

6-8 Sectors Radial Incremental Bond Tool (RIB)

Titan Division | Instruments

Features

- Hunting's hybrid telemetry
- Easily serviced slip joint isolator bar construction
- Unique 1.5-ft transmitter to radial receiver spacing
- Identifies micro annulus and channeling
- Locates top of cement

Benefits

- Less fast formation interference in segmented cement mapping
- Accurate 3-ft spacing
- Accurately assesses cement bond quality and hydraulic isolation

The accurate evaluation of the cement bonding to a well's casing and to the formation is necessary to confirm the integrity of isolation between zones and avoid production problems. The standard single transmitter Cement Bond Log (CBL) tool accurately determines casing bond by measuring the amplitude of the first arrival at the 3-ft receiver. A deeper investigating 5-ft receiver confirms the interpretation and also shows formation bond by a full Variable Density Log (VDL) wave display.

Hunting's family of CBL tools come in a range of sizes to accommodate casing sizes ranging from 2-3/8 in. (60 mm) to 9-5/8 in. (244.48 mm). The tools can be configured to several timing schemes for different logging systems.



Specifications

| Part Number | 1-11/16 in. (43 mm) 6 Sector | 2-3/4 in. (70 mm) 8 Sector |
|---|---|--|
| Standard | 8112-1686NPE150-015-00 High-side Not Available | 8112-2756NPE237-022-00 8112-2756LPE237-022-00 (High-side) |
| High Temperature | 8112-1689NPE150-015-00 High-side Not Available | 8112-2759NPE237-022-00 8112-2759LPE237-022-00 (High-side) |
| Measurements | | |
| Vertical Resolution | 1.5 ft RIB | |
| | 3 ft CBL and 5 ft VDL | |
| Sector Azimuthal Resolution | 60° Cement map | 45° Cement map |
| GTF Synchronized with Sector #1 | *Available Option | *Available Option |
| Borehole Temperature Accuracy** (°F)[°C] | +/-1% from 75 - 400 [24 - 204] | |
| Internal Tool Temperature Accuracy** (°F)[°C] | | |
| Cable Head Voltage, VDC | As Measured at Cable Head | |
| Logging Speed (ft/min)[m/min] | 60 [18.3] | |
| Mud Type • Weight - All Tools | Must be Liquid • No Limitations | |
| Offset from Bottom Shoulder (in.)[cm] | | |
| Temperature • Transmitter | 78.0 [198.2] • 70.0 [177.8] | 76.5 [194.3] • 70.0 [177.8] |
| RIB | 61 [154.9] | |
| 3ft Crystal • 5ft Crystal | 52.0 [132.1] • 40.0 [101.6] | |
| Environmental | | |
| Temperature Rating | | |
| Standard (°F)[°C] | -25 to 375 [-32 to 190.6] | |
| High Temperature (°F)[°C] | -25 to 450 [-32 to 232] | |
| Pressure Rating (psi)[MPa] | 20,000 [138] | |
| Material - All Tools | H ₂ S-Resistant Construction | |
| Mechanical | | |
| Outside Diameter (in.)[mm] | 1.69 [42.9] | 2.75 [69.9] |
| Length (ft)[m] {Hi Temp} | 9.13 [2.78] {10.34 [3.15]} | 9.13 [2.78] {10.47 [3.19]} |
| Weight (lbs.)[kg] {Hi Temp} | 63 [29] {73 [33]} | 120 [54] {148 [67]} |
| Min. Casing Size (in.)[mm] RIB | 2.38 [60] | 4.50 [114] |
| Max. Casing Size (in.)[mm] CBL/VDL | 6.13 [156] (RIB)/7.00 [178] | 8.63 [219] (RIB)/9.63 [244] |
| Top/Bottom Connection | 1-3/16 in. GO Box/Pin | |
| Max. Tension (lbf)[kN] | 40,000 [178] | 60,000 [267] |
| Electrical | | |
| Operating Voltage & Current | 120 VDC @ 40±5 mA | 120 VDC @ 55±5 mA |
| Auxiliary Tool Input | Single or Bi-Level Pulse | |
| HT Telemetry -All Tools | HT Telemetry | |
| Analog Bi-Level Pulse (pulse height & width) | ±12V max • 1µs min, 30 µs max | |
| Sonic Transmitter Frequency (RIB/VDL) KHz | 20/20 | 20/18 |
| Cable Type - All Tools | Single or Multi-Conductor | |
| High Capacitance Lines - All Tools | 7/32 in. 500°F (260°C) | |
| Crystal Type - All Tools | Piezoelectric | |
| Pressure Compensation - All Tools | Sliding Cans | |

*Available Option Gravity Highside Reference to Radial Sector #1 [+/-2° (5° to 90°) Borehole Inclination]
 **Temperature Reading is Less Accurate Below 75°F [24°C] and Above 400°F [204°C]

About Hunting's Titan Division

For successful cased hole logging and perforating services, tool reliability, availability, and time line of delivery are essential. Hunting supplies customers worldwide with the right tools to get the job done. Our product lines include state of the art, high quality wireline and tubing conveyed perforating (TCP) gun systems, hardware and accessories, shaped charges, and electronic logging tools.