

High-expansion fully dissolvable frac plugs

Extended-range frac plugs for applications with casing restrictions or deformations

Applications

- Plug-and-perf multistage fracturing operations in freshwater or brine, when the casing has ID restrictions
- Difficult milling conditions, such as extended-reach laterals, highly deviated wells, and underpressured reservoirs
- Isolation for refracturing operations

Features

A proprietary field-proven coating protects the frac plug and prevents early dissolution, enabling plug placement in the well several hours before isolation is required. To complete isolation, a dissolvable ball is pumped down to the integral ball seat before fracturing begins. Optionally, the plug can be configured for deployment with the ball in place.



How ReacXion Slim frac plugs improve plug-and-perf completions

ReacXion Slim™ high-expansion fully dissolvable frac plugs easily dissolve in the presence of common wellbore fluids after fracturing is complete, considerably simplifying cleanout operations (by eliminating milling) and reducing time to production. The time savings result in reduced diesel consumption and hence, lower CO₂e emissions. These plugs have a reduced OD compared with our other dissolvable frac plugs.

The frac plugs require only minimal field assembly, hence reducing the potential for human error and operational delays. An antipreset design eliminates the risk of presetting while pumping into the well.

Load-transfer technology integrated into the frac plug design uses the casing as a supporting member, transferring the load from the ball to the ball seat, through the slips, and onto the casing. Pressure exerted on the ball during stimulation continues to reinforce the integrity of the plug's seal, forming a tighter seal as pressure is increased.

Their field-proven materials ensure that ReacXion Slim frac plugs dissolve fully and predictably in freshwater or common oilfield brines, depending on the version selected. Improved material selection also enables fast, controlled dissolution of the elastomer.

These plugs

- enable plug-and-perf operations even in wells with casing restrictions
- add flexibility with one tool that works from fracturing to fullbore production without the expense of milling
- provide the ability to tune dissolution performance with the optimal material for freshwater or brine.

ReacXion Slim Specifications

Specifications	4 1/2-in Casing	5-in Casing (Lightweight)	5-in Casing (Heavyweight)
Casing size	4.5 in [114 mm]	5 in [127 mm]	5 in [127 mm]
Casing weight	13.5–15.1 lbm/ft [20.1–22.5 kg/m]	18.0–21.4 lbm/ft [26.8–31.8 kg/m]	21.4–24.1 lbm/ft [31.8–35.9 kg/m]
Configuration	Ball drop or ball in place	Ball drop or ball in place	Ball drop or ball in place
Plug OD	3.19 in [81 mm]	3.6 in [91 mm]	3.4 in [86 mm]
Min. ID	1.13 in [29 mm]	0.92 in [23 mm]	0.92 in [23 mm]
Ball diameter	1 in [25 mm]	1.13 in [29 mm]	1.13 in [29 mm]
Length	18.4 in [466 mm]	11.7 in [297 mm]	11.7 in [297 mm]
Set length	8.5 in [216 mm]	8.3 in [211 mm]	8.3 in [211 mm]
Plug weight	4.5 lbm [2 kg]	5 lbm [2.3 kg]	5 lbm [2.3 kg]
Setting force*	25000 lbf [111000 N]	25000 lbf [111000 N]	25000 lbf [111000 N]
Stroke length*	5 in [127 mm]	5.8 in [147 mm]	5.8 in [147 mm]
Pressure rating	10000 psi [68948 kPa]	10000 psi [68948 kPa]	10000 psi [68948 kPa]
Temperature rating	275 degF [135 degC]	275 degF [135 degC]	275 degF [135 degC]
Pumpdown ring OD	3.7 in [94 mm]	4.11 in [104 mm]	3.98 in [101 mm]

ReacXion Slim Specifications

Specifications	5 1/2-in Casing
Casing size	5.5 in [140 mm]
Casing weight	20.0–23.0 lbm/ft [29.8–34.2 kg/m]
Configuration	Ball drop or ball in place
Plug OD	3.8 in [97 mm]
Min. ID	1.13 in [29 mm]
Ball diameter	1.22 in [31 mm]
Length	19.8 in [503 mm]
Set length	9.5 in [241 mm]
Plug weight	7 lbm [3.2 kg]
Setting force*	45000 lbf [200000 N]
Stroke length*	6.8 in [173 mm]
Pressure rating	10000 psi [68948 kPa]
Temperature rating	275 degF [135 degC]
Pumpdown ring OD	4.53 in [115 mm]

All specifications are subject to change without notice.

* Nominal value