Knowing downhole depth is critical to success in many well intervention operations. Setting a production packer in the wrong place can cripple production. Hitting a casing collar when starting a section milling job can not only damage the mill, but can also unlock collars and hinder milling progress. And during whipstock casing exits, milling through a casing collar compromises the quality of exit window and increases the risk of downhole tool failure.

When casing tallies are inaccurate or missing, you either have to make your best guess as to the depth of the bottomhole assembly (BHA), or you can use wireline casing collar locator (CCL) services to get an accurate depth reading.

Not knowing accurate BHA depths significantly increases operational risks, and wireline operations require rigging down, moving in additional equipment, making an extra run, and then removing the wireline setup before you can intervene. This process increases logistics challenges and cost, and can add a day or more of non-productive time (NPT) depending on the complexity and depth of the well.

Using downhole sensing technology that is part of the xSight™ smart intervention services platform, the xSight casing collar locator (CCL) service is incorporated into the BHA to detect and visualize casing collars in real time as it moves through the wellbore.
With the CCL service, you always know where you are in the wellbore when performing interventions. Having access to live data means you can set packers where you intend and avoid hitting casing collars during section milling and casing-exit operations. The result is reduced NPT, improved operational efficiency, and optimized production.

The xSight CCL service can use either density or magnetic measurements to detect casing collars. Data from downhole sensors are transmitted to the surface, processed with proprietary algorithms to detect collars, and visualized with software to enable easy, accurate interpretation. As a key enabler and an integral part of the CCL service, a bi-directional communication and power module (BCPM) is used to power xSight hardware downhole, and to transmit data bi-directionally between the BHA and the surface.

The xSight CCL service can be combined with the xSight optimization and orientation service to deliver the xSight integrated casing exit service, which consistently and efficiently delivers a clean casing exit in a single trip with reduced crew size.

To learn more about how the xSight CCL service can help you control downhole depth, avoid casing collars, and save trips, visit bhge.com/xSight.

### Properties and specifications

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Temperature</td>
<td>300°F (150°C)</td>
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</table>
| Pressure     | 20,000 psi (1,379 bar) standard  
Up to 30,000 psi (2,068.4 bar) optional |
| Sizes        | *3 1/8 to 9 1/2 in.        |
| Fluids       | Completion fluids, drilling mud, seawater |

*Contact your BHGE representative for exact sizes*

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