

DataSphere® ERD™ XHT Downhole Gauge System

ACCURATE MONITORING FOR EXTREME HIGH TEMPERATURE ENVIRONMENTS

OVERVIEW

In today's challenging environments, there is an increasing need for reliable and accurate reservoir data, driving the need for continuous improvement of monitoring technology. The ERD™ XHT downhole gauge system provides real-time downhole data in extreme high temperature applications and is the latest addition to the DataSphere® permanent monitoring suite.

ERD (Electrical Resonating Diaphragm) gauge sensor technology and sophisticated surface electronics eliminate the need for downhole electronics. The absence of downhole electronics makes the ERD sensor unequalled in reliability in extreme high temperature operating environments.

Typical applications for the ERD system include single and dual zone monitoring. These gauges may be ported to tubing, annulus, or control line.

MONITORING APPLICATIONS

- » Real-time production
- » Extremely high temperature environments
- » High temperature ESP monitoring
- » Thermal EOR
- » Geothermal and SAGD

GAUGE FEATURES

- » ERD technology
- » Maximum 315°C operating temperature
- » Superior shock and vibration performance
- » 1.0-in. OD slim line design

BENEFITS

- » High accuracy – superior to non-quartz offerings on the market
- » Field-proven reliability
- » Provides optimized production management
- » Enables optimization of wells with commingled zones
- » Identifies the continuity and communication between wells
- » Assists in well placement planning
- » Provides accurate data to build reservoir model
- » No downhole electronics allow for use in extreme high temperature applications
- » Enables accurate sub-cool calculation

TESTING

ERD gauges are tested to the full pressure and temperature rating during Factory Acceptance Testing (FAT).

Industry reliability of 95% has been observed through its extensive track record.



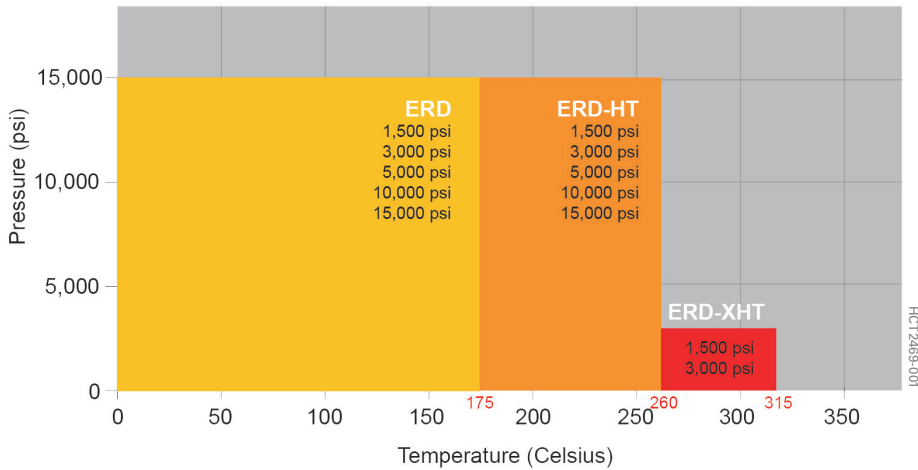
315°C
RATED

ERD™ XHT Gauge Performance Specifications

Calibration Pressure Range (psi)	Atmospheric - 3,000
Pressure Accuracy (%FS) (psi)	0.04 (1.2)
Pressure Resolution (psi/sec)	0.0030
Max Operating Temperature (°C)	315
Temperature Accuracy (°C)	<0.5
Temperature Resolution (°C/sec)	0.01
Vibration Resistance	+/- 35g at 10 – 70 Hz and 500 G's

*ERD-XHT gauge variants available in 175°C, 260°C and 315°C temperature rating and 1,500 psi pressure rating versions.

ERD™ Gauge Variants



For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

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