

Diffuse mode sensor OBT500-18GM60-E5-V1

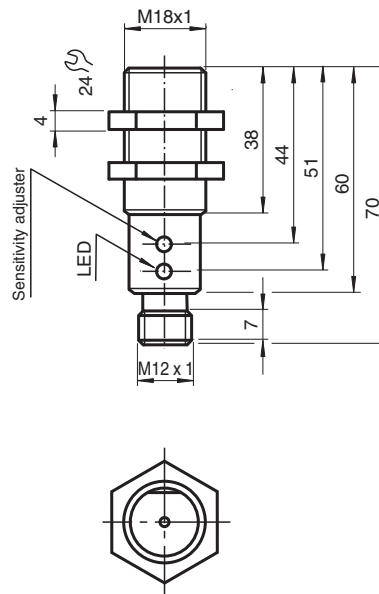


- Dual color indication LED
- High switching frequency
- Light-on/dark-on, programmable
- Degree of protection IP67
- Strong metallic housing in cylindrical shape M18 x 1

Diffuse mode sensor



Dimensions



Technical Data

General specifications

Detection range	0 ... 500 mm
Reference target	standard white 200 mm x 200 mm
Light source	IRED , 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: switch 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	≤ 25 mA
Time delay before availability	t_v	≤ 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	≤ 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
-------------	--------

Approvals and certificates

UL approval	cULus Listed, Type 1 enclosure
CCC approval	CCC approval / marking not required for products rated ≤36 V
Approvals	CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)

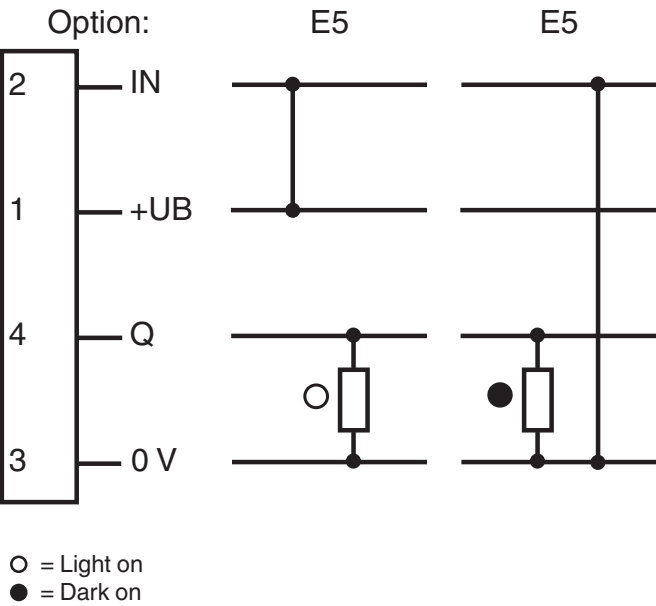
Ambient conditions

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

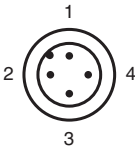
Mechanical specifications

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

Connection Assignment



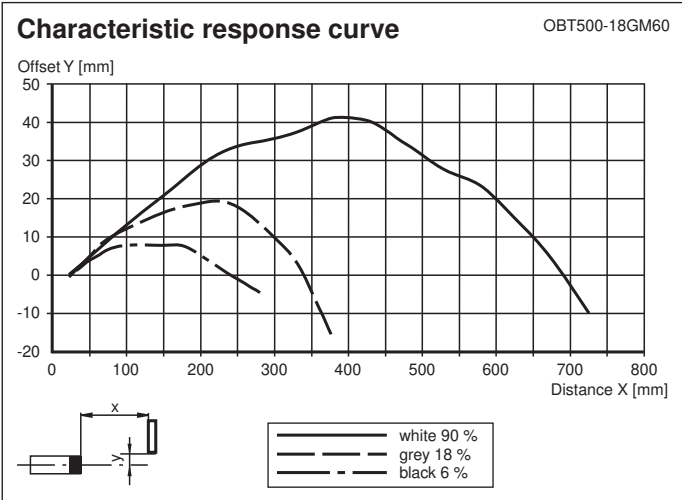
Connection Assignment



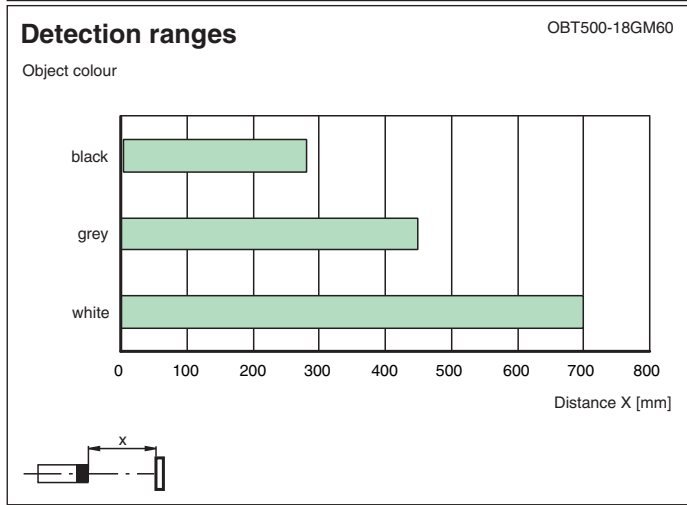
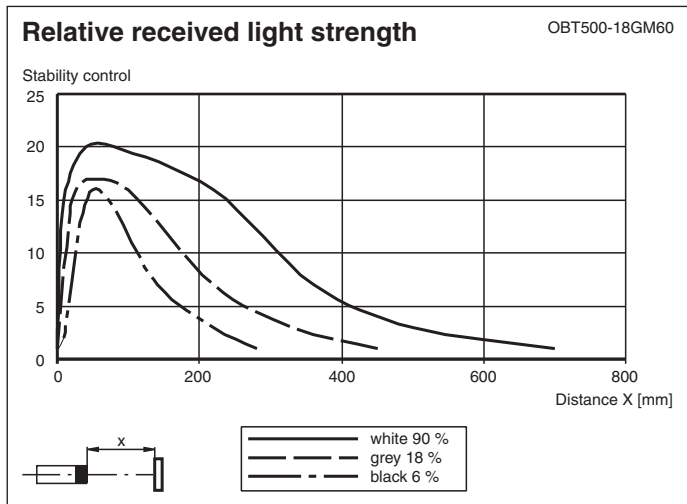
Wire colors in accordance with EN 60947-5-2

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

Characteristic Curve



Characteristic Curve



Accessories

	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey

Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 087797_eng.pdf