

PUMP AND MANIFOLD PRESSURE MONITORING SYSTEM

Cargo Tank Measuring System

PRESSURE SENSOR FOR SUBMERSIBLE TYPE



PRESSURE SENSOR FOR DECK MOUNTING TYPE



GENERAL

1)Vapour pressure monitoring

The Cargo tank ullage space pressure monitoring with high & low pressure is required by SOLAS 74, Chapt. II-2 Req. 59.

This monitoring system is required to preventing serious deformation of the tank structure such over and under pressurization when the tank venting system is in failure.

2)Manifold pressure and Pump Suction and discharge pressure monitoring

The Manifold pressure and pump suction & discharge pressure shall be indicated from CCR. Pressure transmitter will be installed on the dry space and in ballast tank.

3)Vapour return pressure monitoring

This transmitter is required for remote monitoring and high/low alarm from CCR. The pressure transmitter will be installed near in cargo manifold.

FEATURES

- Intrinsically safe detecting is applicable to all of inflammable fluids
- Individual pressure displays
- Anti-corrosion material of pressure sensing part
- High accurate reading vacuum pressure
- Easy calibration and maintenance

- Very strong flash mounting diaphragm
- Zero and span internal adjustable
- All stainless steel material
- Intrinsically safe Ex ia II C T5
- Self-diagnostic function

PRINCIPLE OF OPERATION

The Intrinsically Safe Type Vapour Pressure Monitoring System is intended for Cargo tank pressure monitoring. This system consists of pressure transmitter which has a high quality, accuracy, durable construction suited for excessive pressure and I.S barrier. The output signal which arise by pressure transmitter is transmitted to indicator panel or alarm monitoring system through I.S

barrier located in safety area. The high and low pressure alarm can be classified into two types which are on-deck mounting type and submersible mounting type in accordance with detection position of pressure.

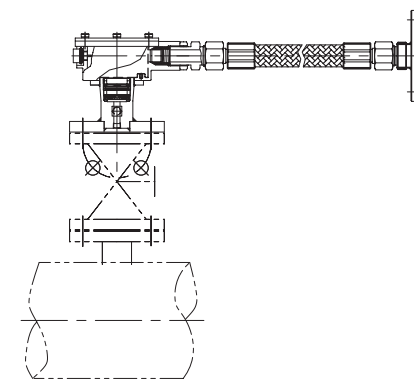
APPLICATIONS

- Cargo pump pressure
- Cargo manifold pressure
- Vapour return line pressure
- Tank cleaning pump pressure
- Fire main line pressure
- Ballast pump pressure

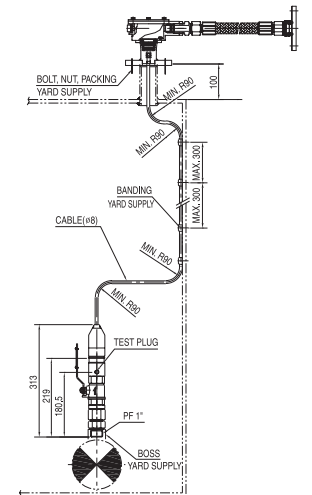
TECHNICAL SPECIFICATION PRESSURE SENSOR

- Accuracy : $\pm 0.2\%$ F.S. at 20°C
- Environmental protection :
 - Transducer : IP68, 10Bar~40Bar
 - Indoor amplifier box : IP66
 - Outdoor amplifier box : IP67
- Operating temperature :
 - P.E. cable : -40~ +80°C
 - FEP cable : -40~ +120°C
- Diaphragm material : Ceramic Al2O3
- Material :
 - Sensor body : SUS316L
 - Indoor amplifier box : PC
 - Outdoor amplifier box : SCS14

DIMENSION/INSTALLATION ON-DECK MOUNTING TYPE



SUBMERSIBLE TYPE



TECHNICAL SPECIFICATION

ALARM MODULE



WIDE ANGLE TYPE



DIGITAL INDICATOR



ONE LINE BLOCK DIAGRAM

