

Float & Gauge USFT Series

It is a reliable & maintenance free gauge, suitable for liquids in underground and partially underground tanks.

Construction & Operation :

Analog Indicator - It consists of a float, clamped to a SS wire rope, the other end of which is wound on a drum, carrying constant torque spring housed in IP66 enclosure, to maintain the rope under tension. Due to change in liquid level, the float rises or falls and rotates the drum. This motion is transmitted through a gear mechanism to a pointer moving over a calibrated dial to display level in meters. Two adjustable switches with or without 4-20mA transmitter can be provided optionally.

Digital Indicator - The construction is similar to analog except, constant torque spring is housed in Ex-d enclosure and the gear motion induces a change in variable voltage signal to give 4-20 mA output & digital level indication in %, mm, cm or mtrs. The current output can be further connected to PLC/DCS through current isolator.

Salient Features :

- Easy to install
- Suitable for locations having limited headroom
- Can be retrofitted on existing tanks
- Choice of analog (IP66) & digital (Ex d Gr IIB) indicator
- Choice of max. two alarm switches & transmitter (analog)

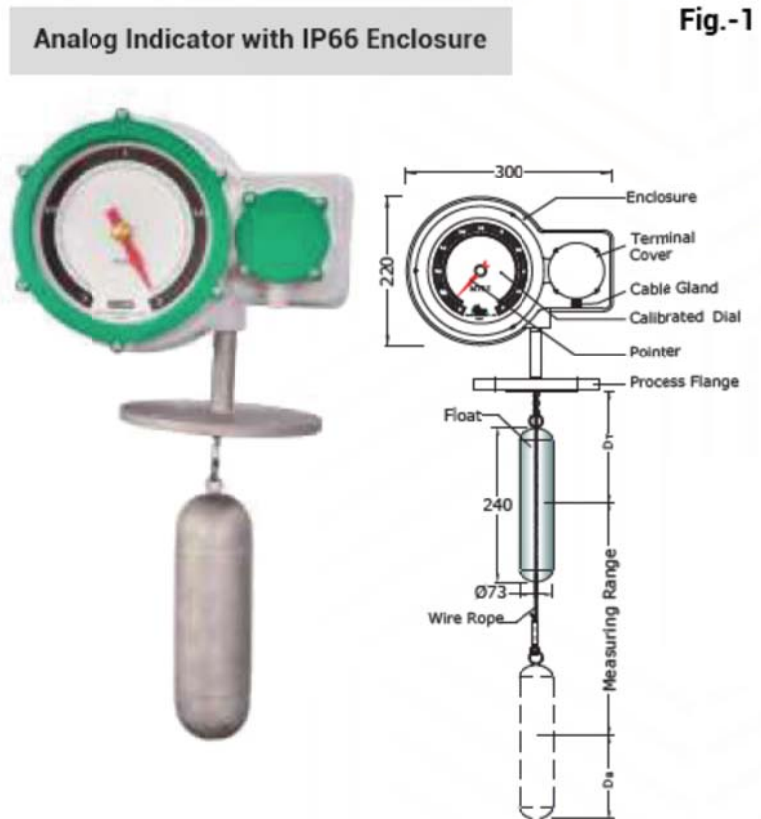


Fig.-1

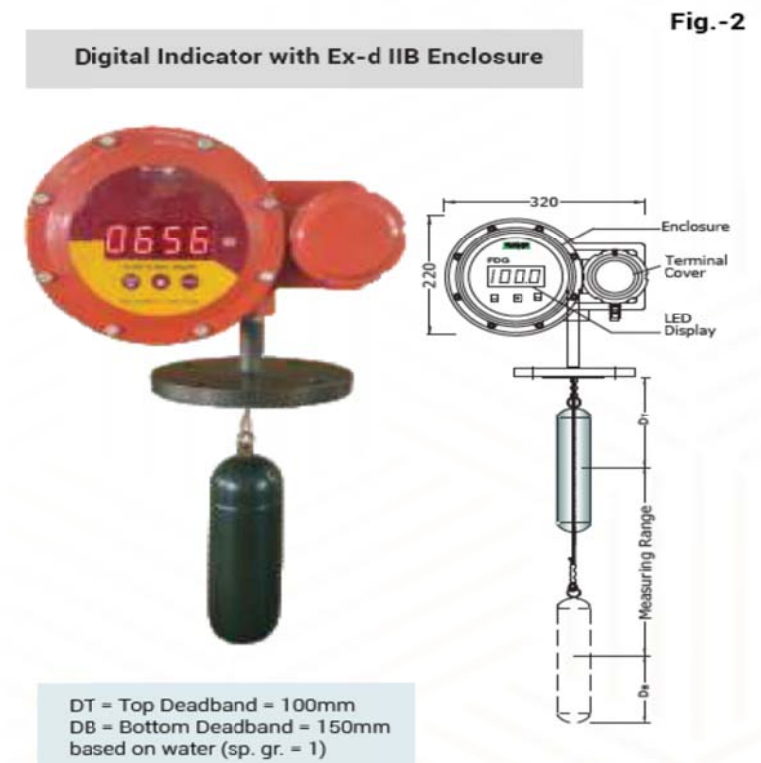


Fig.-2

Specifications

General

Installation : Top
 Process Conn. Size : 3"NB ANSI 150# or 4"NB (with stillwell)
 Process Conn.MOC : CS,SS304/316, PP,ECTFE (Hallar) ctd SS316
 Wire Rope : Ø 1.6 x SS304/316/316L,PTFE insulated SS316
 Float MOC : SS304/ 316/316L,ECTFE (Hallar) SS316
 Float Size : Ø73 x 240H cylindrical
 Liquid SG : ≥ 0.8
 Temp Range : - 1 0 to 100°C
 Pressure : Atmospheric
 Indication : Analog or Digital

Analog Indicator

Ranges : 0-1, 0-2, 0-3,or 0-10 mtrs
 Dial Enclosure : Cast Al, powder ctd., IP66 protection
 Terminal Enclosure : Cast Al, powder ctd., IP66 protection
 Cable Gland : PG9, Polyamide
 Calibrated Dial : Al, white powder coated with black graduations & numerical
 Pointer : Al, red powder coated
 Accuracy : +/- 50 mm
 Adjustable Alarm Switches (Optional)
 Switch Type : Micro switch - SPDT,
 Rating : 5A, 250 VAC
 Switch Action : Mono-stable
 Transmitter (Optional)
 Supply : 24 VDC
 Output : 4 - 20 mA (2wire) x 400 Ohms Load
 Accuracy : +/- 2% FS

Digital Indicator

Range : 0 to 10 mtrs (decimal pt. selectable)
 Dial Enclosure : Cast Al. Ex d Gr IIB
 Cable Gland : ½" NPT, Double Compn, Brass
 Display : 4 digits, 7 segment LED (1")
 Programming : Through keypad
 Accuracy : +/- 2% FS
 Supply : 24 VDC
 Output : 4 -20 mA (4 wire) x 300 Load
 Accessories :
 Still well : 3"NB pipe, with 4"NB ANSI 150 # flange in CS, SS304/316 or PP

Applications :

Raw / Treated Water, Sewage, Effluent, Oil, HDO, LDO & various Solvents

Installation :

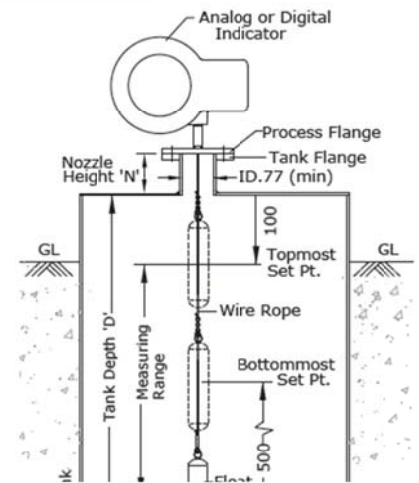


Fig.3

Termination & Wiring

Analog Indication

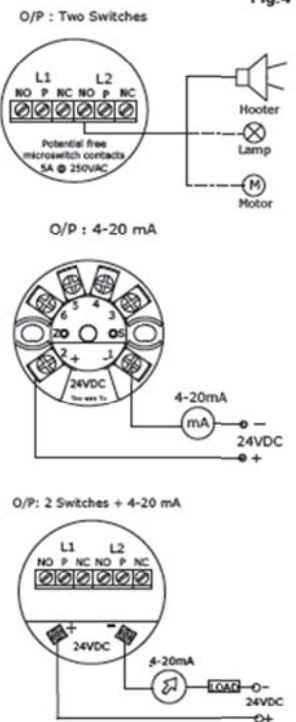
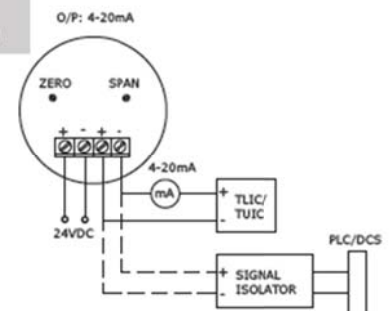


Fig.4

Digital Indication



Model Identification

USFT-							
1. Enclosure Protection x Output							
WP IP66 x Analog Indication	1						
WP IP66 x Analog Indication x 2 switches	2						
WP IP66 x Analog Indication x 4-20 mA	3						
WP IP66 x Analog Indication x 2 Switches x 4-20 mA	4						
WP IP66 x Digital Indication x 4-20 mA	5						
Ex d IIB x Digital Indication x 4-20 mA	6						
2. Installation							
Top		T					
Others		O					
3. Wetted Parts (Float , Wire Rope)							
SS304			N				
SS316			S				
SS316L			L				
ECTFE coated SS316 (3 mtrs max)			V				
Others			O				
4. Process Flange Size							
3" NB ANSI 150#				1			
4" NB ANSI 150# (with stillwell)				2			
Others				0			
5. Process Flange MOC							
CS					M		
SS 304					N		
SS 316					S		
PP with SS clad (ECTFE ctd SS316 MOC)					P		
Others					O		

6. Range			
0 - 1 mtrs		1	
0 - 2 mtrs		2	
0 - 3 mtrs		3	
0 - 4 mtrs		4	
0 - 5 mtrs		5	
0 - 6 mtrs		6	
0 - 7 mtrs		7	
0 - 8 mtrs		8	
0 - 9 mtrs		9	
0 - 10 mtrs		10	
7. Stillwell			
Without			W
CS Stillwell			1
SS 304 Stillwell			2
SS 316 Stillwell			3
PP Stillwell			4
Others			0
8. Level Indicator Controller			
Not Provided			W
Techtrol Loop Powered Indicator (LP-Cator)			L
Techtrol Indicator Controller (TLIC)			C
Techtrol Universal Indicator Controller (TUIC)			U

Ordering Information

Model No, Liquid and its density, Operating Temperature & Pressure, Tank Depth, Nozzle Height, Min/Max Set Points for alarm switches (optional)

**All dimensions in mm except specified*