

3.13” MOTOR

The 3.13” 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	80 - 160	178-311	600	550
MSHT	80-160	195-390	900	750
SSHT	80-160	60-120	950	375

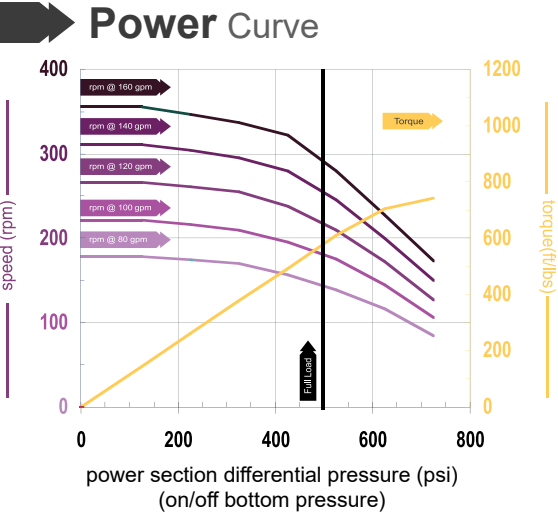
Note: Specifications are based on water at 70°F. Specific ations are subject to change without notice.



MSHP Performance Specifications

Hi-Performance 3.13” Motor

	U.S. UNITS	S.I. UNITS
Outside Diameter	3.375"	86 mm
Overall Length	12.58'	3.83 m
Weight	247 lbs	112 kg
Top Connection	2 3⁄8 " Reg	
Bottom Connection	2 3⁄8 " Reg	
Maximum Weight On Bit	7,500 lbs	3,402 kg
Maximum Bit Pressure Drop	1,500 psi	103 Bar
Flow Rate: Minimum Maximum	80 gpm 160 gpm	302 lpm 606 lpm
No Load Bit Speed @ Min. Flow Rate @ Max. Flow Rate	178 rpm 311 rpm	
No Load Pressure Drop	200 psi	13.8 Bar
Maximum Operating Pressure Differential	550 psi	37.9 Bar
Torque(w/H ₂ O @ 70 °F) Maximum Operating Stall	600 ft-lbs 900 ft-lbs	814 Nm 1,220 Nm
Maximum Allowable Overpull For Re-running Absolute Maximum	121,170 lbs 151,500 lbs	54,962 kg 68,720 kg



Performance Chart

Pressure Differential	Q (gpm)	80	100	120	140	160
125 psi	(ft-lbs)	145	145	145	145	145
	(rpm)	178	222	266	311	356
225 psi	(ft-lbs)	262	262	262	262	262
	(rpm)	174	217	261	304	347
325 psi	(ft-lbs)	378	378	378	378	378
	(rpm)	170	310	255	296	310
425 psi	(ft-lbs)	494	494	494	494	494
	(rpm)	157	196	238	280	322
525 psi	(ft-lbs)	611	611	611	611	611
	(rpm)	139	175	210	245	280
625 psi	(ft-lbs)	705	05	705	705	705
	(rpm)	116	145	172	200	228
725 psi	(ft-lbs)	742	42	742	742	742
	(rpm)	85	106	127	150	173