

SeaConnect™

Intrusive Sand Erosion Sensor - 4 to 20 mA

The RMS pumptools SeaConnect Intrusive Sand Erosion Sensor utilises a 4 to 20 mA transducer to output a 'non-ambient' signal when enough material has been eroded from a bore installed probe to cause the internal tubing pressure to be seen by an internal pressure transducer. Typically two specified depths of erosion are monitored by two independent circuits. It is typically used for Subsea tubing where fluid is flowed through to a depth of 3000m.

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:	-10°C - 80°C *

Sensor Specification

Pressure

Compensated Temperature:	-18°C - 121°C
Calibrated Pressure:	0 - 10,000psi *
Resolution:	0.05% FS
Accuracy:	±0.2% FS (Total Error Band)
Long Term Stability:	0.2% FS / year

Electrical Specification

Power Supply:	12-36VDC
Signal Output:	4-20mA current loop The output is made via electrical penetrators
Insulation:	10MΩ / 50VAC (temperature and pressure)

Qualification

Planned qualification to API 17F, API 6A and API 17D

Key Performance Features

Probe Dimensions

Length: To be specified when ordered
 Probe Diameter: 42.2mm
 Bore Dimensions: To be specified when ordering.
 (including Tip Radius and Material Depth)

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.
 Inconel 625, Probe and Flange 17-4, Duplex, Super Duplex, SS316 (seawater side)

* Other ranges on request

