

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



### Basic features

<b>Application</b>	Object detection
<b>Approval/Conformity</b>	cULus CE WEEE UKCA
<b>Operating mode</b>	Retro-reflector Reflectionlight scanner (switching point) Refl.light scanner (window)
<b>Series</b>	M30M1

### Display/Operation

<b>Adjuster</b>	Key (2x)
<b>Display</b>	Distance value - segment display Output function- LED yellow LED green: Power Sensor settings - segment display
<b>Setting</b>	Multiplex speed Synchronization on/off Synchronous/Multiplex mode Segment displ. bright/dark/off Filter strength (10 levels) Response delay 0 to 20 s Foreground suppression range Multiplex sensor address Sensor calibration Temperature comp. on/off Measured value filter Hysteresis Detection range (3 levels) Teach-in mode display/button Factory setting (Reset) Key disable on/off Operating mode Switching distance, 2 values Normally open/Normally closed

### Electrical connection

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

Ultrasonic Sensors  
BUS M30M1-PPX-03/025-S92K  
Order Code: BUS0022

**BALLUFF**

Electrical data

Current draw max.	80 mA
Hysteresis H max.	3 mm
Input function	Synchronization signal
Operating voltage Ub	9...30 VDC
Output current max.	200 mA
Rated operating voltage Ue DC	24 V
Switching frequency	25 Hz
Synchronization	internal, max. 10 sensors
Ultrasonic Frequency	320 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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Interface

Switching output	PNP normally open/normally closed (NO/NC)
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Material

Housing material	Brass, nickel-plated PBT, TPU
Material sensing surface	PU foam/Epoxy resin/Glass
Surface protection	nickel-plated

Mechanical data

Dimension	Ø 30 x 94.5 mm
Mounting part	Nut M30x1.5

Range/Distance

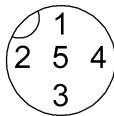
Measuring range	30...350 mm
Rated operating distance Sn	250 mm
Repeat accuracy	± 0.15 %FS
Resolution	≤ 0.025 mm

Remarks

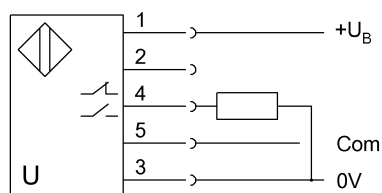
The sensor is functional again after the overload has been eliminated.  
Reference object for Sn: tube Ø10mm. Max. range refers to the aligned plate.  
Do not press key using a pointed tool.  
Order accessories separately.  
For additional information, refer to user's guide.  
For more information about 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.

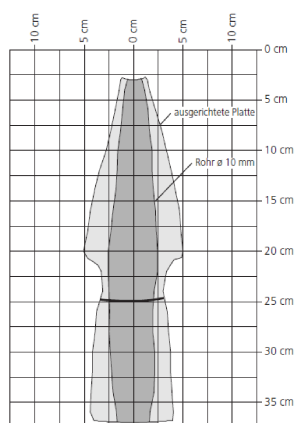
Connector Drawings



Wiring Diagrams (Schematic)



Technical Drawings



Help Views

