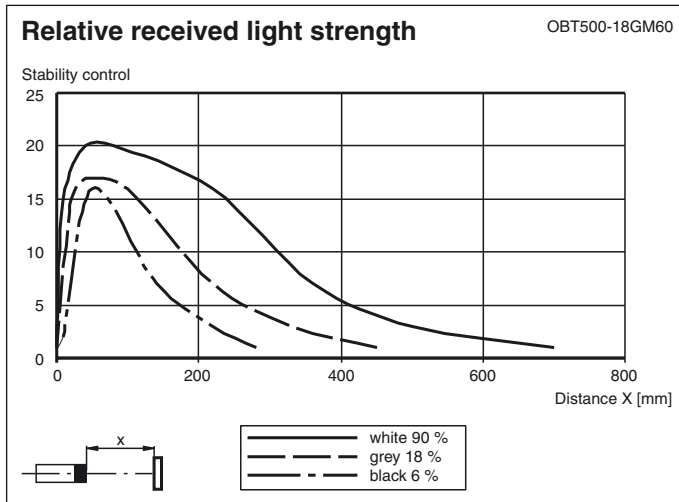
**Mechanical specifications**

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**



Release date: 2019-11-25 10:15 Date of issue: 2019-11-25 087797\_eng.xml

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

Pepperl+Fuchs Group  
 www.pepperl-fuchs.com

USA: +1 330 486 0001  
 fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
 fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
 fa-info@sg.pepperl-fuchs.com



**SCATTERGOOD  
& JOHNSON LTD**  
ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

**[www.scatts.co.uk](http://www.scatts.co.uk)**