

Diffuse mode sensor OBT500-18GM60-E5-V1

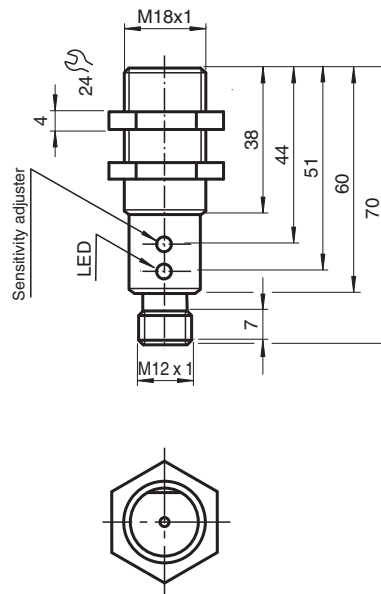


- Dual color indication LED
- High switching frequency
- Light-on/dark-on, programmable
- Degree of protection IP67
- Strong metallic housing in cylindrical shape M18 x 1

Diffuse mode sensor



Dimensions



Release date: 2022-08-08 Date of issue: 2022-08-08 Filename: 087797_eng.pdf

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

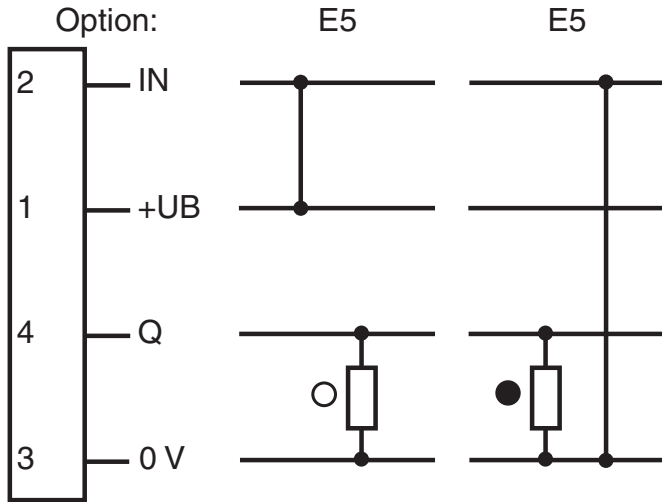
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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Technical Data

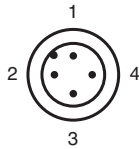
| General specifications | | |
|--------------------------------|-------|--|
| Detection range | | 0 ... 500 mm |
| Reference target | | standard white 200 mm x 200 mm |
| Light source | | IRED , 880 nm |
| Light type | | infrared |
| Diameter of the light spot | | approx. 80 mm at 500 mm |
| Ambient 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 | | |
| EAC conformity | | TR CU 020/2011 |
| 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



○ = Light on
● = Dark on

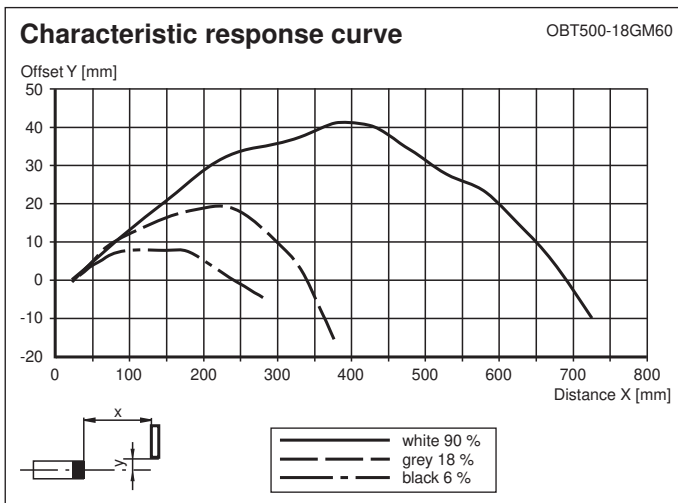
Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Characteristic Curve



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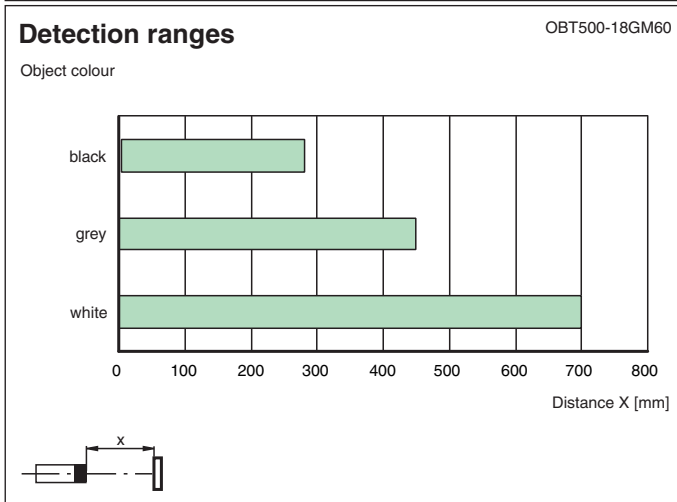
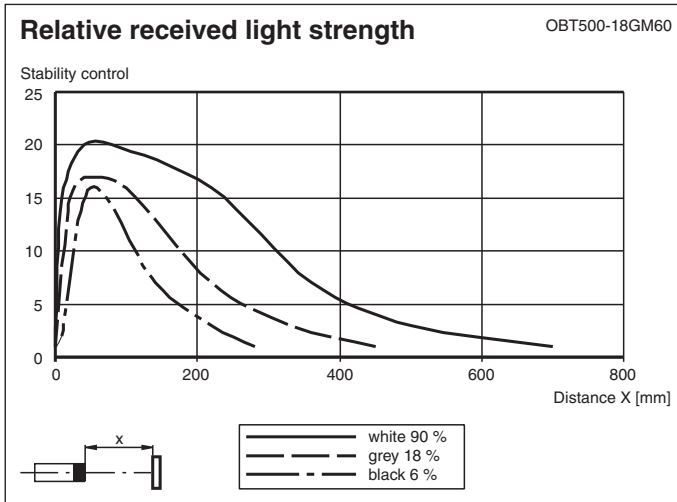
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Characteristic Curve



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 |

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