

4.75" | 5.00"
(121 mm) (127 mm)

7870
CONFIGURATION



SPECIFICATIONS

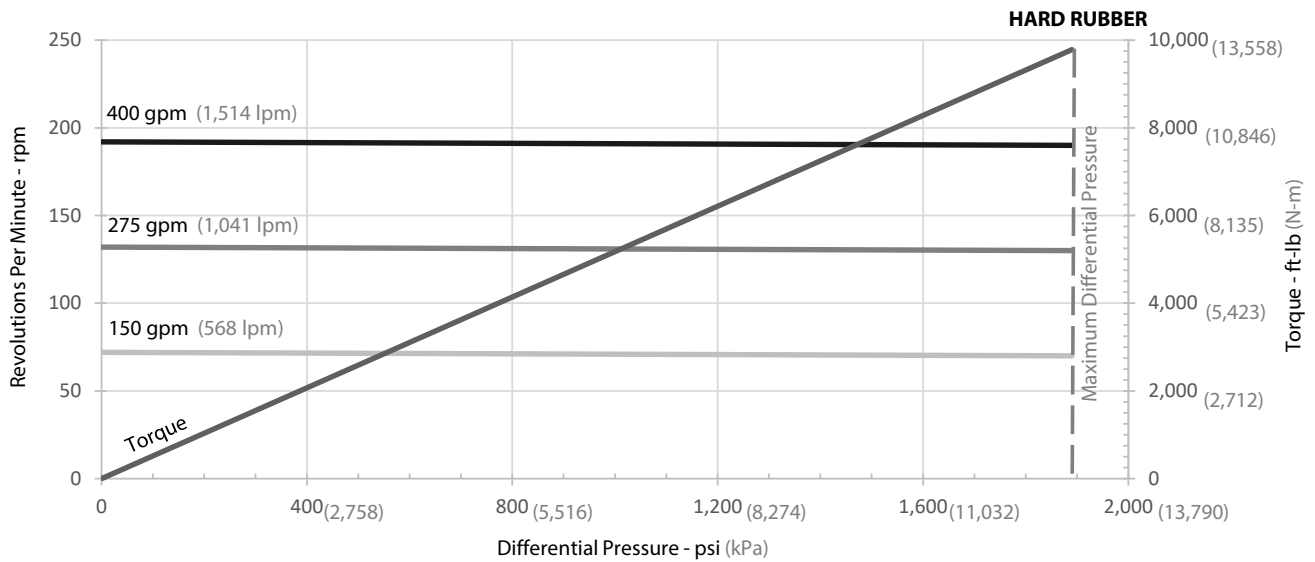
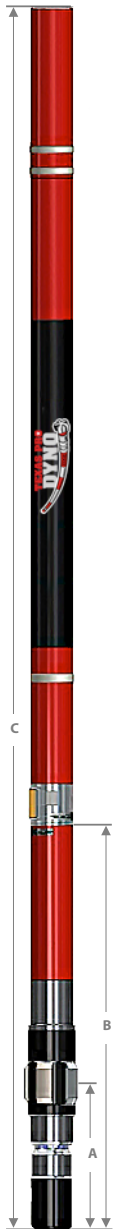
	IMPERIAL	METRIC
Maximum Differential Pressure	1,890 psi	13,032 kPa
Torque at Maximum Differential	9,783 ft-lb	13,264 N-m
Stall Torque	12,230 ft-lb	16,581 N-m
Flow Range	150 - 400 gpm	568 - 1,514 lpm
RPM Ratio	0.48 Revs / gal	0.127 Revs / l
RPM Range	72 - 192 rpm	72 - 192 rpm
Recommended Hole Sizes	6.000 - 6.750 in	152 - 171 mm
Maximum Weight on Bit	77,000 lb	34,250 daN
Maximum Overpull (static)	212,000 lb	94,298 daN
Overall Weight	1,200 lb	544 kg

LENGTH

	IMPERIAL	METRIC
(A) to Stabilizer	13.50 in	0.34 m
(B) to Adj. Bend	54.76 in	1.39 m
(C) to Fixed Bend	48.00 in	1.22 m
(D) Overall	342.51 in	8.70 m

ADJUSTABLE

	IMPERIAL	METRIC
Make-Up Value	12,000 ft-lb	16,270 N-m



0 - 3° ADJUSTABLE

Degrees / 100 ft (30 m)

BEND	6.00" HOLE SIZE		6.25" HOLE SIZE		6.75" HOLE SIZE		P R E I D L S C T E D
0.39°	1.4	2.4	0.2	2.5	-	2.8	
0.78°	3.9	4.8	2.7	5.0	0.2	5.3	
1.15°	6.2	7.2	5.0	7.3	2.5	7.7	
1.50°	8.4	9.4	7.2	9.6	4.8	9.9	
1.83°	10.5	11.5	9.3	11.7	6.9	12.0	
2.12°	12.4	13.3	11.1	13.5	8.7	13.8	
2.38°	14.0	15.0	12.8	15.1	10.3	15.5	
2.60°	15.4	16.4	14.2	16.5	11.7	16.8	
2.77°	16.5	17.5	15.3	17.6	12.8	17.9	
2.90°	17.3	18.3	16.1	18.4	13.6	18.8	
2.97°	17.8	18.7	16.5	18.9	14.1	19.2	
3.00°	17.9	18.9	16.7	19.1	14.3	19.4	

FIXED HOUSING

Degrees / 100 ft (30 m)

BEND	6.00" HOLE SIZE		6.25" HOLE SIZE		6.75" HOLE SIZE		P R E I D L S C T E D
1.50°	8.7	9.6	7.4	9.8	5.0	10.1	
1.75°	10.3	11.2	9.1	11.4	6.6	11.7	
1.90°	11.3	12.2	10.0	12.4	7.6	12.7	
2.00°	11.9	12.9	10.7	13.0	8.2	13.3	
2.12°	12.7	13.6	11.5	13.8	9.0	14.1	
2.25°	13.5	14.5	12.3	14.7	9.9	15.0	
2.50°	15.1	16.1	13.9	16.3	11.5	16.6	
2.60°	15.8	16.8	14.6	16.9	12.1	17.2	

Figures are for reference only. Stabilized build rates assume a lower stabilizer 0.125" undergauge. Actual performance may vary based on tool and operating conditions. Refer to temperature and mud scaling curves for optimal performance and reliability. Rotating above 1.50° may cause damage to the performance motor at certain RPM's. Running above 80% will be done so at client's risk. Contact your Texas Pro Dyno representative to confirm ideal operating specifications. Updated September 2017.