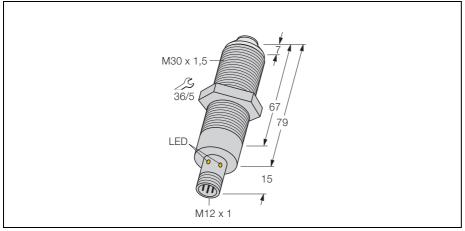


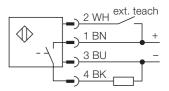
## non-invasive filling level control sensor levelprox LPRE-M30-AP6X2-H1141



| Туре  | LPRE-M30-AP6X2-H1141          |  |  |
|---|-------------------------------|--|--|
| Ident-No.                                     | 1606203                       |  |  |
| Container                                     | 1 15 mm wall thickness        |  |  |
| Material                                      | Steel, Stainless steel, Glass |  |  |
| Min. container diameter                       | 100 mm                        |  |  |
| Max. container diameter                       | 2000 mm (echo mode)           |  |  |
|   | no limit (reverberation mode) |  |  |
| Min. absolute repeat accuracy                 | ≥ ± 5 mm                      |  |  |
| Rated operational voltage (DC) U <sub>B</sub> | 15 30 VDC                     |  |  |
| Function of switching element                 | normally open                 |  |  |
| No-load current I <sub>0</sub>                | ≤60 mA                        |  |  |
| Rated operational current (DC) I <sub>e</sub> | ≤200 mA                       |  |  |
| Overload trip point                           | >270 mA                       |  |  |
| Max. voltage drop at I <sub>e</sub>           | ≤2,5 V                        |  |  |
| Switching frequency                           | ≤1 Hz                         |  |  |
| Time delay before availability                | ≤2 s                          |  |  |
| Short-circuit protection                      | yes                           |  |  |
| Reverse polarity protection                   | complete                      |  |  |
| Wire breakage protection                      | yes                           |  |  |
| Housing style                                 | threaded barrel; M30          |  |  |
| Housing material                              | metal, CuZn, chrome-plated    |  |  |
| Wiring  | connector, M12 x 1            |  |  |
| Operating temperature                         | -25+ 70 °C                    |  |  |
| Degree of protection                          | IP67                          |  |  |
| Supply voltage indication                     | LED green                     |  |  |
| Switching status indication                   | LED yellow                    |  |  |
| Alarm indication                              | LED flashing                  |  |  |

- detection of liquids through the wall of a container
- suited for a large variety of container materials such as metal and glass (plastic and other materials on request)
- no medium contact, thus opening of container not necessary
- Simple mounting via welding adapter (also suited for retaining straps)
- automatic teach-in of ambient conditions and selection of the operation mode, i.e. reverberation or echo mode, by connecting the teach line to '+' or via the teach adapter VB2-SP1 (accessory)

### Wiring diagram



### **Function principles**

Non-invasive ultrasonic sensors detect liguids through the metal wall of a container or tank by means of high frequency ultrasonic pulses. In the reverberation mode, the reflection of the interior container wall adjacent to the sensor are evaluated. Contamination of or air bubbles in the medium hardly effect operation, whereas residues on the container inside will lead to unwanted switching. In the echo mode, the sound is evaluated that it reflected by the opposing interior wall. Residues on the container inside will not cause any problems; but if the container contains built-in components such as stirring devices, or if the medium is contaminated or contains air bubbles, this operation mode may not be used.



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## **Accessories**

| Тур             | Ident-                                 | Description  | Dimension drawing |
|-----------------|--|--|-------------------|
|                 | No.                                    |  |                   |
| LP-MZ-M30-SB    | 6900377                                | combined weld and retention strap mounting adap-     |                   |
|                 |  | ter. retention straps have to be ordered separately. | MOD x 1.0 10.5 4  |
|                 |  |  |                   |
| VB2-SP1 6999084 | Teach adapter for LPRE-M30-AP6X2-H1141 |  |                   |
|                 |  |  |                   |