

Big-Bore Frac Plug

Large-ID pumpdown plug for multistage stimulation



Rated up to 15,000 psi
[103 MPa]



Rated to 350 degF
[177 degC]

APPLICATIONS

- Multistage plug-and-perf operations
- Isolation for refracturing operations

BENEFITS

- Saves time and reduces costs on multistage stimulation operations because
 - large plug ID and dissolvable isolation ball enable immediate production without milling
 - plug design uses one-quarter the material of standard plugs
- Improves sealing integrity because increasing pressure on the ball tightens the seal

FEATURES

- Aluminum construction
- Isolation with balls made from ELEMENTAL* degradable technology
- Small footprint
- Antipreset design that eliminates risk of presetting while pumping into the well
- Tapered entry and exit for easy reentry

The Schlumberger big-bore frac plug maximizes plug ID and uses a dissolvable frac ball, eliminating the need for immediate millout operations. The design combines conventional pumpdown plug and expandable liner hanger technologies.

Conveyed using conventional pumpdown operations, the plug can be set with industry-standard setting tools. After setting, a dissolvable ball is pumped down to the integral ball seat, isolating the lower stages.

The ball dissolves rapidly after fracturing is complete, enabling immediate production through the large bore of the plug. Milling is not required, but the plug can be milled out with conventional milling tools if required.

Load transfer technology improves seal

The 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 tool's seal, forming a tighter seal as pressure is increased.

This load transfer technology enables minimalistic design—the plug contains one-quarter the material of standard pumpdown plugs. The 4.5-in and 5.5-in plugs weigh less than 3 lbm [1.4 kg].



Big-bore frac plug.

Big-Bore Frac Plug Specifications

Nominal Size, in [mm]	Casing Weight, lbm/ft [kg/m]	Running OD, in [mm]	Ball Seat ID, in [mm]	Ball Size, in [mm]	Length, in [mm]	Differential Pressure Rating, psi [MPa]	Temperature Rating, degF [degC]
5½ [139.7]	26 [38.7]	4.27 [108]	3.43 [87]	3.75 [95]	5.5 [139.7]	15,000 [103]	350 [177]
	23 [34.23]	4.375 [111.1]	3.55 [90]	3.875 [98.4]	5.5 [139.7]	15,000 [103]	350 [177]
	20 [29.76]	4.5 [114.3]	3.67 [93]	4 [101.6]	5.5 [139.7]	12,000 [83]	350 [177]
	17 [25.3]	4.63 [117.6]	3.75 [95.3]	4.125 [104.8]	5.5 [139.7]	10,000 [69]	350 [177]
5 [127]	21.4 [31.8]	3.75 [95]	2.95 [75]	3.25 [82.6]	5.5 [139.7]	10,000 [69]	350 [177]
4½ [114.3]	15.1 [22.5]	3.56 [90.5]	2.75 [69.9]	3.125 [79]	5.5 [139.7]	15,000 [103]	350 [177]
	13.5 [20]	3.65 [92.7]	2.88 [73]	3.25 [82.6]	5.5 [139.7]	12,000 [83]	350 [177]
	11.6 [17.3]	3.72 [94.4]	3.00 [76.2]	3.375 [85.7]	5.5 [139.7]	10,000 [69]	350 [177]

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