



Water Ingress Detection System

Model: WID-3000

► Advantage

- In Accordance with SOLAS Ch. XII Reg.12 and MSC 145(77) & IACS UI SC180
- Bilge alarm option for SOLAS X11/9
- Suitable for all kinds of cargo
- Intrinsically safe type(Ex ia)
- Protected from failures due to dust & corrosion
- No need for additional mechanical protection
- Alarm override and override reinstatement
- Certified by KRS, ABS, Class NK and LR
- Patented Technology



► General

- Relate to SOLAS regulation XII/12, the Water ingress detection system should be installed to the all of Bulk Carrier regardless of their date of construction not later than the date of the annual, intermediate or renewal survey, whichever comes first, to be carried out after 1st July 2004.
- The system is for the early detection of any leakage into all cargo holds, ballast tanks, forward of the collision bulkhead(ex. F.P.T) and dry spaces(ex. bosun store) which extends forward of the foremost cargo hold.

► Position of Detection

- 1) Cargo Holds
 - Pre-alarm : at height of 0.5m from the inner bottom
 - Main-alarm : at height not less than 15% of depth, but not more than 2.0m
- 2) Ballast Tank(F.P.T)
 - At height not exceeding 10% of the tank capacity.
- 3) Dry or Void space
 - At height of 0.1m above the inner bottom.



Water Ingress Detection System Model: WID-3000

► Description

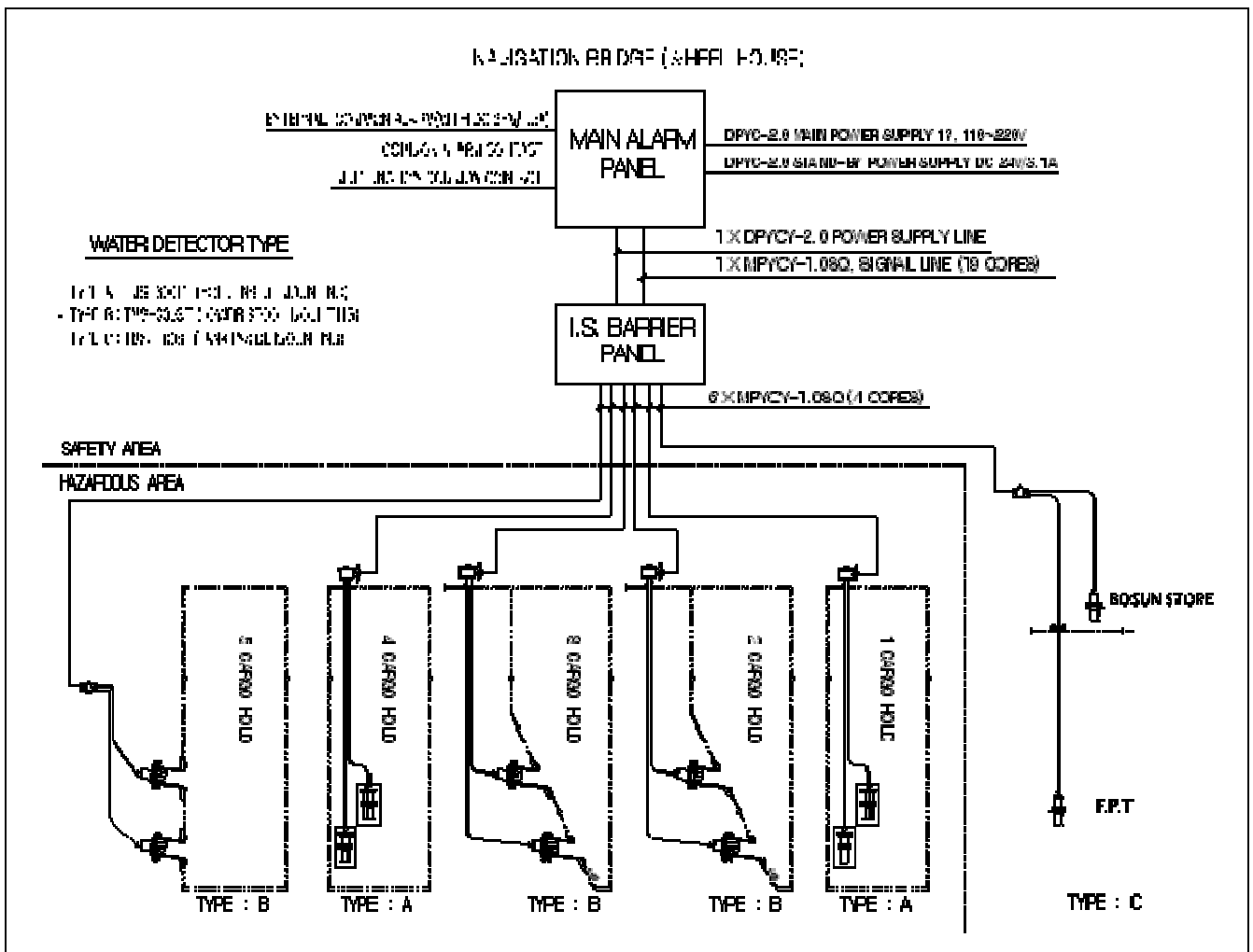
We supply two kinds of model(system) as customer's requirement:

- WID-3000F(Magnet Operated float switch type)
- WID-3000E(Conductive electrode type)

The systems is consisted of Water detector, I.S barrier box for intrinsically safety and Main alarm panel for visual & audible alarm, etc. Each components were designed and approved specially for marine circumstance's endurance and convenient operation. Especially, it have the Override function for interception of alarm when the hold or any space is intended to loading ballast water.

Moreover, it have the Malfunction monitoring function for power failure, line break & shorted circuit.

► General Diagram





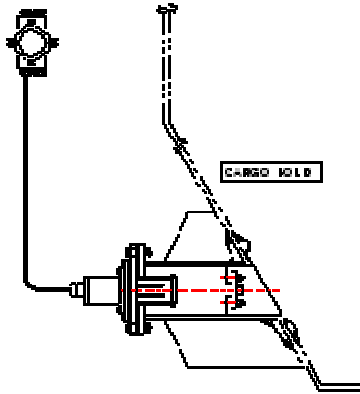
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► Specification

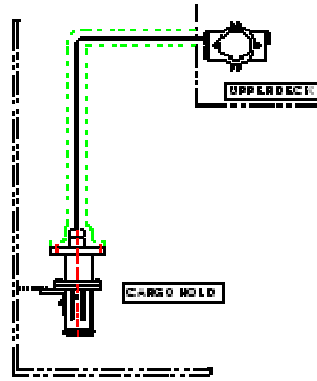
1) Conductive Electrode Level Switch : TMS-300SF, TMS-300TF

When two electrodes are touched by any electrically conductive liquid (sea water), the low value A.C circuit which impressed on two electrodes will be flowed between two electrodes. Then it will be converted to the contact-signal through I.S relay and the signal will be transmitted to the main alarm panel.



LOWER STOOL SIDE INSTALLATION

TMS-300SF



UPPER HOLD SIDE INSTALLATION

TMS-300TF

- ※ You can select the detector as your intended installation area where in the Hold or Lower stool
- ※ Easy to installation and no needed any protection and filtration arrangements for all kinds of cargo.
- ※ Easy to dismantle and reassemble of float for clean and no needed any knowhow for detector.
- ※ Applying for a patent.

Patent application no: 10-2003-0074007 Utility application no: 20-2003-0033158

2) Main Alarm Panel : **WID-3000P**

Power supply	Main AC110V/220V 50~60Hz, Stan-by DC24V
Alarm unit	M3000
	24points input(Max. 11holds)
Malfunction alarm	Power DC24V
	AC power fail
	DC power fail
Alarm override	Line fail
	By push the button and indicated by lamp
Override re-instatement	Automatically on de-ballasting of cargo holds/WBT
Buzzer	1No. Pre alarm and Malfunction alarm
	1NO. Main alarm
Time delay	Pre alarm-3sec, Main alarm-1sec
External output	1No. Pre and Main common alarm(NC contact)
	1No. Malfunction common alarm(NC contact)
	1No. Pre and Main common alarm(with DC 24V)
	1No. RS 485 signal
Buzzer & Lamp test	Manually by push the button
Dimmer	Manually by dial