Level switches and sensors for Draft, Ballast, Mud and Service tanks

**Standard features**
- Measuring level in ballast and service tanks
- Measuring level and density in mud tanks
- Draft measurement
- Level switches for water detection
- Individual sensor for each tank
- Side mounted or submersible installations available
- Transmitters made of AISI316 or Titanium
- Fully integrated with K-Chief automation systems (IAS)

**General description**
KONGSBERG has more than 30 years experience in level gauging and production of pressure transmitters and level switches for marine applications.

**Level measurement**
The GT400-series sensors are designed for remote measurement of ballast and service tank levels, and draft measurement on all types of ships. A typical delivery from Kongsberg includes transmitters, connection boxes, IS barriers, gaskets and brackets, suitable for the type of tank and type of ship.

Solutions for both side mounting and submerged installation is available. The submerged transmitters are of absolute type sensors, and comes with a PUR-cable in specified length.

For mud tanks, two pressure transmitters are delivered for measuring level and density in the tank. The sensors are mounted with flush membrane in tank.

A separate pressure transmitter is included as a common reference transmitter for compensation of the atmospheric pressure.

The pressure transmitters are giving a 4-20 mA output signal, connected to a set of analogue input modules.

**Level switches**
The non-moveable GL-10 level switch is based on patented RF technology detecting the change in phase when medium enter the gap. It is connected through a 2-wire current signal.

The level switches are installed by a clamp, or welded from the outside of a tank.

The DZ-110 zener barrier to be installed if the sensors or switches are installed in explosive area.
GT400 Pressure sensors for level gauging
- Material: AISI316 or Titanium
- Protection: IP68 (absolute)
- Process connection: ½” BSP
- Ex certification: Ex ia IIC T4
- Signal output: 4 – 20 mA / 24VDC
- Accuracy: ± 0.25 % of FRO
- Temperature range: -40 to +85 °C

GL-10 Level switches
- Material: ABS / AISI316
- Protection: IP68
- Ex certification: Ex ia IIC T5
- Signal output: 4 – 20 mA / 24VDC