Magnetic Level Gauges provides clear, high clarity indication of liquid level. Magnetic Level Gauges are principally designed as an alternative to glass level gauges. MLGs are now widely used in all industries as they avoid direct contact with indicator system; it eliminates need of glass for direct level indication and prevents chemical spillage due to breakage of glass.

General Instruments Consortium offers Magnetic Level Gauges in top-bottom, top and side mounted construction with two types of indicator systems i.e. Capsule Shuttle and Bicolour Rollers. Magnetic Level Gauge is consists of three major components: Float Chamber, Float and Indicator System.

Magnetic Level Gauges 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.

**Magnetic Level Gauge**
- **Flapper**
  Indicator system is consists of bicolour 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 bicolour rollers causes each roller to rotate 180°.

**Magnetic Level Gauge**
- **Capsule Shuttle**
  Indicator system consists of capsule shuttle housed in the 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 shuttle causes capsule to travel along with magnetic float.
Specifications

Type: Magnetic Level Gauge
Mounting Orientation: Top Mounted, Side Mounted & Top – Bottom
Indicator System: Bicolour Rotating Flappers / Capsule Shuttle
Housing for Indicator: Bicolour Flappers – RAIL in Aluminium or SS Housing
System: Capsule Shuttle – Heavy Walled Glass Tube in Aluminium / SS Housing
MOC of Indicators: Bicolour Flappers – Aluminium
                   Capsule Shuttle – Plastic
Float Chamber: Non Magnetic Standpipe
MOC of Float Chamber: SS 304, SS 304L, SS 316, SS 316L, Monel, Titanium, Inconel 600,
                   Hastelloy C, PP, PVDF, Other on request
Float: SS 304, SS 304L, SS 316, SS 316L, Monel, Titanium, Inconel 600,
       Hastelloy C, 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 engraved in mm
Optional: Still Well for Top Mounted Construction
Limit Switch Assembly: Snap Acting 1 SPDT Microswitch, 5A, 230 VAC
Switch Housing: Die Cast Aluminium Weatherproof to IP – 65
                   Die Cast Aluminium Explosion proof suitable for Group IIA, IIB
                   Die Cast Aluminium Explosion proof suitable for Group IIC
Electrical Cable Entry: ¾”ET(F)
Centre to Centre Distance: Bicolour Flappers – upto 5000 mm
                        Capsule Shuttle – upto 3000 mm
Max. Operating Pressure: 25 Kg/cm² (others on request)
Max. Operating Temperature: For Side Mounted 10 to 80°C / For Top Mounted 10 to 120°C
                        (others on request)
### Mounting Orientation

| T | Top Mounted |
| S | Side Mounted |

### Type of Level Gauge

| C | Capsule Shuttle |
| F | Bicolor Rotating Flappers |

### Centre to Centre Distance

Indicate the required Centre to Centre Distance in mm

1000

### Order Information

MLG-SF-1000-50F150-S4S4C-CPP-AL-NA-Z

#### Special Features

- **W5**: Limit Switch with Die Cast Aluminium Enclosure
  - Weatherproof to IP – 65
- **EA**: Limit Switch with Die Cast Aluminium Enclosure
  - Explosion proof suitable for Group IIA, IIB
- **EC**: Limit Switch with Die Cast Aluminium Enclosure
  - Explosion proof suitable for Group IIC
- **NA**: Not Applicable

#### Calibrated Scale

- **Al**: Aluminium
- **SS**: SS

#### Process Connection

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#### MOC of Liquid Chamber

- **S4**: SS 304
- **S4L**: SS 304L
- **S6**: SS 316
- **S6L**: SS 316L
- **P**: PP
- **M**: Monel
- **T**: Titanium
- **I**: Inconel 600
- **H**: Hastelloy C

#### MOC of Float

- **S4**: SS 304
- **S4L**: SS 304L
- **S6**: SS 316
- **S6L**: SS 316L
- **P**: PP
- **M**: Monel
- **T**: Titanium
- **I**: Inconel 600
- **H**: Hastelloy C

#### MOC of Float

- **P**: PP
- **M**: Monel
- **T**: Titanium
- **I**: Inconel 600
- **H**: Hastelloy C

**Note**: For Top Mounted MLG Process Connection shall be 3” and above

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