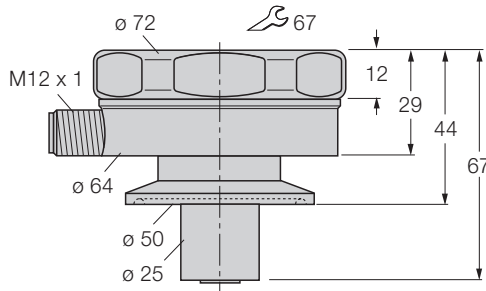
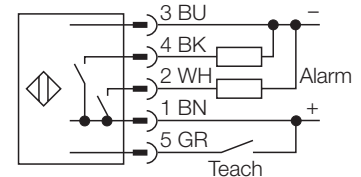


## non-invasive filling level control sensor levelprox LP-T50-UP6X3-H1151



- 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)
- non-invasive, without medium contact, thus especially hygienic
- simple mounting with welding or adhesive Tri-Clamp adapter
- alarm output and alarm indication in case of errors or insufficient coupling
- automatic teach-in of ambient conditions via push button or teach line

### Wiring diagram




### Function principles

Non-invasive ultrasonic sensors detect liquids through the metal wall of a container or tank. For this, they generate a high frequency ultrasonic pulse whose echo is detected and evaluated by the sensor. The sensor compares the actual echo with the taught curves representing the empty and filled status of the container and sets the output accordingly. Electrical or acoustic interference or a sensor failure due to insufficient coupling are indicated by an LED and an alarm output.

|  |   |
|--|---|
| <b>Type</b>  | LP-T50-UP6X3-H1151                          |
| Ident-No.  | 1606200                                     |
| <b>Container</b>                                       | 1... 15 mm wall thickness                   |
| Material   | Steel, Stainless steel, Glass               |
| Min. container diameter                                | 100 mm                                      |
| Adjustment to ambient conditions                       | via push button or teach line               |
| Min. absolute repeat accuracy                          | $\geq \pm 5$ mm                             |
| Switching delay  | 1...10 sec (adjustable via DIP-switches)    |
| <b>Rated operational voltage (DC) <math>U_B</math></b> | 15... 30 VDC                                |
| Function of switching element                          | programmable                                |
| Alarm output   | PNP   |
| No-load current $I_0$                                  | $\leq 60$ mA                                |
| Rated operational current (DC) $I_e$                   | $\leq 200$ mA                               |
| Overload trip point                                    | $>270$ mA                                   |
| Max. voltage drop at $I_e$                             | $\leq 2,5$ V                                |
| Switching frequency                                    | $\leq 1$ Hz                                 |
| Time delay before availability                         | $\leq 2$ s                                  |
| Short-circuit protection                               | yes   |
| Reverse polarity protection                            | complete                                    |
| Wire breakage protection                               | yes   |
| <b>Housing style</b>                                   | cylindrical/smooth; T50 (Tri-Clamp Gehäuse) |
| Housing material                                       | metal, A4 1.4404 (AISI 316L)                |
| Wiring   | connector, M12 x 1                          |
| Operating temperature                                  | -25 ...+ 70 °C                              |
| Degree of protection                                   | IP67<br>(cover screw connections tightened) |
| Protection class                                       | III, SELV                                   |
| <b>Supply voltage indication</b>                       | LED green                                   |
| Switching status indication                            | LED yellow                                  |
| Error indication                                       | LED red flashing and alarm output on        |
| Alarm indication                                       | LED red on and alarm output on              |

## non-invasive filling level control sensor levelprox LP-T50-UP6X3-H1151

### Accessories

| Typ         | Ident-No. | Description   | Dimension drawing   |
|-------------|-----------|---|---|
| LP-MS-T50-S | 6900253   | Tri-Clamp adapter for weld mounting. seal and clamping collar are included in delivery.                             |  |
| LP-MS-T50-K | 6900255   | Tri-Clamp adapter for adhesive mounting. Seal, clamping collar and two-component adhesive are included in delivery. |   |