

**We support
Indigenisation and
Make in India!**



We use indigenous
latest technologies to suit
Naval requirement

Electronic Control
communication
modules

We replace
existing systems with
new technologies and
new techniques

Products for parametric
measurement of level,
flow, temperature &
pressure

Integration of
products to form
systems with
Control and display
capabilities

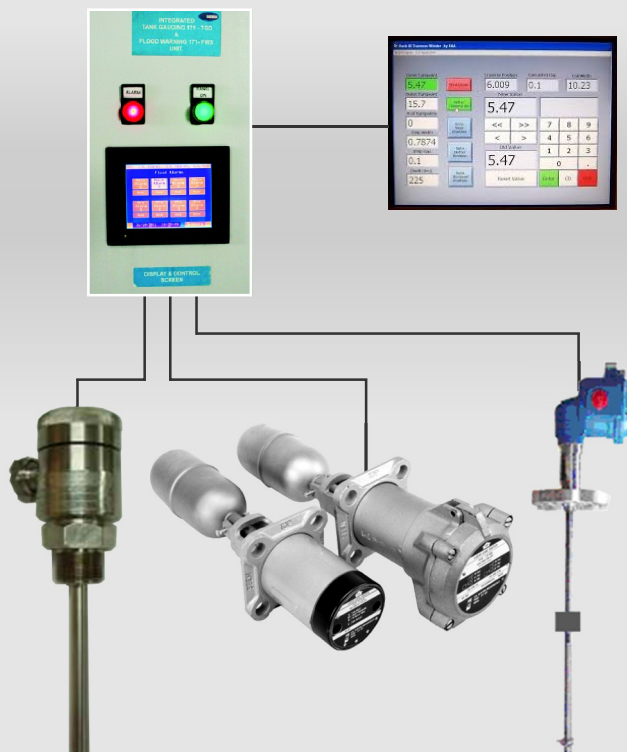


Partner for Level & Flow Measurement

Tank Gauging Systems

Flood Warning Systems

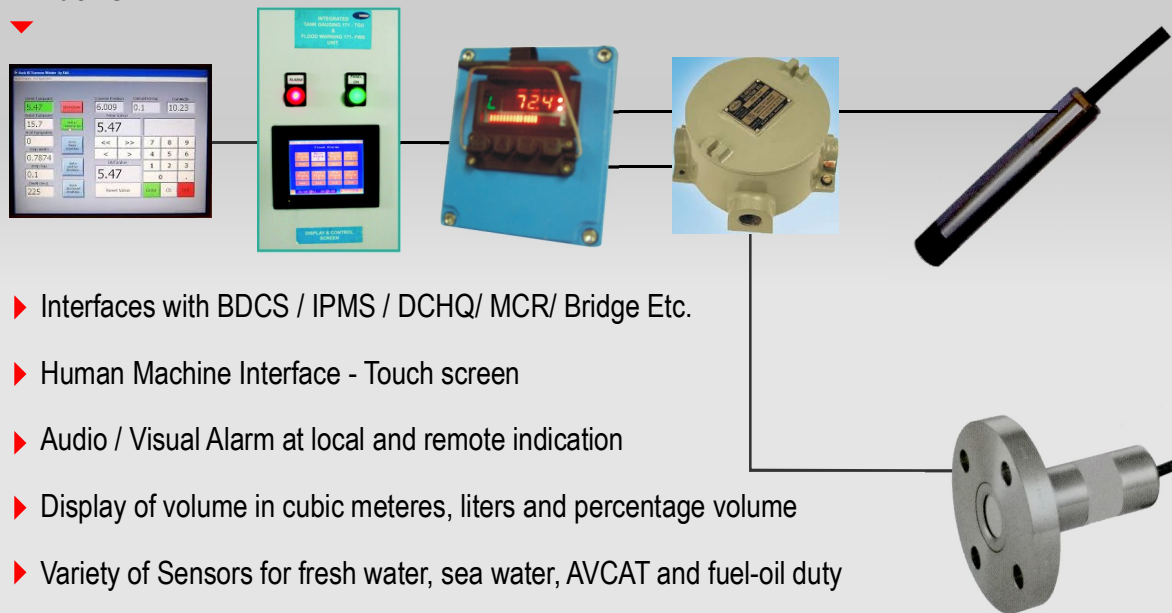
ADDRESSABLE FLOOD ALARM SYSTEM - AFAS



- ▶ The capability to interface with BDCS/ IPMS / DCHQ/ MCR/ Bridge Etc.
- ▶ Audio / Visual Alarm at local and remote stage.
- ▶ MODBUS protocol or any other standard protocol available.
- ▶ System confirms to JSS-55555.
- ▶ Built in diagnostic in sensor and system.
- ▶ Sensors with self-test feature and cable fault tolerance.

TANK GAUGING SYSTEM

Flashing Alarm Windows



- ▶ Interfaces with BDCS / IPMS / DCHQ/ MCR/ Bridge Etc.
- ▶ Human Machine Interface - Touch screen
- ▶ Audio / Visual Alarm at local and remote indication
- ▶ Display of volume in cubic meters, liters and percentage volume
- ▶ Variety of Sensors for fresh water, sea water, AVCAT and fuel-oil duty
- ▶ Sensors be intrinsically safe for Hazardous area applications
- ▶ May be remotely calibrated
- ▶ Marine approvals

ILMS/ Patternised Products (Vendor Code ES9949V-)

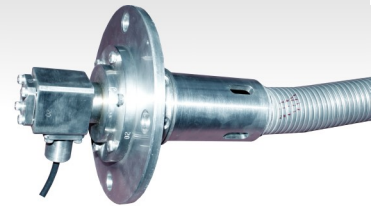
Phase Capacitance Level Sensor, CLS/ CLR/ PCLS. Indication and Display System - IDU

Applications

- EKM Class Submarines.
- Conductive liquids with low / medium viscosity like water, water bound solutions.
- Fresh water / Salt water.

Specifications

- **Temperature** : -10 °C to 55 °C
- **Pressure** : Up to 30 kg/cm²
- **Measuring Accuracy** : +/-2.5%
- **Protection** : Wheatherproof IP67 Design



Ultrasonic Level Switch ULS/ ULR/ SULS

Applications:

- **Marine & Naval:**
- Detection of water Sea water, fuel oil, etc.

Specifications

- **Operating Temperature** : -10 °C to 55 °C
- **Operating Pressure** : Up to 45 kg/cm²
- **Tripping Point** : +-5mm
- **Protection** : IP68



Fuel Water Sensors

- Function of the Fuel Water Separation sensor is to identify change in flowing medium

Product Features

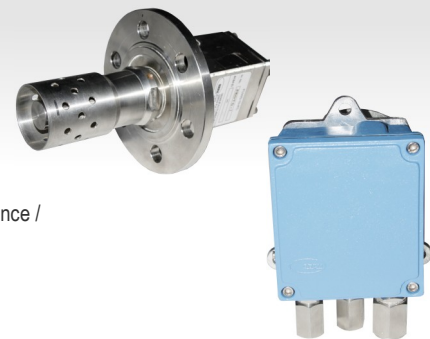
- Rugged construction.
- Type tested for naval and marine use.
- Environmental Test comply to JSS 55555 and EMI / EMC as per MIL standard 461 E/C.
- Remote Level Alarm.
- Max pressure (wet side) at sensor: 40kg/cm²

Applications

- To check the level of fuel – Sea water boundary on board the ship.
- LSHSD & Sea water interface

Specifications

- Power Supply : 220V , 400Hz , +-10%
- Output : Relay energized / deenergised in presence / absence of liquid.
- Max Pressure [wet side] at Sensor : 40 kg/cm².



Hydrostatic Pressure Transmitter 171 HLT - Tank Gauging System

Product Features

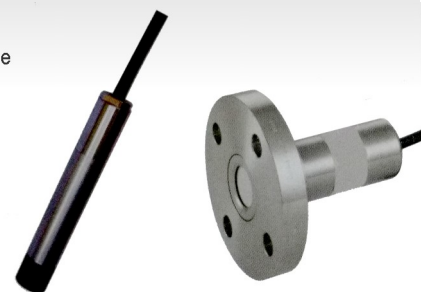
- Continuous Level Measurement upto 20 Meter wetted / Exposed parts in Stainless Steel
- Loop Powered 2 Wire 4-20 mA.
- Strong Diaphragm.
- Wide range of process connection.
- Intrinsically safe version for Hazardous area.

Applications

- Tank guaging System for AVCAT Tank, FW Cargo Tanks, Service Tanks, Level measurement in Ballast Tanks, HFO Tanks.

Specification

- Mounting Variation - Cable Suspended, Cable Suspended Clamp, Pole Mounted, External Flanged or Threaded on Tank.
- Accuracy - +/- 0.2% FSD.
- Protection - IP 68 (Suitable for Continuous Immersion).
- Operating Temperature - 10°C to 80°C.



Tank Level Indicator 103HTL - Remote Display

Product Features

- Excellent for Tank Guaging and Marine onboard use.
- Selectable Display for Product Level, Volume % level and % Volume.
- 64 Point Strap Entry for Volume.
- Site Programmable.
- Interface to MCR / Bridge.

Applications

- Tank guaging System for AVCAT Tank, FW Cargo Tanks, Service Tanks, Level measurement in Ballast Tanks.

Specification

- Input Specification - 4-20mA.
- Indication Accuracy - +/- 0.1% of Full-scale +/-1digit.
- Digital Output - RS485 modbus master / slave output to connect MCR / Bridge.
- Set Points & Control Action - Two Nos Relay Output.(On - Off).
- Protection - Weather IP 67.
- Ambient Temperature - 0°C to 55°C.
- Explosion Safety - Intrinsic Safety provided through Certified Zener Barrier.



About SBEM

SBEM was established in 1974 and is India's market leader in Level instrumentation. With a futuristic approach and a warm beginning in providing Oil companies, with Tank Level Gauging solutions, SBEM has evolved into an organization offering multiple products. SBEM Pvt. Ltd. has established itself as a FLOW MEASUREMENT solutions provider. SBEM is an ISO-9001 certified company, with a DSIR approved R&D Centre. SBEM's core strength is its ability to custom design solutions for each application and customers from every industry - INDIAN NEAVY, Thermal Power, Steel, Cement, Public Health Engineering.

SBEM in a capsule :

- 100% Indigenous Level Measuring instrument since 1978.
- One of first SSI's to obtain ISO 9001:2008 certification in India.
- The only 100% indigenous Servo Gauge in 1992.
- Indigenous developed Phased Capacitance Level Transmitters and Ultrasonic Switches for Indian Naval Submarines.
- Pioneered Magnetostrictive Probes for Automotive LPG Dispensing Stations (ALDS).
- Accurate Magnetostrictive Level Probes for Retail Outlet Automation.
- Weight and measures model approval.
- Third party certification for functional safety.
- What sets us apart from our competition is our extensive application engineering knowledge gathered over 3 decades + of successful supply to users installations in India and abroad.

FLOW LABORATORY

Laboratory accredited by NABL as per ISO/IEC 17025:2005 Lab No. : C-0828



Certificate No. C-1247

- SIL 2 Certification.
- DSIR - Recognition of in house R&D unit.
- DRDO Registered.



Multiple technologies for level and flow measurement.

- | | | |
|------------------------|--------------------|--|
| ▶ Ultrasonic | ▶ Magnetostrictive | ▶ Float |
| ▶ Hydrostatic Pressure | ▶ Conductivity | ▶ TDR: Time Domain Reflectometry based |
| ▶ Capacitance | ▶ Pulse Radar | |

SBEM Pvt. Ltd.

Head Office : 39 Electronic Co-operative Estate, Pune-Satara Road, Pune - 411009

Tel.: +91 20 24527400, 24220505, Fax +91 20 24215670, Email : defence@sbem.co.in

Works : 691A/2, Bibwewadi Industrial Estate, Pune-Satara Road, Pune - 411037.



ISO 9001- 2008

Pune

Tel.: +91 20 24527400
pune@sbem.co.in

Mumbai

Tel.: +91 22 27823601
mumbai@sbem.co.in

Delhi

Tel.: +91 11 26560647
newdelhi@sbem.co.in

Chennai

Tel.: +91 44 24911235
chennai@sbem.co.in

www.sbem-india.com
LF-200-0805-R00