

Hydra-Stroke

Bumper Sub

APPLICATIONS

- Isolating drillstring assemblies from effects of wave motion on floating and semisubmersible rigs
- Providing drillstring travel in plug and abandonment operations when low-level jarring or bumping is necessary
- Providing travel necessary to deploy knives for casing cutting operations

BENEFITS

- Enables jarring for recovery of tools at any depth offshore
- Operates dependably in HPHT well conditions

FEATURES

- Delivery of up to 6 ft of stroke to compensate for drillstring oscillation in offshore operations
- Temperature rating of 500 degF [260.0 degC]
- Seal pressure rating of 20,000-psi [137.9-MPa] differential pressure
- Circulation pressure rating of 10,000 psi [68.9 MPa]
- Closed drive prevents ingress of wellbore fluid into drive section, improving reliability
- Full balance to eliminate pump-open effect caused by internal pressure

The Hydra-Stroke* bumper sub is a key drillstem component for deepwater drilling operations, where drillstring oscillation can be a problem. This tool provides 6 ft [1.83 m] of reliable telescopic movement without placing any limitations on drillstring torque capacity, tensile strength, or hydraulic capability.

Sub designed for reliability

The Hydra-Stroke bumper sub is fully balanced to the annulus and the mud pumps, making it completely reliable at any depth and in any drilling environment. The fully balanced feature eliminates the pump-open effect caused by internal pressure. The tool is rated for high temperature and pressure. Wellbore fluid cannot enter the drive section, improving reliability.

Hydra-Stroke Bumper Sub Specifications, Full Balance

Overall Diameter, in [cm]	Internal Diameter, in [cm]	Tool Joint Connection	Tensile Yield, lbf [N]
5.25 [13.34]	2.25 [5.72]	3 ½ API IF	600,000 [2,668,933.2]
6.75 [16.51]	2.75 [6.99]	4 ½ API IF	964,207 [4,289,006.79]
8 [20.32]	3 [7.62]	6 ⅝ Reg	1,571,980 [6,992,516]

Torsional Yield, ft.lbf [N.m]	Total Stroke, in [cm]	Closed Length, ft [m]	Closed Length, ft.in
28,000 [37,962.9]	72 [182.88]	35.25 [10.744]	1,500
58,300 [79,044.19]	72 [182.88]	32.67 [9.96]	3,200
114,000 [154,563.25]	72 [182.88]	36.16 [11.02]	3,340

Ordering instructions, please specify:

- Hole size
- Drillstring component OD where tool will be used
- Connection size, type, right- or left-hand threads
- Hole temperature
- Tool diameter

Nonstandard tolerances are available upon request.



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