





# BILGE ALARM SYSTEM

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#### INTRODUCTION

Bilge level switches are a safety critical component for the detection of liquid in dead spaces, void and sumps that are rarely visited or inspected by the crew. They need to be able to withstand years of installation in difficult environmental conditions, yet operate immediately and reliably to indicate rising liquid level, a leakage or flooding hazard. The switch is also designed with a manual lift test mechanism, which can be used to check switch operation.

When considering bilge level sensors, it would be easy for a ship builder or owner to try cut cost by using cheaper devices, often constructed with poor quality materials and design. Shridhan believes that this approach compromises reliability as maintenance and replacement costs will always exceed those of installing "the right device first time".

Due to the harsh environments that this bilge water level switch is likely to encounter, extensive successful testing has been undertaken, exceeding the required environmental testing for Marine Type Approval laid out in IACS United requirement E10 and the relevant sections of IEC945.

Shridhan provides in addition to Bilge level switches, consolidated solution for Integration and Automation for Ship Operators.

A control panel system consisting of buzzer, with acknowledgement, indication lamps, relay contacts in proportionate to the number of Bilge level switches. The panels are designed to withstand the extreme environmental conditions in cargo hold, pump room and engine room.

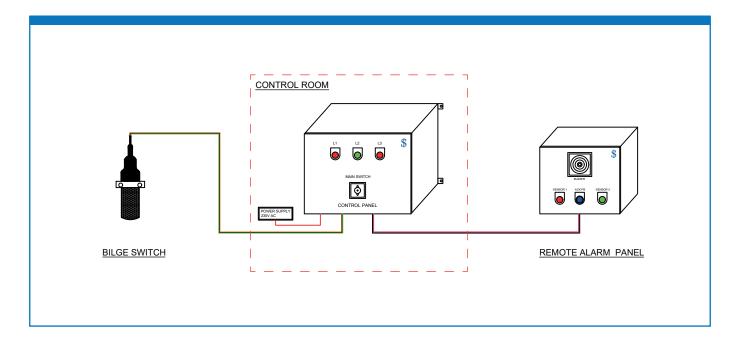
Shridhan provides Custom Engineered Systems for world wide Marine Application requirements.

#### **FEATURES**

- High reliability
- Self monitoring
- Easy setting & installation
- Easy maintenance
- Intrinsically safe design
- Approval by major classification societies



# GA DRAWING OF A BILGE ALARM SYSTEM



#### **SPECIFICATIONS**

### **BILGE LEVEL SWITCH**

Material Type	316 stainless steel stem, float, test mechanism, body plates and slosh shield
Cable	2 meters* of heavy duty LSZH sheathed 22 / 3 core rated 600V
Max. Temperature	125°C
Max. Pressure	12 bar
Switch	SPDT Reed FORM 'C' with 50 VA contact rating
Max. rating	1.5 A
Max. voltage	250 V AC/ 24 V DC
Float SG	0.62
Ingress Protection	IP-68
Approvals	American Bureau of Shipping

#### **ALARM SYSTEM PANEL**

\* Above 2 meters length contact factory

Enclosure	Weather proof IP54 mild steel construction with powder coating
Cable Entry	PG16
Indication Lamps	High level alarm lamp, remote alarm, buzzer, alarm acknowledgement
Alarm Display	Red LED and buzzer
Other Alarm	Power fail
Alarm output	One relay contact / per level switch 5A at 250 V AC
Contact form	SPDT (1NO + 1NC)
Operating temperature	5° C – 60 ° C
Power Source	230 V AC

#### **APPLICATIONS**

Suitable for marine and offshore installations in chemical parcel tankers, chemical tankers, oil tankers, FSO, FPSO etc., land-based systems catered for the petrochemical, refinery and process industry.





Head office and Manufacturing - 1

SHRIDHAN Automation Pvt. Ltd. #B-54, KSSIDC Industrial Estate, Kumbalgodu, Mysore Road, Bangalore-560074. India. +91-80-28437847, +91 80 - 28437848 info@shridhan.com

# Manufacturing - 2

SHRIDHAN Automation Pvt. Ltd. #D-13 KIADB Industrial Area, Kumbalgodu, Mysore Road, Bangalore-560074. India. +91-80-28437847, +91 80 - 28437848 info@shridhan.com

# Middle East

ORBIT Automation FZE #R4-40 A,PO Box - 122828, SAIF Zone, Sharjah, UAE.

A 100% Subsidiary of SHRIDHAN Automation Pvt. Ltd., India. Ph:+97155 - 9347963,+97155 - 1883375 me@shridhan.com



Disclaimer: We reserve the right to modify the design without prior notice

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