

# Roxar subsea SenCorr PT sensor

intrusive pressure & temperature sensor  
- 10,000 psi / 690 bar

Data Sheet



## Subsea Pressure and Temperature (PT) Sensor

A silicon piezoresistive sensor measures both pressure and temperature from the same measurement bridge, giving complete temperature compensation of the pressure reading. The element is placed in a high pressure oil-filled cavity, using a separation diaphragm.

For full redundant Pressure and Temperature measurement, refer to PTPT data sheet.



INTERPRETATION



MODELING



SIMULATION



WELL & COMPLETION



PRODUCTION & PROCESS

## Specifications - PT 10,000 psi

**Interface Details - Mechanical**

## Connection type to pipe:

- Integral flange API 6A 6BX 2 1/16" 10,000 psi, PSL3, PR1, Duplex ASTM A182-F51
- Ring gasket BX 152 CRA Inconel 625 (UNS N06625) all wetted parts  
Temperature range: KX  
Material class: HH

## Connector type:

- Duplex (UNS S31803) top cover with interface to Tronic, ODI or Omnitec Anguila interface

## PT probe material:

- Inconel 625 (UNS NO6625)

## PT element housing and diaphragm:

- Inconel 625 (UNS NO6625)

## Sensor weight:

- Approximate 30 kg

**Interface Details - Electrical**

## Power supply:

- 24 VDC (10 to 32 VDC)

## Current consumption:

- Maximum 50 mA at 24V, depending on protocol

**Interface Details - Logic**

## Communication protocol:

- ModBus, ProfiBus, CanBus, Roxar CorrOcean Native Protocol

## Communication to Subsea Control System:

- RS485

**Specifications**

## Design water depth:

- 3,000 meters / 10,000 feet

## Design life:

- 25 years

## Maximum shock:

- 10 g, 11 ms half sine (all 6 axis)

## Maximum vibration level:

- Frequency range 5-150 Hz, 5-25 Hz:  
±2mm, 25-150 Hz: 5g

**Pressure Rating**

## Operating pressure range - Full Scale Range (FSR):

- 0-690 bar / 0-10,000 psi

## Maximum test pressure:

- 1,035 bar / 15,000 psi

## Pressure accuracies:

- ±0.02%, ±0.05% or ±0.1% of FSR within calibrated temperature range
- ±1 bar from -40°C to 0°C / -40°F to 32°F

## Pressure annual drift:

- <0.02% of FSR/year

## Pressure resolution:

- 0.001 bar

## Pressure repeatability:

- ±0.004% of FSR

## Response time pressure:

- Standard: 1 second
- Best: 0.5 second

**Temperature Rating**

## Operating temperature range:

- Standard: -40°C to +125°C / -40°F to +257°F  
Optional: -60°C, +135°C / -76°F, +275°F

## Calibrated temperature range:

- Standard: 0°C to +125°C / 32°F to +257°F  
Optional: 0°C to +135°C / 32°F to +275°F

## Temperature accuracies:

- ±0.3°C or ±0.5°C / ±0.54°F or ±0.9°F within calibrated temperature range
- ±1°C from -40°C to 0°C / -40°F to 32°F

## Temperature annual drift:

- <0.1% of FSR/year

## Temperature resolution:

- 0.001°C

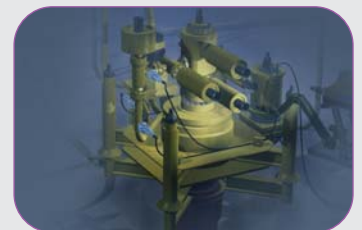
## Temperature repeatability:

- ±0.1°C

## Response time temperature:

- Standard: 1 second
- Best: 0.5 second

## Roxar subsea SenCorr PT sensor



[www.roxar.com](http://www.roxar.com)

For further information please contact your regional office or email: [info@roxar.com](mailto:info@roxar.com) or visit [www.roxar.com](http://www.roxar.com).

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