

VariForm[®] Centralizer Sub

Restores to full OD in underreamed openhole sections after passing through ultratight clearances as narrow as 0.125 in. more than casing OD

Applications

- Running through ultratight annular clearances, such as casing or liners

Features and Benefits

- The bows collapse against the body to enable the centralizer sub to pass through ultratight clearances.
- Precise manufacturing enables the sub to rotate with a minimum of torque.
- The built-in VariForm centralizer provides exceptional restoring force and excellent standoff.
- The curved bow-spring profile enables the sub to glide through restrictions with minimal chance of damage.
- Availability in float collar, float shoe, and guide shoe configurations reduces the number of premium connections.
- The curved bow springs, which are streamlined to the sub body, and the patent-pending mounting method result in low starting and running forces when the centralizer passes through restrictions.
- The beveled ends allow for easy passage through casing windows and ledges or for reversing through casing shoes with large ratholes.

Tool Description

The Weatherford VariForm centralizer sub centralizes ultratight-clearance casing strings during running and cementing operations for enhanced wellbore integrity. The unique design combines a precisely manufactured VariForm centralizer mounted on a field-proven Weatherford centralizer-sub body for reliable performance.

When running the centralizer sub through tight restrictions, the centralizer is pulled into the restriction. The bows collapse against the sub body to create a flat profile along the entire length of the bow spring without a fulcrum point.

The built-in centralizer has beveled ends and increased OD sections above and below the bow spring to glide into ultratight restrictions and ensure safe passage through windows. The curved centralizer bows lower resistance while passing through tight restrictions and reduce the risk of damage to sensitive wellhead and casing hanger profiles. The patent-pending mounting method allows for full rotation of all models with low torque.

The centralizer sub body is manufactured from the same grade of material as the applicable casing string. The body meets or exceeds all burst, collapse, and tensile ratings and maintains casing drift diameters.



The VariForm centralizer sub features a high-performance VariForm centralizer fitted to a machined mandrel. The centralizer is mounted on the sub body with a proprietary holding mechanism.



* VariForm is a registered trademark of Weatherford in the US.