BPS (Burst Port System)™ - Multistage

The patented BPS features a casing collar with premilled frac ports designed to open at precise pressures, providing operators more control over the diversion of their fractures. BPS uses our selective stimulation straddle tool technology, allowing for repeatable, selective isolation of downhole intervals for pinpoint stimulation treatments. Once hydraulic fracturing of the zone is completed, the tool can be quickly repositioned to the next BPS casing collar to repeat the process. The straddle tool can be pulled out of the well once completed, allowing immediate production without the need to drill out plugs or ball seats. BPS is typically used in horizontal multistage completions, where ball-drop fracture treatments are not desirable.

**Features**
- Manufactured to any casing specification
- Customized ports for desired flow area
- Full bore ID maintained by collar

**Benefits**
- Reduced operational risk by eliminating the need for workover rig, or wireline
- No ID restriction for easy passage of cementing equipment

**Applications**
- Cemented and openhole horizontal multistage completions
- Selective fracturing with coiled tubing or jointed pipe
- High temperature applications, up to 450°F (232°C)
- Acid or proppant fracturing
- Under pressured reservoirs where frac balls will not flow back easily

**Technical Data**

<table>
<thead>
<tr>
<th>BPS</th>
<th>Casing Size in. (mm)</th>
<th>Length² in. (mm)</th>
<th>OD in. (mm)</th>
<th>ID in. (mm)</th>
<th>Flow Area in.² (cm²)</th>
<th>Max Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td>4.50 (114.3)</td>
<td>18.0 (457)</td>
<td>5.75 (146.1)</td>
<td>As per casing weight</td>
<td>2.25 (14.5)</td>
<td>Limited by casing pressure</td>
</tr>
<tr>
<td>500</td>
<td>5.00 (127.0)</td>
<td>18.8 (476)</td>
<td>5.90 (149.9)</td>
<td>As per casing weight</td>
<td>2.25 (14.5)</td>
<td>Limited by casing pressure</td>
</tr>
<tr>
<td>550</td>
<td>5.50 (139.7)</td>
<td>20.0 (508)</td>
<td>7.00 (177.8)</td>
<td>As per casing weight</td>
<td>3.61 (23.2)</td>
<td>Limited by casing pressure</td>
</tr>
<tr>
<td>663</td>
<td>6.63 (168.0)</td>
<td>26.0 (660)</td>
<td>8.10 (205.7)</td>
<td>As per casing weight</td>
<td>3.76 (24.3)</td>
<td>Limited by casing pressure</td>
</tr>
</tbody>
</table>

¹ Premium threading will affect overall length