

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>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

**Electrical data**

<b>Current draw max.</b>	80 mA
<b>Hysteresis H max.</b>	20 mm
<b>Input function</b>	Synchronization signal
<b>Operating voltage U<sub>b</sub></b>	9...30 VDC
<b>Output current max.</b>	200 mA
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Switching frequency</b>	8 Hz
<b>Synchronization</b>	internal, max. 10 sensors
<b>Ultrasonic Frequency</b>	200 kHz

**Environmental conditions**

<b>Ambient temperature</b>	-25...70 °C
<b>IP rating</b>	IP67
<b>Storage temperature</b>	-40...85 °C

**Functional safety**

<b>MTTF (40 °C)</b>	1483 a
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**Interface**

<b>Switching output</b>	2x PNP normally open/normally closed (NO/NC)
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Ultrasonic Sensors  
**BUS M30M1-PWX-20/130-S92K**  
**Order Code: BUS003C**



**Material**

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

**Range/Distance**

<b>Range</b>	200...2000 mm
<b>Rated operating distance Sn</b>	1300 mm
<b>Repeat accuracy</b>	± 0.15 %FS
<b>Resolution</b>	≤ 0.180 mm

**Mechanical data**

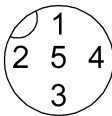
<b>Dimension</b>	Ø 30 x 94.5 mm
<b>Mounting part</b>	Nut M30x1.5

**Remarks**

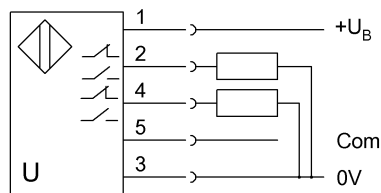
The sensor is functional again after the overload has been eliminated.  
 Reference object for Sn: tube Ø27mm. Max. range refers to the aligned plate.  
 Do not press key using a pointed tool.  
 Order accessories separately.  
 For additional information, refer to user's guide.  
 For more information 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.

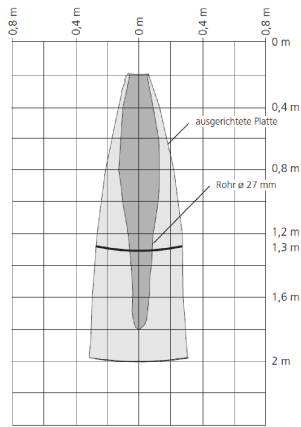
**Connector Drawings**



**Wiring Diagrams**



## Technical Drawings



## Help Views

