

# Well Construction

## Downhole Service Tools

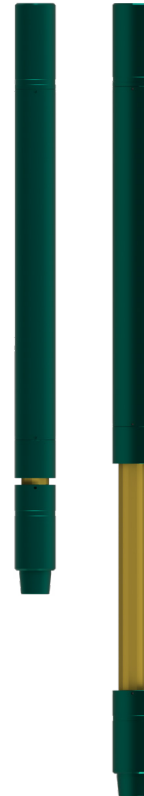
### BRUTE® Bumper Sub

The Expro BRUTE® Bumper Sub is a heavy-duty travel joint designed to withstand sustained torque under severe operations, such as temporary well abandonments.

The BRUTE® Bumper Sub is primarily designed to provide reliable temporary abandonment solutions when assembled with the BRUTE® Retrievable Service Packer and BRUTE® Storm Valve to form the BRUTE® Storm System.

#### Features and benefits

- Completely pressure balanced to permit free travel through full stroke of the sub and eliminate risk of damaging the sub, mis-setting packer, and disconnecting from storm valve
- Proprietary hexagon mandrel design provides larger contact area to eliminate torque limitations for increased operational reliability when deploying the BRUTE® Storm System
- Through-bore access permits full circulation at all times for increased reliability
- Four-foot free travel stroke allows for reliable downhole tool manipulation as a motion compensator



Specifications			
O.D. (in.)	4.750	7.250	8.500
I.D. (in.)	2.250	3.250	4.000
Stroke length (in.)	15.5	48.0	48.0
Thread connections	NC-38	NC-50	6-5/8" FH
Max. pressure (psi)	5,000	11,400	10,000
Max. hang-off (lbs)	433,000	700,000	1,000,000
Max. temperature (°F)	250	300	300
Max. torque (ft-lbs)	15,000	15,000	15,000

Operational temperature range can be adjusted based on elastomeric material compound