

SeaConnect™

Temperature & Pressure Sensor - RS-485 MODBUS RTU

The RMSpumptools SeaConnect™ Temperature & Pressure Sensor performs measurements on completion and production systems in subsea environments to a water depth of 3,000m. It is typically used for Subsea Christmas Trees and are mandatory to monitor these variables during production.

Operational Requirements

Design Life:	30 years
Recalibration:	10 years
Process Connection:	Various Flange sizes available (API 6A 10,000psi with others on request)
Electrical Connection:	Oil filled hose, subsea cable or subsea connector
Ring Gasket:	BX-151 or BX-152
Location of installation:	Subsea Tree Valves or at Manifolds
Working Pressure:	0 - 10,000psi *
Working Temperature:	-18°C - 121°C *

Sensor Specification

Pressure

Compensated Temperature:	-20°C - 120°C
Calibrated Pressure:	-20 - 10,000psi *
Resolution:	0.001% FS
Accuracy:	±0.2% FS (Total Error Band)
Long Term Stability:	0.2% FS / year

Temperature

Calibrated Temperature:	-40°C - 150°C
Resolution:	0.05% FS
Accuracy:	±0.3% FS (Total Error Band)

Electrical Specification

Protocol:	RS-485 MODBUS RTU
Power Supply:	24 Vdc ±20% (19 to 29 Vdc)
Power Consumption (nominal):	< 1 Watt under normal operation

Qualification

Qualified to API 17F v5, API 6A and API 17D

Key Performance Features

Probe Dimensions

Length: To be specified when ordered
Diameter: 42.2mm

Reduced Weight

15kg. Easy handling and installation

Materials

All units are manufactured with qualified materials for subsea use and for corrosive environments, according to the HH class on API 6A and NACE MR-0175. Diaphragm, Probe and Flange are Inconel 625. Seawater side metalwork is Duplex and Super Duplex Stainless Steel.

* Other ranges on request

