

BULAT DRILLABLE REAMING SHOE

APPLICATION

BULAT Reaming Shoe provides reaming during RIH without the need to rotate the liner or casing. BULAT is installed at the bottom of the casing/liner string to ream through unstable wellbore zones and guide the completion assembly to the target depth. Reaming shoe is a product of positive displacement motor evolution: the power section consists of a mud-motor-like power section, transforming pressure created by mud pumps into planetary motion of the rotor, then transferred via drive shaft to a shoe head. Rotational speed varies from steady powerful 5-10 rpm to about 120 rpm. Vibrations created by the power section planetary motion is insignificant compared to a full-size mud motor (it is much shorter and made of much lighter materials), but will also contribute to release of the drill string being stuck.

- Vertical, directional and horizontal wells.

FEATURES AND BENEFITS

- Low rpm, allowing to use PDC cutters on a shoe nose.
- High torque at any speed.
- Made of light materials.
- Can be stopped only by shaft or rotor rapture.
- Slight vibration during operation.
- Pressure drop depends on well conditions and is valve-protected from premature set.

SUPPLY PACKAGE

- BULAT Drillable Reaming Shoe.

TECHNICAL DATASHEET

Shoe size	OD, in	ID, in (after milling out)	Max flow rate, gal/min	Max Diff Pressure, psi	Length, ft	Max allowable tensile, kip	Compression, kip	Material*	Max working temperature, °F
4"	4.528	3.465	476	1131	5	198	337	P-110	150
4.5"	5.236	3.780	476		6	223	101		
5"	5.551	4.409	476		6	223	101		
5.5"	7.638	4.843	476		6.3	223	101		
5.75"	7.638	5.079	476		6.3	270	124		
6.625"	7.913	6.024	476		7.5	270	124		
7"	7.913	6.260	476		7.5	314	143		
7.625"	8.583	6.732	476	1131	7.9	368	175		
9.625"	10.630	8.622	476		11	443	191		
10.75"	10.866	9.724	555		10.8	443	191		
12.75"	13.819	11.968	555		11	551	223		
13.375"	14.528	13.386	555		11.5	551	223		

* Other options are available as per Customer request.



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