INDEPENDENT TYPE TANK HIGH / OVERFILL ALARM SYSTEM (MAGNETIC FLOAT TYPE) Carco Tank Measuring System

HANLAs' cargo tank high/overfill alarm system is thoroughly designed according to USCG latest requirements, and are to be required by IBC code.

GENERAL

This alarm system consists of level alarm sensor, I.S barrier and alarm panel. When the liquid level reaches a set point, the reed switch in the alarm sensor is actuated by magnetic float.

This signal is connected to alarm annunciator through safety barrier. At the same time, we can get audible and visible alarm on the main alarm panel as well as external alarm on the bridge top. The 95% of volume is normally for high alarm and 98% of volume is normally for overfill

FEATURES

- Most advanced electric technology for high reliability and durability.
- · Certified by major certifying authorities.
- Designed for all kind of liquid.
- · Simple for construction.
- · Intrinsically safe designed unit is applicable to all kind of inflammable fluids.
- Lifting type manual test device which can check the function.

APPLICATION

These systems are used for the level alarm in cargo tanks of all kind of oil and chemical carriers.

TECHNICAL SPECIFICATION

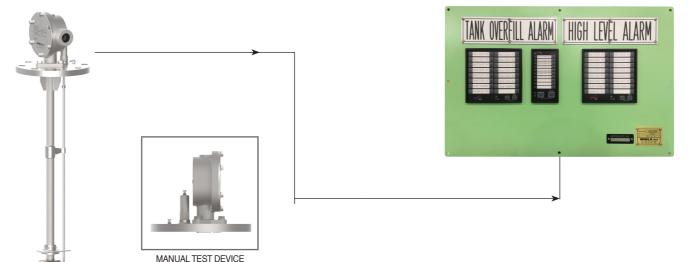
ALARM SENSOR

- **Model**: rHigh alarm:TMR-701T
 - L High and overfill alarm: TMR-702T
- Conn. size : JIS 5K 100A(standard)
- Conduit conn. size : JIS 5K 32A(standard)
- Material: Housing SUS304
 - Flange SUS304 or SUS316
 - Guide pipe SUS316
 - Magnetic float SUS316
- Contact form/rating: SPST/250VAC, 0.5A
- **Accuracy**: \pm 5mm on level rise or fall
- Specific gravity: 0.65~1.5
- Max. working temp : $-25 \sim +100 \, ^{\circ}\mathrm{C}$
- Alarm point: r 95% of volume for high level alarm
 - L98% of volume for overfill alarm
- Protection: IP56 over

LEVEL ALARM PANEL

- Power supply : Γ AC 110/220V(Main)
 - : L DC 24V(Back up)
- Consist of : Alarm annunciator I.S Barrier
 - Power lamp DC power fail alarm
 - Alarm buzzer
- External alarm: Horn & Light

HIGH AND OVERFILL ALARM SENSOR



INTERNAL VIEW

HIGH AND OVERFILL ALARM PANEL



DIMENSION FOR HIGH AND OVERFILL ALARM SENSOR/TMR-702T

JIS 5K 40A FF LIFTING TYPE TEST DEVICE

ONE LINE BLOCK DIAGRAM FOR HIGH AND OVERFILL ALARM SYSTEM

ALARM MODULE



- Channel number: 16 contacts.
- Alarm Input time delay: 0~99 sec.
- Alarm escape time delay: 0~99 sec.
- · Channel outputs: NC or NO. · Common relay output
- Internal Buzzer.
- · Buzzer Stop button.
- Flicker Stop button.
- Supply voltage: 24 VDC (18~32 VDC).
- 100~240VAC (option). • Indication LEDs: 16×red/green, 1×yellow, 1×green
- First alarm flashing.
- Serial Communication: RS-485.
- Channel setting : by internal rotary switch.
 - by windows setting program
- Power consumption : Max. 4.5 Watt at 24 VDC.
- Operating temperature : -10 $^{\circ}$ C to +55 $^{\circ}$ C(70 $^{\circ}$ C peak). • Alarm module enclosure : standard DIN 144×144×86 mm.
- Type code selection : AU-160D-AB.
 - A: Channel Output.
 - 0: None.
 - 1 : Isolated Output.
 - B : Power.
 - 0:24VDC.
 - 1:100~240VAC
- AU-160D: High Level Alarm, Overfill Alarm application. Inhibit buttons for each channel.
 - Navigation function
- Optional repeater unit : AU-160R by RS-485.

