SeaConnect™ Temperature and Pressure Sensor - CAN Bus

The RMSpumptools SeaConnect™ Sensor performs pressure and temperature measurements on completion and production systems in subsea environments to a water depth of 2,500m. It is typically used for Subsea Christmas Trees and are mandatory to monitor these variables during production.

Operational Requirements
Design Life: 25 years
Recalibration: 10 years
Process Connection: API 6BX 1.13/16" 10ksi flange
Electrical Connection: JIC 8 with oil filled hose or subsea cable
Ring Gasket: BX-151 and 2-239 elastomeric seal
Location of installation: Subsea Tree Valves or at Manifolds
Working Pressure: 0 - 10,000psi
Working Temperature: -10 - 121°C

Qualification
Qualified Pressure: 3,800psi
Vibration Test: 12-300Hz at 5g on the 3 axis
Thermal cycling at 4°C, 25°C, 50°C and 60°C with 2 hours on each temperature for 5 days

Electronic Specification
Protocol: CANopen (according to SIIS recommended practice and CiA-443)
Power Supply: 24 Vdc ±20% (19 to 29 Vdc)
Power Consumption (nominal): < 1 Watt under normal operation

Sensor Specification
Pressure:
Compensated Temperature: 0 - 150°C
Calibrated Pressure: 0 - 10,000psi
Resolution: 0.05% FS
Accuracy: ±0.2% FS (Total Error Band)
Long Term Stability: 0.2% FS / year

Temperature:
Calibrated Temperature: 0 - 150°C
Resolution: 0.05% FS
Accuracy: ±1% FS (Total Error Band)

Key Product Features
Reduced Size:
40cm total length, from the flush to the JIC
Reduced Weight:
15kg. Easy handling and installation

Materials:
All units are manufactured with qualified materials for subsea use and for corrosive environments, accordingly to the HH class on API 6A / NACE MR-0175

Two Choices of Materials:
Can be supplied in 316L SS (UNS S31603) or Super Duplex (UNS 32550)