



Marine Systems

Calibron Systems

Contrec

Fluid Technology

Tanksystem

Terminal Automation

#### Companies

##### France: Enraf Marine Systems SAS

###### Sales department

85, avenue de Saint-Cloud  
78000 Versailles

T + 33 (0)1 39 20 38 27 F + 33 (0)1 39 02 25 61

E [contact@enrafmarine.fr](mailto:contact@enrafmarine.fr) | [www.enrafmarine.fr](http://www.enrafmarine.fr)

###### Production and service facility

Bât 59 rue Isaac newton  
ZA Port Sec Nord  
18000 Bourges

T + 33 (0)2 48 23 79 01 F + 33 (0)2 48 23 79 03

E [administration@enrafmarine.fr](mailto:administration@enrafmarine.fr)

##### Americas: Enraf Calibron Systems Inc

T + 001 480 991 3550 F + 001 480 998 5589

E [sales@calibron.com](mailto:sales@calibron.com) | [www.calibron.com](http://www.calibron.com)

##### Americas: Enraf Fluid Technology Inc

T + 001 770 475 1900 F + 001 770 475 1717

E [info@enraf.com](mailto:info@enraf.com) | [www.enraffluidtechnology.com](http://www.enraffluidtechnology.com)

##### Australia: Enraf Contrec Pty Ltd

T + 61 3 9804 4200 F + 61 3 9822 8329

E [contrec@contrec.com.au](mailto:contrec@contrec.com.au) | [www.contrec.com.au](http://www.contrec.com.au)

##### Switzerland: Enraf Tanksystem SA

T + 41 (0)26 91 91 500 F + 41 (0)26 91 91 505

E [info@tanksystem.com](mailto:info@tanksystem.com) | [www.tanksystem.com](http://www.tanksystem.com)

##### USA: Enraf Hermetic, Inc

T + 1 281 930 17 77 F + 1 281 930 12 22

E [info@hermeticinc.com](mailto:info@hermeticinc.com) | [www.hermeticinc.com](http://www.hermeticinc.com)

##### The Netherlands: Enraf Terminal Automation BV

T + 31 (0)15 2701 100 F + 31 (0)15 2701 111

E [info@enraf.nl](mailto:info@enraf.nl) | [www.enraf.com](http://www.enraf.com)



# **WIDS System**

## **Water Ingress Detection System**



**For safety and precision**



**Key benefits**

- **Independent water tight sensors**, insensitive to vibrations, shocks, electrical disturbances and solid cargo product
- **Fully autonomous system**
- **Self tested**
- In compliance with SOLAS chapter XII reg 12
- Approved by major classification societies

## Liquid-sensing switch L20-70DW a dependable solution

The **Lidex type L20-70DW**, is specially designed for water ingress detection and offers a dependable solution for **detecting the presence of liquids within dry cargos**.

The **Lidex L20-70DW is based on the propagation of a surface wave**. This design does not include any moving part. The reliability of the device is ensured by a built-in function which monitors electronic or transducer failures.

With a **stainless steel housing**, it can be installed directly on the deck.

The **lidex L20-70DW doesn't require any calibration** as it is not influenced by the surrounding cargo (e.g. coal, cement, or any powdery substance). It is able to be functionally **tested in-situ** by using a simple magnet.



L20-70DW

### LIDEX Technical data

**Operating temperature:**

- 25°C to +60°C

**Power supply:**

18 to 28 Vdc

**Cargo temperature:**

up to 70°C max

**Intrically safe:**

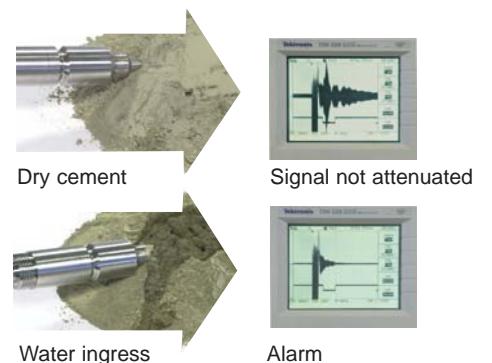
II 1G/D EEx ia IIC T6 T5 T4

II 1G/D EEx ia IIC T6 T5 T4

LCIE 02 ATEX 618X

### The main advantages of this L20-70DW lies in its ability:

- to operate even with cargos that may absorb water to form a paste
- to be remotely tested from the alarm cabinet, even after cargo loading



## WIDS system: intelligent and self-reliant

The Lidec **L20-70DW liquid sensing switches** can be connected directly to a **central alarm unit**. For safety and retrofit purposes Enraf Marine Systems offers an independent solution with the **WIDS system**.

The **excellent through life reliability** of the **control cabinet** and its components - especially the alarm unit which is an **intelligent** and **self-reliant** warning unit - no longer need to be demonstrated.

Its role is to **process signals, eliminate unwanted information** and **give alarms at the right time**.

The alarm reset and test push buttons are located on the front face. The labels are removable and enable the rapid customisation of the marking of each channel.

Built in accordance with maritime quality criteria, **the alarm unit benefits from many international agreements**.



## Regulations

**This system has been existing since 1992** for bilge level detection and overflow alarm. It is now specifically tested to comply with **IMO regulations MSC145, SOLAS chapter XII part 12** and **IACS Unified Interpretation SC180**.

## Typical installation method

