

# HYDRAULIC TOE SLEEVE

## DESCRIPTION

The Hydraulic Frac Sleeve is an integral component of the liner assembly for multi-stage hydraulic fracturing (MSHF), specifically designed to perform the first-stage frac operation. Installed above the ball seat, the sleeve is activated hydraulically by applying pressure after the ball is dropped and seated. Once the activation pressure is reached, the sleeve shifts, opening the frac ports and establishing direct communication with the formation.

A reclosable configuration is available, allowing the sleeve to be closed after fracturing when zonal isolation or flow control is required. The design can also be modified for cemented liner applications, providing flexibility across various well conditions and completion types.

Engineered for reliability and precision, the Hydraulic Frac Sleeve provides a simple and efficient method for initiating stimulation, ensuring consistent first-stage performance in both open-hole and cemented completions.

## FEATURES

- Option to close the sleeve at a later stage for zonal control
- Adjustable activation pressure range to meet specific well requirements
- Available in all standard casing sizes and specifications
- Configurable for both open-hole and cemented liner applications

Casing / Liner size in - [mm]	OD Sleeve in - [mm]	ID in - [mm]
2,875 - [73]	3.62 - [92]	2.28 - [58]
4 - [101.6]	4.75 - [120.65]	3.48 - [88.29]
4.5 - [114.3]	5.25 - [133.4]	3.85 - [97.8]
5 - [127]	5.56 - [141.3]	4.41 - [111.96]
5.5 - [139.7]	6.5 - [165.1]	4.75 - [120.7]
5.75 - [146.1]	6.75 - [171.5]	4.875 - [123.8]

