

# Bullmastiff Frac Sleeve

The Bullmastiff™ frac sleeve is a ball-drop activated multistage frac system for open-hole horizontal completions. The system is installed as an integrated part of the lower completion string. Multiple stages can be installed in a wellbore.

For each stage, one ball is pumped from surface to open a sleeve in a given stage. The ball used to open a sleeve then passes down to a fixed seat in the sleeve below to close the lower sleeve. The frac job can be carried out in a continuous pumping operation with no prep time between stages.

The Bullmastiff frac sleeve is used in conjunction with the Bullmastiff screen sub(s) and a toe sleeve to create a frac system requiring minimum intervention and providing proppant and production sand control after the frac. This system saves time and water consumption with no delays between stages.

## Applications

- Fracturing / stimulation
- Proppant and production sand control
- Injection



## Features

- Ball-drop operated
- Designed for open-hole applications utilizing sand screens
- Configurable nozzles and shear pressures
- Seat increments optimized based on pressure requirements
- Open-frac-close functionality
- No explosives required on location
- Drillable cast iron ball seats for easy millout

## Benefits

- Increased time and cost efficiency compared with traditional plug-and-perf methods
- Ability to employ continuous pumping operations
- Excellent zonal isolation
- Optimized fracture initiation
- Multiple stages per well
- Maximizes reservoir contact
- Reduces HSE risk by eliminating need for dedicated wireline operations
- Decreases amount of water used compared to traditional plug-and-perf methods

## Technical data

| Size<br>in. (mm)  | Grade   | Casing weight<br>lb/ft (kg/m) | Length<br>in. (mm) | Max. OD<br>in. (mm) | Min. ID<br>in. (mm) | Burst rating<br>psi (MPa) | Collapse<br>rating<br>psi (MPa) | Tensile rating*<br>lbf (kN) | Temperature<br>rating<br>°F (°C) |
|-------------------|---------|-------------------------------|--------------------|---------------------|---------------------|---------------------------|---------------------------------|-----------------------------|----------------------------------|
| 4.500<br>(114.30) | 125 ksi | 13.5 (20.09)                  | 49.480 (1,256.79)  | 5.500 (139.7)       | 3.912 (99.36)       | 10,928 (75.35)            | 10,499 (72.39)                  | 342,677 (1,524.30)          | 350 (176.67)                     |

\*Tensile rating is limited to end connection.

Note: Premium threading will affect overall length.