

Float & Dial Gauge - FDG

Pre Installation check :

Ensure that supplied goods are as per your purchase order.

a) Local indication : (fig. 1)

1. Manually extend the wire rope and ensure that the pointer moves freely on the dial and then release it gradually so that wire rope does not 'slip out' from the pulley and develops 'kinks'.
2. Calibration check -The pointer should indicate 'full measuring range' on the dial when the wire rope is fully wound and float is at its topmost position. It should indicate '0' when wire rope is extended upto its measuring range. In case of error, loosen the pointer knob and bring the pointer at '0' on dial.

b) Switch operation : (Refer fig 12)

1. Micro switches are set for 'high' & 'low level' of measuring range.
2. Open terminal enclosure and connect continuity tester between P & NO terminals. Slowly extend the wire rope observe continuity between P & NO at set points.(c/o of contacts)

c) Transmitter o/p 4-20mA (fig. 2 & 14) :

1. Transmitter output is pre - calibrated at factory on the basis of tank height & nozzle length specified by the customer.
2. Open terminal enclosure and connect **24VDC** through multimeter in series to '+ve' & '-ve' terminals of 'x'mitter card.
3. Observe **20mA** on multimeter when pointer shows '**full measuring range**' on dial (**Tank full condition**). **Slowly** extend the wire rope till pointer shows '**0**' on dial & observe gradual decrease in current. It shows **4mA** when pointer is at '**0**' (**Tank empty condition**)
4. In case of error, rotate '**Zero**' trim pot minutely using an appropriate screw driver to get **4mA** on multimeter when pointer shows '**0**' on dial. By same procedure, set **20 mA** through '**Span**' trimpot when pointer shows '**full measuring range**' on dial.

Installation :

fig. 1

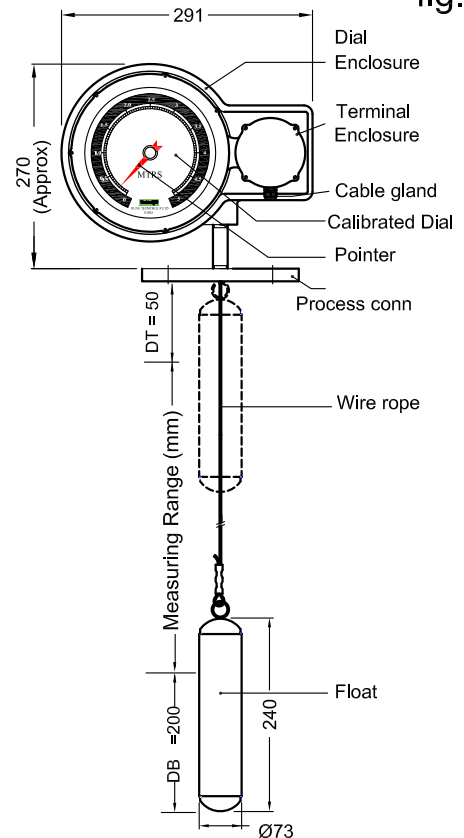
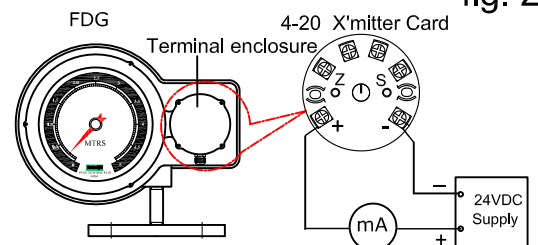


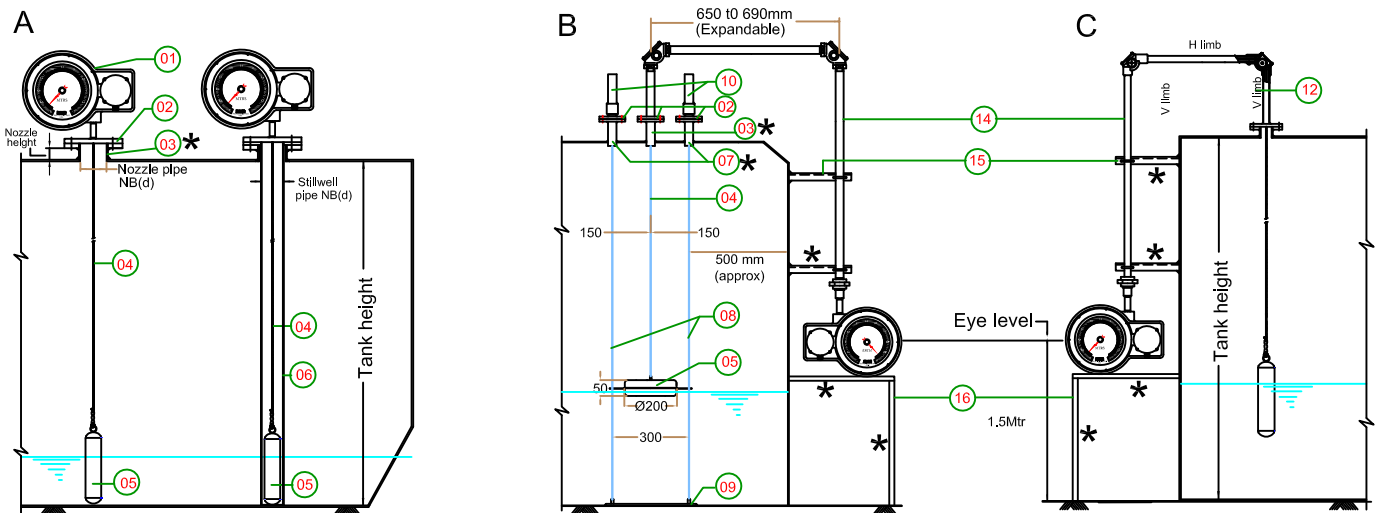
fig. 2



Top mtd. FDG (unguided float) - A

Side mtd. FDG (Guided float) - B & C

fig. 3



- 01: FDG enclosure, 02: Process flange, 03: Measuring nozzle, 04: Float wire ropes, 05: Float, 06: Still well, 07: Guide nozzle
08: Guide wires, 09: Anchor, 10: Tensioner, 11: Protection conduit with elbow pulleys, 12: Seal pot,
13: Vertical conduit support, 14: Conduit pipes, 15: Conduit support, 16: Gauge mounting support, * Items in users scope