REFLEX ACT III

Core orientation system delivering exceptional accuracy

REFLEX ACT III is a digital core orientation system that records the orientation of the core sample and other key data in core drilling operations. It has a patented rapid descent system that reduces time to complete core recovery. It delivers exceptional accuracy, while being easy to use and reliable in harsh field conditions and is the preferred core orientation system for drillers and geologists worldwide. It’s high level of data accuracy leads to better understanding of the geological structure, ultimately resulting in enhanced drill program management and geotechnical planning.

RUGGED AND RELIABLE

The REFLEX ACT III is designed to withstand the harshest conditions and treatment in the bottom-of-hole environment. It has a hardened steel outer casing and heat treated threads. Components are shock tolerant and able to withstand up to 20,000G of force. The unit can operate in temperatures of up to 80°C. It has a separate purpose designed hand held controller for communication and state-of-the-art control panel technology which are water resistant. Built with no moving parts and high quality lithium batteries, the REFLEX ACT III needs no maintenance and will operate for approximately 12 months under normal use.

ACCURATE DIGITAL DATA COLLECTION

The REFLEX ACT III controller displays accelerometer data collected via time stamping technology, including depth values, (when entered at each orientation), inclination, roll, gravity, temperature and all button presses. Unique sequence logic prevents incorrect data and also eliminates operator error, ensuring more accurate data. Data stored on the controller cannot be manipulated and using REFLEX’s digital auditor software can be used for QA/QC and audit purposes, as well as operational performance and production analysis.

IMPROVED OPERATIONAL EFFICIENCY

The REFLEX ACT III is designed to improve productivity on site. It is supplied as a two tool system, while one tool is down the hole, the other is ready for the next run, ensuring no interruption to drilling operations. Core samples are easily matched with orientation data using a spirit level jig, bottom or top orientation can be accurately transferred to any core sample. The controller also indicates if the downhole unit has encountered temperatures above it’s safe operating range, displayed on the LCD screen during data retrieval.

COMPATIBLE WITH AUTO DRILL SYSTEMS
**REFLEX ACT III**

**CORE SIZES**
NQ*, NQ*2, NQ*3, HQ*, HQ*2, HQ*3, PQ*, LTK60, BQ*, BQ*TK®, W/L56, W/L66, W/L76, BTW, NTW

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>Between 300 to 400mm</td>
</tr>
<tr>
<td>Control unit</td>
<td></td>
</tr>
<tr>
<td>Outer diameter</td>
<td>42mm</td>
</tr>
<tr>
<td>Length</td>
<td>300mm</td>
</tr>
<tr>
<td>Weight</td>
<td>Average weight per kit is 30kg</td>
</tr>
</tbody>
</table>

**ACCURACY**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>0 to ±88º dip</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 1º</td>
</tr>
</tbody>
</table>

**DEPTH RATING**

- **Downhole instrument:**
  - Housing pressure: Up to 10 000psi
  - **Housing pressure:**
    - **Range:** 0 to ±88º dip
    - **Accuracy:** ± 1º

**TEMPERATURE RATING**

- **Downhole instrument:**
  - **Housing pressure:**
    - Operating: -30 ºC to +80 ºC
    - Normal use: -30 ºC to +50 ºC
  - **Control unit:**
    - Operating: -30 ºC to +50 ºC
    - Normal use: -30 ºC to +50 ºC

**BATTERY**

- **Non-rechargeable lithium battery pack. Approximate battery life:**
  - Downhole instrument:
    - Infrequent use: Up to 2 years
    - Normal use: Up to 12 months
  - Control unit:
    - Infrequent use: > 2 years
    - Normal use: 2 years

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*Q® is a registered trademark of Boart Longyear that refers its Q® Wireline System. The use of the Q mark herein is not intended to equate the Q mark with a particular hole size but rather to indicate that REFLEX’s products and services are designed and intended to be used with Boart Longyear’s Q® Wireline System, as well as other wireline systems available in the industry that are comparable to that of the Q® Wireline System.*