

Ultra Reach Flotation Collar II

Running production casing in extended reach wellbores becomes problematic due to high frictional forces created while running casing in the horizontal section. These forces make running casing inefficient and can prevent the ability to run casing to the target depth.

The Ultra Reach Flotation Collar II (URFC II) is a casing deployed flotation tool that allows air to be trapped inside the lower part of the production casing during deployment. The trapped air increases the buoyancy of the casing below the URFC II, reducing the frictional forces along the horizontal section of the wellbore.

The URFC II contains a glass barrier that allows fluid to be placed above the tool from surface while running in the wellbore. Once casing reaches the target depth, pressure is applied from surface, shattering the glass and establishing circulation for conditioning and cementing operations.

We determine the optimal location of the flotation collar based on the well trajectory, casing design and fluid types. This allows us to select the amount of applied pressure required to activate the tool prior to installation.



Features

- Full casing ID after opening
- No intervention requirement compared to deep-set/horizontal wireline plugs
- Circulation established hydraulically through differential pressure with predetermined burst pressure
- Installed as integral part of casing or liner string

Benefits

- No debris sub required due to small debris size
- Different settings are available to accommodate a large range of depths and mud weights
- Glass barrier shatters into fine particles, 5 - 10 mm in diameter

Applications

- Long laterals, also known as extended-reach laterals
- Laterals where casing is difficult to achieve target depth to ensure the wellbore integrity remains intact

Casing size in. (mm)	Casing weight range lb/ft (kg/m)	Max. OD in. (mm)	Min. ID in. (mm)	Overall Length in. (mm)	Rupture Glass Differential Pressure psi (kPa)	Temp. rating °F (°C)
4.500 (114.3)	11.6 - 15.1 (17.26 - 22.47)	5.440 (138.2)	Compliant with casing	24.50 (622.3)	2,500 - 9,500 (17,236.9- 65,500.2)	300 (148.9)
5.000 (127.0)	18.0 (26.79)	5.880 (149.4)	Compliant with casing	26.60 (675.6)	5,500 - 7,500 psi (37,921.2 - 51,710.7)	300 (148.9)
5.000 (127.0)	24.10 (35.87)	6.000 (152.4)	Compliant with casing	26.60 (675.6)	5,500 - 7,500 psi (37,921.2 - 51,710.7)	300 (148.9)
5.500 (139.7) Slimhole	17.0 - 23.0 (25.30 - 34.22)	6.500 (165.1)	Compliant with casing	28.60 (726.4)	2,500 - 10,000 psi (17,236.9- 65,500.2)	300 (148.9)
5.500 (139.7)	17.0 - 23.0 (25.30 - 34.22)	7.090 (180.1)	Compliant with casing	28.60 (726.4)	2,500 - 10,000 psi (17,236.9- 65,500.2)	300 (148.9)

NOTE: For the 4.500-in. and 5.500-in. versions, the rupture glass is offered in differential pressure increments of 500 PSI for pressures under 7,500-psi and increments of 1,000-psi for pressures above 7,500-psi.