

1) Ultrasonic transducer axis, 2) Exit direction 90° connector, 3) Display and control panel



### Basic features

<b>Application</b>	Distance measurement
<b>Approval/Conformity</b>	cULus LISTED CE EAC WEEE
<b>Operating mode</b>	Analog measurement (output curve)
<b>Series</b>	M30E1

### Display/Operation

<b>Adjuster</b>	Key (2x)
<b>Setting</b>	Filter strength (10 levels) Response delay 0 to 20 s Segment displ. bright/dark/off Synchronous/Multiplex mode Foreground suppression range Multiplex sensor address Sensor calibration Temperature comp. on/off Output curve rising/falling Analog output U/I/Auto Segment display mode Synchronization on/off Multiplex speed Measured value filter Hysteresis Detection range (3 levels) Teach-in mode display/button Factory setting (Reset) Operating mode Switching distance, 2 values Normally open/Normally closed Key disable on/off Output curve window

### Electrical connection

<b>Connection</b>	M12x1-Male, 5-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

Ultrasonic Sensors  
**BUS M30E1-XC-60/600-S92K**  
Order Code: BUS0042

# BALLUFF

## Electrical data

Current draw max.	80 mA
Input function	Synchronization signal
Load resistance RL max. (Analog I)	500 Ohm at UB 20 V 100 Ohm at UB 20 V
Load resistance RL min. (Analog V)	100 kOhm at UB 15 V
Operating voltage Ub	9...30 VDC
Rated operating voltage Ue DC	24 V
Synchronization	internal, max. 10 sensors
Ultrasonic Frequency	80 kHz

## Environmental conditions

Ambient temperature	-25...70 °C
IP rating	IP67
Storage temperature	-40...85 °C

## Functional safety

MTTF (40 °C)	1483 a
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## Material

Housing material	Stainless steel PBT, TPU
Material sensing surface	PU foam/Epoxy resin/Glass

## Mechanical data

Dimension	Ø 65 x 116.2 mm
Mounting	Nut M30x1.5

## Output/Interface

Analog output	Analog, voltage/Analog, current 0...10 V/4...20 mA
Output characteristic	linear rising/falling

## Range/Distance

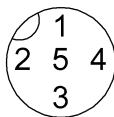
Range	600...8000 mm
Rated operating distance Sn	6000 mm
Repeat accuracy	± 0.15 %FS
Resolution	≤ 0.180 mm

## Remarks

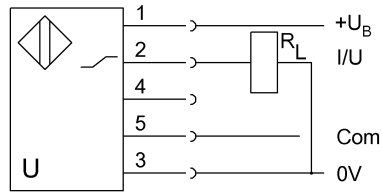
The sensor is functional again after the overload has been eliminated.  
Reference object for Sn: tube ø27mm. Max. range refers to the aligned plate.  
Do not press key using a pointed tool.  
Order accessories separately.  
For additional information, refer to user's guide.  
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

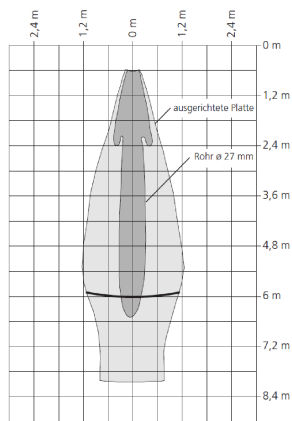
## Connector Drawings



### Wiring Diagrams



### Technical Drawings



### Help Views

