**XPC**

Extreme-profile single shoulder connection

**APPLICATIONS**
- High-dogleg severity (DLS), high-rpm, and high shock and vibration environments
- Standard API NC connection BHAs

**BENEFITS**
- Increases resistance to galling
- Improves fatigue resistance
- Connects with 15% higher torque than the equivalent API NC connection
- Facilitates drilling at high ROP in severe downhole conditions
- Enables faster makeup speed

**FEATURES**
- Single-shoulder connector
- Innovative thread design
- Similar collar ID and OD to standard API NC connections

Developed to eliminate twist offs and reduce NPT and maintenance costs associated with downhole failures, the XPC* extreme-profile single shoulder connection significantly increases fatigue life over standard API NC connections.

The advanced connection design provides improved makeup capacity and superior resistance to galling than comparable NC connections. Using an innovative thread form, with advanced manufacturing processes applied to the thread, XPC connections have more than 10 times improved fatigue resistance and 15% higher torque than the equivalent API NC connection. The connection is designed specifically for BHA components with similar collar ID and OD measurements as standard API NC connections, which prevents the customer from having to compromise tool hydraulics by modifying its internal components.

![XPC connection](image)

*The XPC connection is an advanced connection design that provides improved makeup capacity and superior resistance to galling compared with NC connections.*

Using these connectors, challenging well profiles can be drilled with confidence at high ROP in severe downhole conditions, including high rpm, high shock and vibration, and at a high DLS, with a greatly reduced risk of catastrophic connection failure. The single-shoulder rotary connector also enables faster makeup speeds at the rig.

**Specifications**

<table>
<thead>
<tr>
<th>475–500 Tool Size</th>
<th>A102</th>
<th>A107</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market access</td>
<td>Internal</td>
<td>Internal</td>
</tr>
<tr>
<td>Box ID, in</td>
<td>3½</td>
<td>3½</td>
</tr>
<tr>
<td>Box OD, in</td>
<td>4¼</td>
<td>5</td>
</tr>
<tr>
<td>Shoulder type</td>
<td>Single shoulder</td>
<td>Single shoulder</td>
</tr>
</tbody>
</table>

**Operations: Standard**

- Makeup torque, ft.lbf: 11,000, 11,500
- DLS, °/100 ft: 12, 12
- Cycle rpm: >20 million, >20 million
- Torsional yield, ft.lbf: 17,000, 18,500
- Pin tensile yield, lbf: Standard NC38, Standard NC38

**Operations: High Torque**

- Makeup torque, ft.lbf: 14,500, 14,500
- DLS, °/100 ft: 12, 12
- Cycle rpm: 10 million, 10 million