



KONGSBERG

MN1535

Temperature Sensor

Description

Application and general description

The MN1535 Temperature Sensor is designed for monitoring temperatures in cargo tanks onboard chemical tankers, gas and oil tankers, product carriers and certain specialized vessels.

The system consists of the following main parts:

- An UP-321 Adapting Flange welded to the tank top
- A protection pipe in the tank (not made by Kongsberg Maritime)
- An MN-1805 Terminal Box for temperature sensors
- 1, 2 or 3 MN1535 Temperature Sensors

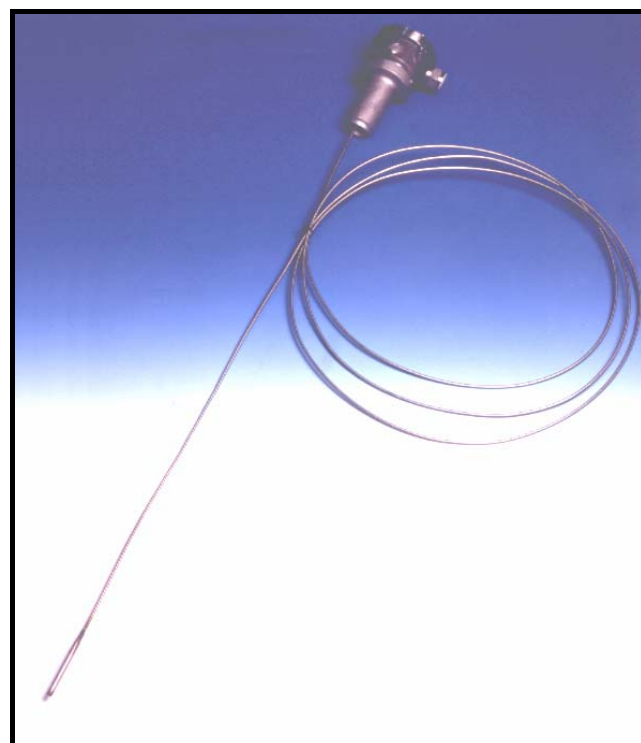
One flange is welded to the deck for each tank top. A protection pipe runs through the centre hole down into the tank. The terminal box is located on top of the flange and the temperature sensors run from the box down the protection pipe.

The liquid/oil must:

- Be suitable for the cargo temperature
- Not corrode the sensors and pipes
- Not, in case of leakage, be harmful to the cargo
- Not freeze or crystallize in the temperature range in question

The MN1535 Temperature Sensor

The temperature sensor can be delivered with Pt100 or Pt1000 elements according to IEC 751.

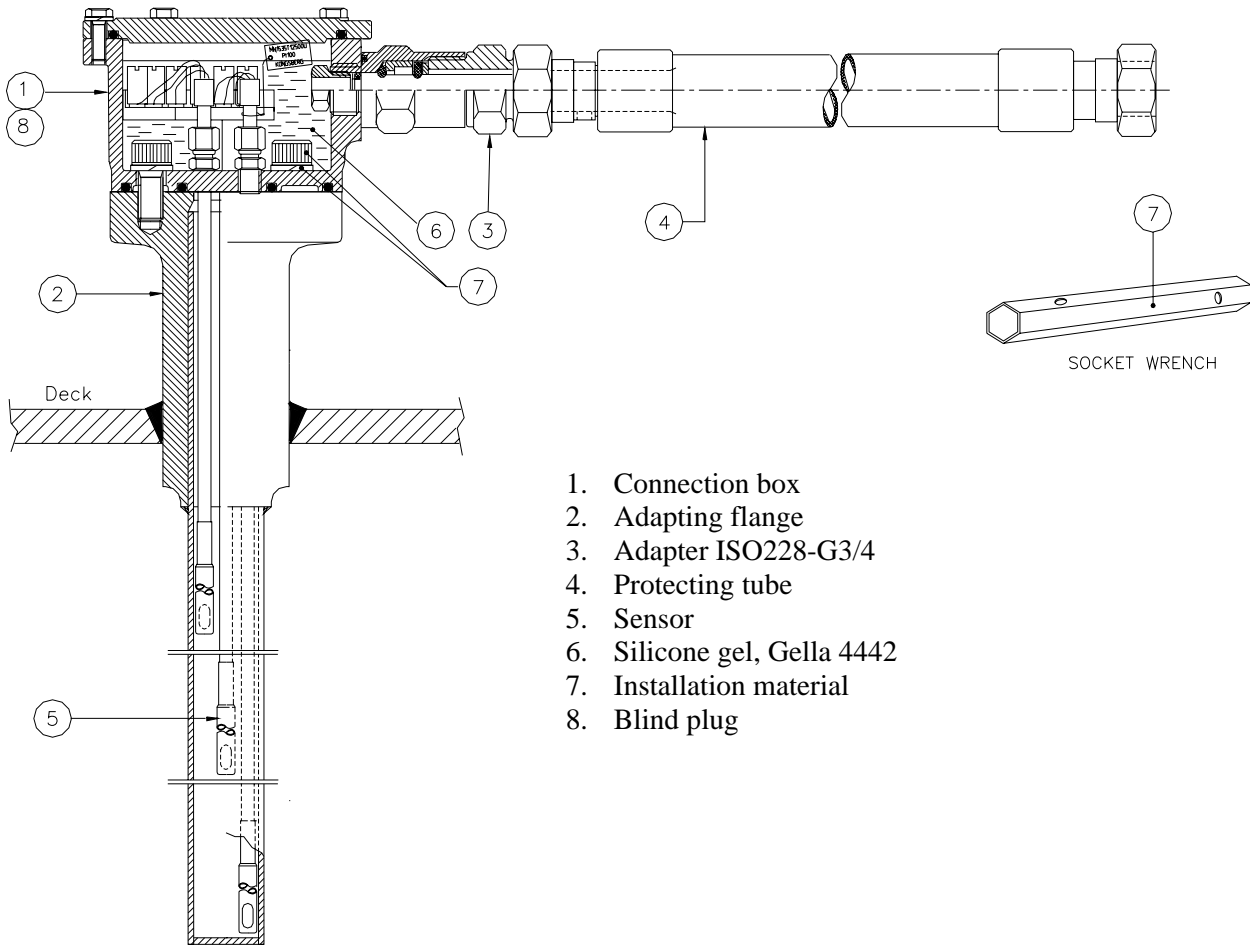


Connection to LON Ex Field-bus

Normally the MN1535 Temperature Sensor is installed in a hazardous area, and the installation must be intrinsically safe, EEx ia. Connecting the temperature sensors to a LON Node normally solves this. The LON Node is a part of an Ex Field-bus with EEx ia approval, see separate description.

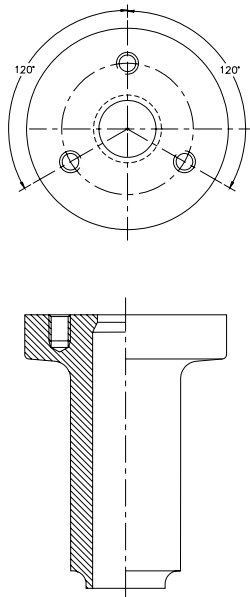
For connection, see Figure 3.

Drawings



Based on dwg. no. MN-3730

Fig. 1: The MN1535 Temperature Sensor with the MN-1805 Terminal Box



Based on dwg. no. UP-321

Fig. 2: Adapting Flange

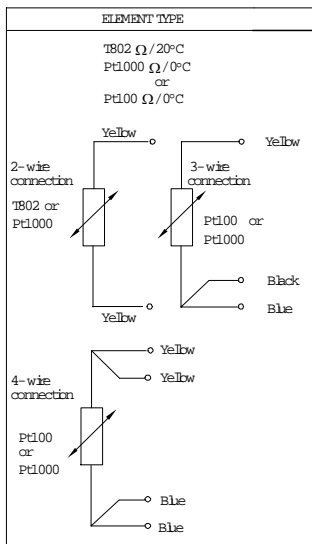
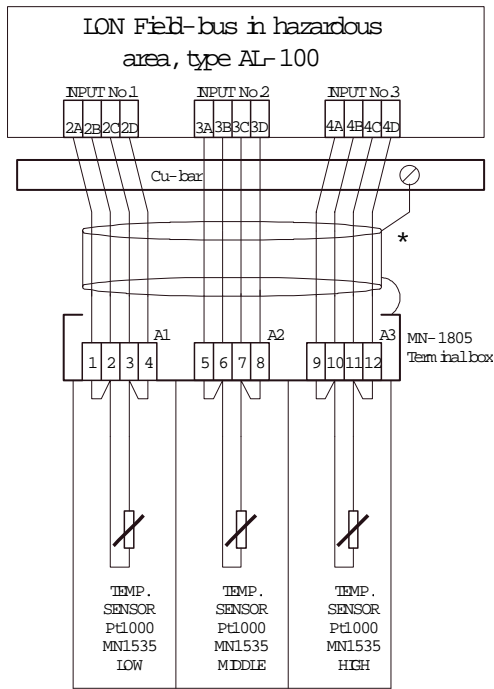


Fig. 3: The MN-1805 Temperature Sensor and LON Node, connection

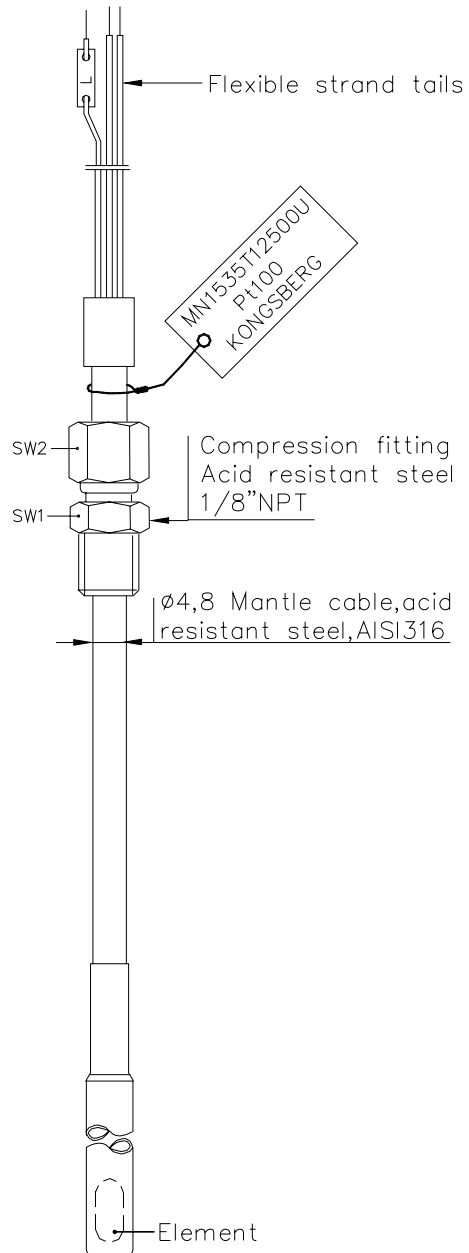


Fig. 4: The MN1535 Temperature Sensor

Based on dwg. no. MN-1535