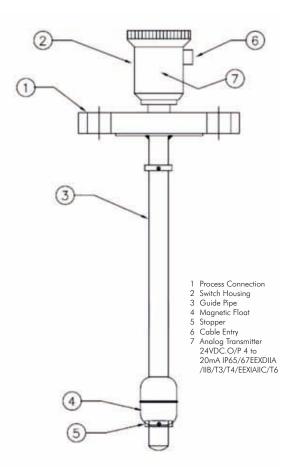


# TDSDLT2011 Displacer Type Level Transmitters

#### **Features**

- Displacer type level transmitter with application upto 100 bar and 350 deg cent application
- Heavy walled floats for critical application
- Tight sealing versions for float sensors with level transmitter to enable correct application solutions, with sealing internals at 10(-3/-4) mbarltr/sec available
- Insertion length defined for 5000mm, other lengths on request and confirmation on design
- Durability defined on sealing and pressure and temperature application
- Improved reliability with dual opposed magnet design which provides snap action
- Applicable with various versions of MOC's depending on pressure and temperature, versions with Stainless and steel, hastealloy, monel, PTFE, PP, Titanium available
- Versions with flange, screwed, welded available
- IBR versions available
- Applicable for H2S, NACE, certified
- Radiography level 1 versions available
- Level transmitter is CCOE approved and certified for IP67, IP65
- Certified for group IIA/IIB, IIC
- Enclosure at die cast alluminium and SS available
- Application with PTFE lined at special 1.6 mm thickness and PTFE floats for critical media available
- Versions with ATEX and FM certified available on request



**G** A Drawing for assembly and mounting



Application in petrochemical complex with varied specific gravity

### **Concept and Principle of operation**

This is top mounted displacer type level transmitter provided continues set points. It uses float that glides on the surface of liquids. This level switch consists of Terminal Enclosure, Float Stem with Reed Switches and resistor and Float with magnets assembled inside. This type of level transmitter can be used for continuos level controls for both closed and open tanks . When level rises float travels with the liquid on the float stem and when it comes in contact with the reed switches, due to magnetic force reed switch changes its contact. This type of level transmitter is used for lengths upto 5000 mm, other lengths on request and confirmation on design. It is recommended to use perforated stillwell for lengths more than 3000 mm.

#### Displacer level transmitter applicable for:

- Paper industry
- Chemical industry
- Petrochemicals
- **■** Refineries
- **■** Fertilizers
- **■** Food industry
- Pharma industry



# TDSDLT2011 Displacer Type Level Transmitters

### **Technical Specifications: Table-1 Material of Construction**

Float PTFE, PP, PVDF, SS316, SS304, SS316L, SS304L, Monel, Titanium, hastealloy Float stem PTFE lined SS, PP lined SS, PVDF lined SS, SS316, SS304, SS316L, SS304L,

Monel, Titanium, hastealloy

Flange PTFE, PP, PVDF, SS316, SS304, SS316L, SS304L, Monel, Titanium,

cast carbon steel, hastealloy

Switch enclosureDie cast alluminium, SS304, SS316, SS316LCable glandBrass, PBS plastic, SS316, SS304, 316L

**Stopper** Metal stoppers of relavant material compatible to media

#### **Technical Specifications: Table-2**

Float Flange rating

44

Temperature application

Float 38X200mm upto 60X 160mm and upto 68X100mm

Float Specific gravity = 0.4, till 1.2

Float Stem 500mm to 5000mm, other lengths on request and confirmation on design

Float stem width 12.5mm and 16mm

Flange 2" till 6", ANSI RF, FF, 125-250AARH, DIN std DN50 till 150, BS10TabE,

socket weld, butt weld, weld neck flange in ANSI Pressure design till 40 kg / 60 kg / 100 kg max rating ANSI 600# and DN PN 100

Cable gland Double compression, metal cable normal glands, ½" NPT F. ¾" ET. M20, PG 13.5, PG16

Flange Forged, cast versions, radiography level - 1 / 2 versions available

Float weight 60gms to 200 gms depending specific gravity
Float stem weight Max upto 200 gms depending on size / length

**Flange weight** 500gms till 30 kg depending float dimensions which inturn would density of

media and other accessories
-100 deg cent till 350 deg cent

Pressure applicationUpto 100 kg/cm2 gAnalog transmitter output4- 20 m AAnalog transmitter principleReed switch

Analog transmitter power supply 230 VAC, 5 A or 24VDC, 0.5 A

**Analog transmitter out put in split range**Split range of 4...12 m A and 12...20 m A, others on request

Analog transmitter internal resistance 200M ohms Transmitter accuracy 3% Transmitter repeatability 0.15%

**Transmitter certifications** CCOE, FM, ATEX, CE (versions applicability on request)

**Transmitter enclosure** EExia IICT6, Eexd IIA/IIB, Eexd IIC and IP65

HART transmitter principle Reed switch, LVDT

HART transmitter accuracy 1.5 %

HART transmitter output in split range

Adjustable as per HART software

**HART programmable software**With serial interface adapter with HART interface to calibrate

HART transmitter feature SIL2 certified

HART transmitter feature Slave circuitry operation with MASTER as an additional option on request

**HART output** 4 to 20 m A, other on request

HART transmitter internal resistance 440 ohms

HART transmitter enclosure EExia IICT6, EExd IIA/IIB, EExd IIC and IP65

**HART transmitter certifications**CCOE, FM, ATEX, CE (versions applicability on request)