





### **TECHNICAL DATA SHEET**

## RCCL

Ruggedised Casing Collar Locator

The READ Ruggedised CCL tool is a highly versatile precision correlation system used to determine the position of moving inserts within downhole completion devices.

An extremely robust memory and electronics permit the deployment of the tool in a carrier, run on Coiled Tubing or slick line, to deliver precision determination of depth and relative positions of complex assemblies. READ's unique "fingerprint" library of completion devices enables precise and accurate interpretation of the data.

A high-resolution coil and magnet assembly responds to changing metal thickness and geometry in its vicinity, while the temperature and quartz pressyre sensors in the tool can aid in diagnosing well production problems. The resulting signals are input to high sample-rate, programmable electronics and stored on high capacity memory.

Owing to its rugged construction the RCCL system has been designed to withstand hammering and jarring forces, often required during manipulation of completion items or the delivery of remedial products. The in-built bypass tube within the optional carrier system also facilitates pump-through capability for use on Coiled Tubing applications.

#### **APPLICATIONS:**

- Depth correlation in tubing and casing
- SSD position identification
- SSD flow verification/leak detection

#### **BENEFITS**

- Robust design
- Deployable on slickline or coiled tubing
- High density data storage
- Provides accurate temperature and quartz pressure data in same run
- Fast data sampling for more accurate results
- Downhole redundancy (2 short R-CCL tools may be run in the same carrier)
- Pump through facility for coiled tubing operations

# Specifications

|                             | CCL & Temperature                       | CCL, Temperature & Pressure             |
|-----------------------------|---|---|
| Temperature rating          | 350°F (177°C)                           |   |
| Pressure rating             | 15,000 psi (1,034 bar)                  |   |
| Tool diameter               | 1.375 in (34.9 mm)                      |   |
| Tool length                 | 19.6 in (499 mm)                        | 22.6 in (574mm)                         |
| Tool weight                 | 5.0 lb (2.26 kg)                        | 7.38 lb (3.35 kg)                       |
| Response Time               | 0.1 sec                                 |   |
| Temp. Resolution            | 0.01°C                                  |   |
| Temp. Accuracy              | ±0.5°C                                  |   |
| Pressure Resolution         | N/A                                     | 0.01 psi                                |
| Pressure Accuracy           | N/A                                     | ±7.5 psi                                |
| Materials                   | Corrosion Resistant Throughout          |   |
|                             | Standard Coiled Tubing Gauge<br>Carrier | Slimline Coiled Tubing Gauge<br>Carrier |
| Outside diameter            | $2^{3}/_{4}$ in (69.85 mm)              | 2 ½ in (53.98 mm)                       |
| Jpper Connection            | $2\sqrt[3]{8}$ in PAC DSI Box           | 1.7 in 10 TPI Stub Acme Box             |
| Lower Connection            | $2\sqrt[3]{_8}$ in PAC DSI Pin          | 1.7 in 10 TPI Stub Acme Pin             |
| Flow tube ID                | 0.08 in (20.5 mm)                       | N/A                                     |
| Max. Temperature            | 190°C                                   |   |
| Rated Tensile Load          | 69,500 lbf (309 kN)                     | 24,000 lbf (106.7 kN)                   |
|                             | 71.2 in (1.81 m)                        | 59.3 in (1.506 m)                       |
| Tool length                 |   |   |
| Tool length Shipping weight | 125 lb (57 kg)                          | 25.8 lb (11.7 kg)                       |