LEVEL MEASURING

WITH DISPLACER TRANSMITTER

www.aramakco.com

Introductions

The Displacer Level Transmitter (DLT) that made in Aramak Co. is a Hydraulics coupling type level indicating transmitter with smart data processing function.

The hydraulic coupling is a new innovation of displacement measurement that develop in ARAMAK company.

Displacement Level Transmitter is one of the most advanced level instruments based on displacer device.

The buoyancy principle has been well known for many decades as its high reliability and stability.

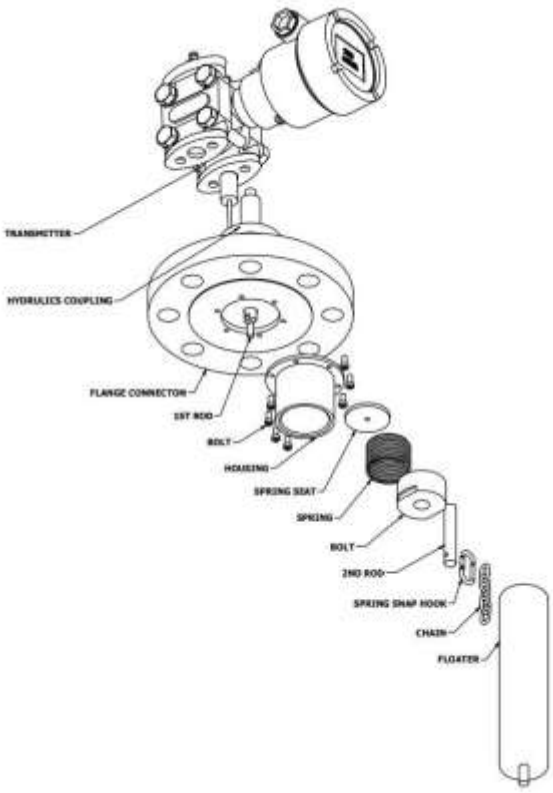
The buoyancy principle of Archimedes is applied into its operation.

The **DLT** Series can be configured parameter values and monitored the measured values by using PC or HART Communicator in Control Center were located far distance from site. It is also possible to be adjustment, operation, and control easily by using conventional remote keypad on site.

Applications

- Knock-out pots
- Condensate drums
- Separators
- Flash vessels
- Storage vessels
- Receiver tanks

Technical Data:



Output: 4–20 mA / HART / Loop Powered

Range: 300 to 3000 mm (to order)

Operating pressure: -0.6 to 200 bar

Specific gravity range: 0.5 to 1.5

Operating temperature: –20 to 200°C

Ambient temperature: –20 to 60 °C

Accuracy: < ±1.5% of output span

Repeatability: ±0.2% of output span

Linearity: 0.2% of output span

Resolution: 0.1% of output span

Hysteresis: 0.3% of output span

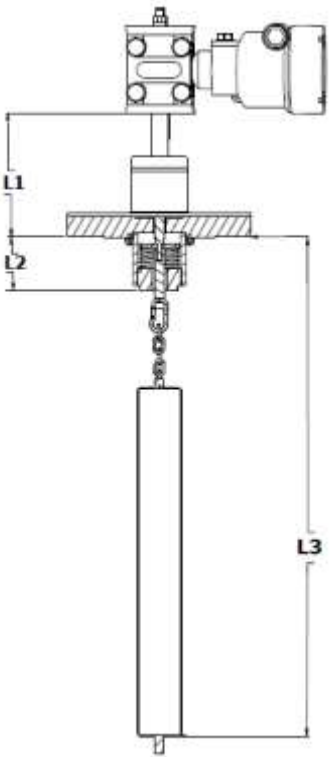
Ingress Protection: IP66/IP67

Approval/Certificate: ATEX Exia IIC T6 / Exd (for transmitter)

Materials of Construction:

The transmitter head is manufactured from cast aluminum with a paint finish of two-pack Epoxy paint suitable for off-shore/coastal use.

Wetted parts are made from stainless steel, including the element and hydraulic coupling, except for the spring which is manufactured from a specialist corrosion resistant spring material, chosen for its stability and repeatability under changing process conditions.



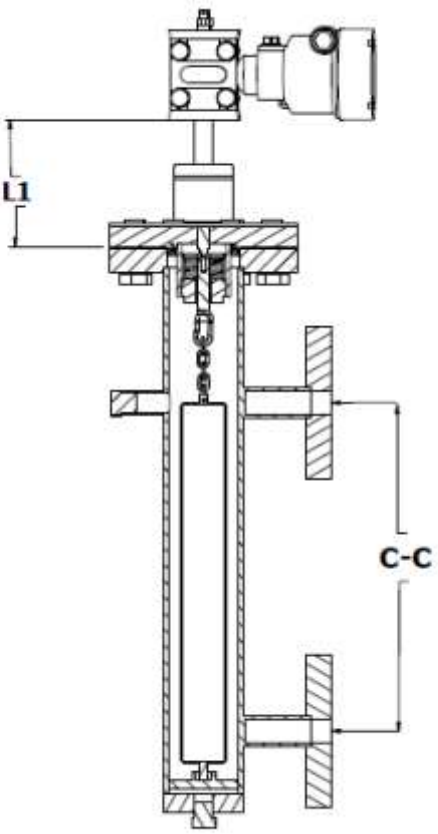
Option:

Wet ted part materials in Alloy C276 (UNS N10276), Alloy 625, (UNS N06625), and others on request

External Chamber :

The material used is either as specified on the order or selected by Aramak to suit the application. Only certified materials are used, and welding is qualified to ASME IX, and EN ISO 15614-1.

All pressure retaining parts are hydrostatically pressure tested to a minimum of 1.5 times working pressures. NDT including radiography and dye penetrant testing is available when specified at time of ordering. Inspection by customers or their appointed agents is welcome provided that this is requested at time of ordering.



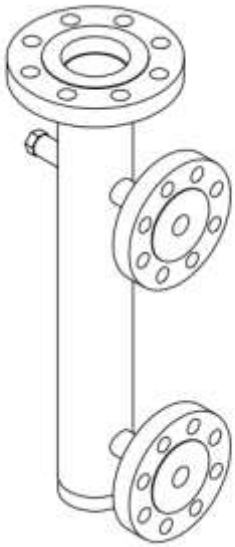
The common material /size is :

- 3”or 4” A106 pipe (depending of float size)
- Top flanged is A105, 3 or 4 inch according to chamber pipe
- Process connection: ½” to 4” (FF, RTJ, RF)
- Pressure rating: 150# to 1500# (PN20 to PN160)

Option:

- Wet side materials in Stainless Steel 316/304 , Titanium, Alloy C276 (UNS N10276), Alloy 625, (UNS N06625), Monel 400 and others on request
- Vent/Drain is applicable

The C-C length and process connection according to related datasheet



Mounting type:

Side Mounted Level Transmitter

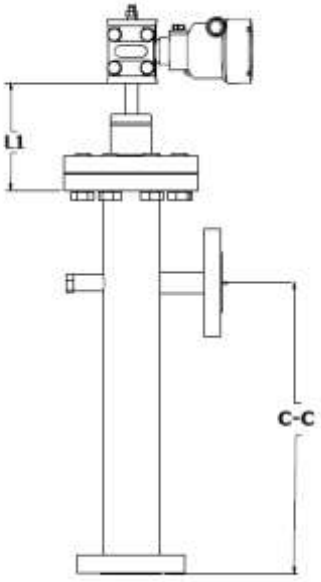
- All construction in house by code certified welders
- Float designed and weighted for maximum accuracy
- Transmitter and switch which installed, adjusted and maintained
- Safe for corrosive, flammable, toxic, high-temperature and high- pressure applications
- Rugged design- low maintenance

Top Mount Magnetic Level Gauge

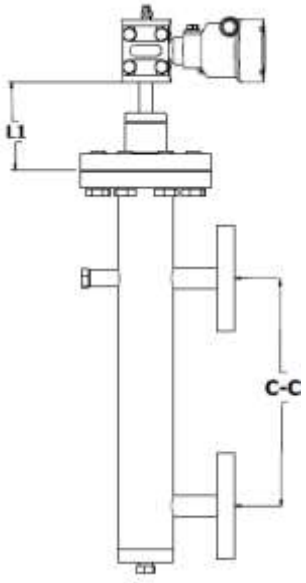
- Magnets above float connected with chain
- Slug catcher level
- Optional stilling wells
- Total or interface level measurement
- Underground tanks and sumps

Heat Traced and High Temperature Insulation Magnetic Level Gauge

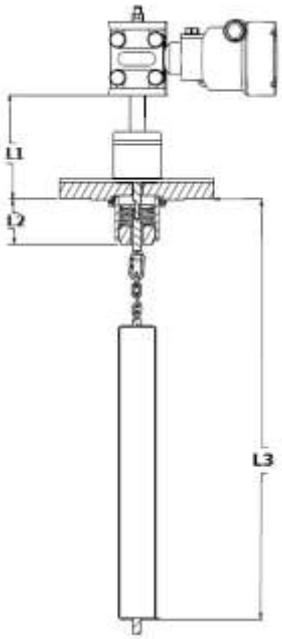
- Electrical or steam heat tracing
- Removable insulation



Side-Bottom



Side-Side



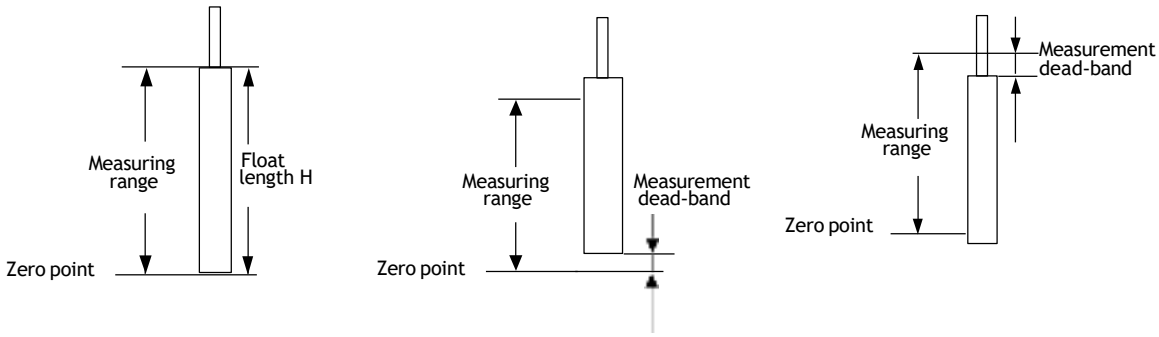
Top mount

Attention in usage

Aramak standard Displacement type level transmitter measurement range is set equivalent to float length H.

Therefore, it will be unsuitable when detecting the levels around 0 % or 100 % (at normal operation), or when continuous output of 4 mA or less or 20 mA or more is needed.

When conducting the actual liquid adjustment (filling adjustment) after installing the displacement type level transmitter at the job site, be sure to set the float bottom to zero point (reference point at 0 % liquid level). Structurally, if the measurement fluid is not in contact with float, output will not change. If other than the float bottom is set to zero point (reference point at 0 % liquid level), it may cause the measurement dead-band at the measurement range of lower limit (or upper limit), or may cause output linearity error.



Order Information

Please click here to refer to web site configuration

Contact us

Instrumentation manufacturer & designer

Tel : 021-46069694

Aramakco.com

Info@aramakco.com

Sales@aramakco.com