VersaFlex® Big Bore System

IMPROVE THE RELIABILITY OF SUBSEA INSTALLATIONS WITH HIGH-PERFORMANCE LINER HANGERS

OVERVIEW

The VersaFlex® expandable liner hanger (ELH) system helps operators reduce both risk and capital costs. Evolved from this successful product family, the VersaFlex Big Bore system is designed specifically for the deepwater and subsea markets to address complex well conditions. The system does not require landing in a predetermined profile, helping to eliminate complications common to positioning in mudline/casing wellhead profiles. Additionally, the VersaFlex Big Bore system does not require liner-top cement integrity to achieve a liner-top seal upon setting. It incorporates casing-placement flexibility that helps eliminate related liner installation issues, and our elastomeric seal technology is unmatched in the industry. The redundant leak-proof design helps eliminate sustained casing pressure.

With our ground-breaking clean-form design, the VersaFlex Big Bore system is an all-in-one integral hanger/packer. It has no moving parts, which helps eliminate costly tool failures associated with conventional liner hangers. CAPEX savings do not end at operations, they continue throughout the life of the well. One of the biggest payoffs for operators is a cost reduction in materials. In most cases, liner overlap is greatly reduced with the VersaFlex Big Bore system because pressure bearing tieback strings are not required. The system also minimizes many of the operating steps required to set the liner hanger/packer, compared to conventional systems while virtually eliminating remediation costs.

VersaFlex Big Bore system’s rotating and reciprocation capability during cementing allows for zonal isolation integrity. An ideal solution for extreme well conditions, its high-torque rating permits reaming through downhole cave-ins, kicking-off ledges from previously drilled segments, and drilling new hole sections. Surge and ECD risks are greatly reduced with an optimized OD and lack of a profile ring.

EXTREME DESIGN

When well construction challenges in large casing sizes dictate more robust requirements, the VersaFlex Big Bore system can be mated with the metal sealing VersaFlex XtremeGrip hanger body technology. This combined system has all the same reliable functionalities as the VersaFlex Big Bore system, including the ability to overcome challenges such as heavier hang loads and elevated temperatures for an effective 360-degree hydraulically energized metal-to-metal compliant seal with bi-directional anchoring capabilities.

BENEFITS

» Proven reliability
» Set-and-forget design simplicity helps eliminate risks associated with conventional liner hangers
» Improves wellbore integrity
» Solves issues associated with larger casing strings installed in deepwater or subsea wells
» Holds in tension and compression during the life of the well
» Sets in deviated wellbores
» Improved bypass area for reduced ECDs
VersaFlex® Big Bore System Specifications

<table>
<thead>
<tr>
<th>Hanger Seal Type</th>
<th>Liner OD (in.)</th>
<th>Casing Size OD (in.)</th>
<th>Casing Weight (lb/ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elastomeric</td>
<td>14.0</td>
<td>16.0, 16.04, 16.15, 16.264</td>
<td>84.0, 97.0, 102.9, 103.39, 109.0, 109.61, 119.23, 122.5, 126.91, 131.7, 136.04</td>
</tr>
<tr>
<td>Elastomeric</td>
<td>14.0, 16.0, 17.0</td>
<td>18.625</td>
<td>87.5, 96.5, 97.7, 115.0, 136.0</td>
</tr>
<tr>
<td>Elastomeric</td>
<td>16.0, 17.25</td>
<td>20.0</td>
<td>129.29, 129.33, 133.0, 147.0, 154.0, 169.0</td>
</tr>
<tr>
<td>Elastomeric</td>
<td>18.0, 18.625</td>
<td>22.0</td>
<td>183.92, 202.00, 224.0, 251.0</td>
</tr>
</tbody>
</table>

VersaFlex® Big Bore with XtremeGrip System Specifications

<table>
<thead>
<tr>
<th>Hanger Seal Type</th>
<th>Liner OD (in.)</th>
<th>Casing Size OD (in.)</th>
<th>Casing Weight (lb/ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal-to-Metal</td>
<td>14.0</td>
<td>16.0, 16.04, 16.15, 16.264</td>
<td>84.0, 97.0, 102.9, 103.39, 109.0, 119.23, 122.5, 126.91, 127.5</td>
</tr>
<tr>
<td>Metal-to-Metal</td>
<td>16.0</td>
<td>18.0</td>
<td>93.54, 94.0, 105.0</td>
</tr>
</tbody>
</table>

Notes:
- For sizes and weight ranges not listed, check with your local Halliburton representative.
- When requesting information on VersaFlex Big Bore system, specify minimum ID the hanger will have to pass through.

VERSAFLEX BIG BORE SYSTEM FEATURES

- Simplified installation – operational steps cut in half compared to conventional systems
- Fully integral hanger/packer design
- Minimized potential leak paths
- Designed to hang 13 3/8-in. – 18-in. liners
- Large radial clearance (clean-form design)
- Sets and seals the hanger inside welded casing

VERSAFLEX BIG BORE WITH XTREMEGRIP SYSTEM FEATURES

- Increased bi-directional anchoring capability
- Ability to work in heavier parent casing weights
- Metal-to-metal seal with resilient elastomeric seals (for casing imperfections)
- Increased temperature ratings

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

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