# Emco Controls

CONSTRUCTION AND DESIGN OF INSTRUMENTS FOR FLOW, LEVEL AND TEMPERATURE



# **EMCO** magnetic level indicators series LI

## **Application**

EMCO magnetic level indicators series LI indicates the liquid level of vessels and tanks locally without power supply. The liquid level detection is safe, reliable and maintenance free. Special types indicates the interface between 2 non homogeneous liquids.

Reed switches can be added for alarm function or for control of pumps and valves.

Remote indication of the liquid level via a 4-20 mA signal (or HART protocol) is optional.

The LI level indicators are fully in compliance with PED 97/23 EC

### **Principle**

The EMCO magnetic level indicator is constructed from a vertical stand pipe made from a non magnetic material. The side mounted types are connected to the vessel at the top and bottom creating the principle of connected vessels.

Inside the stand pipe a float containing a permanent magnet moves up and down following the change of liquid level.

On the outside of the stand pipe a transparent rail with indicator flaps are mounted.

The small flaps hold small permanent magnets. The flaps are bi-colour with colours red and yellow.

When the float passes the flaps, the flaps are rotated 180° by the magnetic field in the float.

The indicator shows the red colour up to the liquid level. Above the colour is yellow

#### **Technical features:**

No risk of leakage For corrosive and non corrosive liquids, explosive, flammable and toxic liquids

0-01-012-1e



