

## SIDE MOUNTED LEVEL INDICATOR



### DESCRIPTION

"INSTONNIC" make Magnetic Level Gauge provides clear, high clarity indication of liquid level. Magnetic Level Gauges are principally designed as an alternative to glass level gauges. Instonnic Instruments Services offers Magnetic Level Gauges in top-bottom, top and side mounted construction with two types of indicator system i.e. Capsule and Bi-colour Rollers. Magnetic Level Gauge is consists of three major components: Float Chamber, Float and Indicator System. Magnetic Level Gauge operates on the principle of magnetic field coupling to provide fluid level information. Float chamber is typically constructed with non magnetic pipe having process connections that matches to the vessel connections. Float size and weight is determined by the process fluid, pressure, temperature and the specific gravity of the process fluid. Float contains magnets to provide 360° magnetic flux field. "INSTONNIC" make top Mounted Level Indicator Substitute to the dip sticks method (for Horizontal & Vertical Tanks.) Corrosive acids like Sulphuric, Nitric, Chlorosulphuric, Acetic Acids, Solvents like Benzene, Acetone, Toluene, OR any Organic Liquids like Butadine, Vinyl chloride. NO maintenance and NO motive power require. Simple Non Magnetic can offer where bi-colour PVC capsules mounted on the float moves in glass tube externally.

### DESIGN FEATURES

#### Roller Design :

Indicator system is consists of bi-colour rollers equipped with magnets mounted on rail inside the housing. As the level starts rising or falling magnetic float also travels with liquid level in non magnetic chamber. The magnetic interaction between magnets in float and bi-colour rollers causes each roller to rotate 180°. We are providing high & low Level Switch adjustable.

#### Capsule Design:

Indicator system consists of bi-colour capsule which moves in glass tube inside the housing. As the level starts rising or falling magnetic float also travels with liquid level in non magnetic chamber. The magnetic interaction between magnets in float and capsule causes capsule to travel along with magnetic float. We are providing high & low Level Switch adjustable.

**Performance :** Reliable for aggressive, F.O, combustible, toxic, high pressure and high temperature (upto 150°C) liquid storage tanks. Side mounted magnetic level indicator most reliable & safe for dangerous application like LPG, Oleume, Chlorosulphuric Acid, HNO<sub>2</sub>, Solvents like benzene, Toluene alcohols, C excellent visibility. Useful for acid alkali solvent oil, vegetable Oil Heavy duty type with flange joints & gland construction. visibility tested at 10 kg / cm<sup>2</sup>

### MATERIAL OF CONSTRUCTION

Type	: Magnetic Level Gauge
Mounting Orientation	: Top Mounted, Side Mounted & Top - Bottom
Indicator System	: Bi-colour Rotating Roller / Capsule
Housing for Indicator	: For Bi-colour Roller - RAIL in Aluminium or SS Housing System For Capsule - Heavy Walled Glass Tube in Aluminium / SS Housing
MOC of Indicator	: ABS Plastic
Float Chamber	: Non Magnetic Standard pipe
MOC of Float Chamber	: SS 304, SS 304L, SS 316 SS 316L, PP, PVDF, Others on request
Float	: SS 304, SS 304L, SS 316 SS 316L, PP, PVDF, Others on request
Process Connection	: Flanged in various sizes
Vent	: ½" Plugged / ½" Needle Valve / ½" Ball Valve
Drain	: ½" Plugged / ½" Needle Valve / ½" Ball Valve
Scale	: Aluminium / SS / Acrylic engraved in mm
Limit Switch Assembly	: Snap Acting 1 SPDT Micro switch, 5A, 230 VAC or 24 VDC X 2 amp reed Switch
Switch Housing	: * Aluminium Die Cast Weatherproof to IP 65 * Aluminium Die Cast Explosion proof suitable for Group IIA, IIB * Aluminium Die Cast Explosion proof suitable for Group IIC
Electrical Cable Entry	: ¾" ET (F)

Centre to Centre Distance : Bi-colour Rollers - upto 6000 mm Capsule - upto 6000 mm

Max. Operating Pressure : 15 Kg/cm<sup>2</sup> (others on request)

**MANUFACTURING RANGE:-**

Type	SIDE Mounted	Top mounted	Float & Board
Range mm	500 - 6000mm	300 - 8000mm	500 - 20000mm
Accuracy mm	± 5 -10	±10-15	±15-20
Flange NB mm	20 - 50	100-200	25-100
Specs	DIN/ASA/BS	DIN/ASA/BS	DIN/ASA/BS
Pressure Vac to.	30 Bar	30 Bar	0.5 Bar
Materials	S.S.304, S.S.316, P.P.	S.S.304, S.S.316, P.P., C.S.	S.S.304, S.S.316, P.P., C.S.

\* ACCURACY DEPENDS ON SPECIFIC GRAVITY