

1.69” MOTOR

The **1.69”** Motor features a wide **Range of RPM, flow rates, and torque** to convert hydraulic fluid energy, created by flow and pressure, into mechanical energy. This positive displacement motor produces optimum power output with maximum efficiency for today’s thru-tubing demands.

TRANSMISSION

The motor’s single-piece flexible shaft is the simplest and the most reliable transmission for standard applications in a small-diameter motor.

POWER SECTION

The power section consists of a stainless steel rotor, and an elastomeric lined stator tailored to the planned well intervention whether it is a high-temperature application or an aggressive fluid application.

BEARING ASSEMBLY

Downhole Motor’s bearing assembly is well suited for weight on bit, sideloading, and overpulls. For high-pressure tool applications, the sealing system uses mud lubricated bearings and mechanical seal assembly.

SPECIFICATIONS

DESIGNATION	FLOW RANGE (GPM)	SPEED RANGE (RPM)	MAX. OPERATING TORQUE (FT-LBS)	MAX. PRESSURE DIFFERENTIAL (PSI)
MSHP	18-42	270-640	110	700
MSHT	18-42	300-700	170	1000
SSHT	15-45	83-250	157	375

Note: Specifications are based on water at 70°F. Specific ations are subject to change without notice.



MSHP Performance Specifications
Hi-Performance 1.69” Motor

	U.S. UNITS	S.I. UNIT
Outside Diameter	1.688"	43 mm
Overall Length	7.83'	2.39 m
Weight	45 lbs	20 kg
Top Connection	1" AMMT	
Bottom Connection	1" AMMT	
Maximum Weight On Bit	2,500 lbs	1,134 kg
Maximum Bit Pressure Drop	1,500 psi	103 Bar
Flow Rate: Minimum Maximum	18 gpm 42 gpm	68 lpm 159 lpm
No Load Bit Speed @ Min. Flow Rate @ Max. Flow Rate	273 rpm 637 rpm	
No Load Pressure Drop	200 psi	13.8 Bar
Maximum Operating Pressure Differential	700 psi	48.3 Bar
Torque(w/H ₂ O @70 °F) Maximum Operating Stall	110 ft-lbs 165 ft-lbs	149 Nm 224 Nm
Maximum Allowable Overpull For Re-running Absolute Maximum	23,980 lbs 29,970 lbs	10,877 kg 13,594 kg