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# LWT300 series

## Quick Start Guide

### Unpacking

If you are reading this document, you have already opened the box containing your instrument. While following the basic safety instructions provided below, proceed with unpacking the content of this box.

### Basic safety

#### Personnel



#### WARNING

**Only properly certified and authorized personnel** should be charged with the installation, electrical connection, commissioning, operation and maintenance of the instrument.

**Depressurize the vessel** before opening the instrument connection. Any process media released may cause severe injuries.

Carefully **plan** any installation, modification or repair before actually proceeding.

#### Electrical



#### WARNING

**Do not** make electrical connections unless the electrical code designation stamped on the instrument data plate matches the classification of the area in which you want to install the instrument. Failure to comply with this warning can result in fire or explosion.

Use **only** tools compliant with national insulation standards, e.g., DIN EN 60900.

Use **only** non sparking tools when installing the instrument in hazardous areas.

#### Improper use

It is prohibited to use the instrument for any of the following, including but not limited to:

- A climbing aid, e.g., for mounting purposes.
- A support for external loads, e.g., as a support for pipes.
- By adding material, e.g., by painting over the name plate, or welding/soldering on parts.
- By removing material, e.g., by drilling the housing.

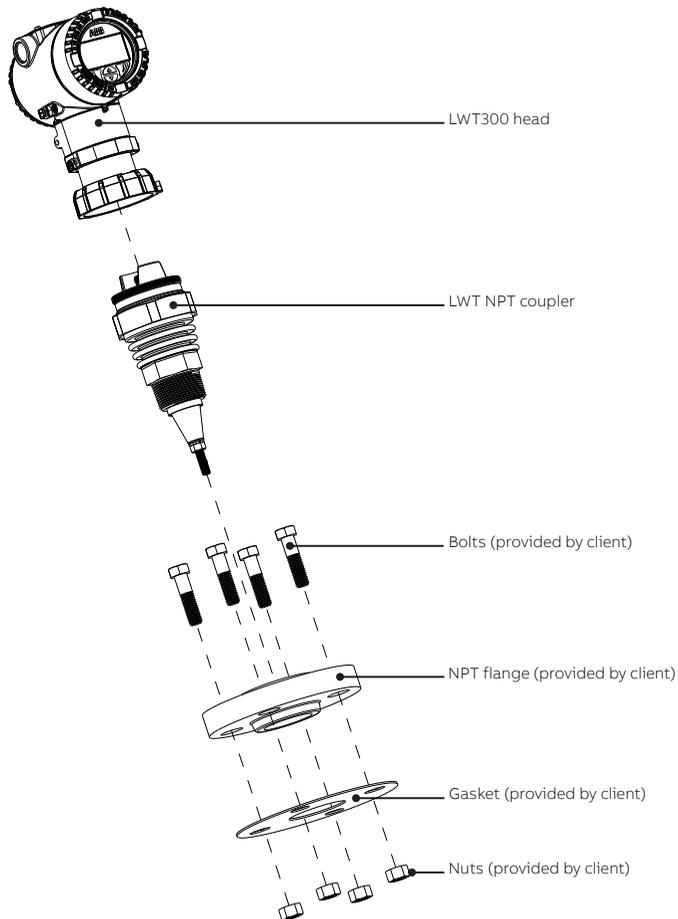
## What's in the box

Check for damages to the included parts:

- LWT series instrument head
- Instrument coupler
- Probe
- User's guide

Should any part of the package be damaged upon reception, contact ABB customer service as indicated on the back cover of your user guide.

**Figure 1** LWT300 series typical installation



# Basic physical installation

Below is a list of basic steps necessary to properly install LWT series instruments, as recommended by ABB. All installations should be performed by **certified and authorized** personnel in accordance with all applicable local security codes (electrical, engineering, etc.) (the page references in parentheses refer to the LWT series user's guide)

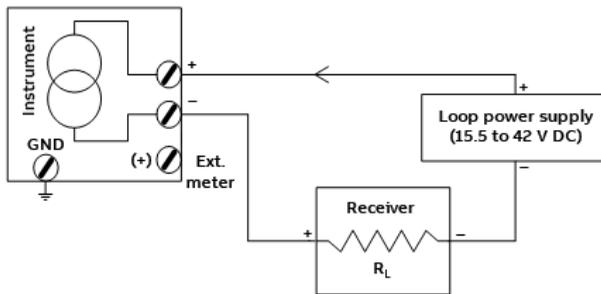
Here are the basic installation steps:

- 1 Access and properly secure the installation site (vessel depressurization and cool down, mains power down, etc.).
- 2 Attach the probe to the head/coupler assembly.
- 3 Slide the probe in the vessel and attach the probe/coupler assembly on the flange.
- 4 Connect the mains to the head unit.
- 5 Power up and configure the instrument.

## Simple connection diagram

Here is a simple power connection diagram for LWT series instruments.

**Figure 2** Typical LWT connection



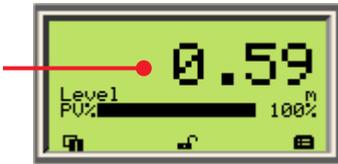
## Initial software setup

Initial setup of the instrument is performed via the **Easy Setup** menu. Below you will find menu items, factory-set values and lists of all available values when you click **Select** from the **Easy Setup** screen.

**Figure 3** Easy Setup menu



| Submenu  | Default value                           | Available values   |
|--|---|--|
| <b>Language</b><br>(language used on the interface)  | English                                 | <b>English</b><br>French (Français)<br>German (Deutsch)<br>Simplified Chinese  |
| <b>Set PV (4-20mA)</b><br>(primary value measured on the 4-20 mA current loop)                                     | Level                                   | <b>Level</b><br>Distance<br>Ullage   |
| <b>PV Unit</b><br>(measurement unit for the primary value)   | m (meter)                               | <b>m (meter)</b><br>cm (centimeter)<br>mm (millimeter)<br>ft (feet)<br>in (inches)                                   |
| <b>Empty/Zero</b><br>(distance between the process connection and the starting point of the measuring level range) | factory-set based on instrument ordered | Customizable   |
| <b>Full/Span</b><br>(the distance between the minimum level and the maximum level)                                 | factory-set based on instrument ordered | Customizable   |
| <b>Application Category</b><br>(general type of process application)   | Water-based (DC>10)                     | <b>Water-based (DC&gt;10)</b><br>Liquid mix. (3<DC<10)<br>Oil-based (DC<3)<br>Solid (organic)<br>Solid (others)      |
| <b>Max Level Rate</b><br>(rate at which the vessel should reach its maximum level)                                 | No Filter                               | <b>No Filter</b><br>Very Slow: <1cm/min<br>Slow: <5cm/min<br>Medium: <25cm/min<br>Fast: 1m/min<br>Very Fast: <5m/min |
| Display Line1 View1<br>(first line of text on the first screen displayed, under the measured value)                | Level                                   | <b>Level</b><br>Ullage<br>PV Percent<br>Current<br>Empty<br>Distance<br>Span<br>Probe Length<br>Media Level          |



All menus available in your LWT instrument are explained in more details in the accompanying user's guide.