

COMPLETION SOLUTIONS | PERMANENT MONITORING

DataSphere® ERD™ and ERD-HT Downhole Gauge Systems

Accurate monitoring for production applications

GAUGE FEATURES

- ERD technology
- Maximum of up to 260°C operating temperature
- Superior shock and vibration performance
- 1.0-in. OD slim line design
- Field-testable metal-to-metal seal

MONITORING APPLICATIONS

- Real-time production
- HPHT environments
- Artificial lift
- CCUS
- Geothermal
- Unconventional
- Thermal observation wells
- Water and CO₂ floods
- Tight gas

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
- Provides accurate data to build reservoir model
- No downhole electronics in all applications

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™ and ERD-HT downhole gauge systems provide real-time downhole data. These latest additions to the DataSphere® permanent monitoring suite provide a unique level of performance bridging an area of application between quartz and piezo gauges.

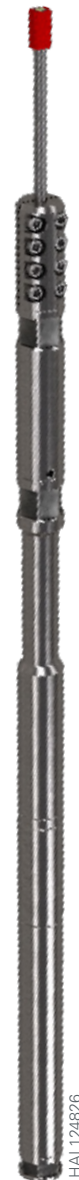
ERD (Electrical Resonating Diaphragm) gauge sensor technology and sophisticated surface electronics eliminate the need for downhole electronics. Typical applications for the ERD system include single and dual zone monitoring. These gauges may be ported to tubing, annulus, or control line.

Testing

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

The gauge is subject to telemetry testing up to 30,000 ft. Industry reliability of 95% has been observed through its extensive track record.

260°C
R A T E D



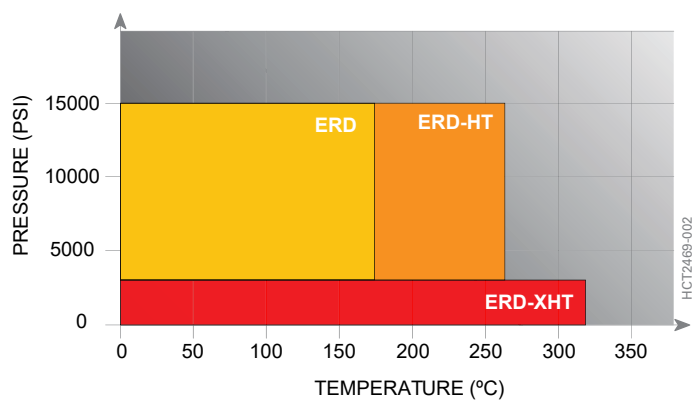
DataSphere® ERD™ gauge

ERD™ and ERD-HT Gauge Performance Specifications

DESCRIPTION	ERD	ERD-HT
Calibration Pressure Range (psi)	Atmospheric - 15,000*	Atmospheric - 15,000*
Pressure Accuracy (%FS) (psi)	0.03 (4.5)	0.03 (4.5)
Pressure Resolution (psi/sec)	0.015	0.020
Max Operating Temperature (°C)	175	260
Temperature Accuracy (°C)	<0.5	<0.5
Temperature Resolution (°C/sec)	0.01	0.01
Vibration Resistance	+/- 35g at 10 – 70 Hz and 500 G's	+/- 35g at 10 – 70 Hz and 500 G's

*ERD gauge variants available in 1,500 psi, 3,000 psi, 5,000 psi, 10,000 psi and 15,000 psi pressure ratings.

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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