Sontay®
Four Elms Road · Edenbridge
Kent · TN8 6AB · UK

# LS-712
## Hydrostatic Level Transmitter

Issue Number: 7.0
Date of Issue: 26/01/2017

### Features & Benefits

- Compact design
- Simple installation
- Stainless steel construction

### Technical Overview

The LS-712 range of submersible water level transmitters provides continuous hydrostatic level measurement up to 10.2m of water column. They are suitable for many applications such as water tanks, wells, sumps and ponds.

Transmitters have a vented cable which provides an atmospheric reference for the sensor, which is necessary for ensuring repeatable, precision depth measurements under the most adverse conditions.

### Product Codes

*4-20mA Output:*

| | |
|---|---|
| **LS-712-A** | Hydrostatic level transmitter, 0-300mbar, 5 meter cable |
| **LS-712-B** | Hydrostatic level transmitter, 0-1000mbar, 15 meter cable |

*0-10Vdc Output:*

| | |
|---|---|
| **LS-712-A-V** | Hydrostatic level transmitter, 0-300mbar, 5 meter cable |
| **LS-712-B-V** | Hydrostatic level transmitter, 0-1000mbar, 15 meter cable |

### Specification

| | | |
|---|---|---|
| Output: | | |
| | LS-712-x | 4-20mA |
| | LS-712-x-V | 0-10Vdc |
| Supply voltage: | | |
| | 4-20mA | 10 to 30Vdc |
| | 0-10Vdc | 12 to 30Vdc |
| Measuring range: | | |
| | LS-712-A | 3.06m |
| | LS-712-B | 10.2m |
| Response time | | < 2ms |
| Load: | | |
| | 4-20mA | $\leq \frac{\text{Supply voltage} - 7V}{0.07A}$ (Ohm) |
| | 0-10Vdc | >10Kohm |
| Current consumption: | | |
| | 4-20mA | <20mA |
| | 0-10vdc | <5mA |
| Electrical connections | | Via flying lead |
| Accuracy: | | |
| | Characteristic line | ±0.8% fs @ 25°C |
| | Resolution | 0.1% fs |
| | Thermal characteristic | ±0.2% fs/10k |
| Maximum pressure | | 4.5bar |
| Materials: | | |
| | Case | Stainless steel 1.4404/AISI 316L |
| | Cable | PE-HD |
| | Sealing material | EPDM |
| Temperature | | -40 to 80°C |
| Dimensions: | | |
| | Sensor | 116 x 23.4mm |
| | Cable | 5 or 15m |
| Protection | | IP68 |
| CE Conformity | | CE Marked to EN 61326-2-3, EMC |
| Country of origin | | Switzerland |

CE

The products referred to in this data sheet meet the requirements of EU Directive 2014/30/EU

**WEEE Directive:**
At the end of the products useful life please dispose as per the local regulations.
Do not dispose of with normal household waste.
Do not burn.

Tel: +44 (0)1732 861200 - E-mail: sales@sontay.com - Web: www.sontay.com

## Installation

The level pressure transmitter LS-712 is installed hanging downwards on the cable. In moving media, the transmitter must be fixed to prevent measuring errors. This can be done with a guide tube. Make sure that the inlet openings on the protective cap of the level pressure transmitter are not soiled in order to guarantee perfect functioning.

## Connections

LS-712-x (4-20mA):

| | |
|---|---|
| Brown | 10 - 30Vdc |
| Green | 4-20mA signal |

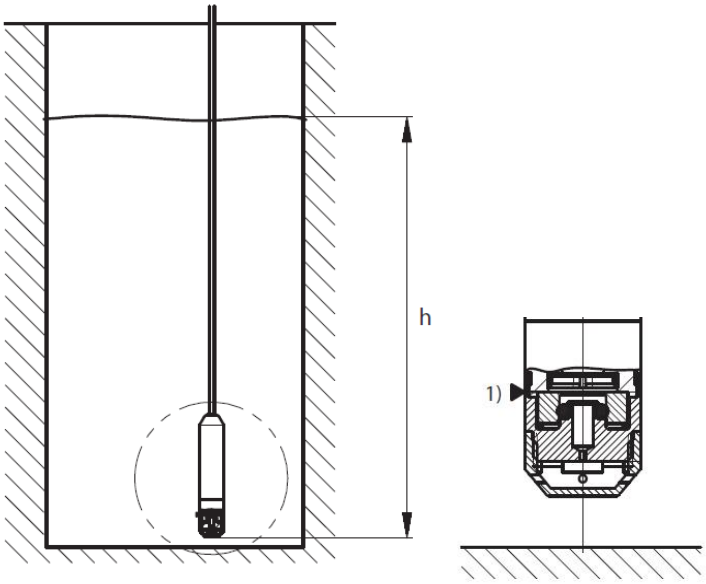
LS-712-x-V (0-10Vdc):

| | |
|---|---|
| Brown | 12 - 30Vdc |
| White | 0V (Ground) |
| Green | 0-10Vdc signal |

## Level Measurement

h Fluid level
1) Measurement ref height

The transmitter has been pre-calibrated, and cannot be re-calibrated.




## Operating conditions

The following points should be noted particularly when using the device:

- The maximum permissible pressure pmax of the transmitter may not be exceeded.
- The temperature of the medium in contact with the transmitter may not exceed 80°C.
- Avoid formation of ice on the process input of the transmitter because this could damage the diaphragm.
- Prevent soiling of the transmitter input.
- Avoid obstruction to the vent pipes in the special cable (influences the measuring accuracy).



Tel: +44 (0)1732 861200 - E-mail: sales@sontay.com - Web: www.sontay.com