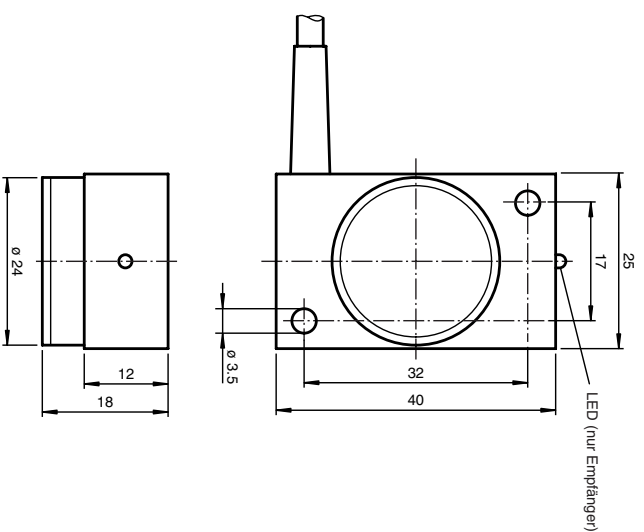


## Ultraschall-Einwegschranke UBE500-F64-SE2



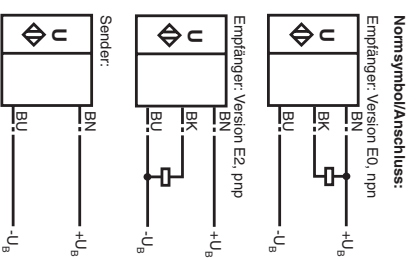
## Abmessungen



## Technische Daten

<b>Allgemeine Daten</b>	0 ... 500 mm, Abstand Sender-Empfänger 15 mm ... 500 mm
Erfassungsbereich	200 kHz
Wandelfrequenz	Referenzblech
Abzelen/Bedienelemente	Schaltzustandsanzeige (Empfänger)
LED gelb	18 ... 30 V DC, Weelligkeit 10 %ss
<b>Elektrische Daten</b>	20 mA Empfänger
Betriebsspannung	12 mA Sender
Leerlaufstrom $I_0$	
<b>Ausgang</b>	
Ausgangstyp	1 Schaltausgang E2, pnp, Schließer
Beimessungsstrom $I_b$	200 mA
Spannungsfall $U_d$	$\leq 2$ V
Schaltfrequenz $f$	100 Hz
Einschaltverzögerung $t_{on}$	$< 5$ ms
<b>Normenkonformität</b>	EN 60947-5-2
<b>Normen</b>	
<b>Umgebungsbedingungen</b>	
Umgebungstemperatur	0 ... 60 °C (273 ... 333 K)
Lagertemperatur	-40 ... 85 °C (233 ... 358 K)
<b>Mechanische Daten</b>	
Schutzart	IP54
Anschluss	2 m, PVC-Kabel
Material	Sender: 2 x 0,34 mm <sup>2</sup>
Gehäuse	Empfänger: 3 x 0,34 mm <sup>2</sup>
Masse	PA, 6,6
	80 g je Gerät

## Elektrischer Anschluss



## Hinweise

### Funktionsweise

Eine Ultraschall-Einwegschranke besteht immer aus je einem Sender und einem Empfänger. Das Funktionsprinzip der Ultraschall-Einwegschranken beruht auf der Unterbrechung der Schallübertragung vom Sender zum Empfänger durch das zu erfassende Objekt. Der Sender erzeugt ein Ultraschall-Signal, welches vom Empfänger ausgewertet wird. Wenn der Ultraschall durch das zu erfassende Objekt gedämpft oder unterbrochen wird, schaltet der Empfänger. Zwischen Sender und Empfänger sind keine elektrischen Verbindungen erforderlich. Die Funktion der Ultraschall-Einwegschranken ist unabhängig von der Einbaulage. Es empfiehlt sich dennoch, zur Vermeidung der Ablagerung von Schmutzpartikeln, bei vertikaler Einbaurichtung den Sender unten zu montieren.

### Montagetoleranzen

Die Montagetoleranzen der Mittelachsen von Sender und Empfänger dürfen die in der nebenstehenden Abbildung angegebenen Werte nicht überschreiten.

### Erkennung dünner Folien

Bei der Erkennung dünner Folien ( $< 0,1$  mm) sollte die Ultraschall-Einwegschranke in einem Winkel von  $\geq 10^\circ$  zur Senkrechten auf der Folie montiert werden.

### Achtung

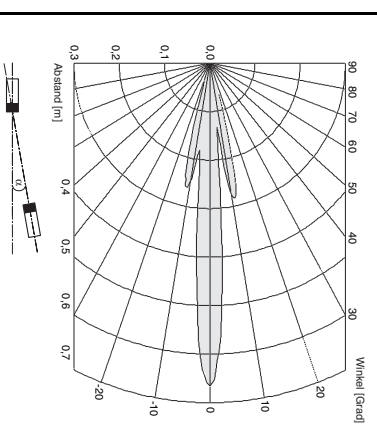
Sender und Empfänger immer nur paarweise einbauen oder austauschen. Beide Geräte sind herstellereitig aufeinander abgestimmt.

## Bestellbezeichnung

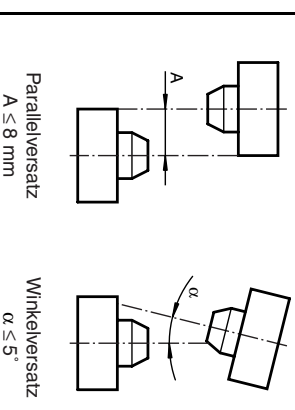
UBE500-F64-SE2

## Kennlinien/Kurven/zusätzliche Informationen

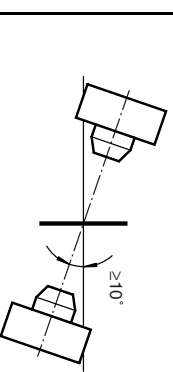
### Charakteristische Ansprechkurve



### Montage/Ausrichtung



### Erkennung dünner Folie

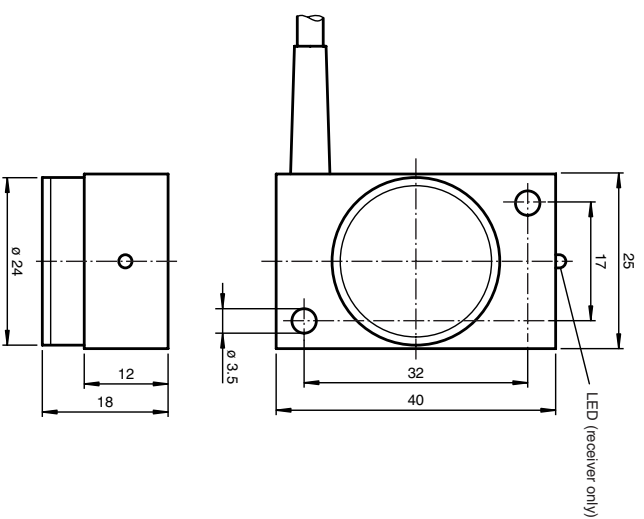


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## Through-beam ultrasonic barrier UBE500-F64-SE2



## Dimensions



## Notes

### 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.

### Installation tolerances

The installation tolerances of the central axes of the emitter and receiver may not exceed the values specified in the illustration.

### Detection of thin foils

For the detection of thin foils (< 0.1 mm), install the through-beam ultrasonic barrier at an angle of  $\geq 10^\circ$  from perpendicular to the foil.

### Caution

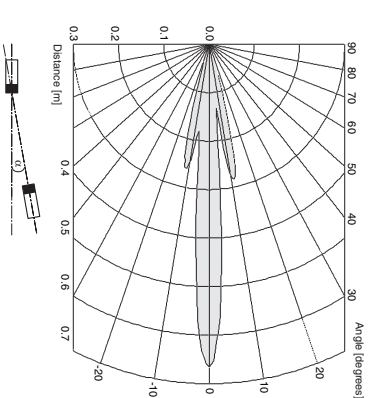
Mount or replace emitter and receiver only in pairs. Both devices are optimally matched to each other by the manufacturer.

## Model number

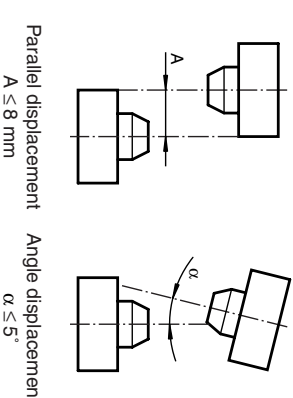
UBE500-F64-SE2

## Characteristic curves/additional information

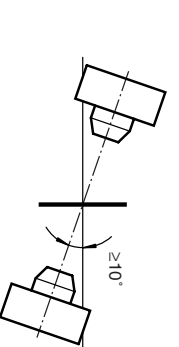
### Characteristic response curves



### Mounting/Adjustment



### Thin foil detection



## Features

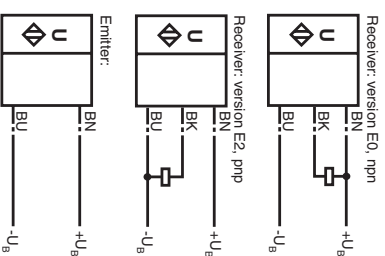
- Reliable detection of transparent materials
- High switching frequency
- Small angle of divergence
- Small, compact design
- Plastic housing
- Emitter and receiver included in the delivery package

## Technical data

<b>General specifications</b>	0 ... 500 mm , distance emitter-receiver 15 mm ... 500 mm
Sensing range	200 kHz
Transducer frequency	reference target
Reference target	LED yellow
Indicators/operating means	indication of the switching state (receiver)
LED yellow	18 ... 30 V DC , ripple 10 %SS
<b>Electrical specifications</b>	20 mA receiver
Operating voltage	12 mA emitter
No-load supply current $I_0$	1 switch output E2, pnp NO
<b>Output</b>	200 mA
Output type	$\leq 2$ V
Rated operational current $I_b$	100 Hz
Rated operational current $I_b$	$< 5$ ms
Voltage drop $U_d$	EN 60947-5-2
Switching frequency $f$	0 ... 60 °C (273 ... 333 K)
Switch-on delay $t_{on}$	-40 ... 85 °C (233 ... 358 K)
Switch-off delay $t_{off}$	IP54
<b>Standard conformity</b>	2 m, PVC cable
Standards	emitter: 2 x 0.34 mm <sup>2</sup>
<b>Ambient conditions</b>	receiver: 3 x 0.34 mm <sup>2</sup>
Ambient temperature	PA 6,6
Storage temperature	80 g per device
Protection degree	
<b>Mechanical specifications</b>	
Material	
Housing	
Mass	

## Electrical connection

Standard symbol/Connection:



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