

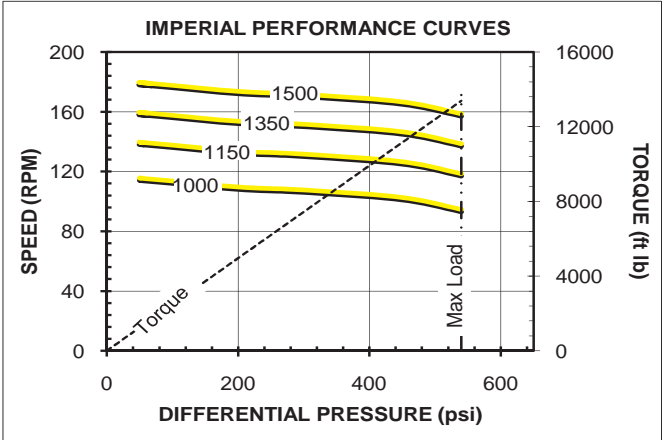


11 3/4" (298 mm)

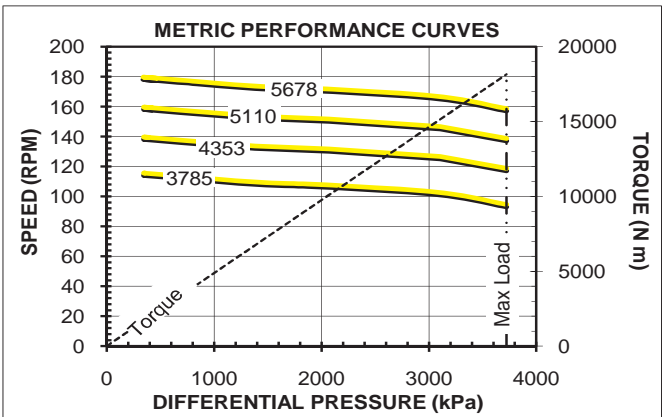
Mud Motors

For further motor information please contact Cougar Drilling Solutions Inc.

Maximum Pump Rate	1,500 gpm	5,680 Lpm
Revolutions per unit volume	0.116 rev/gal	0.031 rev/L
Pressure at full Load	540 psi	3,720 kPa
Torque at full load	13,390 ft lb	18,160 N m



Drilling Fluid Flow (GPM)	1000	1150	1350	1500
Pressure Drop Across Motor with No Load (off-bottom pressure) (PSI)	51	56	61	67
Maximum Allowable Differential Pressure (on-bottom - off-bottom pressure) (PSI)	489	484	479	473



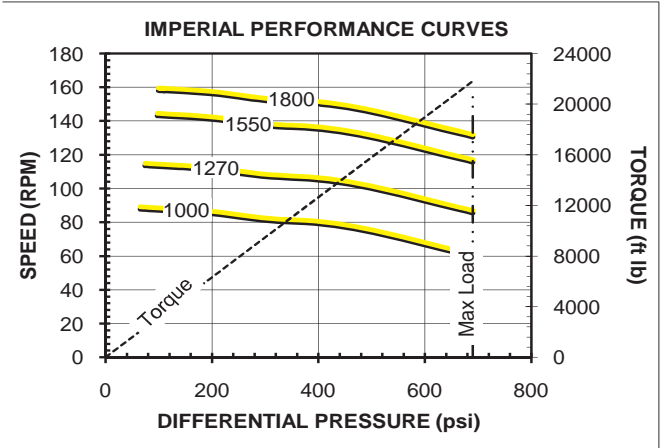
Drilling Fluid Flow (L/min)	3785	4353	5110	5678
Pressure Drop Across Motor with No Load (off-bottom pressure) (kPa)	352	386	421	462
Maximum Allowable Differential Pressure (on-bottom - off-bottom pressure) (kPa)	3372	3337	3303	3261

11 3/4" (286 mm) 5-6 4.6 Stage

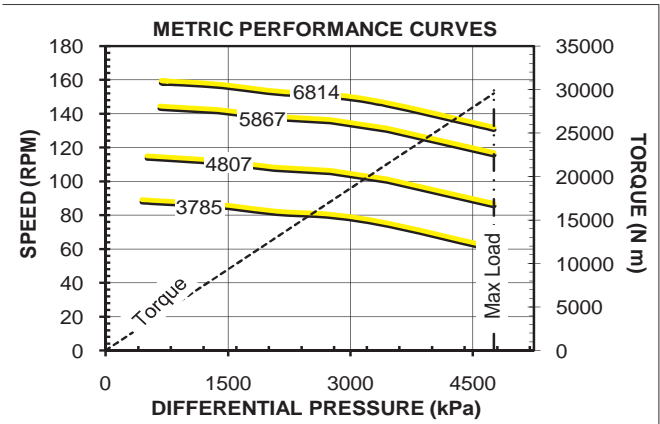


For further motor information please contact Cougar Drilling Solutions Inc.

Maximum Pump Rate	1,800 gpm	6,810 Lpm
Revolutions per unit volume	0.089 rev/gal	0.024 rev/L
Pressure at full Load	690 psi	4,760 kPa
Torque at full load	21,800 ft lb	29,560 N m



Drilling Fluid Flow (GPM)	1000	1270	1550	1800
Pressure Drop Across Motor with No Load (off-bottom pressure) (PSI)	65	74	97	110
Maximum Allowable Differential Pressure (on-bottom - off-bottom pressure) (PSI)	625	616	593	580



Drilling Fluid Flow (L/min)	3785	4807	5867	6814
Pressure Drop Across Motor with No Load (off-bottom pressure) (kPa)	448	510	669	758
Maximum Allowable Differential Pressure (on-bottom - off-bottom pressure) (kPa)	4309	4247	4089	3999

