



ALTITUDE

**MOTOR  
BOOK**

TECHNICAL SPECIFICATIONS  
CANADIAN  DIVISION

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# 5.00” REACT 520

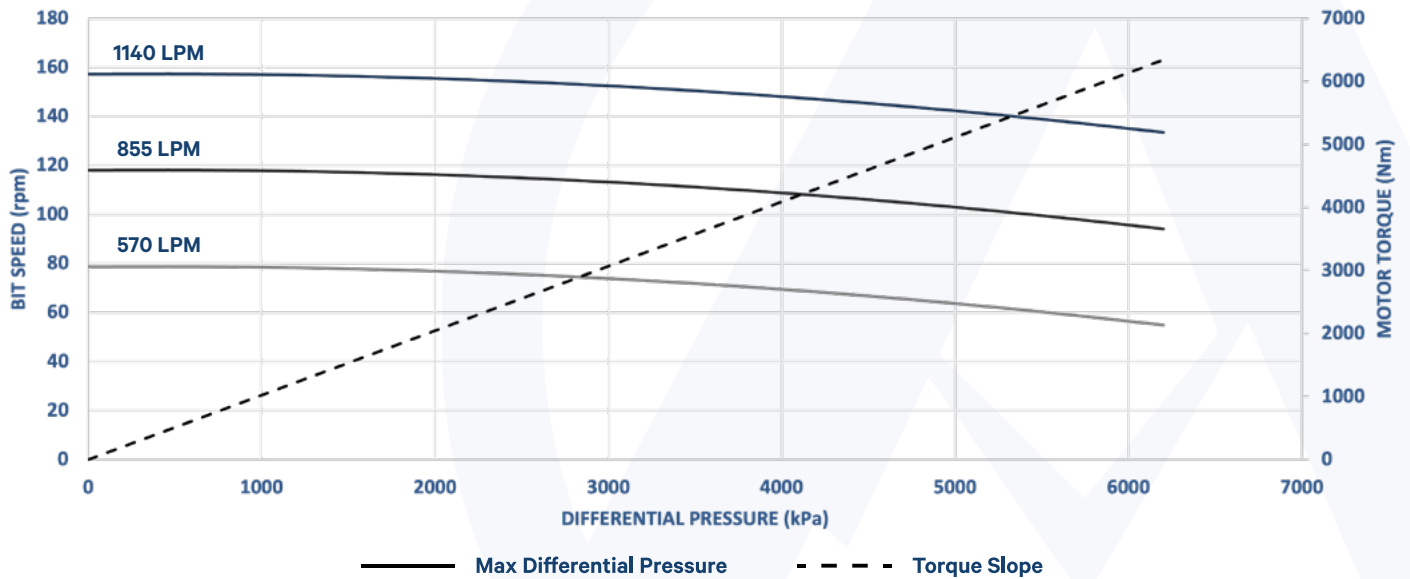
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	7.4	m	15.7	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	79 - 157	rpm	79 - 157	rpm
Rotation	0.138	rev/litre	0.522	rev/gal
Torque Slope	1.023	Nm/kPa	5.200	ft-lb/psi
Max Differential Pressure	6,200	kPa	900	psi
Max Torque	6,340	Nm	4,680	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" REACT 800

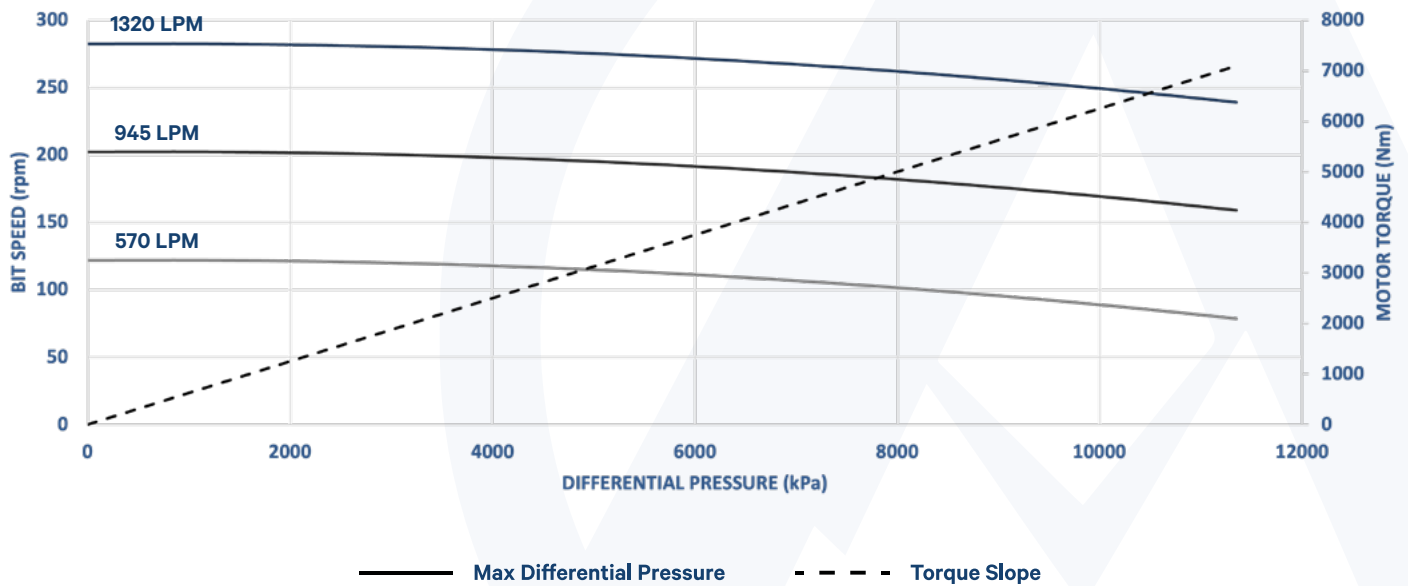
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.0	m	17.0	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	122 - 282	rpm	122 - 282	rpm
Rotation	0.214	rev/litre	0.810	rev/gal
Torque Slope	0.625	Nm/kPa	3.180	ft-lb/psi
Max Differential Pressure	11,350	kPa	1,650	psi
Max Torque	7,090	Nm	5,230	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" REACT 1050

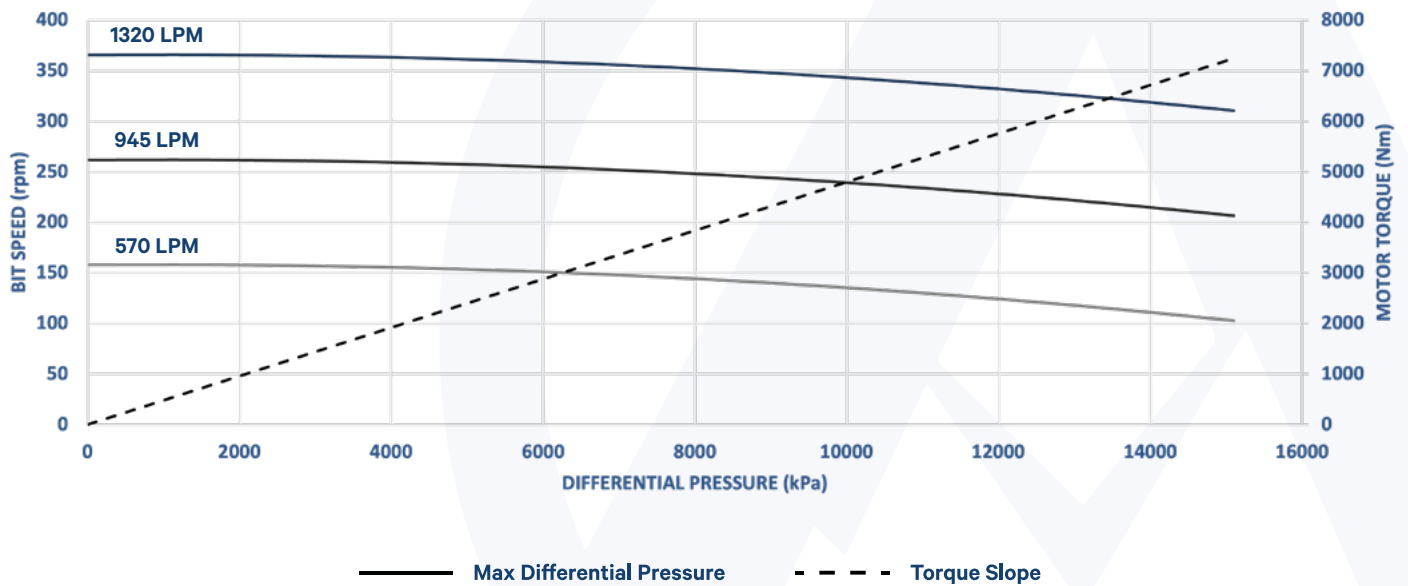
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.0	m	17.0	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	158 - 366	rpm	158 - 366	rpm
Rotation	0.277	rev/litre	1.050	rev/gal
Torque Slope	0.480	Nm/kPa	2.440	ft-lb/psi
Max Differential Pressure	15,100	kPa	2,190	psi
Max Torque	7,250	Nm	5,350	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.50” REACT 330

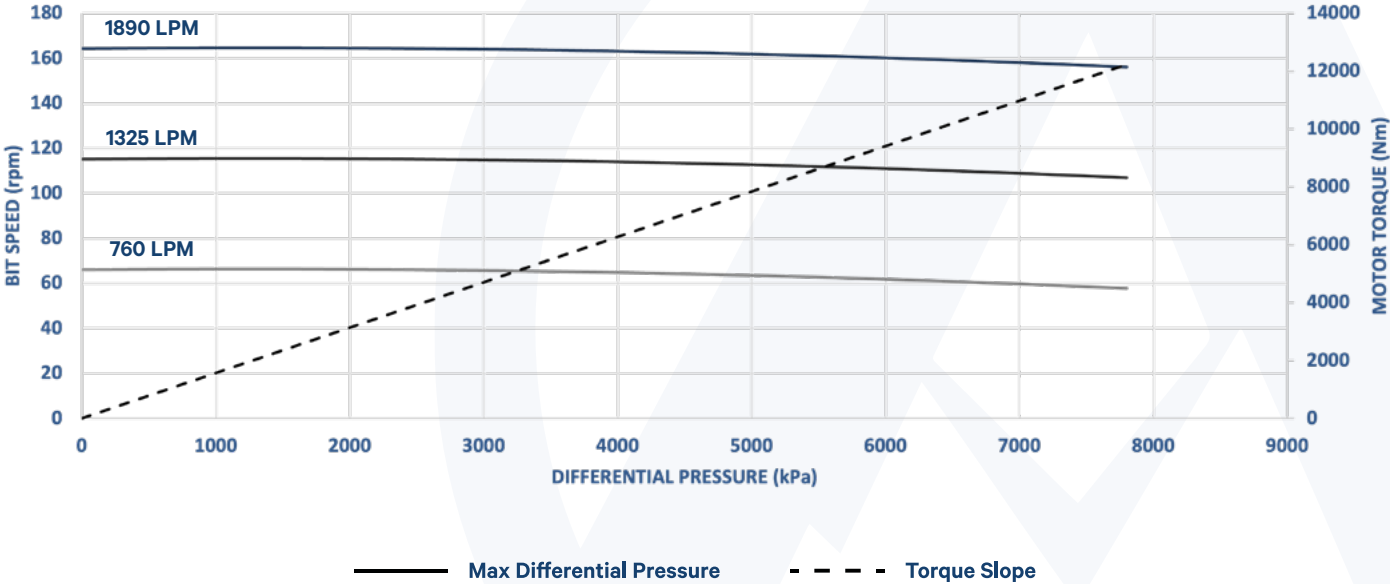
General Data				
	Metric		Imperial (US)	
Bit Sizes	200 - 251	mm	7.88 - 9.88	in
Nominal Length	8.1	m	17.2	ft
Operational Max WOB (with flow)**	22.9	kDaN	51,500	lbs
Max Bit Pull (with damage)*	144.6	kDaN	325,000	lbs
Max Body Pull (with damage)*	289.1	kDaN	650,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,890	litre/min	200 - 500	gpm
Speed Range	66 - 164	rpm	66 - 164	rpm
Rotation	0.087	rev/litre	0.330	rev/gal
Torque Slope	1.569	Nm/kPa	7.980	ft-lb/psi
Max Differential Pressure	7,800	kPa	1,130	psi
Max Torque	12,240	Nm	9,030	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.



# 6.75" REACT 270

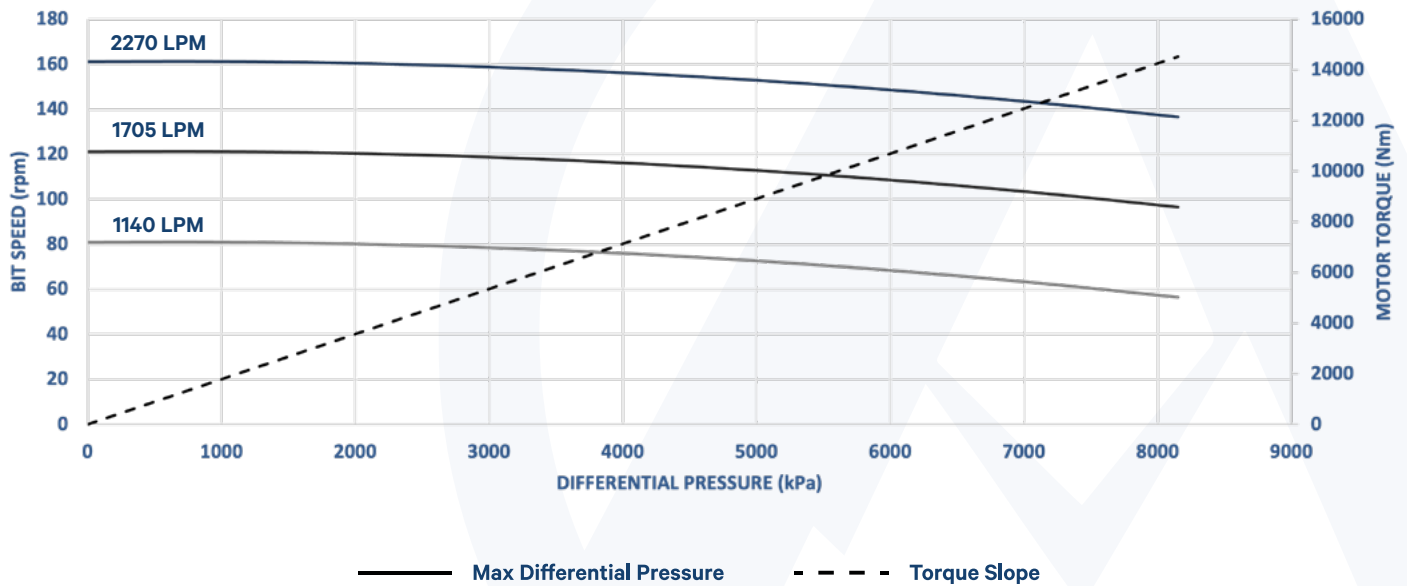
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	7.9	m	16.7	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	81 - 161	rpm	81 - 161	rpm
Rotation	0.071	rev/litre	0.270	rev/gal
Torque Slope	1.782	Nm/kPa	9.060	ft-lb/psi
Max Differential Pressure	8,150	kPa	1,180	psi
Max Torque	14,520	Nm	10,710	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 8.00" REACT 240

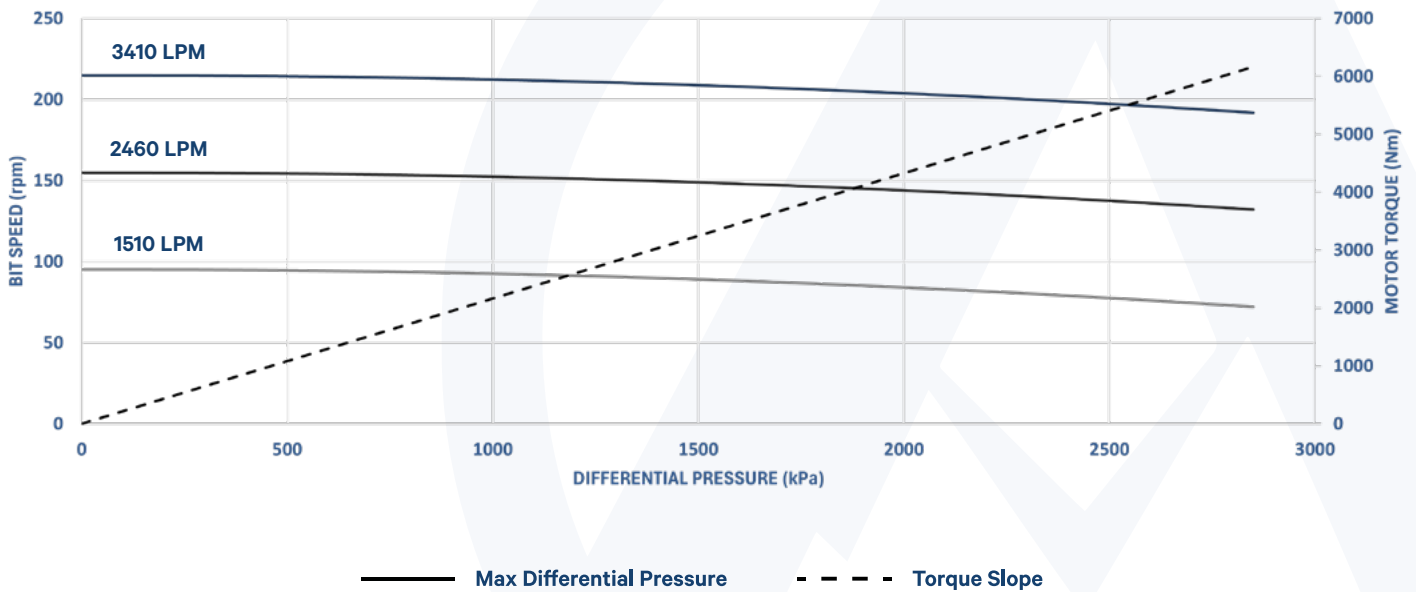
General Data				
	Metric		Imperial (US)	
Bit Sizes	251 - 311	mm	9.88 - 12.25	in
Nominal Length	6.5	m	13.8	ft
Operational Max WOB (with flow)**	311	kDaN	70,000	lbs
Max Bit Pull (with damage)*	222.4	kDaN	500,000	lbs
Max Body Pull (with damage)*	444.8	kDaN	1,000,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,510 - 3,410	litre/min	400 - 900	gpm
Speed Range	95 - 215	rpm	95 - 215	rpm
Rotation	0.063	rev/litre	0.240	rev/gal
Torque Slope	2.163	Nm/kPa	11,000	ft-lb/psi
Max Differential Pressure	2,850	kPa	410	psi
Max Torque	6,160	Nm	4,550	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

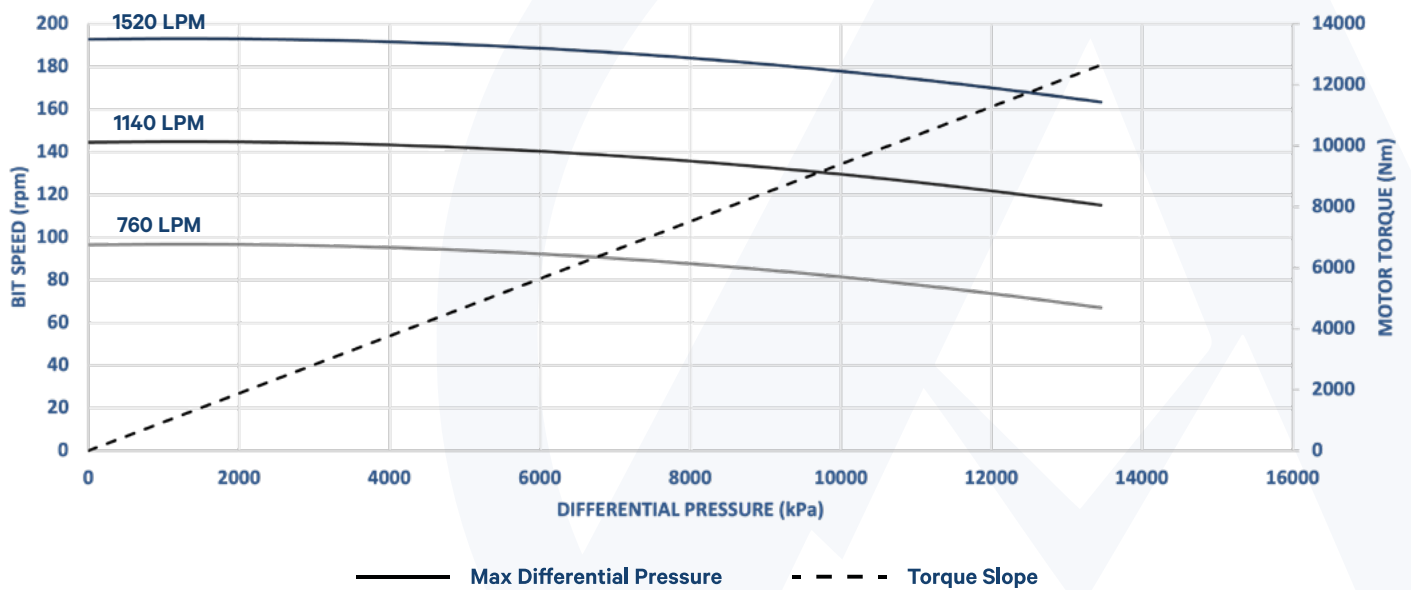
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,520	litre/min	200 - 400	gpm
Speed Range	96 - 193	rpm	96 - 193	rpm
Rotation	0.127	rev/litre	0.480	rev/gal
Torque Slope	0.940	Nm/kPa	4.780	ft-lb/psi
Max Differential Pressure	13,450	kPa	1,950	psi
Max Torque	12,640	Nm	9,330	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.15" CLAW 640 ERT

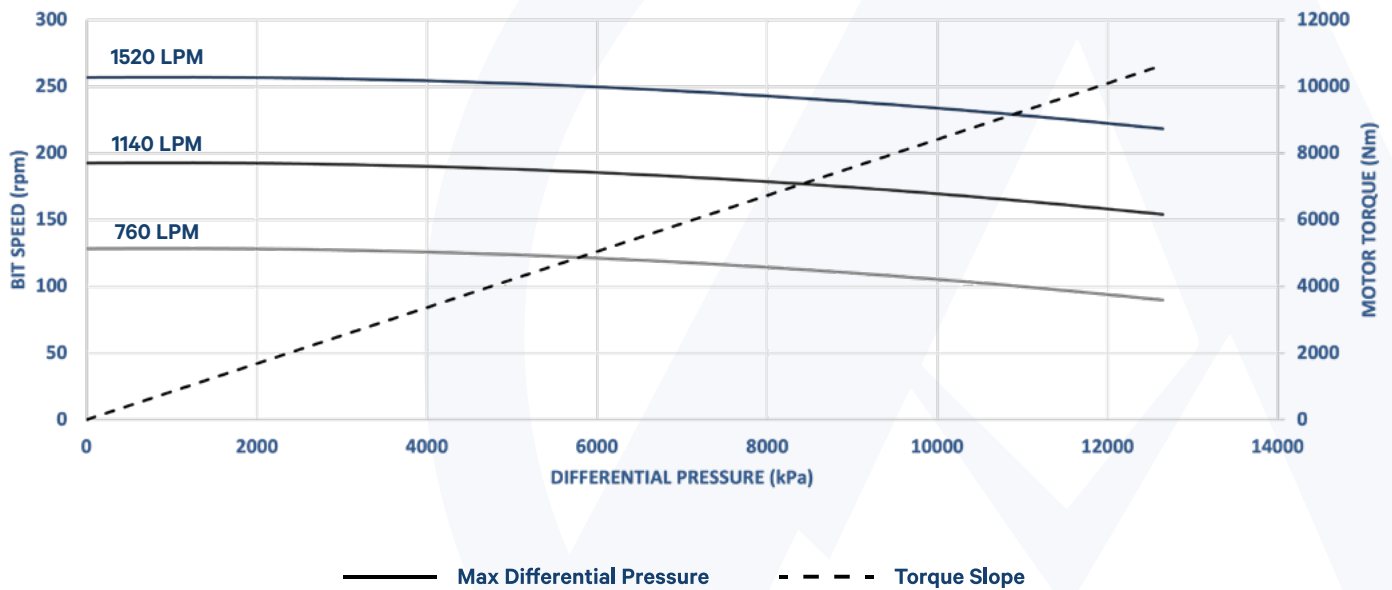
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.3	m	17.5	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,520	litre/min	200 - 400	gpm
Speed Range	128 - 257	rpm	128 - 257	rpm
Rotation	0.169	rev/litre	0.640	rev/gal
Torque Slope	0.841	Nm/kPa	4.280	ft-lb/psi
Max Differential Pressure	12,650	kPa	1,830	psi
Max Torque	10,640	Nm	7,850	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.15" CLAW 640

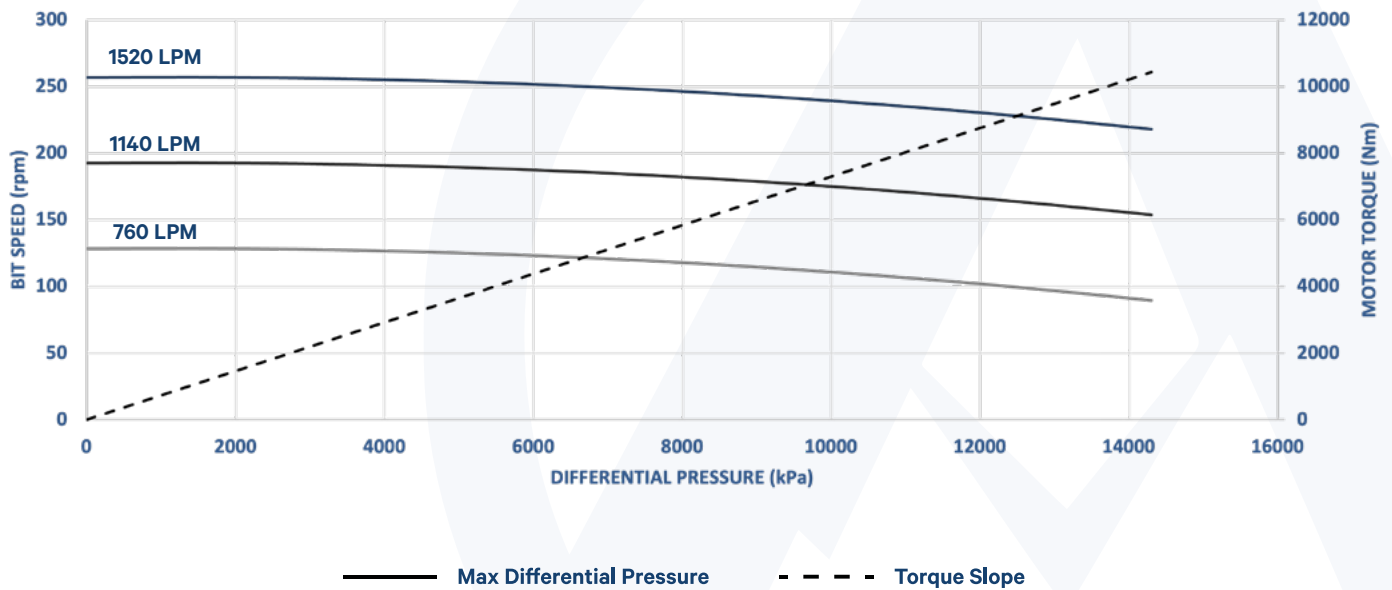
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,520	litre/min	200 - 400	gpm
Speed Range	128 - 257	rpm	128 - 257	rpm
Rotation	0.169	rev/litre	0.640	rev/gal
Torque Slope	0.730	Nm/kPa	3.710	ft-lb/psi
Max Differential Pressure	14,300	kPa	2,070	psi
Max Torque	10,440	Nm	7,700	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.15" CLAW 700

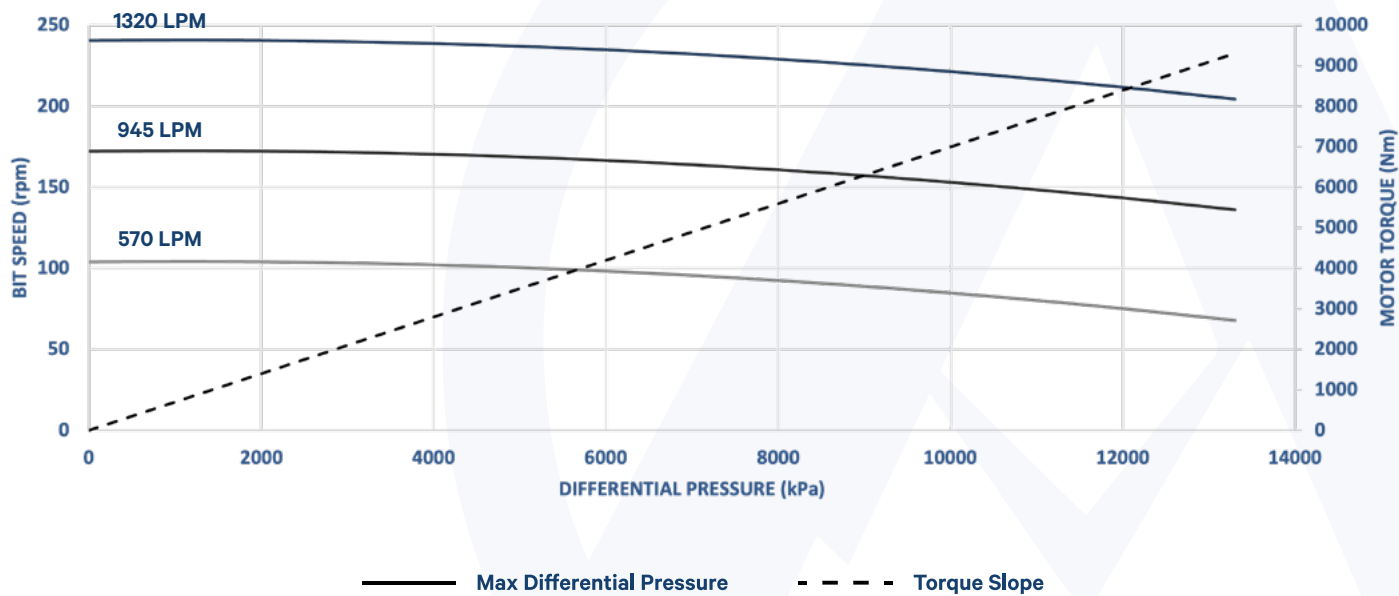
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.0	m	19.1	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	104 - 241	rpm	104 - 241	rpm
Rotation	0.182	rev/litre	0.700	rev/gal
Torque Slope	0.700	Nm/kPa	3.560	ft-lb/psi
Max Differential Pressure	13,300	kPa	1,930	psi
Max Torque	9,310	Nm	6,870	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.15" CLAW 750

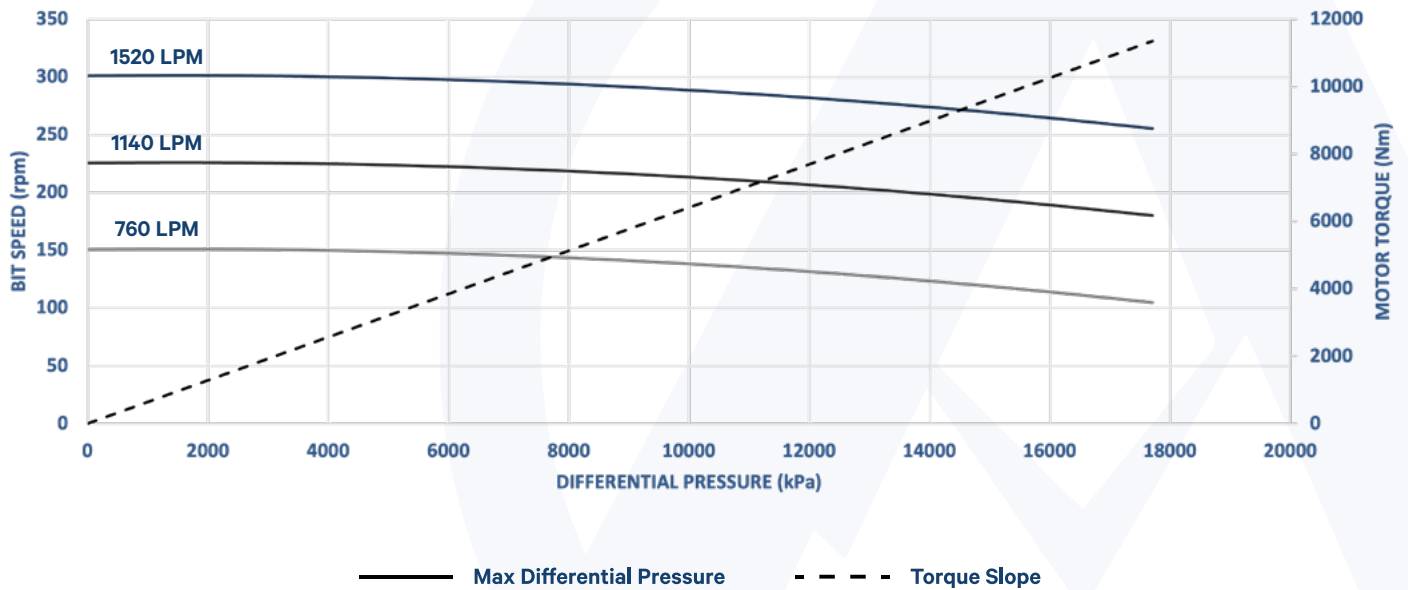
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,520	litre/min	200 - 400	gpm
Speed Range	151 - 301	rpm	151 - 301	rpm
Rotation	0.198	rev/litre	0.750	rev/gal
Torque Slope	0.641	Nm/kPa	3.260	ft-lb/psi
Max Differential Pressure	17,700	kPa	2,570	psi
Max Torque	11,350	Nm	8,370	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

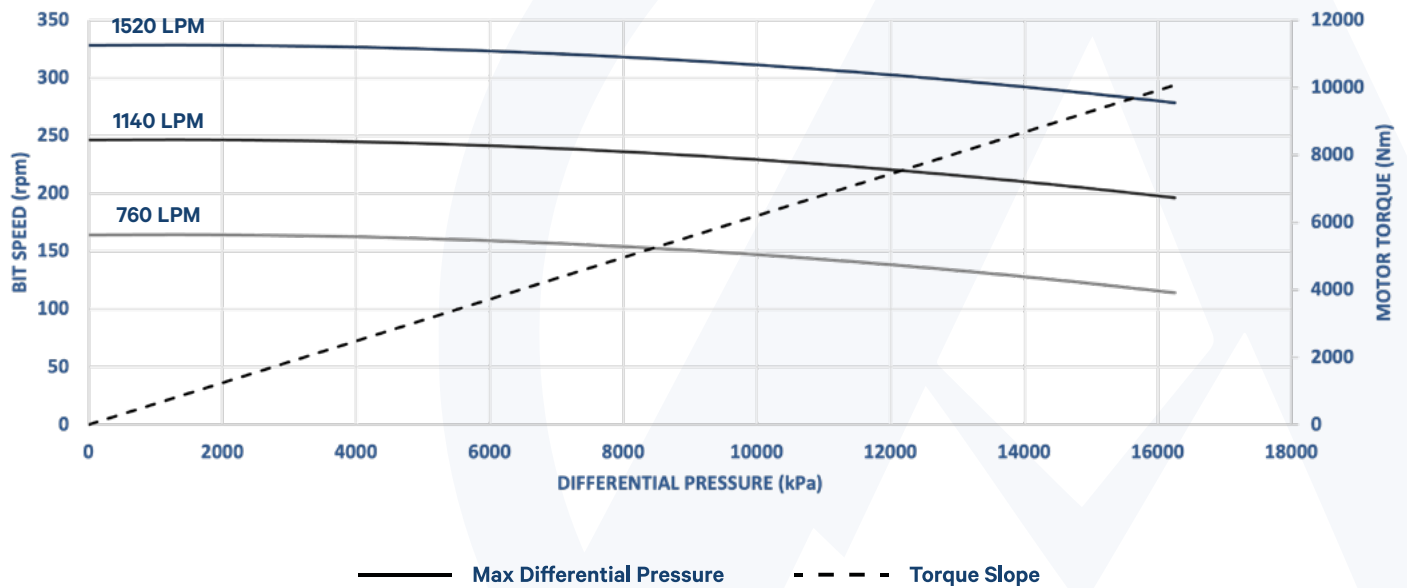
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.2	m	19.5	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,520	litre/min	200 - 400	gpm
Speed Range	164 - 328	rpm	164 - 328	rpm
Rotation	0.216	rev/litre	0.818	rev/gal
Torque Slope	0.620	Nm/kPa	3.150	ft-lb/psi
Max Differential Pressure	16,250	kPa	2,360	psi
Max Torque	10,070	Nm	7,430	ft-lb

### POWER SECTION PERFORMANCE CURVE\*\*\*



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# 5.15” CLAW 1000

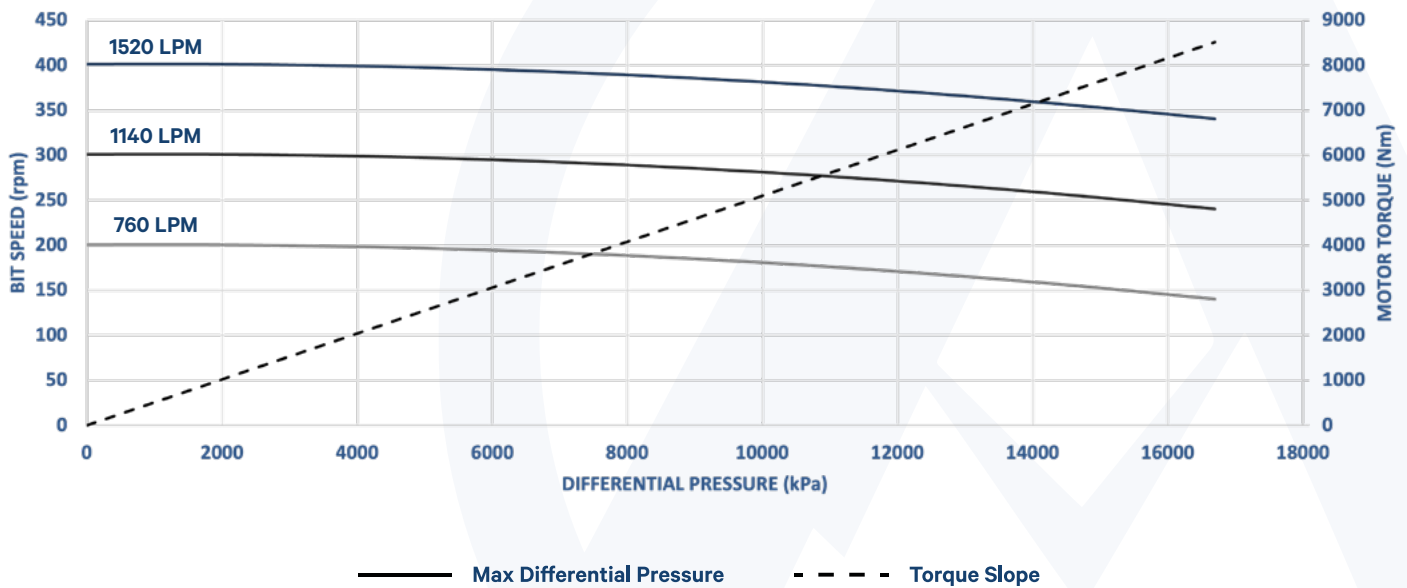
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,520	litre/min	200 - 400	gpm
Speed Range	201 - 401	rpm	201 - 401	rpm
Rotation	0.264	rev/litre	1.000	rev/gal
Torque Slope	0.510	Nm/kPa	2.590	ft-lb/psi
Max Differential Pressure	16,700	kPa	2,420	psi
Max Torque	8,520	Nm	6,280	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.25" CLAW 520

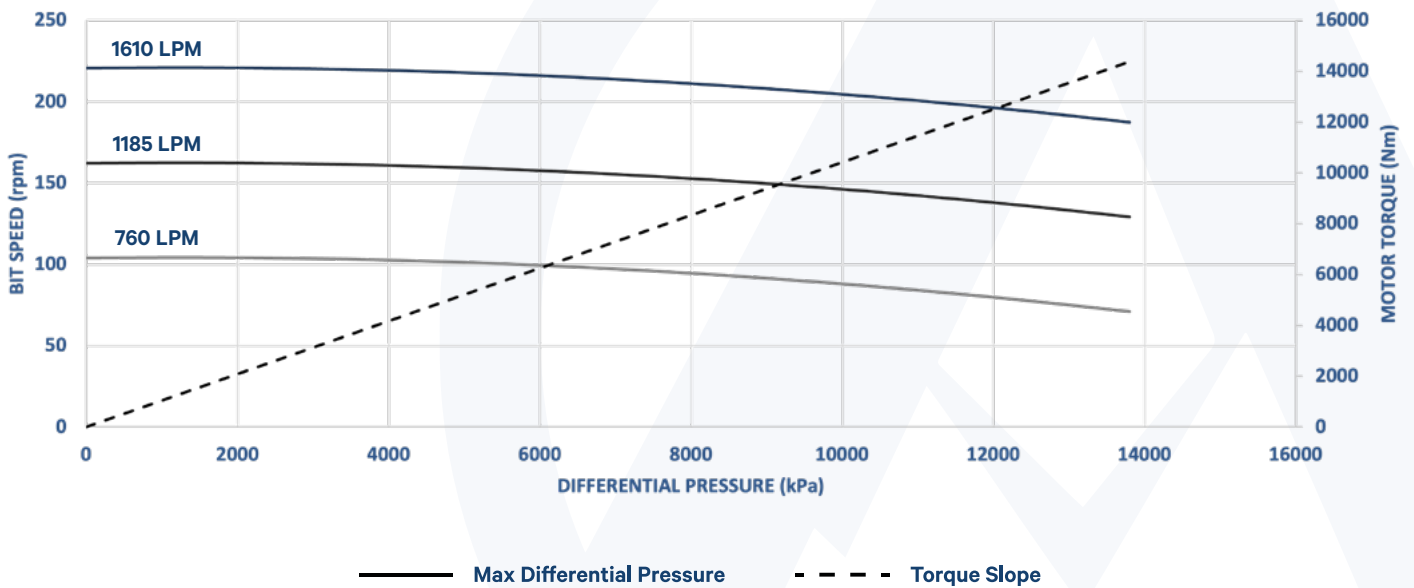
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,610	litre/min	200 - 430	gpm
Speed Range	104 - 221	rpm	104 - 221	rpm
Rotation	0.137	rev/litre	0.520	rev/gal
Torque Slope	1.042	Nm/kPa	5.300	ft-lb/psi
Max Differential Pressure	13,800	kPa	2,000	psi
Max Torque	14,380	Nm	10,610	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.25" CLAW 650

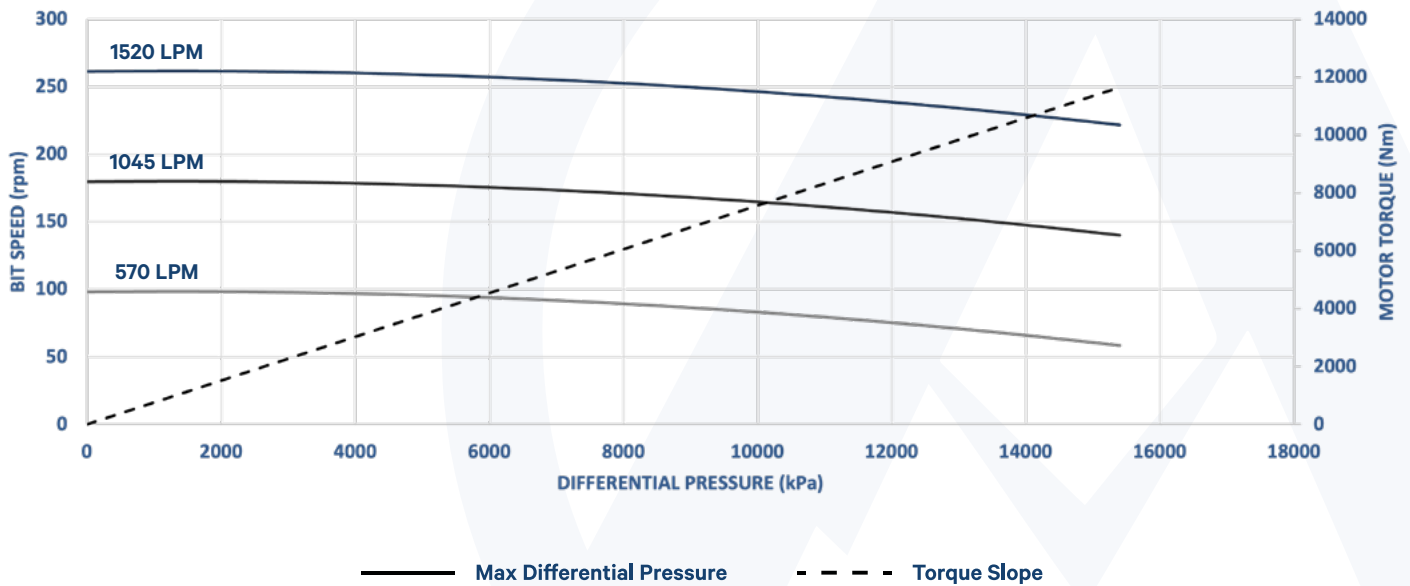
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,520	litre/min	150 - 400	gpm
Speed Range	98 - 261	rpm	98 - 261	rpm
Rotation	0.172	rev/litre	0.650	rev/gal
Torque Slope	0.757	Nm/kPa	3.850	ft-lb/psi
Max Differential Pressure	15,400	kPa	2,230	psi
Max Torque	11,650	Nm	8,600	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.62" CLAW 650

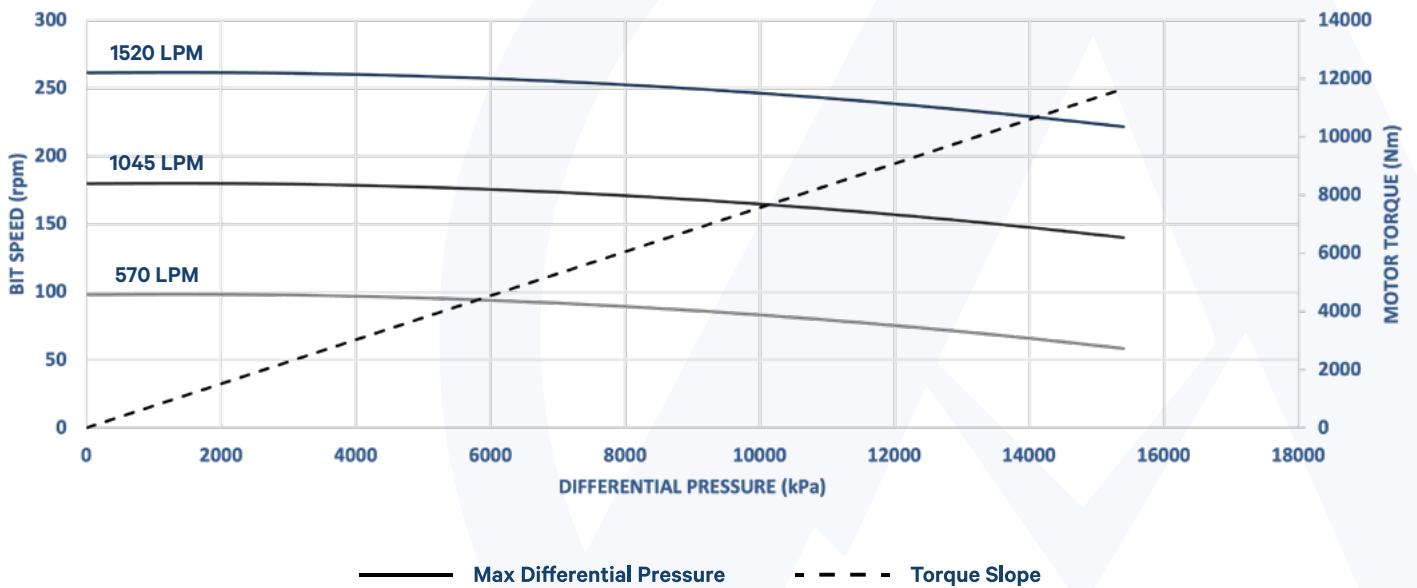
General Data				
	Metric		Imperial (US)	
Bit Sizes	165 - 200	mm	6.5 - 7.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	20.2	kDaN	45,500	lbs
Max Bit Pull (with damage)*	111.2	kDaN	250,000	lbs
Max Body Pull (with damage)*	222.4	kDaN	500,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,520	litre/min	150 - 400	gpm
Speed Range	98 - 261	rpm	98 - 261	rpm
Rotation	0.172	rev/litre	0.650	rev/gal
Torque Slope	0.757	Nm/kPa	3.850	ft-lb/psi
Max Differential Pressure	15,400	kPa	2,230	psi
Max Torque	11,650	Nm	8,600	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.60" CLAW 410

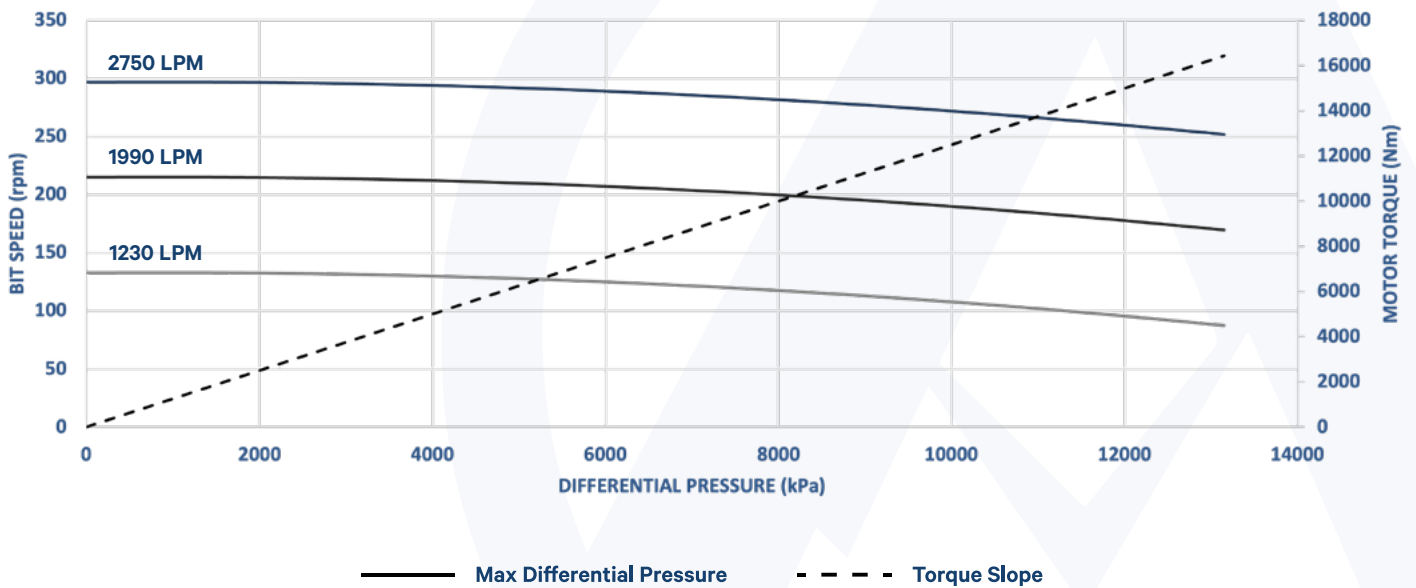
General Data				
	Metric		Imperial (US)	
Bit Sizes	200 - 251	mm	7.88 - 9.88	in
Nominal Length	9.6	m	20.2	ft
Operational Max WOB (with flow)**	22.9	kDaN	51,500	lbs
Max Bit Pull (with damage)*	144.6	kDaN	325,000	lbs
Max Body Pull (with damage)*	289.1	kDaN	650,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,230 - 2,750	litre/min	320 - 730	gpm
Speed Range	133 - 297	rpm	133 - 297	rpm
Rotation	0.108	rev/litre	0.410	rev/gal
Torque Slope	1.250	Nm/kPa	6.360	ft-lb/psi
Max Differential Pressure	13,150	kPa	1,910	psi
Max Torque	16,440	Nm	12,120	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 7.00" CLAW 250

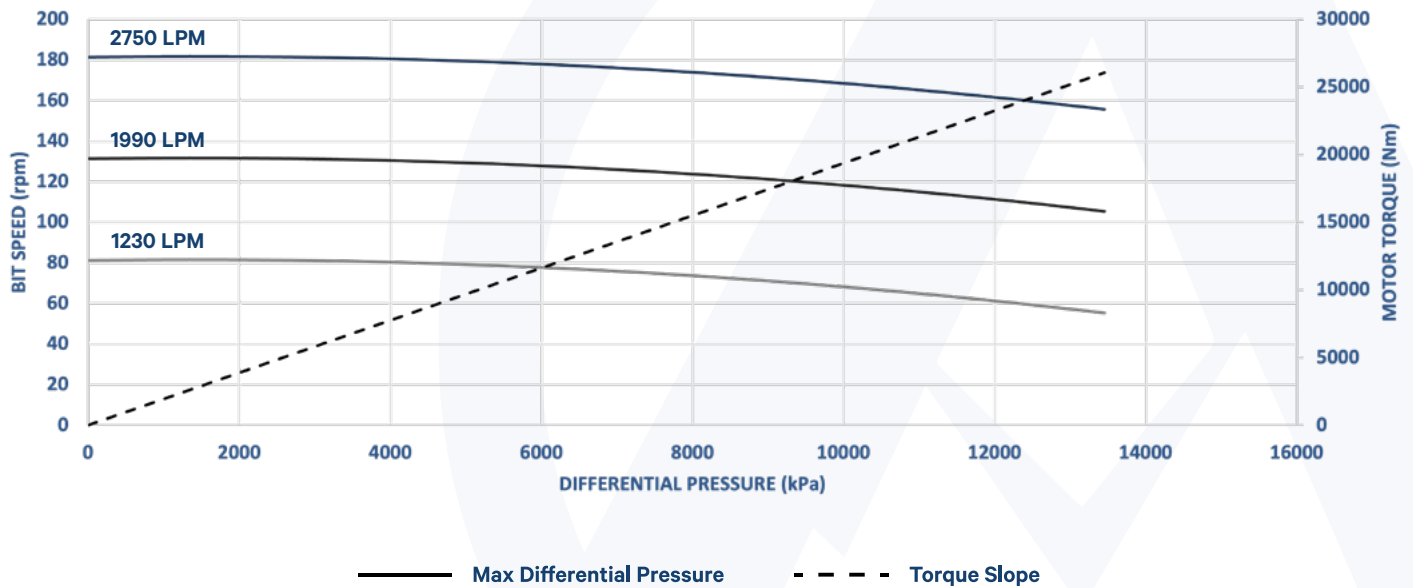
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	10.6	m	22.4	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,230 - 2,750	litre/min	320 - 730	gpm
Speed Range	81 - 182	rpm	81 - 182	rpm
Rotation	0.066	rev/litre	0.250	rev/gal
Torque Slope	1.937	Nm/kPa	9.850	ft-lb/psi
Max Differential Pressure	13,450	kPa	1,950	psi
Max Torque	26,060	Nm	19,220	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 7.00” CLAW 350

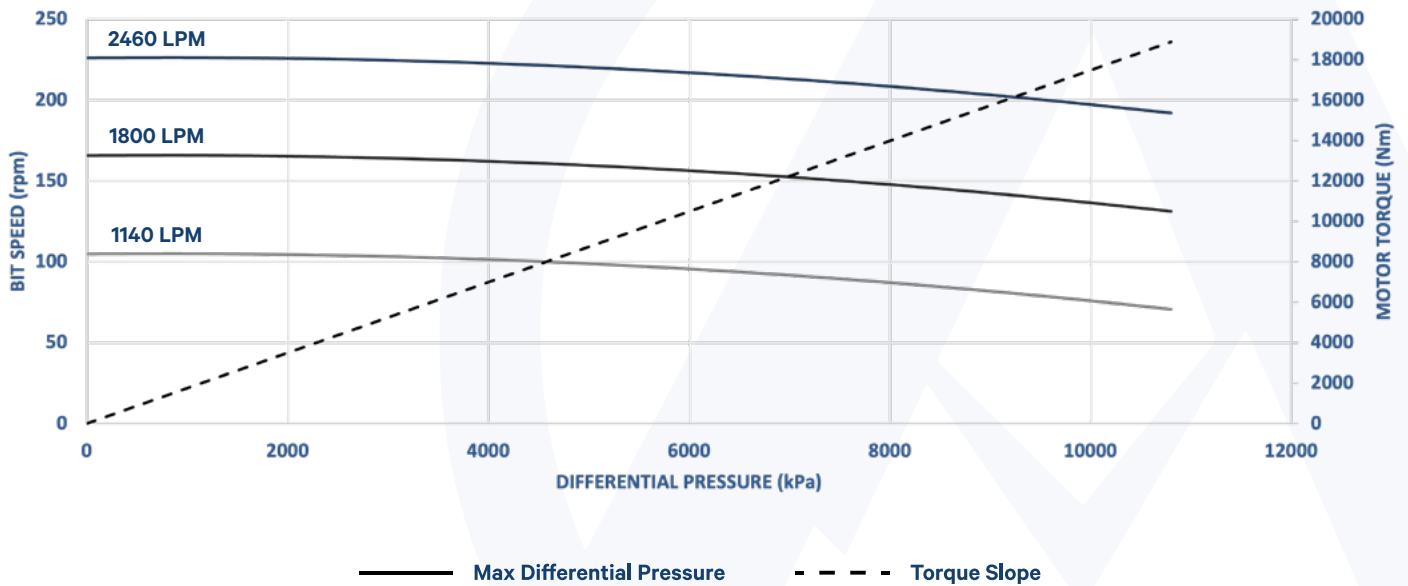
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	7.9	m	16.8	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,460	litre/min	300 - 650	gpm
Speed Range	105 - 226	rpm	105 - 226	rpm
Rotation	0.092	rev/litre	0.350	rev/gal
Torque Slope	1.748	Nm/kPa	8.890	ft-lb/psi
Max Differential Pressure	10,800	kPa	1,570	psi
Max Torque	18,880	Nm	13,930	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 7.00" CLAW 400

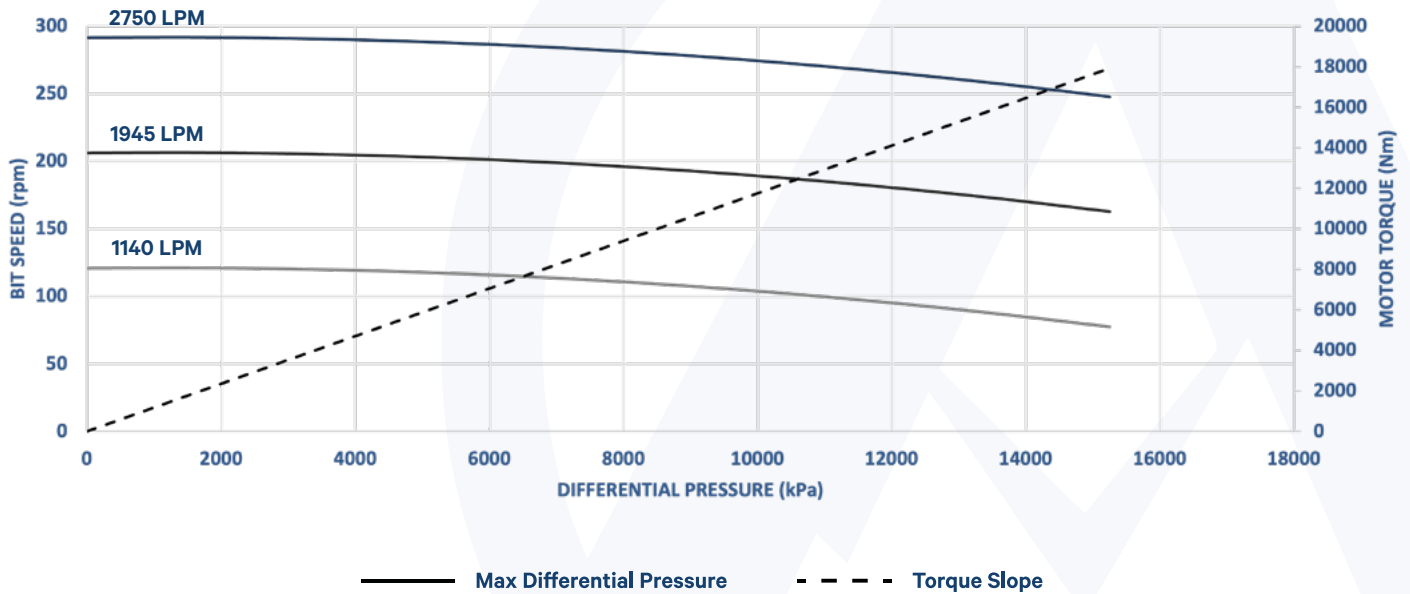
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	9.9	m	21.0	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,750	litre/min	300 - 730	gpm
Speed Range	121 - 292	rpm	121 - 292	rpm
Rotation	0.106	rev/litre	0.400	rev/gal
Torque Slope	1.176	Nm/kPa	5.980	ft-lb/psi
Max Differential Pressure	15,250	kPa	2,210	psi
Max Torque	17,930	Nm	13,220	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.



# 5.00” HUMMINGBIRD

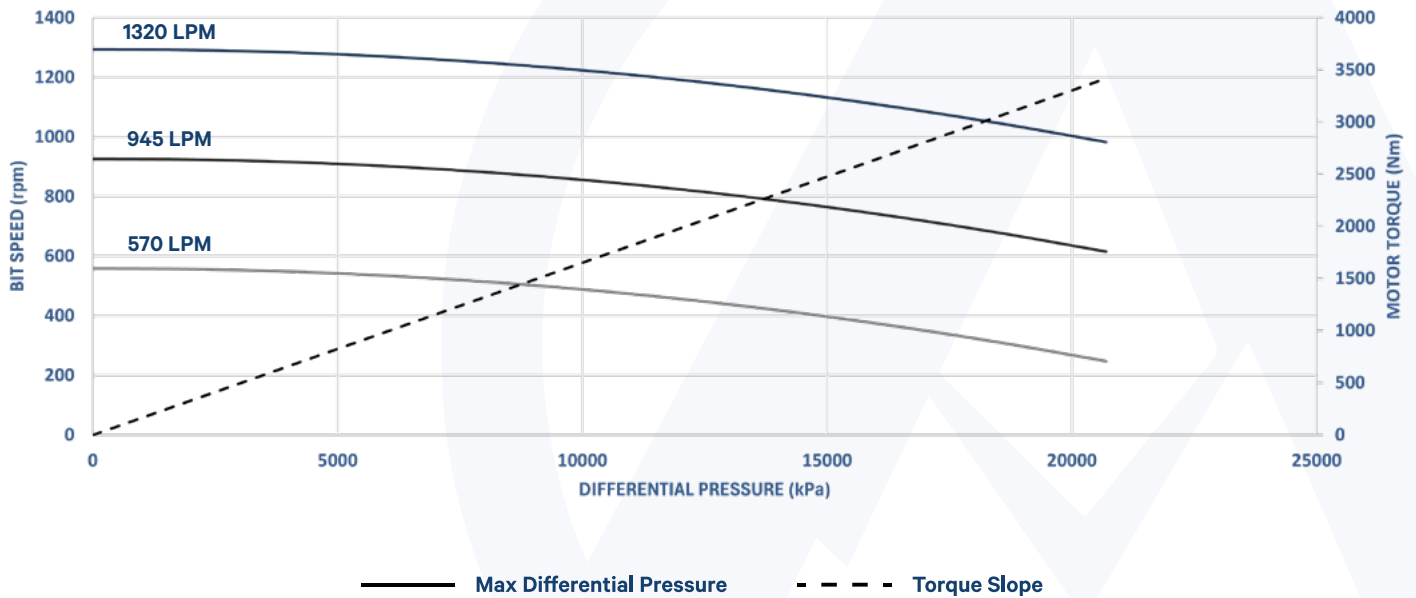
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.8	m	18.5	ft
Operational Max WOB (with flow)**	9.0	kDaN	20,250	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	559 - 1,294	rpm	559 - 1,294	rpm
Rotation	0.980	rev/litre	3.710	rev/gal
Torque Slope	0.165	Nm/kPa	0.840	ft-lb/psi
Max Differential Pressure	20,700	kPa	3,000	psi
Max Torque	3,420	Nm	2,520	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.50” HUMMINGBIRD

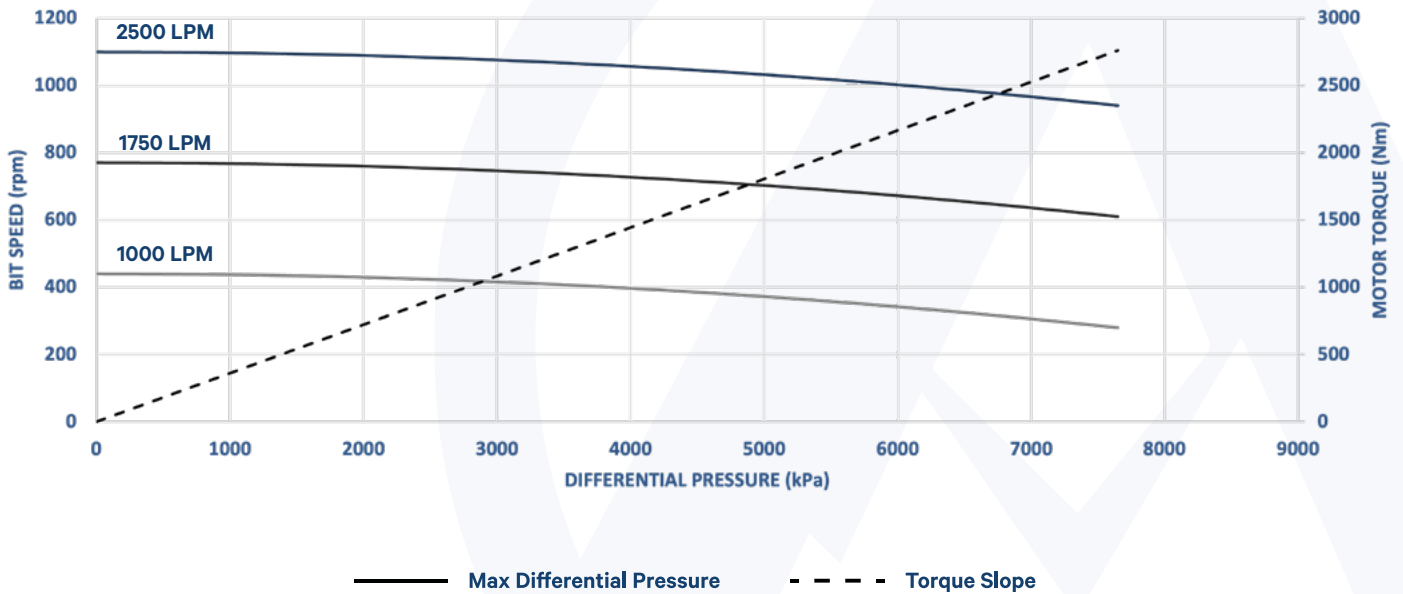
General Data				
	Metric		Imperial (US)	
Bit Sizes	200 - 251	mm	7.88 - 9.88	in
Nominal Length	7.7	m	16.3	ft
Operational Max WOB (with flow)**	22.9	kDaN	51,500	lbs
Max Bit Pull (with damage)*	144.6	kDaN	325,000	lbs
Max Body Pull (with damage)*	289.1	kDaN	650,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,000 - 2,500	litre/min	260 - 660	gpm
Speed Range	440 - 1,100	rpm	440 - 1,100	rpm
Rotation	0.440	rev/litre	1.666	rev/gal
Torque Slope	0.361	Nm/kPa	1.840	ft-lb/psi
Max Differential Pressure	7,650	kPa	1,110	psi
Max Torque	2,760	Nm	2,040	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 4/5 LOBE 6.3 STAGE

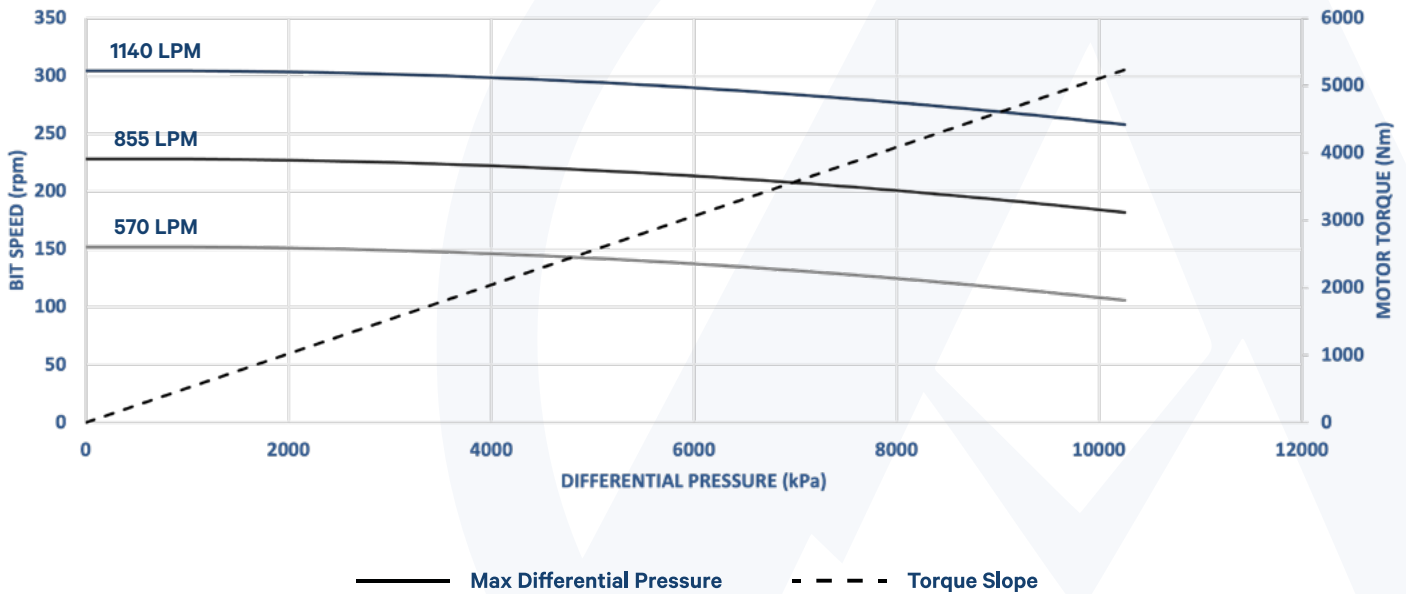
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	7.9	m	16.7	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	152 - 304	rpm	152 - 304	rpm
Rotation	0.267	rev/litre	1.011	rev/gal
Torque Slope	0.511	Nm/kPa	2.600	ft-lb/psi
Max Differential Pressure	10,250	kPa	1,490	psi
Max Torque	5,240	Nm	3,860	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00” 5/6 LOBE 6.7 STAGE

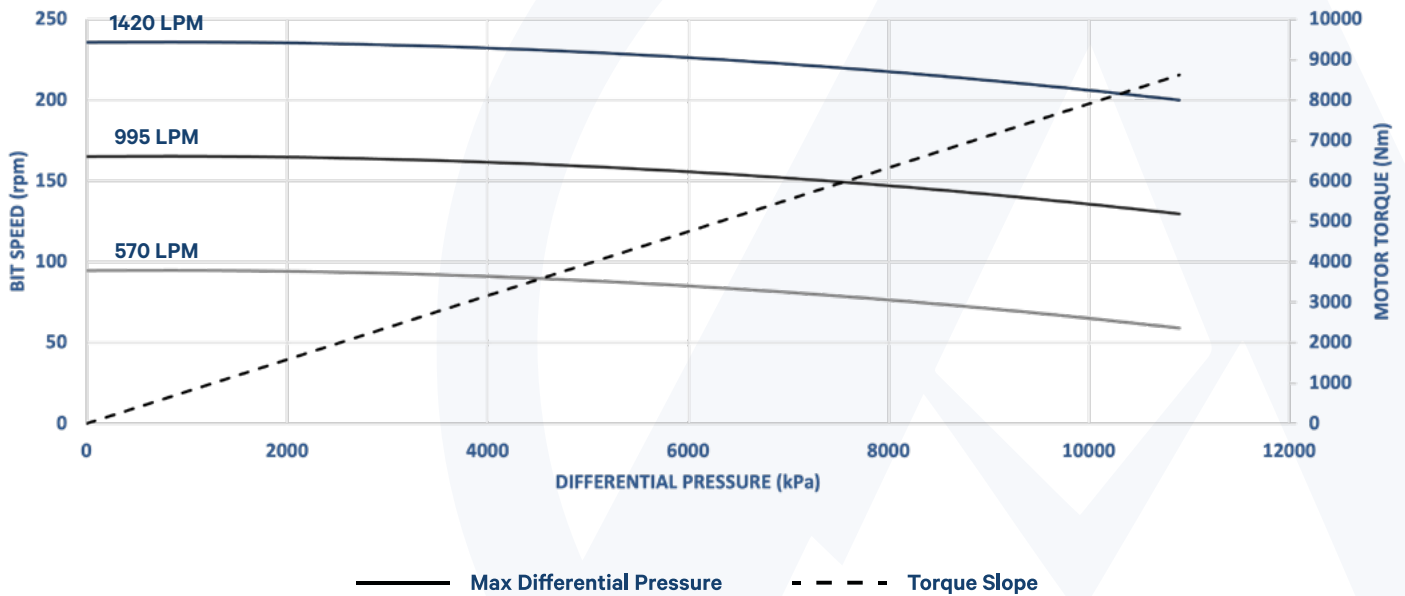
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.0	m	19.1	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,420	litre/min	150 - 370	gpm
Speed Range	95 - 236	rpm	95 - 236	rpm
Rotation	0.166	rev/litre	0.628	rev/gal
Torque Slope	0.791	Nm/kPa	4.020	ft-lb/psi
Max Differential Pressure	10,900	kPa	1,580	psi
Max Torque	8,620	Nm	6,360	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 5/6 LOBE 8.3 STAGE

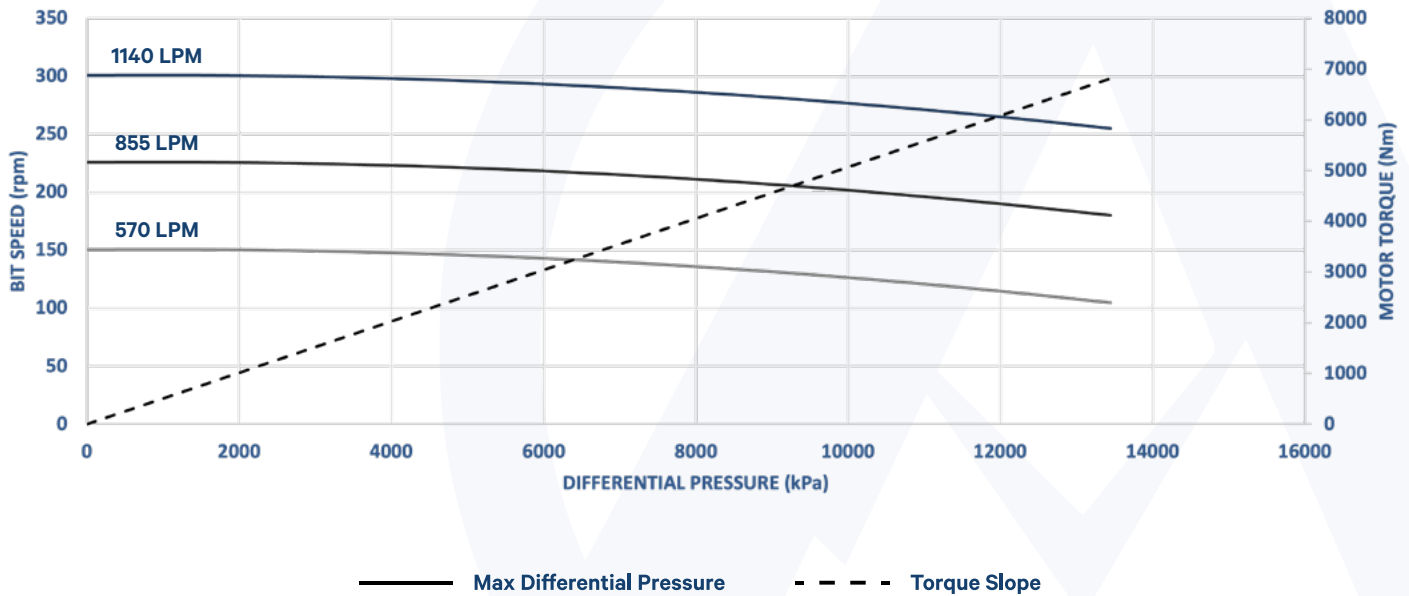
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.8	m	18.7	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	150 - 301	rpm	150 - 301	rpm
Rotation	0.264	rev/litre	1.000	rev/gal
Torque Slope	0.507	Nm/kPa	2.580	ft-lb/psi
Max Differential Pressure	13,450	kPa	1,950	psi
Max Torque	6,820	Nm	5,030	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 6/7 LOBE 7.0 STAGE

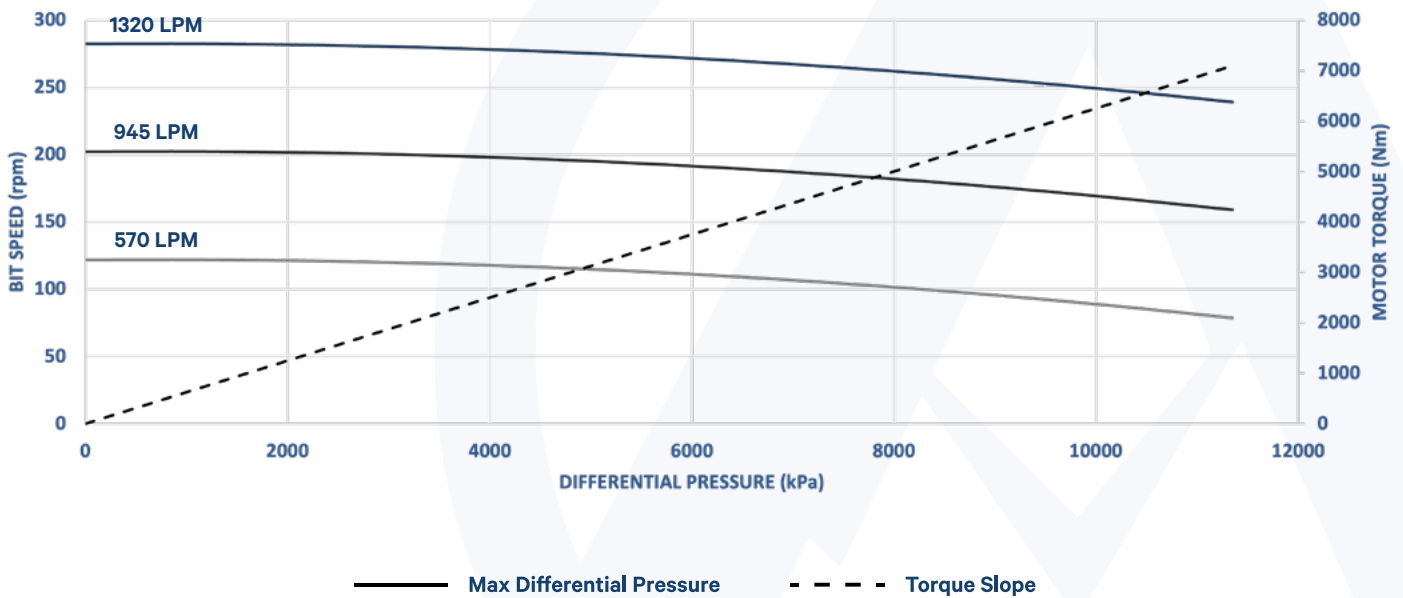
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.0	m	17.0	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	122 - 282	rpm	122 - 282	rpm
Rotation	0.214	rev/litre	0.810	rev/gal
Torque Slope	0.625	Nm/kPa	3.180	ft-lb/psi
Max Differential Pressure	11,350	kPa	1,650	psi
Max Torque	7,090	Nm	5,230	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 6/7 LOBE 8.0 STAGE

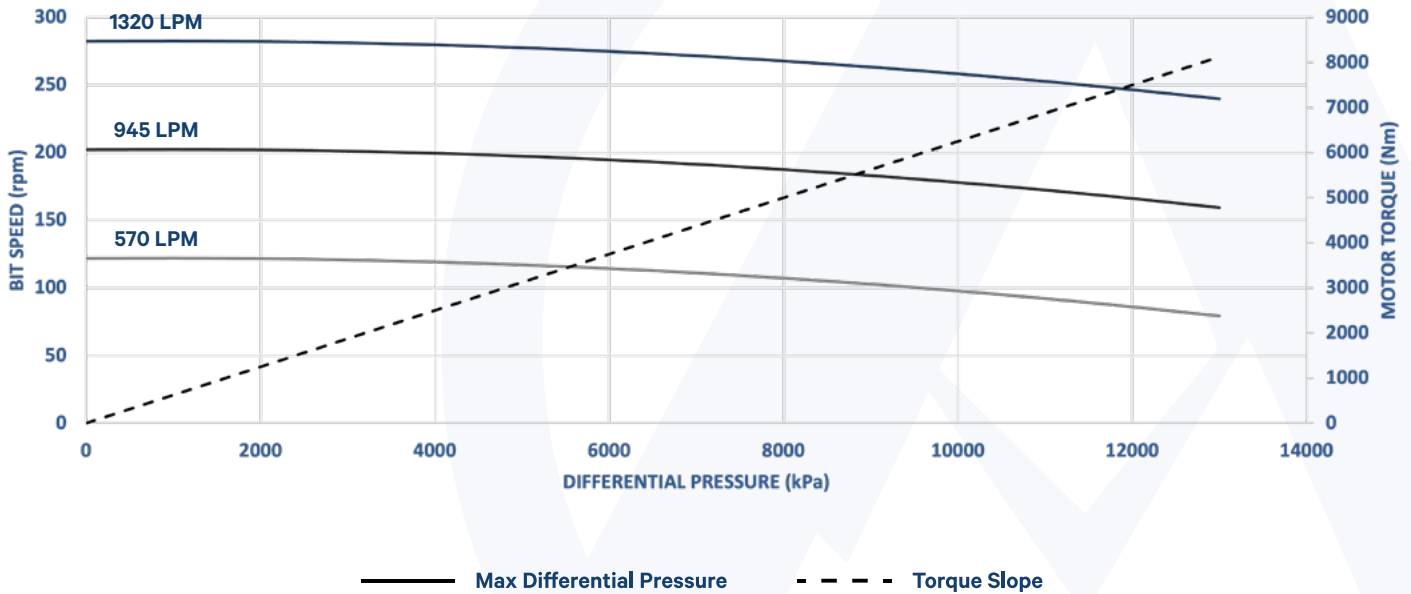
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.9	m	18.8	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	122 - 282	rpm	122 - 282	rpm
Rotation	0.214	rev/litre	0.810	rev/gal
Torque Slope	0.625	Nm/kPa	3.180	ft-lb/psi
Max Differential Pressure	13,000	kPa	1,890	psi
Max Torque	8,130	Nm	5,990	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00” 6/7 LOBE 11.7 STAGE

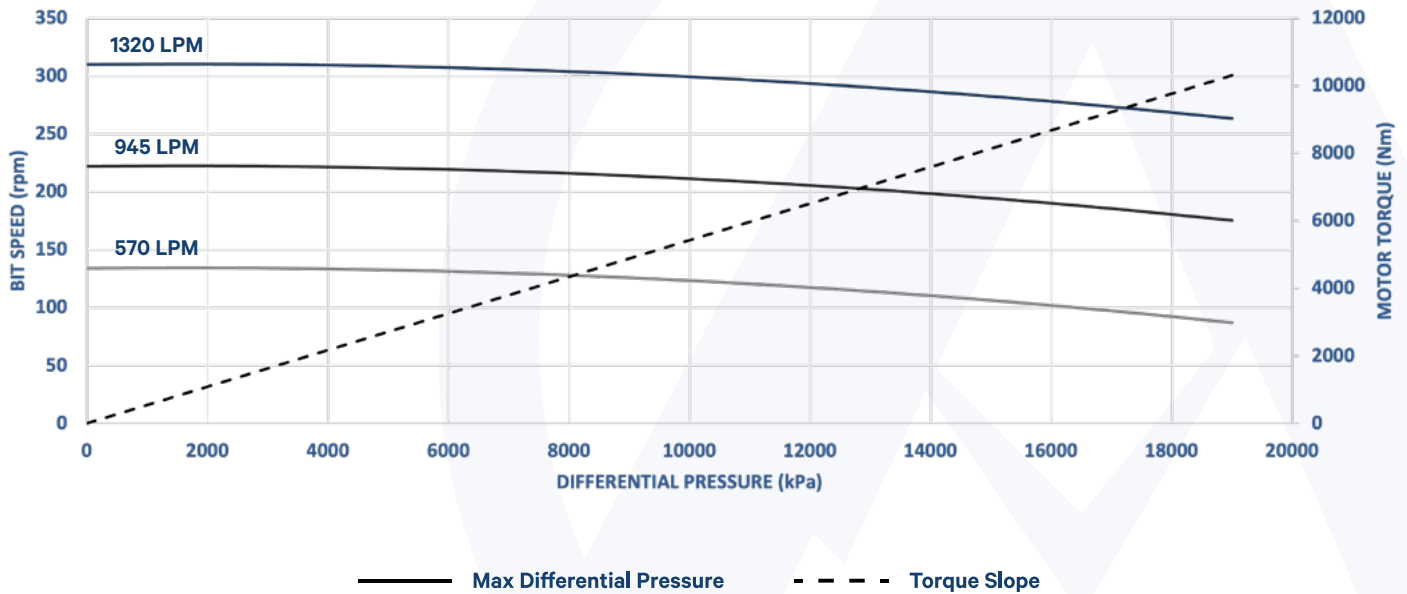
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.6	m	20.4	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	134 - 310	rpm	134 - 310	rpm
Rotation	0.235	rev/litre	0.890	rev/gal
Torque Slope	0.543	Nm/kPa	2.760	ft-lb/psi
Max Differential Pressure	19,000	kPa	2,760	psi
Max Torque	10,320	Nm	7,610	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.



# 5.00” 7/8 LOBE 2.6 STAGE

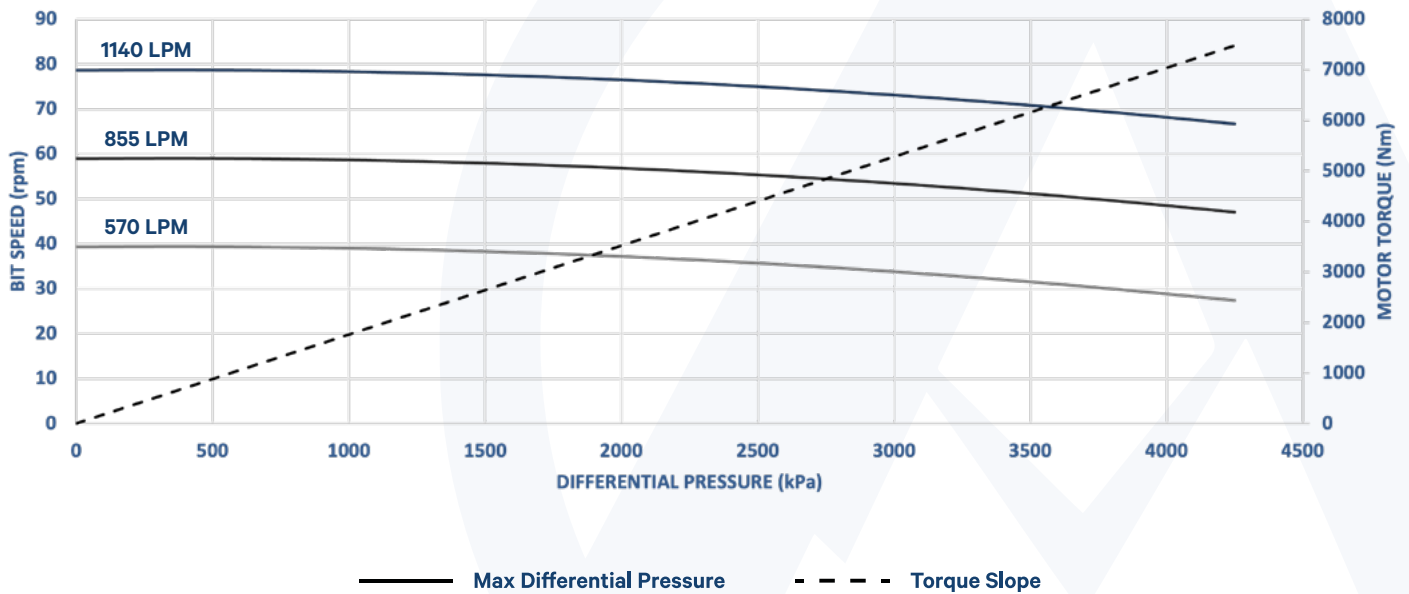
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.5	m	17.9	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	39 - 79	rpm	39 - 79	rpm
Rotation	0.069	rev/litre	0.261	rev/gal
Torque Slope	1.760	Nm/kPa	8.950	ft-lb/psi
Max Differential Pressure	4,250	kPa	620	psi
Max Torque	7,480	Nm	5,520	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 7/8 LOBE 3.7 STAGE

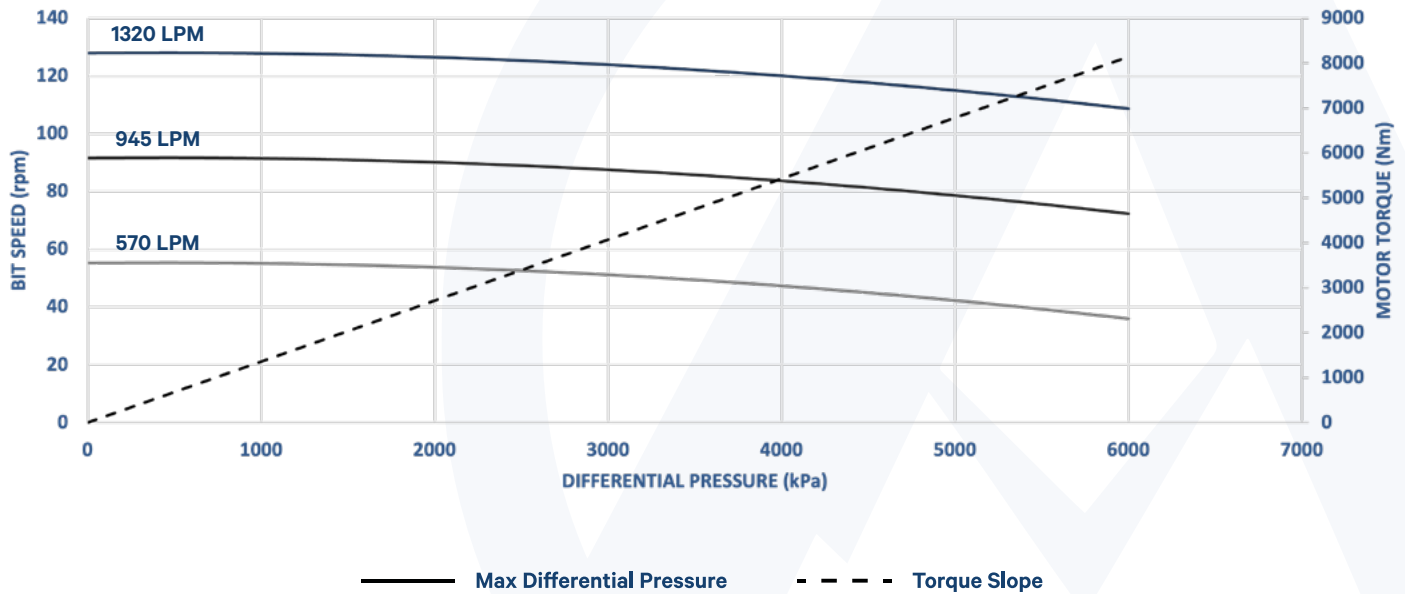
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.6	m	18.3	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,320	litre/min	150 - 350	gpm
Speed Range	55 - 128	rpm	55 - 128	rpm
Rotation	0.097	rev/litre	0.367	rev/gal
Torque Slope	1.357	Nm/kPa	6.900	ft-lb/psi
Max Differential Pressure	6,000	kPa	870	psi
Max Torque	8,140	Nm	6,010	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 7/8 LOBE 3.8 STAGE

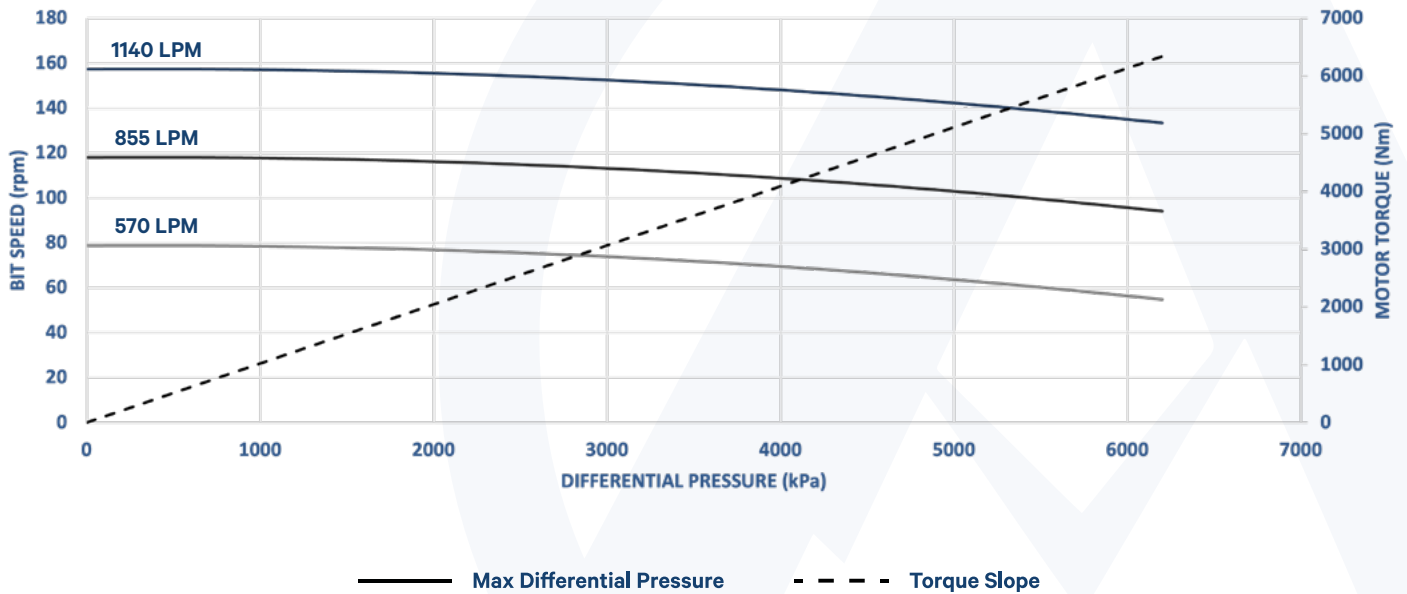
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	7.4	m	15.7	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	79 - 157	rpm	79 - 157	rpm
Rotation	0.138	rev/litre	0.522	rev/gal
Torque Slope	1.023	Nm/kPa	5.200	ft-lb/psi
Max Differential Pressure	6,200	kPa	900	psi
Max Torque	6,340	Nm	4,680	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 7/8 LOBE 5.7 STAGE

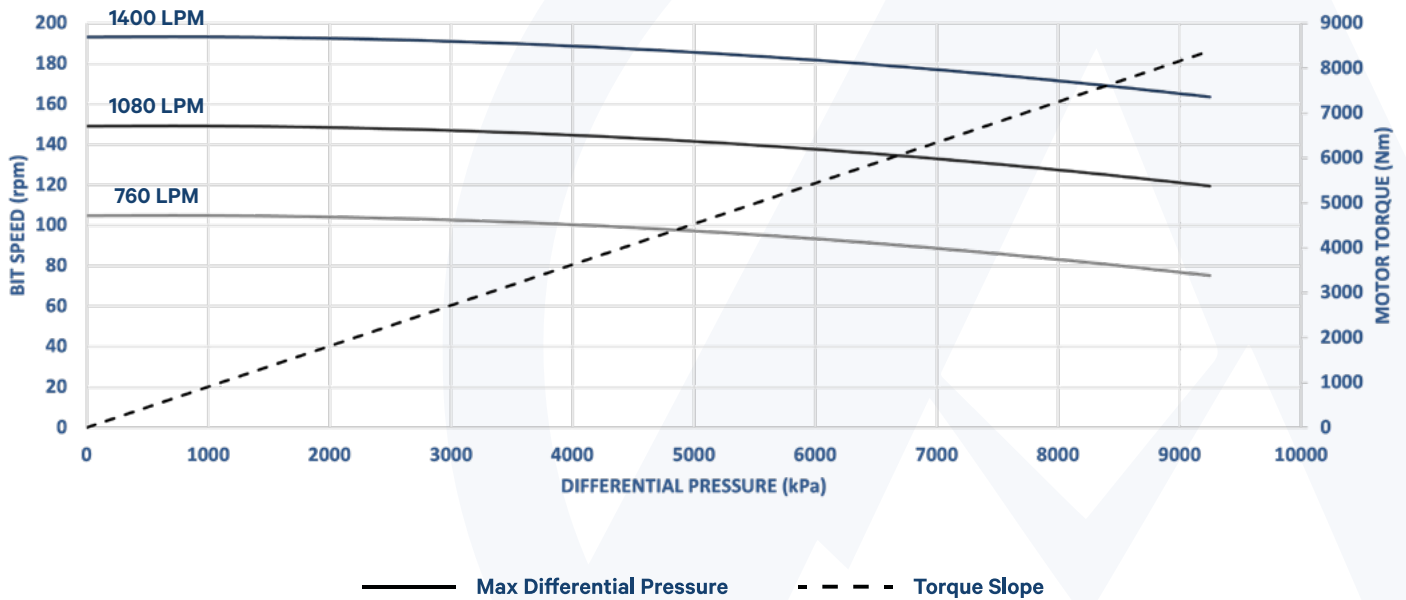
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.0	m	19.1	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,400	litre/min	200 - 370	gpm
Speed Range	105 - 193	rpm	105 - 193	rpm
Rotation	0.138	rev/litre	0.522	rev/gal
Torque Slope	0.907	Nm/kPa	4.610	ft-lb/psi
Max Differential Pressure	9,250	kPa	1,340	psi
Max Torque	8,390	Nm	6,190	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 7/8 LOBE 6.4 STAGE

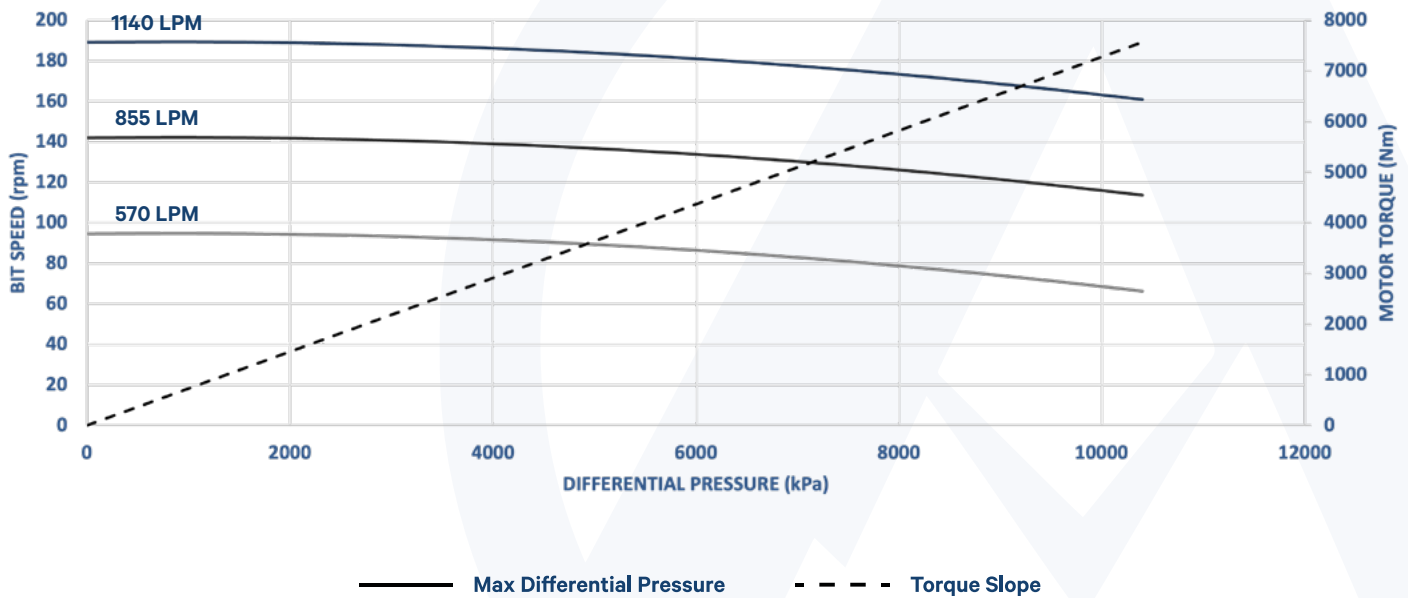
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.6	m	18.3	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	95 - 189	rpm	95 - 189	rpm
Rotation	0.166	rev/litre	0.628	rev/gal
Torque Slope	0.728	Nm/kPa	3.700	ft-lb/psi
Max Differential Pressure	10,400	kPa	1,510	psi
Max Torque	7,570	Nm	5,580	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 8/9 LOBE 6.0 STAGE

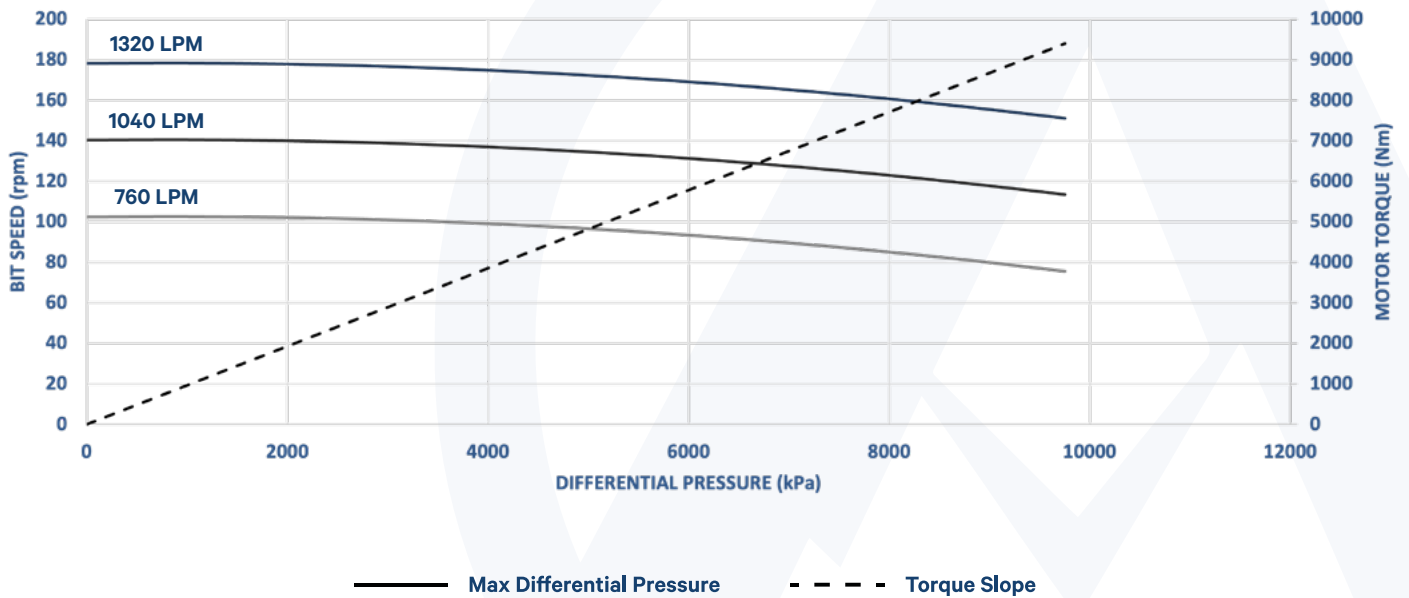
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	9.0	m	19.1	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,320	litre/min	200 - 350	gpm
Speed Range	103 - 178	rpm	103 - 178	rpm
Rotation	0.135	rev/litre	0.511	rev/gal
Torque Slope	0.964	Nm/kPa	4.900	ft-lb/psi
Max Differential Pressure	9,750	kPa	1,410	psi
Max Torque	9,400	Nm	6,930	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 5.00" 9/10 LOBE 2.1 STAGE

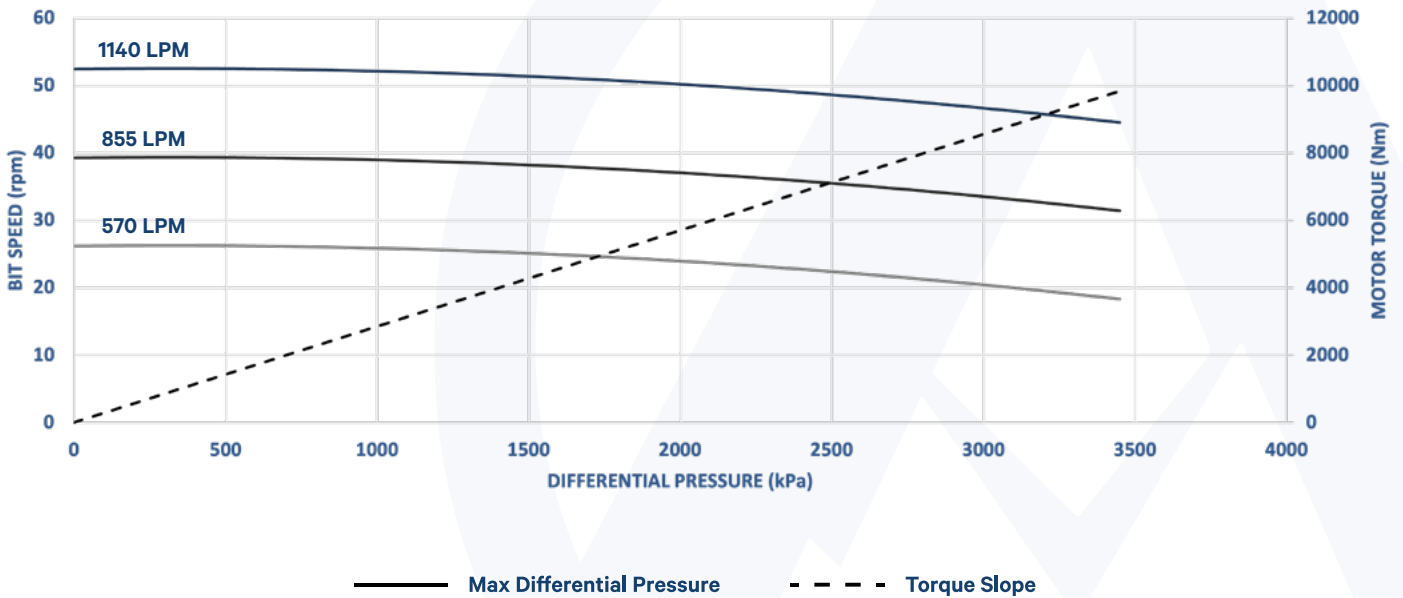
General Data				
	Metric		Imperial (US)	
Bit Sizes	152 - 175	mm	6 - 6.88	in
Nominal Length	8.6	m	18.3	ft
Operational Max WOB (with flow)**	13.6	kDaN	30,500	lbs
Max Bit Pull (with damage)*	89.0	kDaN	200,000	lbs
Max Body Pull (with damage)*	189.0	kDaN	425,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	570 - 1,140	litre/min	150 - 300	gpm
Speed Range	26 - 52	rpm	26 - 52	rpm
Rotation	0.046	rev/litre	0.174	rev/gal
Torque Slope	2.851	Nm/kPa	14.500	ft-lb/psi
Max Differential Pressure	3,450	kPa	500	psi
Max Torque	9,840	Nm	7,250	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.50” 6/7 Lobe 5.0 Stage

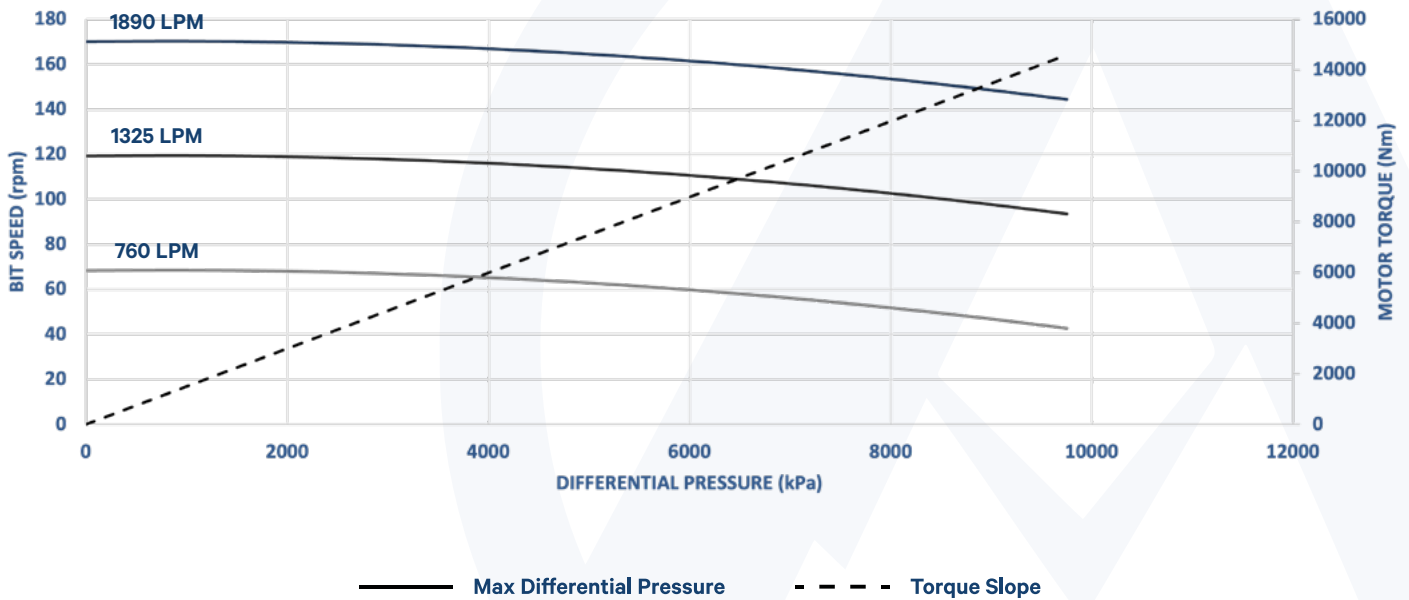
General Data				
	Metric		Imperial (US)	
Bit Sizes	200 - 251	mm	7.88 - 9.88	in
Nominal Length	8.1	m	17.2	ft
Operational Max WOB (with flow)**	22.9	kDaN	51,500	lbs
Max Bit Pull (with damage)*	144.6	kDaN	325,000	lbs
Max Body Pull (with damage)*	289.1	kDaN	650,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,890	litre/min	200 - 500	gpm
Speed Range	68 - 170	rpm	68 - 170	rpm
Rotation	0.090	rev/litre	0.341	rev/gal
Torque Slope	1.497	Nm/kPa	7.610	ft-lb/psi
Max Differential Pressure	9,750	kPa	1,410	psi
Max Torque	14,600	Nm	10,770	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.



# 6.50" 7/8 LOBE 4.8 STAGE

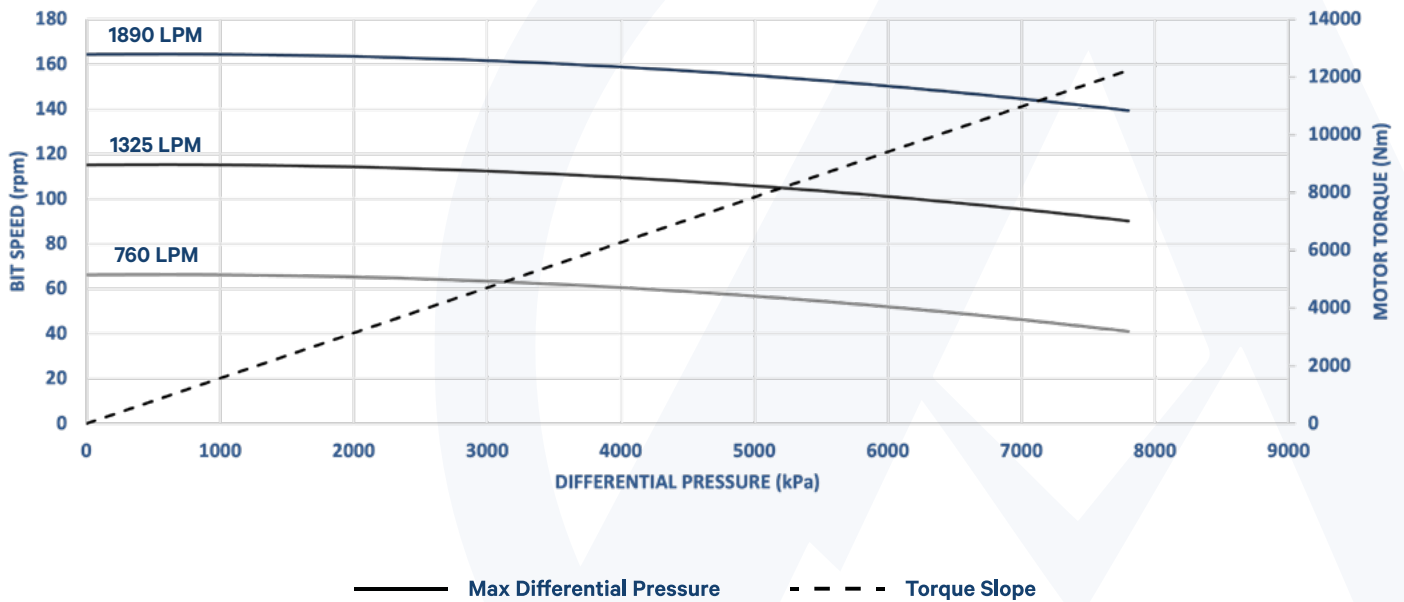
General Data				
	Metric		Imperial (US)	
Bit Sizes	200 - 251	mm	7.88 - 9.88	in
Nominal Length	8.1	m	17.2	ft
Operational Max WOB (with flow)**	22.9	kDaN	51,500	lbs
Max Bit Pull (with damage)*	144.6	kDaN	325,000	lbs
Max Body Pull (with damage)*	289.1	kDaN	650,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	760 - 1,890	litre/min	200 - 500	gpm
Speed Range	66 - 164	rpm	66 - 164	rpm
Rotation	0.087	rev/litre	0.329	rev/gal
Torque Slope	1.569	Nm/kPa	7.980	ft-lb/psi
Max Differential Pressure	7,800	kPa	1,130	psi
Max Torque	12,240	Nm	9,030	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.75" 4/5 LOBE 7.0 STAGE

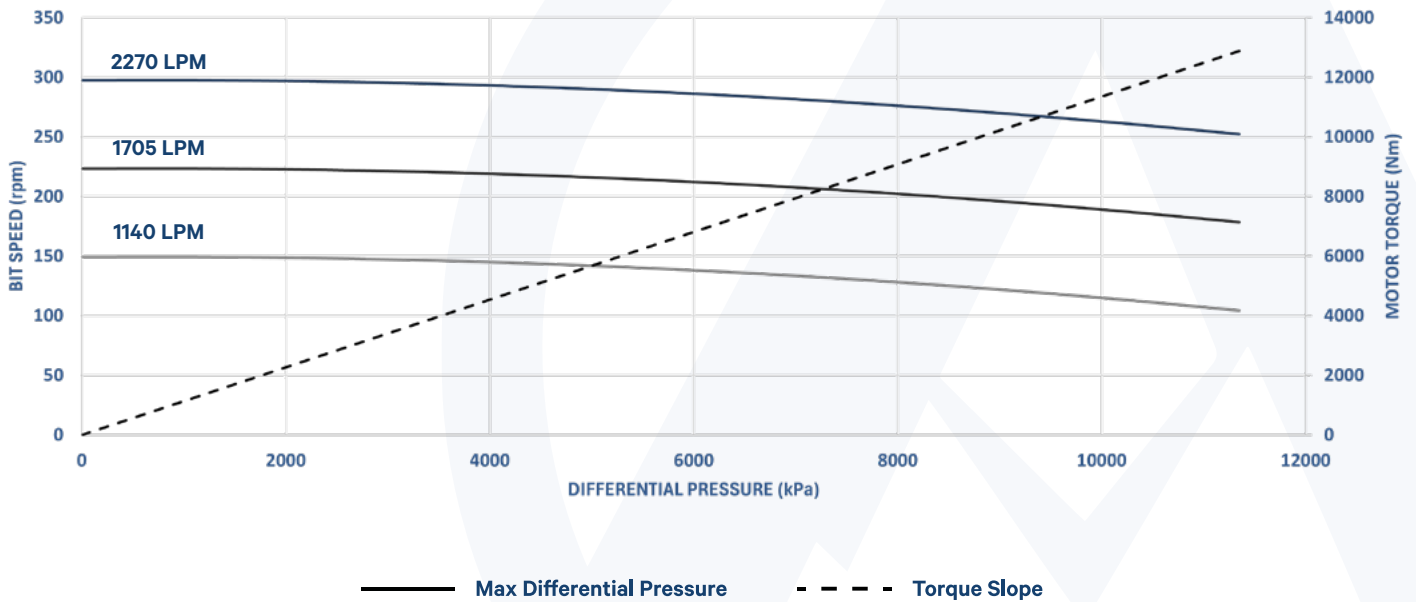
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	8.3	m	17.6	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	149 - 297	rpm	149 - 297	rpm
Rotation	0.131	rev/litre	0.496	rev/gal
Torque Slope	1.135	Nm/kPa	5.770	ft-lb/psi
Max Differential Pressure	11,350	kPa	1,650	psi
Max Torque	12,880	Nm	9,500	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.75" 7/8 LOBE 3.0 STAGE (SLOW)

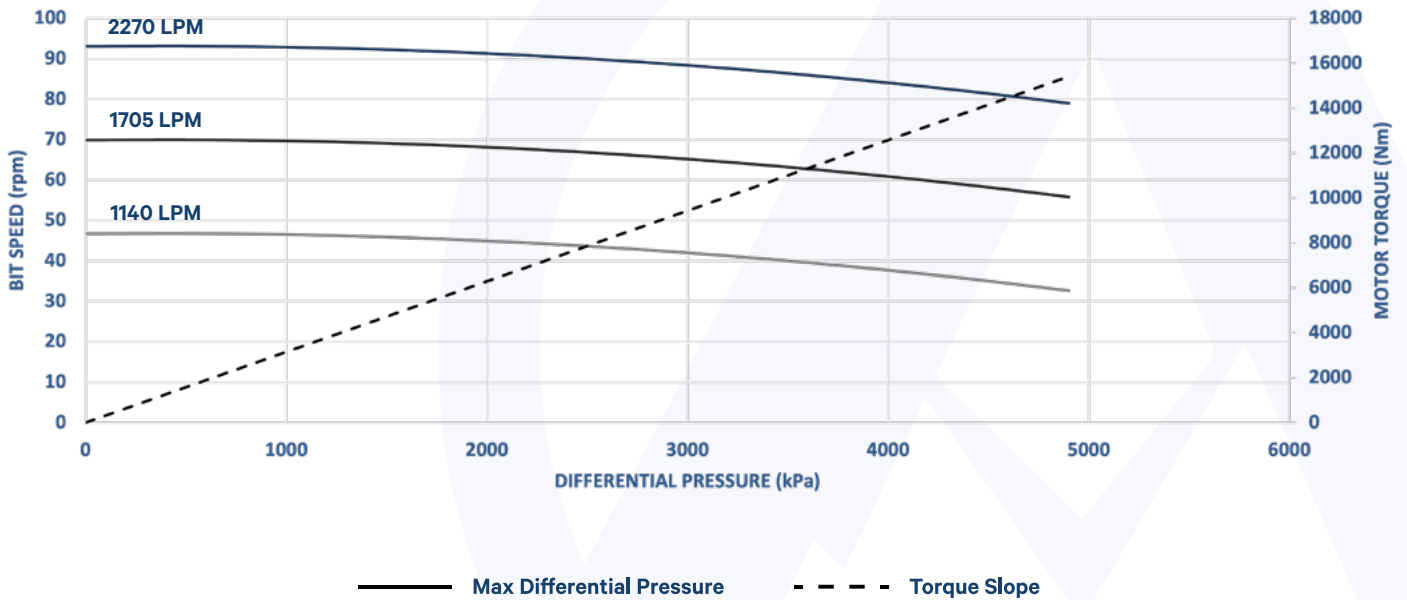
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	8.1	m	17.2	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	47 - 93	rpm	47 - 93	rpm
Rotation	0.041	rev/litre	0.155	rev/gal
Torque Slope	3,146	Nm/kPa	16,000	ft-lb/psi
Max Differential Pressure	4,900	kPa	710	psi
Max Torque	15,420	Nm	11,370	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.75" 7/8 LOBE 5.0 STAGE

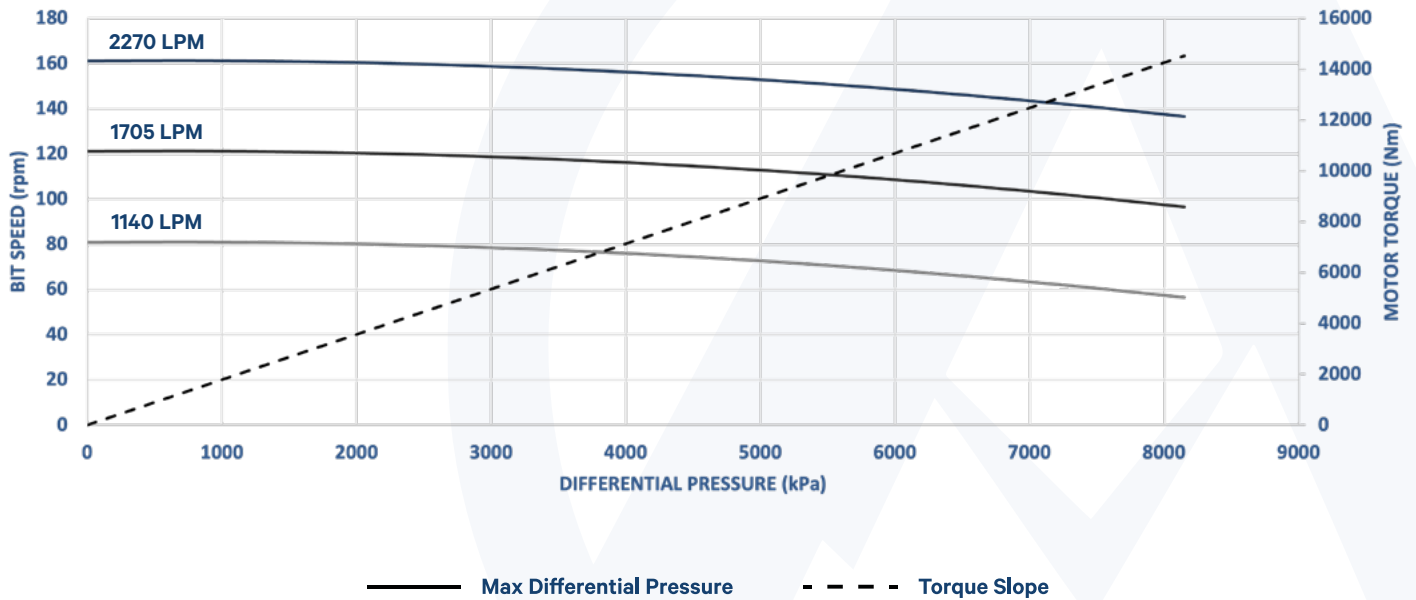
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	7.9	m	16.7	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	81 - 161	rpm	81 - 161	rpm
Rotation	0.071	rev/litre	0.269	rev/gal
Torque Slope	1.782	Nm/kPa	9.060	ft-lb/psi
Max Differential Pressure	8,150	kPa	1,180	psi
Max Torque	14,520	Nm	10,710	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.75" 7/8 LOBE 5.7 STAGE

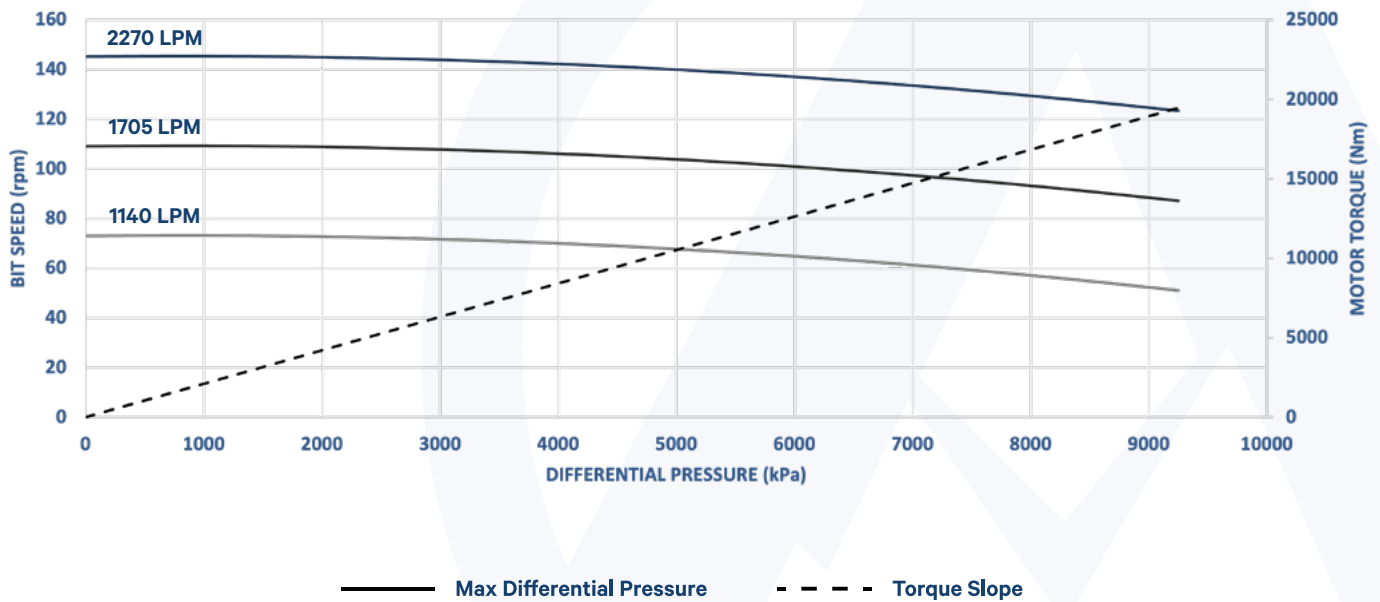
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	9.6	m	20.2	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	73 - 145	rpm	73 - 145	rpm
Rotation	0.064	rev/litre	0.242	rev/gal
Torque Slope	2.104	Nm/kPa	10.700	ft-lb/psi
Max Differential Pressure	9,250	kPa	1,340	psi
Max Torque	19,460	Nm	14,350	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.75" 7/8 LOBE 6.0 STAGE

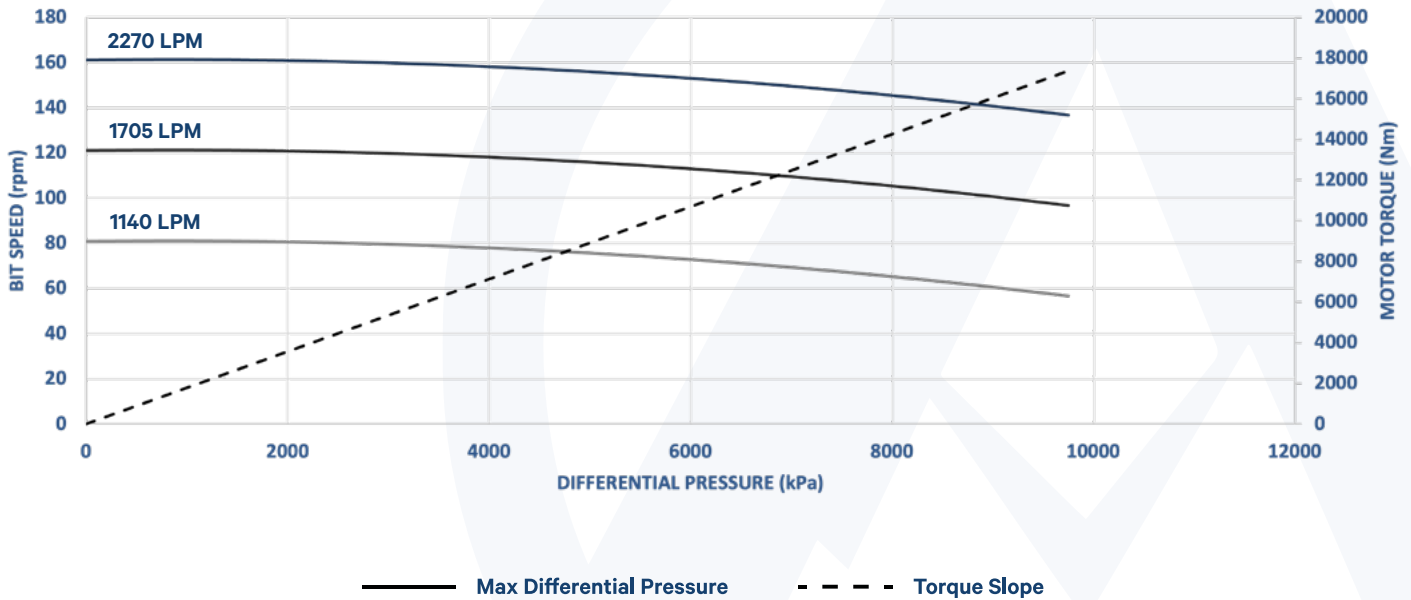
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	8.9	m	18.7	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	81 - 161	rpm	81 - 161	rpm
Rotation	0.071	rev/litre	0.269	rev/gal
Torque Slope	1.782	Nm/kPa	9.060	ft-lb/psi
Max Differential Pressure	9,750	kPa	1,410	psi
Max Torque	17,370	Nm	12,810	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 6.75" 7/8 LOBE 6.4 STAGE

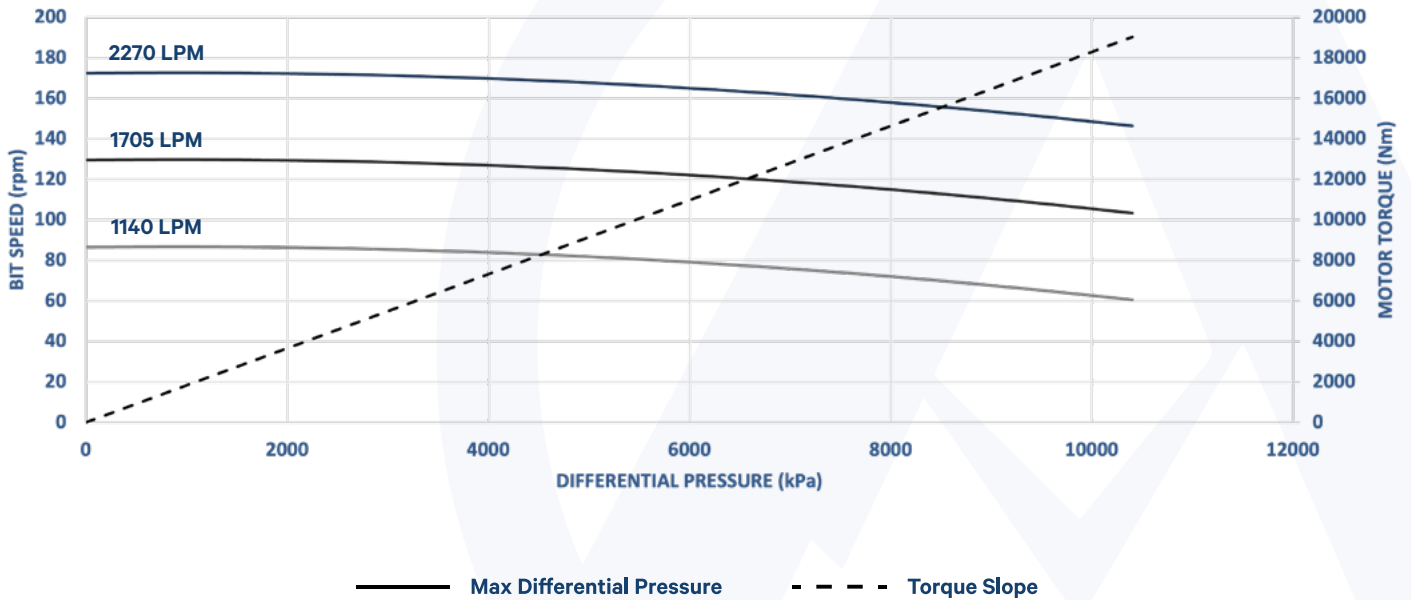
General Data				
	Metric		Imperial (US)	
Bit Sizes	216 - 270	mm	8.5 - 10.63	in
Nominal Length	9.2	m	19.4	ft
Operational Max WOB (with flow)**	26.9	kDaN	60,500	lbs
Max Bit Pull (with damage)*	177.9	kDaN	400,000	lbs
Max Body Pull (with damage)*	355.9	kDaN	800,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,140 - 2,270	litre/min	300 - 600	gpm
Speed Range	87 - 173	rpm	87 - 173	rpm
Rotation	0.076	rev/litre	0.288	rev/gal
Torque Slope	1.829	Nm/kPa	9.300	ft-lb/psi
Max Differential Pressure	10,400	kPa	1,510	psi
Max Torque	19,020	Nm	14,030	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 8.00” 7/8 LOBE 3.0 STAGE

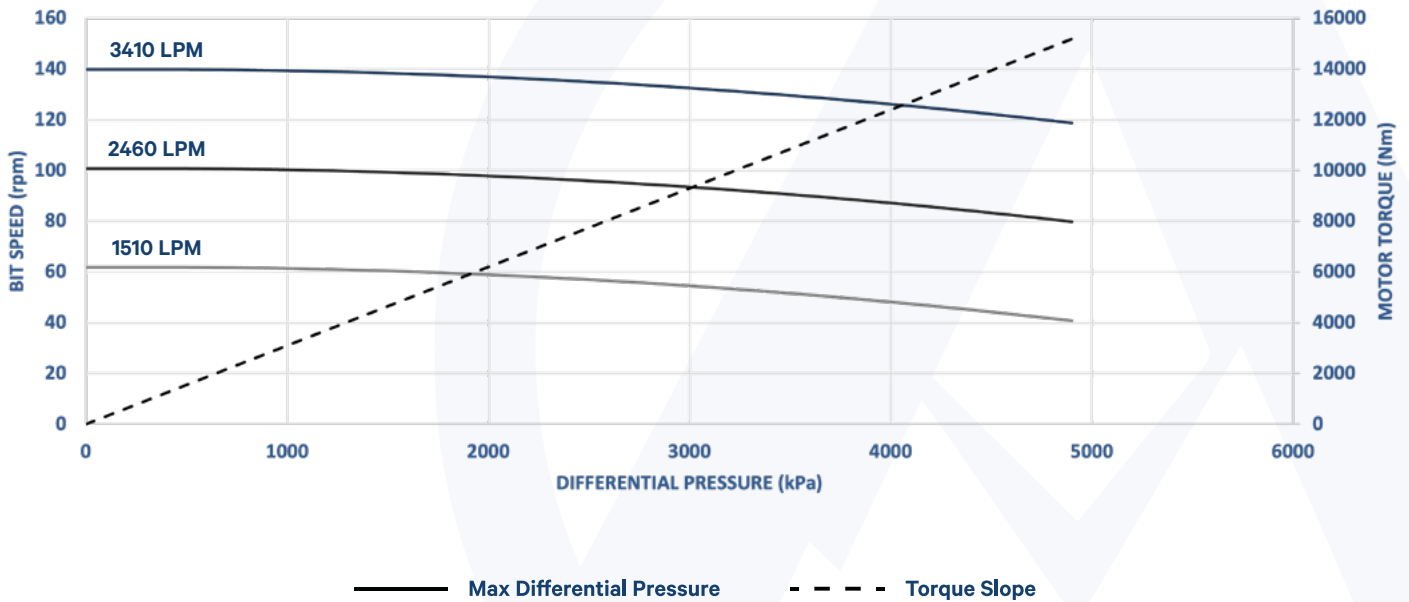
General Data				
	Metric		Imperial (US)	
Bit Sizes	251 - 311	mm	9.88 - 12.25	in
Nominal Length	7.2	m	15.3	ft
Operational Max WOB (with flow)**	311	kDaN	70,000	lbs
Max Bit Pull (with damage)*	222.4	kDaN	500,000	lbs
Max Body Pull (with damage)*	444.8	kDaN	1,000,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,510 - 3,410	litre/min	400 - 900	gpm
Speed Range	62 - 140	rpm	62 - 140	rpm
Rotation	0.041	rev/litre	0.155	rev/gal
Torque Slope	3.101	Nm/kPa	15.770	ft-lb/psi
Max Differential Pressure	4,900	kPa	710	psi
Max Torque	15,190	Nm	11,210	ft-lb

POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.



# 8.00” 7/8 LOBE 4.0 STAGE

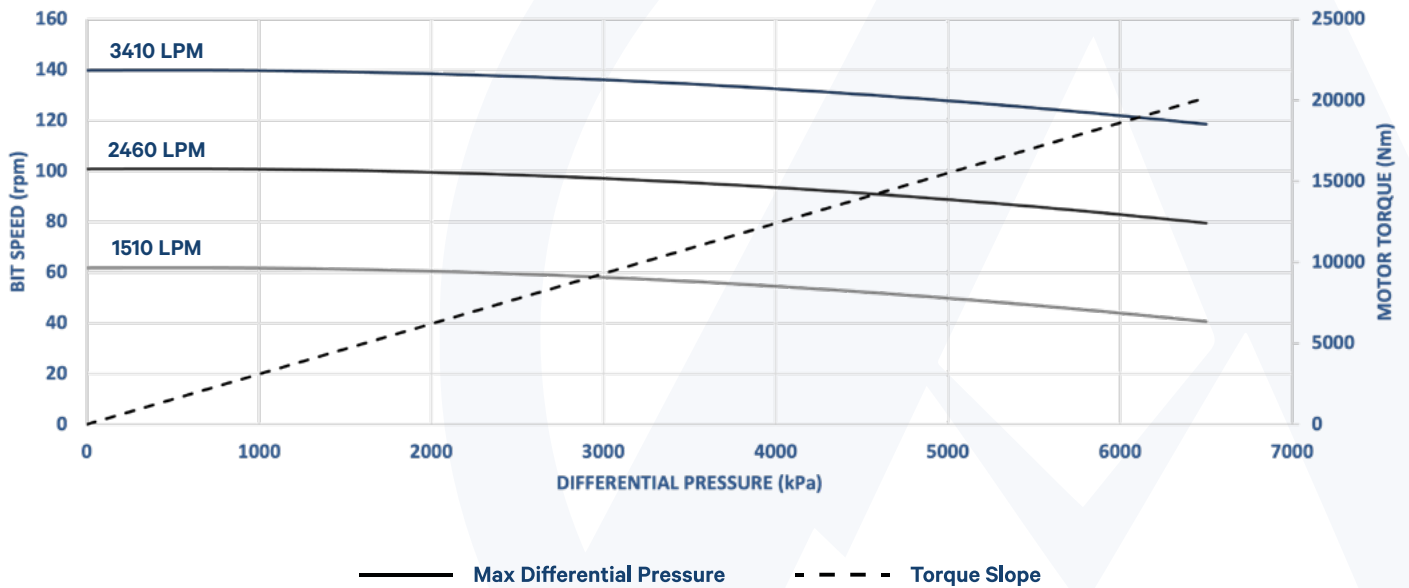
General Data				
	Metric		Imperial (US)	
Bit Sizes	251 - 311	mm	9.88 - 12.25	in
Nominal Length	8.3	m	17.6	ft
Operational Max WOB (with flow)**	311	kDaN	70,000	lbs
Max Bit Pull (with damage)*	222.4	kDaN	500,000	lbs
Max Body Pull (with damage)*	444.8	kDaN	1,000,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,510 - 3,410	litre/min	400 - 900	gpm
Speed Range	62 - 140	rpm	62 - 140	rpm
Rotation	0.041	rev/litre	0.155	rev/gal
Torque Slope	3.101	Nm/kPa	15.770	ft-lb/psi
Max Differential Pressure	6,500	kPa	940	psi
Max Torque	20,160	Nm	14,870	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 8.00” 7/8 LOBE 5.9 STAGE

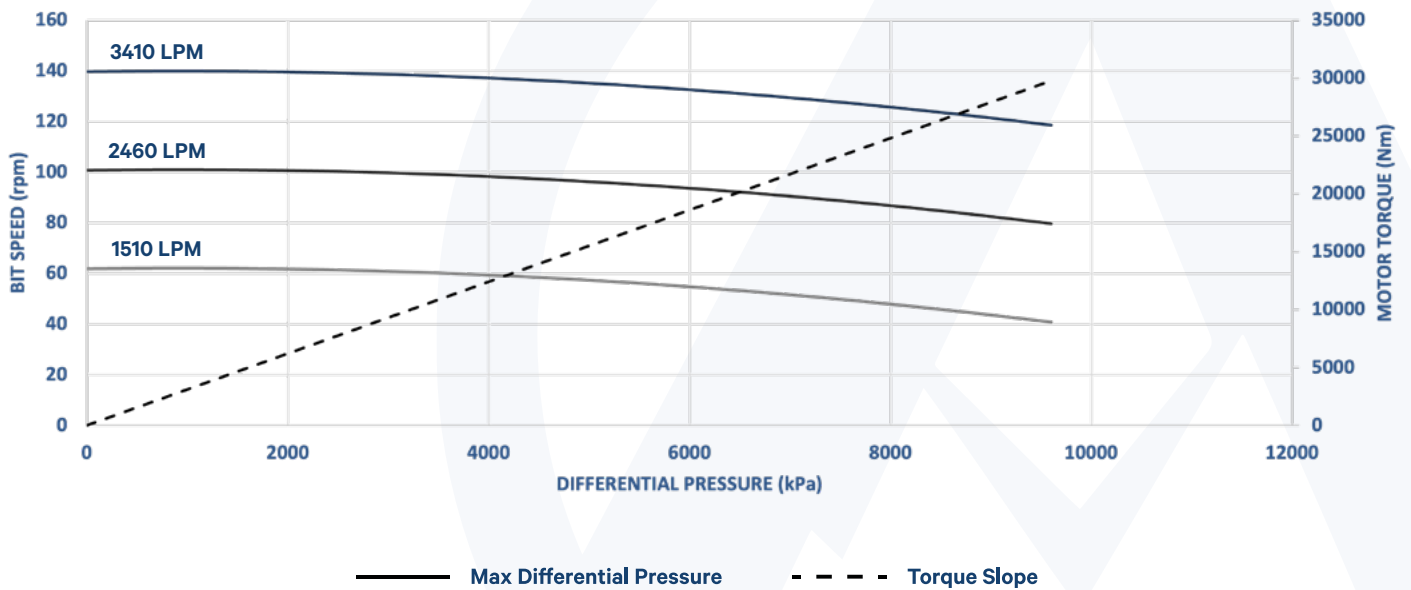
General Data				
	Metric		Imperial (US)	
Bit Sizes	251 - 311	mm	9.88 - 12.25	in
Nominal Length	10.8	m	22.8	ft
Operational Max WOB (with flow)**	311	kDaN	70,000	lbs
Max Bit Pull (with damage)*	222.4	kDaN	500,000	lbs
Max Body Pull (with damage)*	444.8	kDaN	1,000,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,510 - 3,410	litre/min	400 - 900	gpm
Speed Range	62 - 140	rpm	62 - 140	rpm
Rotation	0.041	rev/litre	0.155	rev/gal
Torque Slope	3.101	Nm/kPa	15.770	ft-lb/psi
Max Differential Pressure	9,600	kPa	1,390	psi
Max Torque	29,770	Nm	21,960	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 8.00" 8/9 LOBE 6.0 STAGE

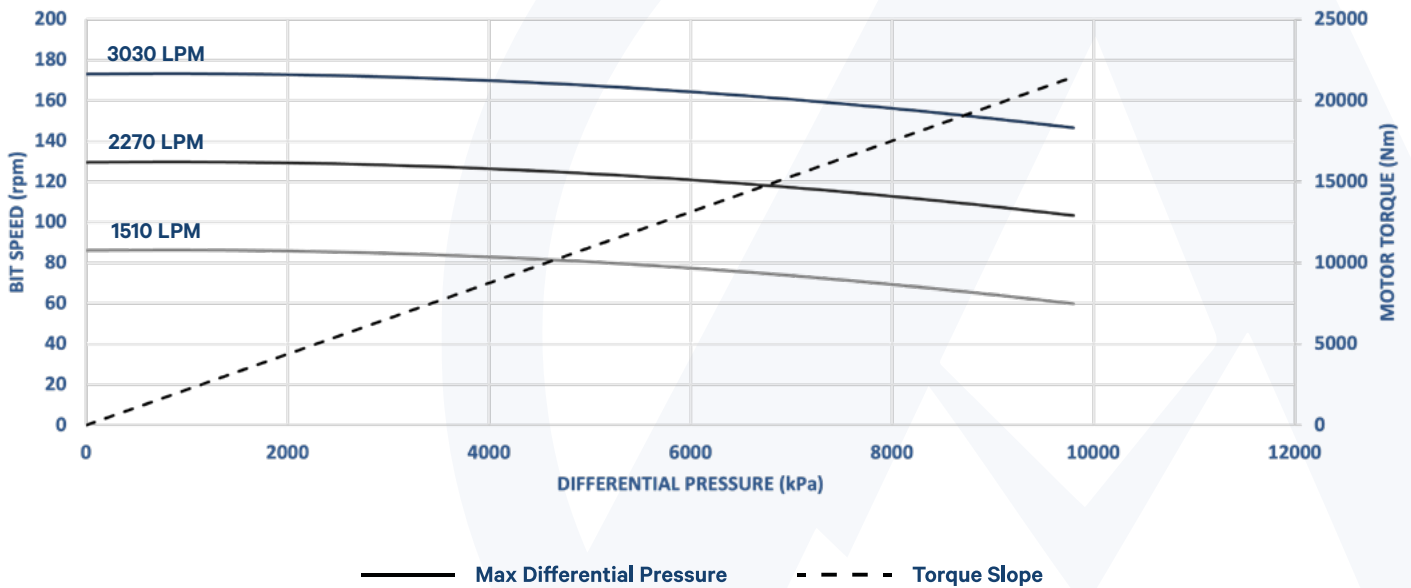
General Data				
	Metric		Imperial (US)	
Bit Sizes	251 - 311	mm	9.88 - 12.25	in
Nominal Length	8.4	m	17.7	ft
Operational Max WOB (with flow)**	311	kDaN	70,000	lbs
Max Bit Pull (with damage)*	222.4	kDaN	500,000	lbs
Max Body Pull (with damage)*	444.8	kDaN	1,000,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	1,510 - 3,030	litre/min	400 - 800	gpm
Speed Range	86 - 173	rpm	86 - 173	rpm
Rotation	0.057	rev/litre	0.216	rev/gal
Torque Slope	2.190	Nm/kPa	11,140	ft-lb/psi
Max Differential Pressure	9,800	kPa	1,420	psi
Max Torque	21,460	Nm	15,830	ft-lb

## POWER SECTION PERFORMANCE CURVE\*\*\*



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 9.62" 3/4 LOBE 6.0 STAGE

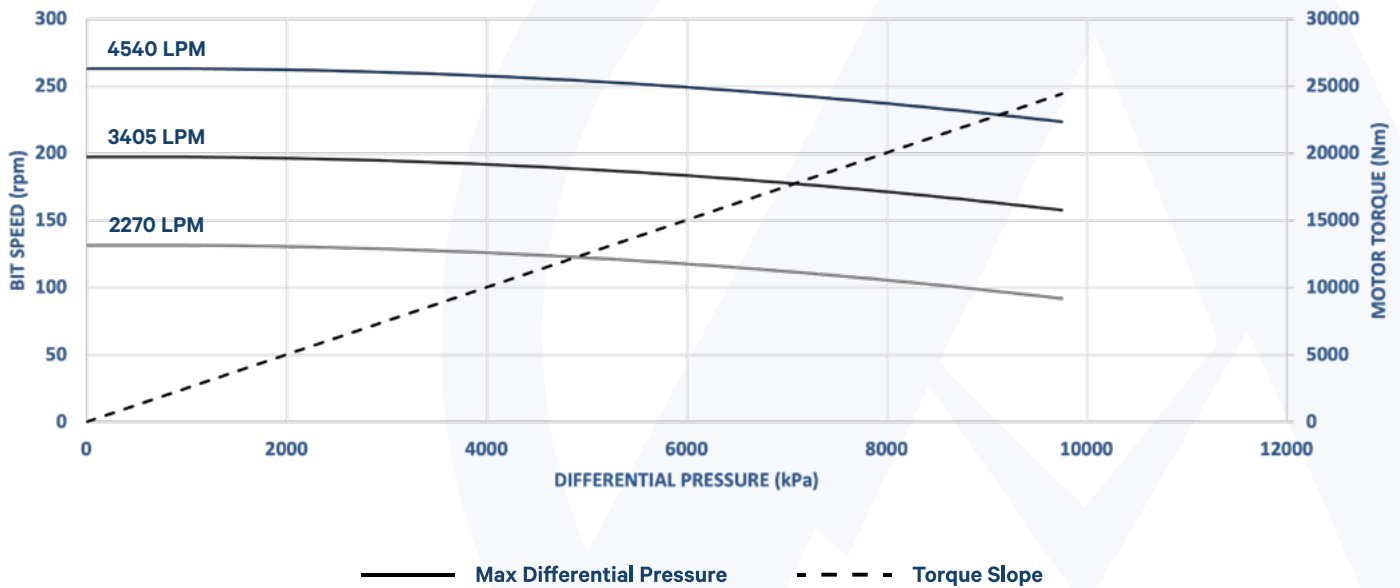
General Data				
	Metric		Imperial (US)	
Bit Sizes	311 - 508	mm	12.25 - 20	in
Nominal Length	9.5	m	20.1	ft
Operational Max WOB (with flow)**	37.8	kDaN	85,000	lbs
Max Bit Pull (with damage)*	322.5	kDaN	725,000	lbs
Max Body Pull (with damage)*	645.0	kDaN	1,450,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	2,270 - 4,540	litre/min	600 - 1,200	gpm
Speed Range	132 - 263	rpm	132 - 263	rpm
Rotation	0.058	rev/litre	0.220	rev/gal
Torque Slope	2.507	Nm/kPa	12.750	ft-lb/psi
Max Differential Pressure	9,750	kPa	1,410	psi
Max Torque	24,440	Nm	18,030	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 9.62" 5/6 LOBE 5.0 STAGE

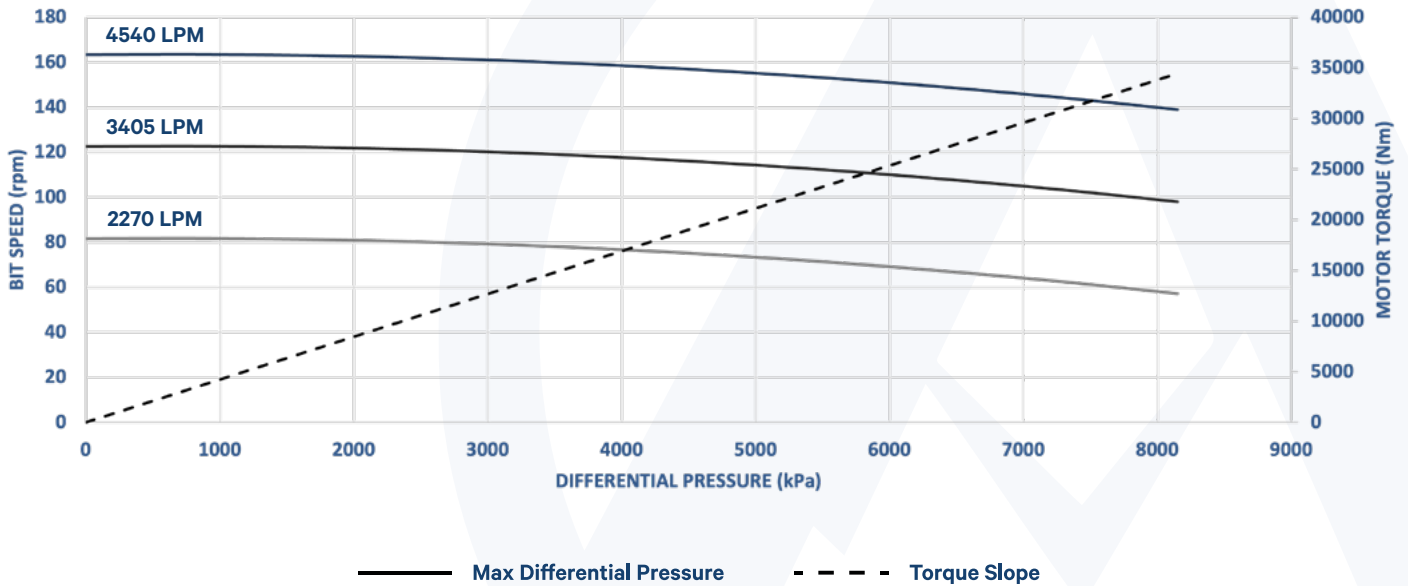
General Data				
	Metric		Imperial (US)	
Bit Sizes	311 - 508	mm	12.25 - 20	in
Nominal Length	9.6	m	20.3	ft
Operational Max WOB (with flow)**	37.8	kDaN	85,000	lbs
Max Bit Pull (with damage)*	322.5	kDaN	725,000	lbs
Max Body Pull (with damage)*	645.0	kDaN	1,450,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	2,270 - 4,540	litre/min	600 - 1,200	gpm
Speed Range	82 - 163	rpm	82 - 163	rpm
Rotation	0.036	rev/litre	0.136	rev/gal
Torque Slope	4.225	Nm/kPa	21,490	ft-lb/psi
Max Differential Pressure	8,150	kPa	1,180	psi
Max Torque	34,430	Nm	25,400	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.

# 9.62" 6/7 LOBE 5.0 STAGE

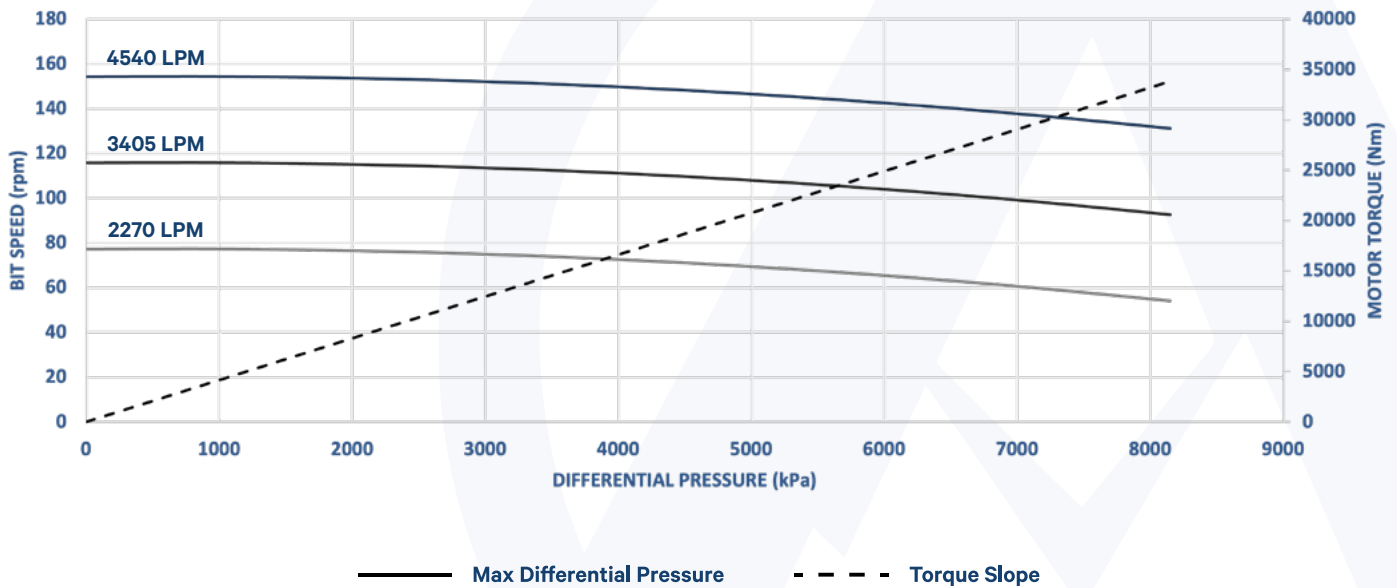
General Data				
	Metric		Imperial (US)	
Bit Sizes	311 - 508	mm	12.25 - 20	in
Nominal Length	9.3	m	19.6	ft
Operational Max WOB (with flow)**	37.8	kDaN	85,000	lbs
Max Bit Pull (with damage)*	322.5	kDaN	725,000	lbs
Max Body Pull (with damage)*	645.0	kDaN	1,450,000	lbs

\* Exceeding the value may cause severe damage to the motor

\*\* Exceeding this value drastically reduced the motor life

Performance Specifications				
	Metric		Imperial (US)	
Flow Range	2,270 - 4,540	litre/min	600 - 1,200	gpm
Speed Range	77 - 154	rpm	77 - 154	rpm
Rotation	0.034	rev/litre	0.129	rev/gal
Torque Slope	4.151	Nm/kPa	21.110	ft-lb/psi
Max Differential Pressure	8,150	kPa	1,180	psi
Max Torque	33,830	Nm	24,950	ft-lb

**POWER SECTION PERFORMANCE CURVE\*\*\***



\*\*\* Operating a power section at or above maximum differential pressure will greatly reduce stator life. Power Section Performance Curves are for reference only. Actual power section performance may vary depending on downhole temperature and rotor/stator fit. Contact Altitude Energy Partners for more details.