PRODUCT DESCRIPTION:
The Hydraulic-Activated Fracturing Sleeve (HFS) is an interventionless fracturing sleeve that incorporates redundant opening sleeves. Differential pressure is created by applying pressure against the setting ball in the Circulation Closing Valve. When a predetermined shear pressure is reached, the sleeve opens. Once opened, the sleeve can be used for stimulation of the first zone and/or as the flow path to pump the ball down to the first PosiFrac® Ball-Activated Fracturing Sleeve.

PROVIDE SOLUTIONS FOR:
- Horizontal open hole multi-stage hydraulic fracturing completions

FEATURES:
- The fracturing sleeve opens with differential internal pressure
- A redundant sleeve opening system provides a built-in backup
- The lock-open feature is engaged immediately after the sleeve is opened
- Large flow area through the ports is greater than the casing flow area

BENEFITS:
- No intervention required to open sleeve
- Added reliability in ensuring communication to formation
- Eliminated risk of sleeve inadvertently closing during stimulation or production
- No restrictions during stimulation or production

TOOL SIZES:

<table>
<thead>
<tr>
<th>Casing Size</th>
<th>OD in. (mm)</th>
<th>ID in. (mm)</th>
<th>Length (mm)</th>
<th>Pressure Rating psi</th>
<th>Shear Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 1/2</td>
<td>5.62 (142.75)</td>
<td>3.38 (85.85)</td>
<td>56.18 (1426.97)</td>
<td>10,000</td>
<td>10 screws/ 1013 psi</td>
</tr>
<tr>
<td>5 1/2</td>
<td>7.10 (180.34)</td>
<td>4.60 (121.41)</td>
<td>61.10 (838.20)</td>
<td>10,000</td>
<td>10 screws/ 1041 psi</td>
</tr>
</tbody>
</table>