

# Magnetic Level Gauges

## Type MLA, MLB, MLD, MLC



### Operating Principle of Magnetic level gauges

- \* Archimede's principle indicates that the upward buoyant force that is exerted on a body immersed in a fluid, whether fully or partially submerged, is equal to the weight of the fluid that the body displaced
- \* Working principle whereby the liquid in by-pass chamber is always the same level
- \* Magnetically communication between float and display magnets (flappers, roller of shuttle type)

### Applications

- \* Offshore
- \* (Petro) chemical plants
- \* Gas installations
- \* Power Plants
- \* Water Purification plants
- \* Hospitals
- \* Horticulture (steamboler)

### Technical information

- \* Liquid and gas applications
- \* Chemically aggrasive media
- \* Inflammable or explosive media
- \* Interface applications (seperate line 2 different media)
- \* Low specific grafity (< 250 kg/m3)
- \* Low and high pressure ( vacuum till 100 barg)
- \* Low and high temprature (-50°C + 400°C)
- \* With steam jacket

### Materials

- \* Stainless steel 1.4404 (316L) 1.4571 (316Ti)
- \* Plastic PVC, PE, PP and PVDF
- \* Alloy 20
- \* Hastelloy B 276
- \* Monel
- \* Titanium
- \* PTFE, Halar lined (wetted parts)

### Certificates & calculation

- \* Material certificates acc. EN10204 3.1
- \* Hydrotest certificate
- \* Nace MR0175 (hardness requirements test)
- \* PMI (Positive Material Identification)
- \* PED certificate 97/23/EG (NoBo Bureau Veritas CE1117)
- \* X-ray (Radiographic examination)
- \* Liquid Dyne Penetrant test
- \* Marine approval (third party)
- \* ATEX CE 0344 II2 GD IIB T6 T85° (NEN EN 13463-1)
- \* Calculation acc. EN-13455 (DIN process connections)
- \* Calculation acc. ASME VIII div1 (ASME process connections)

### General technical information

- \* Standard 2" Tube welded with flanges or screwed connections acc. customers specifications
- \* Centre to centre dimension (CCD) is the area that represent the mesuring zone
- \* The float is hermatically sealed , designed acc. customer process specification
- \* Indication rail available with Flappers, Rollers or Shuffle type
- \* SS Scale into in mm, cm, litre or inch
- \* Reed Switches available in Stainless steel or Aluminium Junction boxes
- \* 4-20 mA output signal

