

Casing Buoyancy Sub

Reduces drag and friction while running casing in deviated wellbores

Applications

- Running casing in deviated and extended-reach wellbores
- Installing long strings or liner hangers
- Landing casing in wells with high friction forces

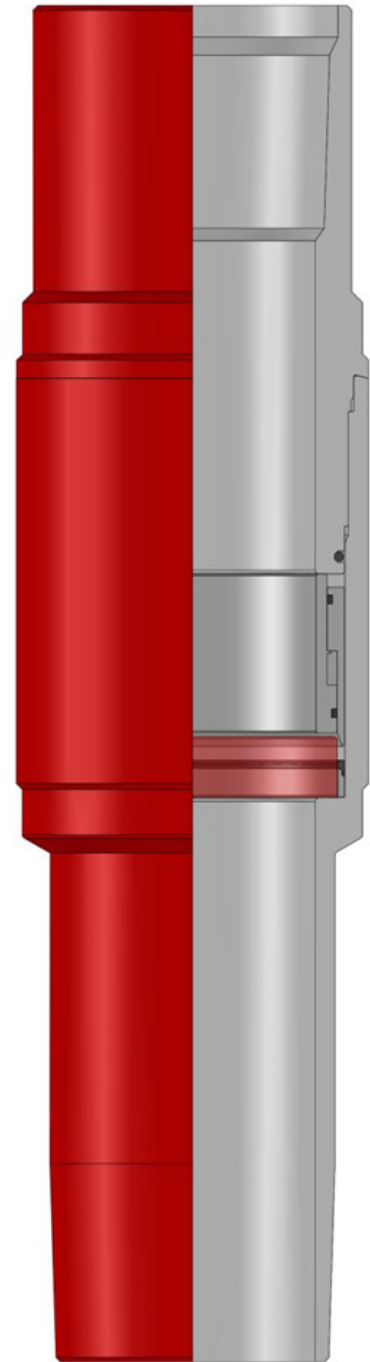
Features and Benefits

- Buoyancy forces lift the casing to reduce drag against the formation while running to setting depth.
- Frangible disk-shear mechanism uses hydrostatic and applied pressure to break the glass disk.
- Frangible glass disk requires no debris management, removing obstruction risk to enable passage of additional downhole tools such as ball seats, float equipment, and toe-initiation subs
- Disk-shear values accommodate the well design and downhole environment, with opening pressures from 3,000 to 10,000 psi (20.68 to 68.95 MPa).
- Low-profile design maintains full-bore ID after activation
- Weatherford torque and drag analyses determine optimal sub placement for best performance.

Tool Description

The Weatherford casing buoyancy sub enhances floatation at the end of a casing string to enable running through an extended lateral section. The sub is made up to the casing string above the kickoff point, creating an air chamber between the sub and the float equipment at the end of the casing string. This additional buoyancy decreases drag in the horizontal section while the fluid above the sub provides weight to assist running the casing to bottom, reducing trip time.

The casing buoyancy sub can be run in combination with all completion methods on both long-string and liner-hanger designs and requires no alterations to the casing or cement operations. The sub is designed for 4.5- and 5.5-in. production strings and can be threaded to the customer's casing specifications. The sub strength specifications match the host casing. It decreases the need for rotation to reach TD, reducing requirements for premium-thread casing. High-pressure and high-temperature options are also available.



The casing buoyancy sub increases buoyancy at the end of the casing string to reduce drag while floating casing into the lateral section of a wellbore.

