# **High Level and Overfill Alarm System**

In accordance to Marine Classification Society and U.S.C.G 46 CFR 39.20-7 Requirements

### **Features**

- High Reliability
- Self Monitoring
- Manual Test Device
- Easy Setting and Installation
- Easy and Low Maintenance
- Intrinsically Safe Design
- Class NK Type Approved
- Class Approval by other major classification societies



## **Principle of Operation**

HLAS Series – High Level and Overfill Alarm is designed using the magnetic float switch principle which has been proven very effective. Each system consiss of the RFS float switch and alarming panel. Reed switches inside the stem are activated by the permanent magnetic inside the float which rises and falls with the changes of liquid level. Once the reed switches are activated, it sends an alarm signal to the indicating unit in the control room.

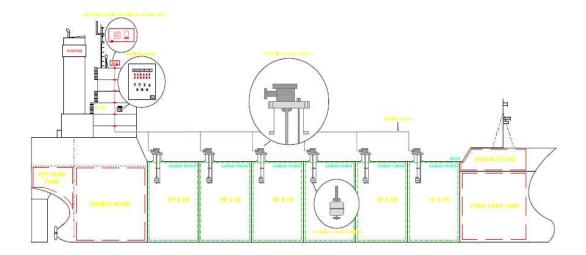
## **Application**

HLAS is developed to comply with IMO regulations for Cargo High and High Level Alarm. The sensors are designed to withstand extreme environmental conditions on a ship's deck and in cargo tanks.

It is suitable for use in marine and offshore installations in chemical parcel tankers, chemical / product tankers, oil tankers, FSO, FPSO etc. Land-based system catered for the petrochemical, refinery and process installations are available.



#### TECHNICAL SPECIFICATIONS



Model : Monitor panel: HLAS

Principle : Magnetic float with reed switch

Accuracy : Within  $\pm 5$ mm

Specific Gravity : 0.5 and above (liquid)

Alarm Display : Red Lamp (High), Amber Lamp (Overfill) and Buzzer

Alarm Level : 95% and 98%

Alarm Function : When liquid level exceeds the alarm level, High / Overfill

alarm lamp, buzzer and common relays will come on

Other Alarm : Power fail alarm
Alarm output : External relay contact
Enclosure : IP56 (level switch)

Operating conditions : -5 °c to 55 °c (Monitor Panel)

-25 °c to +70 °c (Level Switch)

Power Source : AC220V or AC110V Power Consumption : 6W Max per channel

Safety Approval : Intrinsic Safety by BASEEFA

Connection size : JIS 5K 150A (tank), JIS 5K 25A (cable)
Material in Process : Stainless Steel SS 316 (Level Switch)

Class Approval : ClassNK Type Approved

Manufacturer:	Distributed by :
MODERN Automation & Engineering Pte Ltd Blk 4026, #01-263 Ang Mo Kio Industrial Park 1	
Singapore 569637. Tel: +65 6451 6313   Fax: +65 6451 5501	
E-mail: sales@modernautomation.com.sg Website: www.modernautomation.com.sg	