

2.87” MOTOR

The 2.87” 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 a mechanical seal assembly.

SPECIFICATIONS

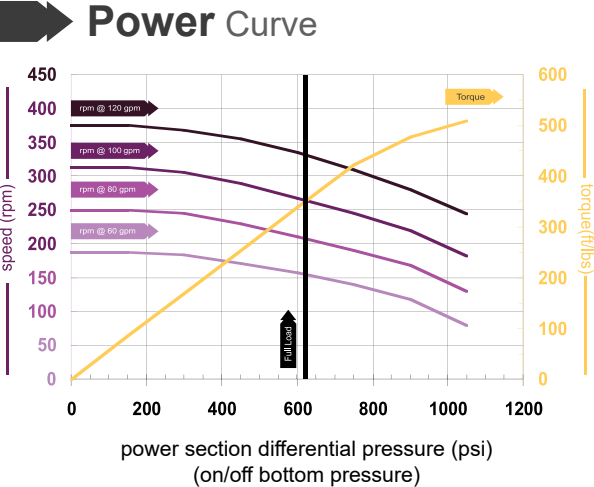
DESIGNATION	FLOW RANGE (GPM)	SPEED RANGE (RPM)	MAX. OPERATING TORQUE (FT-LBS)	MAX. PRESSURE DIFFERENTIAL (PSI)
MSHP	60-120	190-375	350	625
MSHT	60-120	200-415	475	875
SSHT	60-120	60-120	800	375

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



MSHP Performance Specifications
Hi-Performance 2.87” Motor

	U.S. UNITS	S.I. UNITS
Outside Diameter	2.875"	73 mm
Overall Length	10.66'	3.25 m
Weight	202 lbs	92 kg
Top Connection	2 3⁄8" PAC	
Bottom Connection	2 3⁄8" PAC	
Maximum Weight On Bit	5,200 lbs	2,359 kg
Maximum Bit Pressure Drop	1,500 psi	103 Bar
Flow Rate: Minimum Maximum	60 gpm 120 gpm	227 lpm 454 lpm
No Load Bit Speed @ Min. Flow Rate @ Max. Flow Rate	188 rpm 375 rpm	
No Load Pressure Drop	200 psi	13.8 Bar
Maximum Operating Pressure Differential	625 psi	43.1 Bar
Torque(w/H ₂ O @ 70°F) Maximum Operating Stall	350 ft-lbs 525 ft-lbs	475 Nm 712 Nm
Maximum Allowable Overpull For Re-running Absolute Maximum	80,250 lbs 100,300 lbs	36,401 kg 45,496 kg



Performance Chart

Pressure Differential	Q (gpm)	60	80	100	120
150 psi	(ft-lbs)	85	85	85	85
	(rpm)	188	250	313	368
300 psi	(ft-lbs)	169	169	169	169
	(rpm)	185	245	306	368
450 psi	(ft-lbs)	254	254	254	254
	(rpm)	172	230	290	355
600 psi	(ft-lbs)	339	339	339	339
	(rpm)	158	210	268	336
750 psi	(ft-lbs)	423	423	423	423
	(rpm)	140	190	246	310
900 psi	(ft-lbs)	478	478	478	478
	(rpm)	118	168	220	280
1,050 psi	(ft-lbs)	510	510	510	510
	(rpm)	80	130	182	244