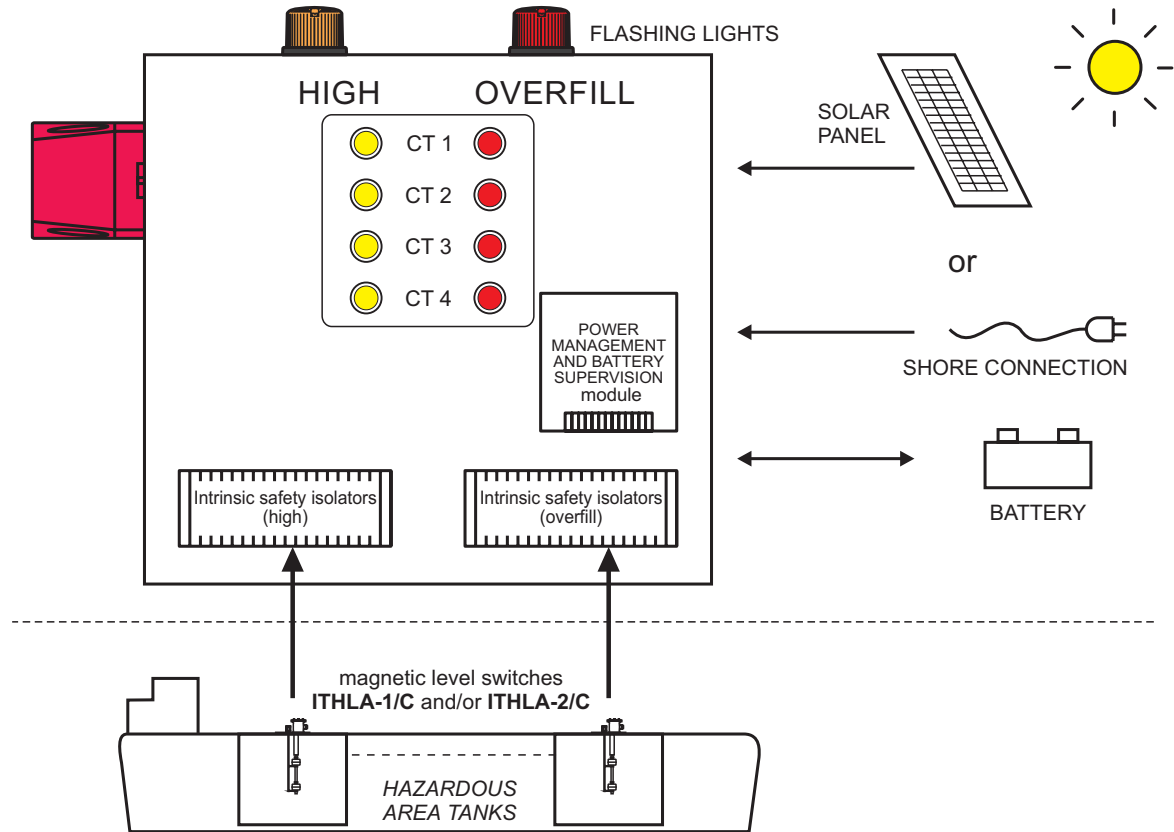


HIGH LEVEL AND OVERFILL ALARM SYSTEM ITHLA for BARGES

Based on our proven **High level and overfill alarm system** type **ITHLA**, barge version has special features:

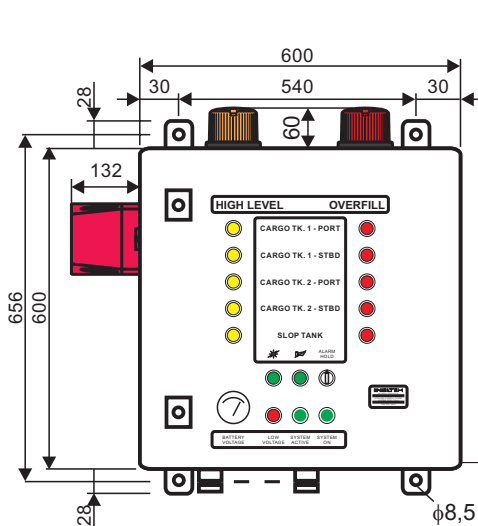
- Stand alone system with built-in batteries
- Power management - reduces consumption of system
- Optional solar panels - eliminate a need for external power supply
- IP 66 protection - suitable for open deck mounting



High level and overfill alarm system consists of:

- **Control unit** with completely separate high level and overfill alarm
- Magnetic level switches type **ITHLA-1/C** (single point alarm) and/or **ITHLA-2/C** (double point alarm)
- Signalling devices: flashing lights and electronic sirens as a part of control unit
- Stand alone system - built in batteries
- Shore connection or solar panels

COMPONENTS TECHNICAL CHARACTERISTICS AND DIMENSIONS



CONTROL UNIT

- Power supply 24VDC (solar or shore connection)
- IP 66 enclosure, polyester, fibre glass reinforced
- Alarm units ITDAC-14 with IP66 led indicators for alarm indication, with common control button (electrically separated contacts for high level and overfill alarm).
- Intrinsic safety isolators for magnetic level switches connection. Magnetic level switches connection cables are fully controlled (short circuit, line break, resistance)
- Battery voltage indicator and low voltage alarm indication
- Flashing lights included (red for overfill, amber for high)
- Built-in power management module reduces consumption of unit

MAGNETIC LEVEL SWITCHES

TECHNICAL CHARACTERISTICS

Types ITHLA-2/C (double point)
ITHLA-1/C (single point)

When high level or overflow alarm is required, single point magnetic level switch ITHLA-1/C is used; when both (high level and overflow) alarms are required, double point magnetic level switch ITHLA-2/C should be used

Specially designed for mounting on open deck, robust construction

AISI 316L stainless steel construction with flange DN100, NP10/NP16

Can be tested from outside of tank

A float with built-in magnet moves with liquid level and activates reed switch fitted in the stem

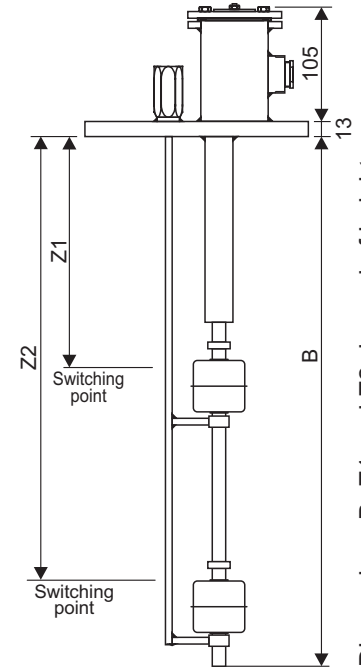
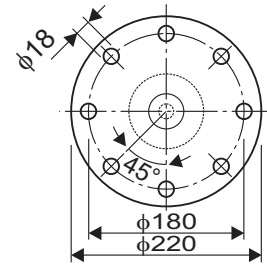
Can be installed in dangerous area and connected only over intrinsic safety isolator situated in non-hazardous area

Regarding "Ex" rules, represent element well known as "simple apparatus" due to construction of passive elements as reed switch and resistors

Operating temperature: -25°C up to +90°C

Working pressure: up to 4 bar for wetting part

Connection head protection: IP 56



Dimensions B, Z1 and Z2 depend of height of the tank.

SIGNALLING DEVICES

TECHNICAL CHARACTERISTICS

Type: siren type AS
Protection IP 66
Power supply/consumption: 24 VDC / 41 mA
Sound pressure level: 108dB/1m
Intermittent tone for high alarm (IMO code 3a), continuous for overflow (IMO code 2)



Type: flashing light type ITFL
Protection: IP 56
Power supply/consumption: 24 VDC / 0,5A
Flash energy: 5J
Amber for high alarm and red for overflow

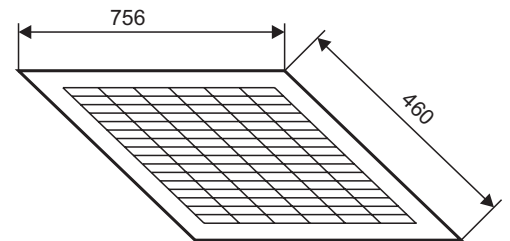


SOLAR PANELS

TECHNICAL CHARACTERISTICS



Marine grade Crystalline high-performance cells
Stainless steel back plate
Teflonlike protective film
Set of 2 panels
Weight/panel: 3,75 kg
Different types of panels can be delivered (depends on barge usage)



Height: 2mm

BATTERIES

Maintenance free regarding water refilling
For off-grid marine application

All dimensions are in mm.