



Model Number

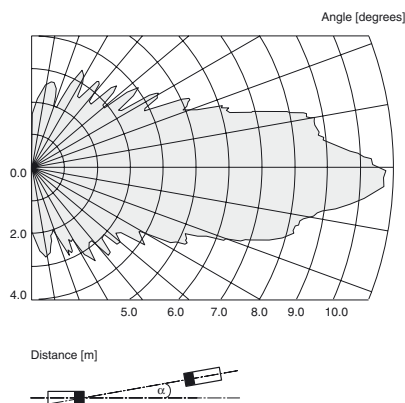
UBE6000+U1+SA2

Features

- High switching frequency
- Complementary outputs
- Absolute polarity reversal protection
- Adjustable sensitivity

Curves

Characteristic response curves



Technical data

General specifications

Sensing range	0 ... 6000 mm
Operating range	0 ... 6000 mm
Transducer frequency	approx. 130 kHz
Reference target	receiver

Indicators/operating means

LED green	Emitter: "Power on" mains ON Receiver: "Power on" mains ON
LED yellow	switching state (receiver only)
LED red	LED on continuously: strong signal LED 2 Hz flashing: multiple reflections

Electrical specifications

Operating voltage U_B	20 ... 30 V DC, ripple 10 % _{SS}
Power consumption P_0	Emitter: ≤ 1.5 W Receiver: ≤ 1 W

Output

Output type	Receiver: Complementary output stage 200 mA, Short-circuit/overload protected
Voltage drop U_d	Receiver: $U_B - 3$ V
Switching frequency f	≤ 30 Hz

Ambient conditions

Ambient temperature	-25 ... 70 °C (248 ... 343 K)
Storage temperature	-40 ... 85 °C (233 ... 358 K)

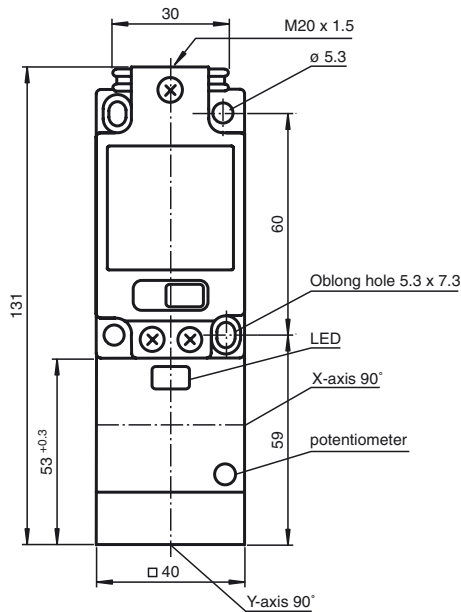
Mechanical specifications

Protection degree	IP65
Connection	terminal compartment, ≤ 2.5 mm ² conductor csa
Material	
Housing	PBT
Transducer	epoxy resin/hollow glass sphere mixture; polyurethane foam
Mass	180 g each sensor

Compliance with standards and directives

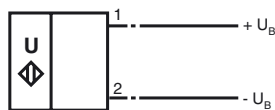
Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

Dimensions



Electrical Connection

Standard symbol / Connection:
Emitter



Description of the sensor function

This system consists of one emitter and one receiver, which are operating independently of each other. For the handling of the wide dynamic range the sensitivity of the receiver can be adjusted by means of a built-in potentiometer. The red LED can be used as adjustment aid.

System adjustment

Mount emitter and receiver in the desired distance. The detection area has to be unobstructed. Switch on supply voltage and turn potentiometer counter-clockwise until the red LED lights up permanently (strong signal). In case of short distance application, it may happen, that the red LED flashes at a frequency of approx. 2 Hz caused by multi sound reflections between the sensors transducers. In that case, turn the potentiometer clockwise, until the red LED goes off.

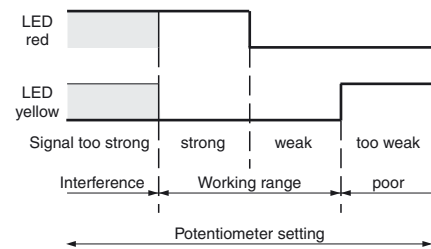
Make sure, that the receiver's output is not activated (yellow LED off) when the detection area is unobstructed.

In the strong working range, the system is highly resistant against any interference. Only large objects can be detected.

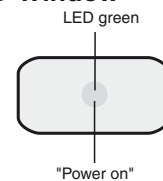
In the weak working range the system's resistance against interference is decreased, but the system is highly sensitive even to detect small objects.

Additional Information

Indicating/operating means



LED-Window



Accessories

MH 04-2681F

Mounting aid