



Model Number

UBE500-18GM40A-V1-Y220367

Single head system

Features

- Short design, 40 mm
- Function indicators visible from all directions
- Test input
- Stainless steel housing

Technical data

General specifications

| | |
|-----------------------|-----------------|
| Sensing range | 100 ... 500 mm |
| Standard target plate | 100 mm x 100 mm |
| Transducer frequency | approx. 390 kHz |

Indicators/operating means

| | |
|-----------|---------------------|
| LED green | Power on |
| LED red | Emitter deactivated |

Electrical specifications

| | |
|------------------------------|---|
| Operating voltage U_B | 10 ... 30 V DC, ripple 10 % _{SS} |
| No-load supply current I_0 | ≤ 20 mA |

Input

| | |
|------------|--|
| Input type | 1 Test input emitter deactivated: +6 V ... + U_B input impedance: > 4.7 kΩ |
|------------|--|

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

Mechanical specifications

| | |
|----------------------|---|
| Connection type | Connector M12 x 1, 4-pin |
| Degree of protection | IP67 |
| Material | |
| Housing | stainless steel V4A |
| Transducer | epoxy resin/hollow glass sphere mixture; foam polyurethane, cover PBT |
| Mass | 25 g |

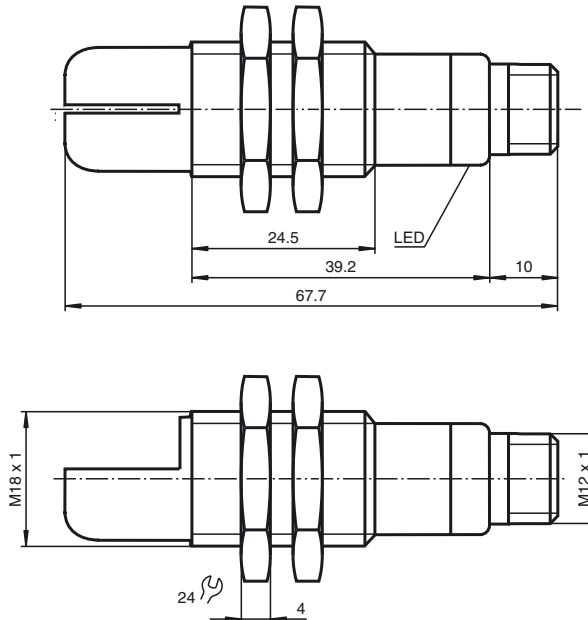
Compliance with standards and directives

| | |
|---------------------|---|
| Standard conformity | |
| Standards | EN 60947-5-2:2007 + A1:2012 IEC 60947-5-2:2007 + A1:2012 |

Approvals and certificates

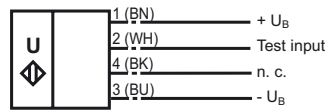
| | |
|--------------|--|
| UL approval | cULus Listed, General Purpose |
| CSA approval | cCSAus Listed, General Purpose |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |

Dimensions



Electrical Connection

Standard symbol/Connections:
(Emitter)



Core colours in accordance with EN 60947-5-2.

Pinout

Connector V1



Accessories

CPZ18B03

Mounting Bracket with swivel nut

OMH-04

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

BF 18

Mounting flange, 18 mm

BF 18-F

Mounting flange with dead stop, 18 mm

BF 5-30

Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

V1-G-2M-PVC

Female cordset, M12, 4-pin, PVC cable

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

Function

A through-beam ultrasonic barrier always consists of a single emitter and a single receiver. The function of a through-beam ultrasonic barrier is based in the interruption of the sound transmission to the receiver by the object to be detected. The emitter sends an ultrasonic signal that is evaluated by the receiver. If the signal is interrupted or muted by the object to be detected, the receiver switches. No electrical connections are required between the emitter and receiver. The function of through-beam ultrasonic barriers is not dependent on the position of their installation. We recommend, however, to install the emitter below in the case of vertical installations to prevent the accumulation of dust particles.

Test function

For test purpose, the ultrasonic emitter is equipped with a test input. In normal operation mode (test input not connected or connected to -U_B), the green LED of the emitter is on. If the test input is connected to +U_B, the ultrasonic emitter gets deactivated and its LED changes into red. Simultaneously the receiver switches and its yellow LED goes on.