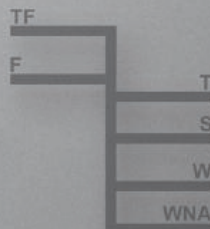


Draught Measuring System

Draught Measuring System

Control
every move



Barksdale
CONTROL PRODUCTS

CRANE Barksdale, Inc./Barksdale GmbH
A Subsidiary of Crane Co.

Barksdale – modern draught measuring system



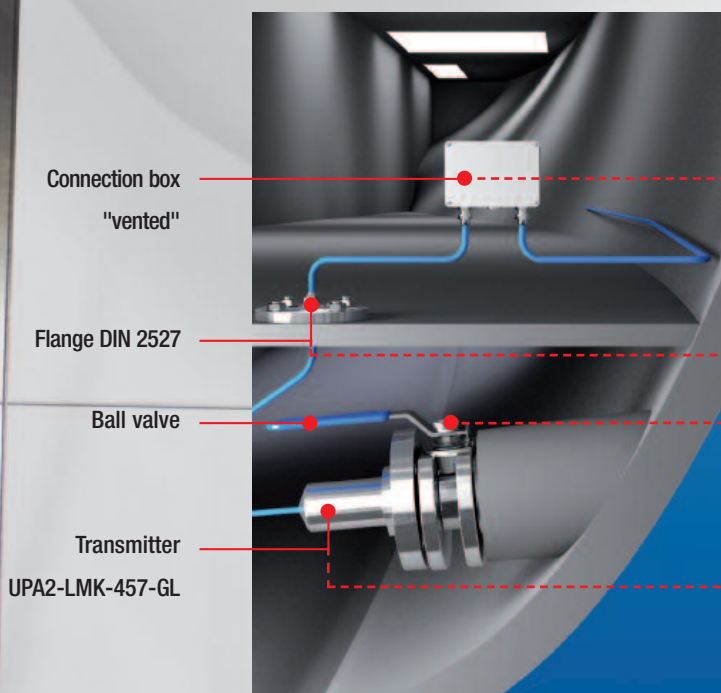
Draught and horizontal position

The Barksdale Draught Measuring System is designed to measure and control the draught of ships and vessels during the loading process. One of the most important factors in evaluating draught, trim and list are the measuring points used. In its standard configuration, the Barksdale system uses four level sensors: one each at the bow, stern, mid-ship port and mid-ship starboard. The signals generated from these four reference points work in concert to determine draught and horizontal position.

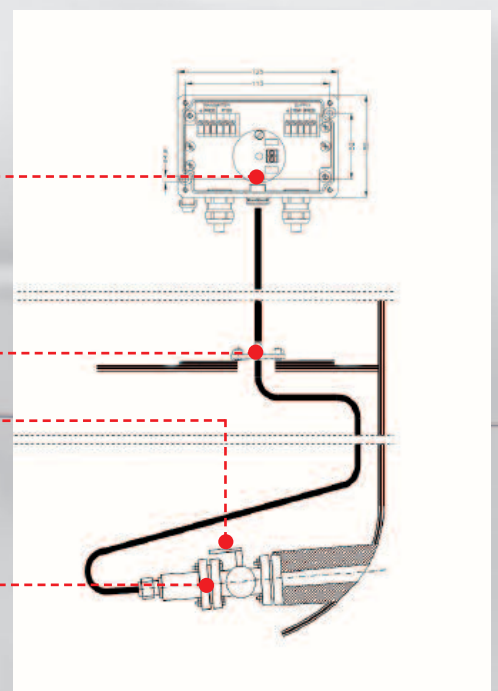
The draught measuring system (DMS)

The DMS is a fully electronic PLC based measuring system, designed to measure and control the draught of ships and vessels during loading or moving at low speed. Barksdale UPA2-LMK-457-GL submersible pressure transmitters are used for the exact draught measurement. The transmitter has a housing manufactured in CuNiFe, IP68 rated, providing reliable protection against humidity as well as high resistance against the corrosive influences of seawater or brackish water.

SM
80
80
40
20
SM
80
80
40
20
IM



Schematic diagram of the draught
measuring system



The parameters of the draught measuring system

- ▶ Draught forward in cm, taken from the perpendicular
- ▶ Draught forward in cm, taken from the draught mark
- ▶ Draught aft in cm, taken from the perpendicular
- ▶ Draught aft in cm, taken from the draught mark
- ▶ Draught at mid ship port side in cm, taken from the draught mark
- ▶ Draught at mid ship starboard side in cm, taken from the draught mark
- ▶ Trim in cm
- ▶ Trim in degree
- ▶ List in cm
- ▶ List in degree
- ▶ Seawater/water density

The TG 01 Control Unit utilizes a GL approved display panel and accepts the UPA2-LMK-457-GL transmitter 4-20 mA outputs. This ensures the integration of display and handling in the cabinet. The display panel has an RS485/RS422 serial communication with the PLC mounted inside the cabinet. The RS232 serial communication enables direct communication between a laptop and the display panel.



Control unit type TG01



Pressure transmitter UPA2-LMK-457-GL, flange version, also available in high temperature version

Barksdale – Engineering the future

Today's markets demand suppliers that are flexible and dynamic. Lean production processes and efficient management makes Barksdale a world-class provider of innovative products and comprehensive customer service.

Our products cover the full range of mechanical and electronic pressure, temperature, level and flow control for liquid and gaseous media. With premium product solutions, we provide the highest standards of performance and reliability for the most challenging control tasks in any manufacturing environment.

Barksdale has the advantage of over 50 years market experience, a global distribution network and is part of the Crane Co. family, one of the world's largest manufacturers of engineered products. These facts guarantee you a perfect solution.

The special environment of shipbuilding demands quality measurement products. Certified with the GL approval, Barksdale products are used every day in all areas of shipbuilding.

With our experience, know-how and our personal involvement we provide solutions to your desires and demands.



**BUREAU
VERITAS**



DNV

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