

# Dyna-Drill

## Coiled Tubing Motor Spec Sheets

**Power That Lasts**



Version 2

## Conventional Thru Tubing Motors

Robust motors that accommodate high pressures, flow rates, and performance requirements

### APPLICATIONS

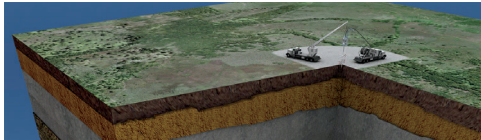
- Coiled tubing and thru tubing operations

### BENEFITS

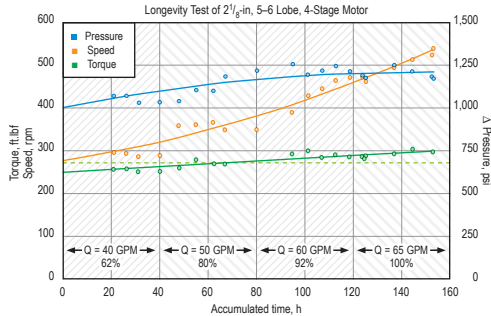
- Time savings with reduced number of connections
- Fast tool servicing with no machined parts
- Enhanced integrity and reliability with high-strength steel components
- Decreased risk of loss in hole with available rotor catch

### FEATURES

- NBR-HR elastomer for improved fluid and temperature resistance
- Optional HT-HR elastomer for higher power at higher temperatures up to 375F
- Up to 50% more power compared with other conventional motors
- High-flow internals for improved annual velocity while displacing milling solids
- Optimized connections for extreme torque outputs
- One-piece transmission with no moving parts to handle high power
- Rotor catch available on 2 7/8-in and bigger sizes
- High-pressure-flow restrictor option (easily convertible to any application)
- Interchangeable power sections for every size



Dyna-Drill conventional thru tubing motors feature high-performance elastomer and profile designs to help operators achieve exceptional power ratio. Available on 1 1/2-in through 3 1/2-in sizes, these coiled tubing motors provide higher hours of operation with constant power output.



Motor Size (in)	Lobes	Stages	OAL (ft)	Weight (lbs)	GPM	RPM	Max Diff Pressure (psi)	Operation Torque (ft-lb)	Stall Torque (ft-lb)	Temp Range (F)	WOB Capacity (lbs)	Over Pull Capacity (lbs)
1-11/16"	5/6	2.3	9.0	50	20-42	185-390	580	160	240	300	2,500	57,850
	5/6	4.0	8.8	47	20-42	326-690	1,000	170	250	300	2,500	57,850
2-1/8"	5/6	4.0	10.0	83	30-65	287-630	1,000	270	410	300	5,000	94,890
	5/6	4.9	11.1	97	30-65	287-630	1,230	340	510	300	5,000	94,890
2-1/8" HT	5/6	4.0	10.0	83	30-65	287-630	1,000	300	450	375	5,000	94,890
	5/6	4.0	10.5	95	40-80	287-580	1,000	360	530	300	5,000	94,890
2-7/8"	7/8	3.5	12.2	179	60-120	240-480	880	570	850	300	12,500	150,960
	5/6	3.5	13.8	198	60-120	202-410	880	610	910	300	12,500	150,960
	5/6	7.0	15.3	202	60-120	344-690	1,750	850	1,270	300	12,500	150,960
3-1/8"	7/8	3.0	15.8	395	80-160	135-280	750	1,120	1,670	300	14,500	208,150
	7/8	3.3	16.6	375	120-210	178-320	830	1,510	2,260	300	14,500	208,150
3-3/8"	7/8	3.0	17.3	398	80-160	111-230	680	1,260	1,890	300	14,500	208,150
	7/8	4.7	18.2	405	120-210	221-390	1,060	1,520	2,280	300	14,500	208,150

Other company, product, and service names are the properties of their respective owners. Copyright © 2015 Dyna-Drill. All rights reserved. 15-DD-0011

dyna-drill.com

# Dyna-Drill



**Model No: DD168562.3**

**1.688" 5/6 Lobes 2.3 Stages**

## MOTOR SPECIFICATIONS

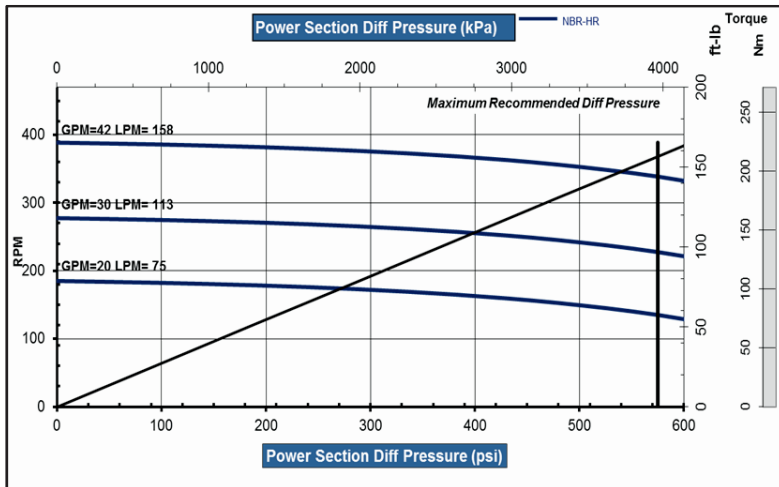
	ft	m
Overall Length	8.98	2.58
Bit Box - Top Sub	8.57	2.46
Bit Box - Stator	3.3	0.95
Total Weight	50 (lb)	23 (kg)
Top Connection	1 API Reg - 1 MT	
Max WOB	2,500 (lb)	
Max Overpull Total	57,850 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.272 ft-lb/psi 0.054 Nm/kPa
Flow Range	20 to 42 GPM 80 to 160 Litre/min
Rotation	9.250 Rev/Gal 2.444 Rev/Litre
Speed Range	185 to 390 RPM
Off Bottom Press	75 psi 520 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	580 (3960)
Max Torque ft-lb (Nm)	160 (210)
Stall Diff Press psi (kPa)	860 (5950)
Stall Torque ft-lb (Nm)	240 (320)
Max Recommended HP (kW)	11 (8)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD168564.0**

**1.688" 5/6 Lobes 4.0 Stages**

## MOTOR SPECIFICATIONS

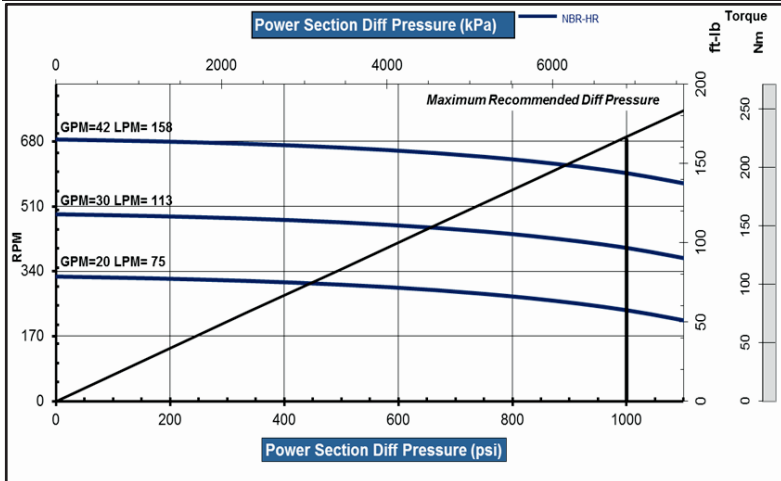
	ft	m
Overall Length	8.85	2.54
Bit Box - Top Sub	8.43	2.42
Bit Box - Stator	3.3	0.95
Total Weight	47 (lb) 22 (kg)	
Top Connection	1 API Reg - 1 MT	
Max WOB	2,500 (lb)	
Max Overpull Total	57,850 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.167 ft-lb/psi 0.033 Nm/kPa
Flow Range	20 to 42 GPM 80 to 160 Litre/min
Rotation	16.314 Rev/Gal 4.310 Rev/Litre
Speed Range	326 to 690 RPM
Off Bottom Press	85 psi 590 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	1000 (6890)
Max Torque ft-lb (Nm)	170 (230)
Stall Diff Press psi (kPa)	1500 (10340)
Stall Torque ft-lb (Nm)	250 (340)
Max Recommended HP(kW)	21 (16)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD213564.0**

**2.125" 5/6 Lobes 4.0 Stages**

## MOTOR SPECIFICATIONS

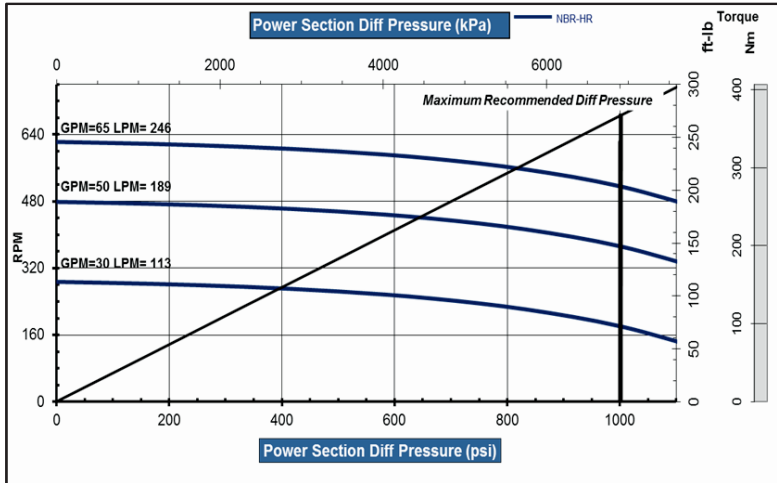
	ft	m
Overall Length	10.06	2.89
Bit Box - Top Sub	9.51	2.73
Bit Box - Stator	3.55	1.02
Total Weight	83 (lb)	38 (kg)
Top Connection	1.5 API Reg - 1.5 MT	
Max WOB	5,000 (lb)	
Max Overpull Total	94,890 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.270 ft-lb/psi	0.053 Nm/kPa
Flow Range	30 to 65 GPM	110 to 250 Litre/min
Rotation	9.574 Rev/Gal	2.529 Rev/Litre
Speed Range	287 to 630 RPM	
Off Bottom Press	70 psi	480 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	1000 (6890 )
Max Torque ft-lb (Nm)	270 (370 )
Stall Diff Press psi (kPa)	1500 (10340 )
Stall Torque ft-lb (Nm)	410 (550 )
Max Recommended HP(kW)	30 (22)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD213564.0 HT - 375 °F**

**2.125" 5/6 Lobes 4.0 Stages**

## MOTOR SPECIFICATIONS

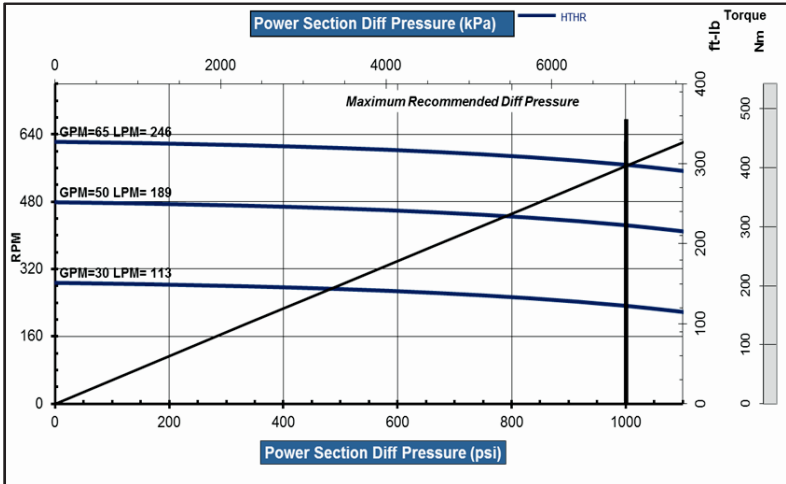
	ft	m
Overall Length	10.06	2.89
Bit Box - Top Sub	9.51	2.73
Bit Box - Stator	3.55	1.02
Total Weight	83 (lb) 38 (kg)	
Top Connection	1.5 API Reg - 1.5 MT	
Max WOB	5,000 (lb)	
Max Overpull Total	94,890 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.297 ft-lb/psi	0.058 Nm/kPa
Flow Range	30 to 65 GPM	110 to 250 Litre/min
Rotation	9,574 Rev/Gal	2,529 Rev/Litre
Speed Range	287 to 630 RPM	
Off Bottom Press	62 psi	430 kPa

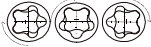
## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	1000 (6890 )
Max Torque ft-lb (Nm)	300 (400 )
Stall Diff Press psi (kPa)	1500 (10340 )
Stall Torque ft-lb (Nm)	450 (600 )
Max Recommended HP(kW)	34 (25)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD213564.9**

**2.125" 5/6 Lobes 4.9 Stages**

## MOTOR SPECIFICATIONS

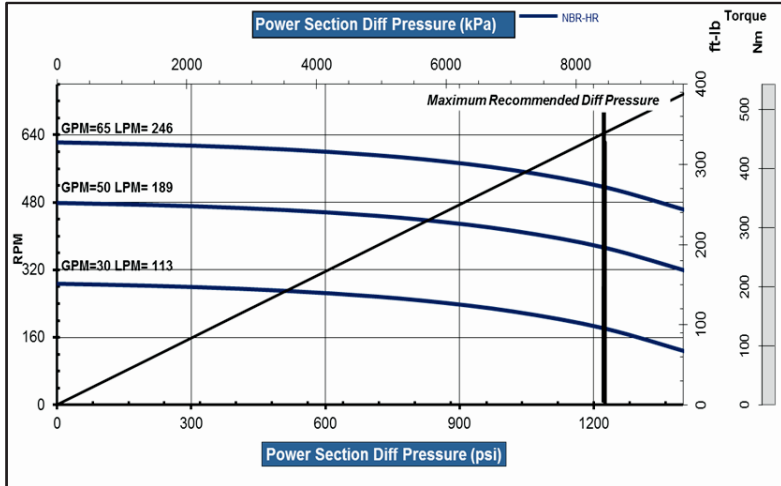
	ft	m
Overall Length	11.15	3.20
Bit Box - Top Sub	10.6	3.05
Bit Box - Stator	3.55	1.02
Total Weight	96 (lb)	40 (kg)
Top Connection	1.5 API Reg - 1.5 M	
Max WOB	5,000 (lb)	
Max Overpull Total	94,890 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.277 ft-lb/psi 0.054 Nm/kPa
Flow Range	30 to 65 GPM 110 to 250 Litre/min
Rotation	9.574 Rev/Gal 2.529 Rev/Litre
Speed Range	287 to 630 RPM
Off Bottom Press	68 psi 470 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	1230 (8450 )
Max Torque ft-lb (Nm)	340 (460 )
Stall Diff Press psi (kPa)	1840 (12670 )
Stall Torque ft-lb (Nm)	510 (680 )
Max Recommended HP(kW)	38 (28)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD238564.0**

**2.375" 5/6 Lobes 4.0 Stages**

## MOTOR SPECIFICATIONS

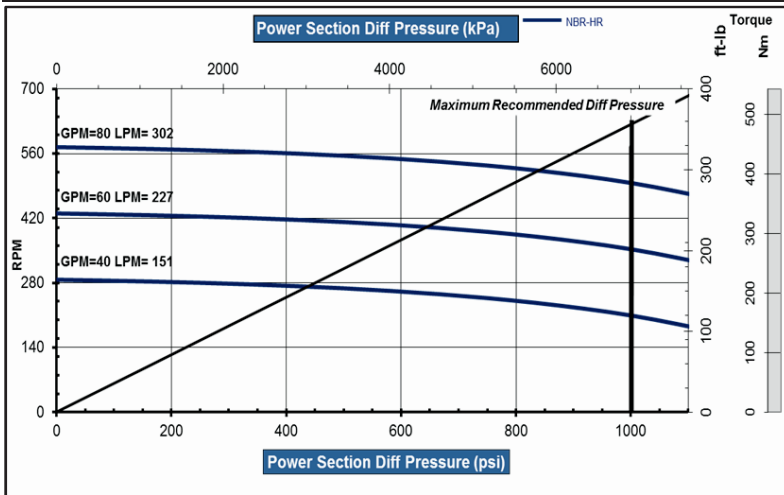
	ft	m
Overall Length	10.51	3.02
Bit Box - Top Sub	10.05	2.89
Bit Box - Stator	4	1.15
Total Weight	95 (lb) 43 (kg)	
Top Connection	1.5 API Reg - 1.5 MT	
Max WOB	5,000 (lb)	
Max Overpull Total	94,890 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.356 ft-lb/psi	0.070 Nm/kPa
Flow Range	40 to 80 GPM	150 to 300 Litre/min
Rotation	7.175 Rev/Gal	1.895 Rev/Litre
Speed Range	287 to 580 RPM	
Off Bottom Press	67 psi	460 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	1000 (6890 )
Max Torque ft-lb (Nm)	360 (480 )
Stall Diff Press psi (kPa)	1500 (10340 )
Stall Torque ft-lb (Nm)	530 (720 )
Max Recommended HP(kW)	37 (28)



Copyright 2015 Dyna-Drill. All rights reserved.



# Dyna-Drill



**Model No: DD287563.5**

**2.875" 5/6 Lobes 3.5 Stages**

## MOTOR SPECIFICATIONS

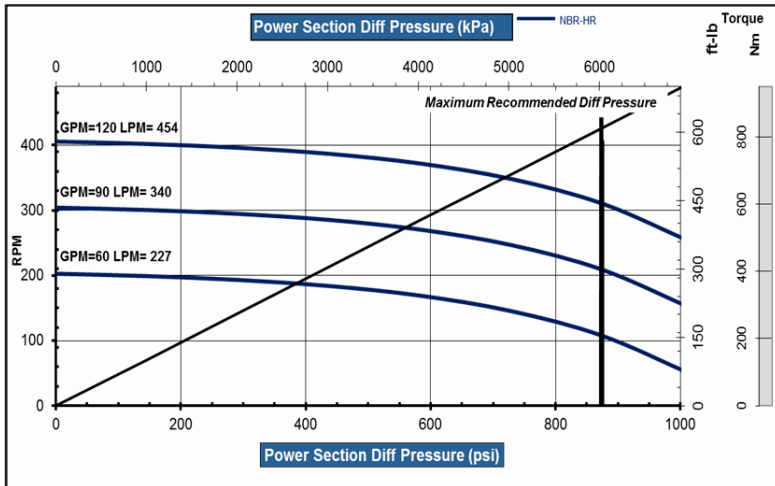
	ft	m
Overall Length	13.76	3.95
Bit Box - Top Sub	12.97	3.73
Bit Box - Stator	4.75	1.36
Total Weight	198 (lb)	90 (kg)
Top Connection	2-3/8" DSI PAC	
Max WOB	12,500 (lb)	
Max Overpull Total	150,960 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.697 ft-lb/psi 0.137 Nm/kPa
Flow Range	60 to 120 GPM 230 to 450 Litre/min
Rotation	3.380 Rev/Gal 0.893 Rev/Litre
Speed Range	202 to 410 RPM
Off Bottom Press	200 psi 1380 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	880 (6030 )
Max Torque ft-lb (Nm)	610 (830 )
Stall Diff Press psi (kPa)	1310 (9050 )
Stall Torque ft-lb (Nm)	910 (1240 )
Max Recommended HP(kW)	43 (32)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD287783.5**

**2.875" 7/8 Lobes 3.5 Stages**

## MOTOR SPECIFICATIONS

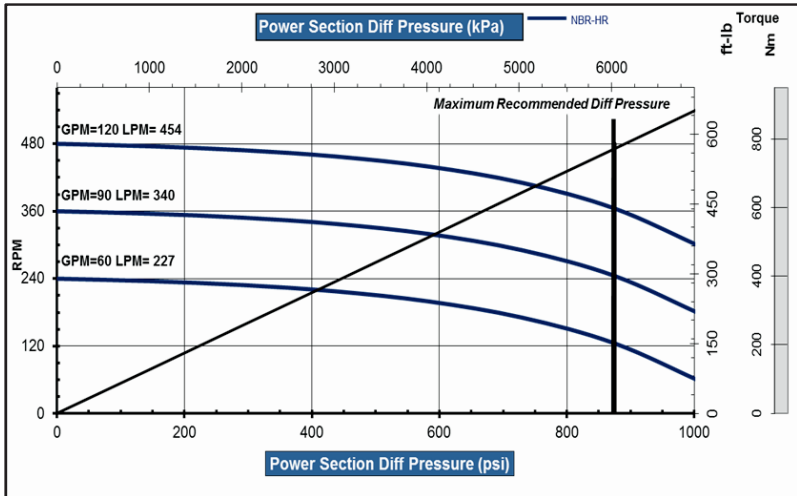
	ft	m
Overall Length	12.21	3.51
Bit Box - Top Sub	11.42	3.28
Bit Box - Stator	4.75	1.36
Total Weight	179 (lb) 81 (kg)	
Top Connection	2-3/8" DSI PAC	
Max WOB	12,500 (lb)	
Max Overpull Total	150,960 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.650 ft-lb/psi 0.128 Nm/kPa
Flow Range	60 to 120 GPM 230 to 450 Litre/min
Rotation	4.000 Rev/Gal 1.057 Rev/Litre
Speed Range	240 to 480 RPM
Off Bottom Press	74 psi 510 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	880 (6030)
Max Torque ft-lb (Nm)	570 (770)
Stall Diff Press psi (kPa)	1310 (9050)
Stall Torque ft-lb (Nm)	850 (1160)
Max Recommended HP(kW)	48 (36)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD287567.0**

**2.875" 5/6 Lobes 7.0 Stages**

## MOTOR SPECIFICATIONS

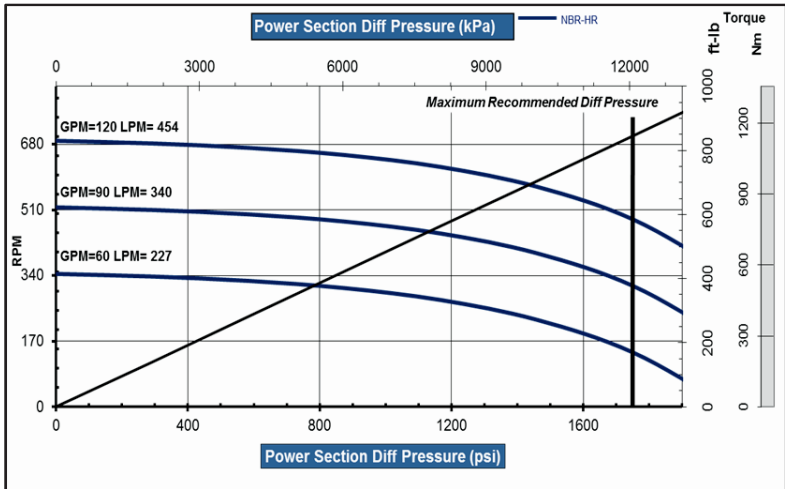
	ft	m
Overall Length	15.29	4.39
Bit Box - Top Sub	14.5	4.17
Bit Box - Stator	4.75	1.36
Total Weight	202 (lb)	92 (kg)
Top Connection	2-3/8" DSI PAC	
Max WOB	12,500 (lb)	
Max Overpull Total	150,960 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	0.483 ft-lb/psi	0.095 Nm/kPa
Flow Range	60 to 120 GPM	230 to 450 Litre/min
Rotation	5.740 Rev/Gal	1.516 Rev/Litre
Speed Range	344 to 690 RPM	
Off Bottom Press	119 psi	820 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	1750 (12070 )
Max Torque ft-lb (Nm)	850 (1150 )
Stall Diff Press psi (kPa)	2630 (18100 )
Stall Torque ft-lb (Nm)	1270 (1720 )
Max Recommended HP(kW)	100 (75)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD313783.0**

**3.125" 7/8 Lobes 3.0 Stages**

## MOTOR SPECIFICATIONS

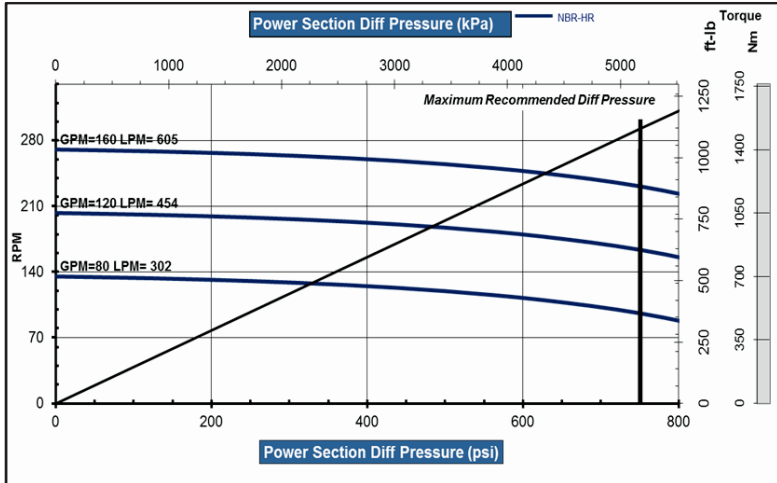
	ft	m
Overall Length	15.82	4.55
Bit Box - Top Sub	14.96	4.30
Bit Box - Stator	6.22	1.79
Total Weight	395 (lb) 179 (kg)	
Top Connection	2-3/8 DSI PAC	
Max WOB	14,500 (lb)	
Max Overpull Total	208,150 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	1.488 ft-lb/psi	0.293 Nm/kPa
Flow Range	80 to 160 GPM	300 to 610 Litre/min
Rotation	1.690 Rev/Gal	0.447 Rev/Litre
Speed Range	135 to 280 RPM	
Off Bottom Press	57 psi	390 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	750 (5170 )
Max Torque ft-lb (Nm)	1120 (1520 )
Stall Diff Press psi (kPa)	1130 (7760 )
Stall Torque ft-lb (Nm)	1670 (2270 )
Max Recommended HP(kW)	54 (40)



Copyright 2015 Dyna-Drill. All rights reserved.

# Dyna-Drill



**Model No: DD313783.3**

**3.125" 7/8 Lobes 3.3 Stages**

## MOTOR SPECIFICATIONS

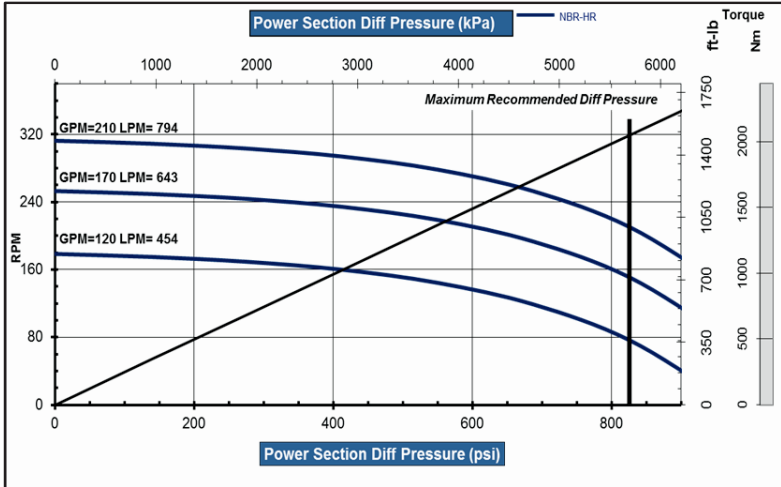
	ft	m
Overall Length	16.65	4.55
Bit Box - Top Sub	15.79	4.30
Bit Box - Stator	6.22	1.79
Total Weight	375 (lb)	170 (kg)
Top Connection	2-3/8 DSI PAC	
Max WOB	14,500 (lb)	
Max Overpull Total	208,150 (lb)	

## PERFORMANCE SPECIFICATIONS

Torque Slope	1.830 ft-lb/psi	0.360 Nm/kPa
Flow Range	120 to 210 GPM	450 to 790 Litre/min
Rotation	1.488 Rev/Gal	0.393 Rev/Litre
Speed Range	178 to 320 RPM	
Off Bottom Press	84 psi	580 kPa

## PERFORMANCE DETAILS

	NBR-HR
Max Diff Press psi (kPa)	830 (5690)
Max Torque ft-lb (Nm)	1510 (2050)
Stall Diff Press psi (kPa)	1240 (8530)
Stall Torque ft-lb (Nm)	2260 (3070)
Max Recommended HP(kW)	80 (60)



Copyright 2015 Dyna-Drill. All rights reserved.

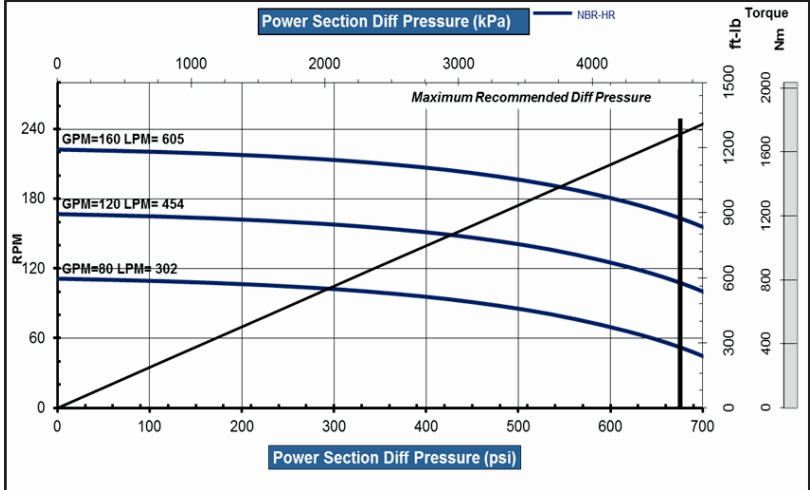
# Dyna-Drill



**Model No: DD338783.0**  
**3.375" 7/8 Lobes 3.0 Stages**

MOTOR SPECIFICATIONS		
	ft	m
Overall Length	17.37	4.99
Bit Box - Top Sub	16.54	4.75
Bit Box - Stator	6.22	1.79
Total Weight	398 (lb)	181 (kg)
Top Connection	2-3/8 DSI PAC	
Max WOB	14,500 (lb)	
Max Overpull Total	208,150 (lb)	

PERFORMANCE SPECIFICATIONS		PERFORMANCE DETAILS	
Torque Slope	1.869 ft-lb/psi 0.368 Nm/kPa	Max Diff Press psi (kPa)	NBR-HR
Flow Range	80 to 160 GPM 300 to 610 Litre/min	Max Torque ft-lb (Nm)	680 (4650 )
Rotation	1.390 Rev/Gal 0.367 Rev/Litre	Stall Diff Press psi (kPa)	1260 (1710 )
Speed Range	111 to 230 RPM	Stall Torque ft-lb (Nm)	1010 (6980 )
Off Bottom Press	57 psi 390 kPa	Max Recommended HP(kW)	1890 (2570 )
			49 (37)



Copyright 2015 Dyna-Drill. All rights reserved.

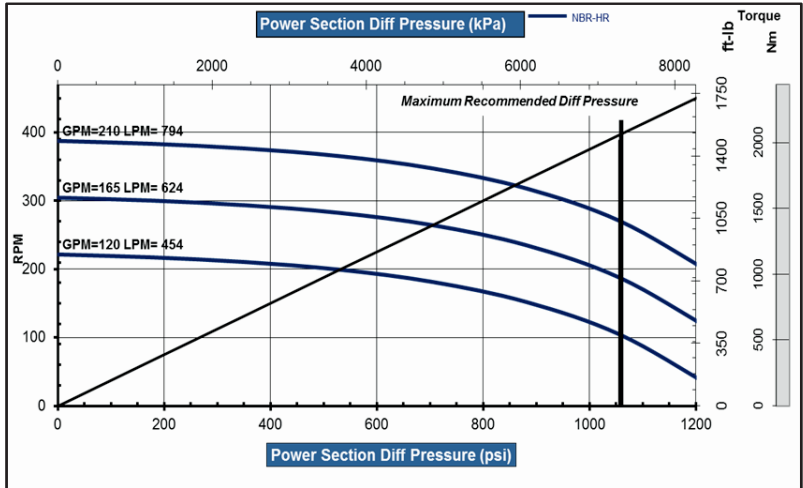
# Dyna-Drill



**Model No: DD338784.7**  
**3.375" 7/8 Lobes 4.7 Stages**

MOTOR SPECIFICATIONS		
	ft	m
Overall Length	18.21	5.23
Bit Box - Top Sub	17.36	4.99
Bit Box - Stator	6.22	1.79
Total Weight	405 (lb) 184 (kg)	
Top Connection	2-3/8 DSI PAC	
Max WOB	14,500 (lb)	
Max Overpull Total	208,150 (lb)	

PERFORMANCE SPECIFICATIONS		PERFORMANCE DETAILS	
Torque Slope	1.437 ft-lb/psi 0.283 Nm/kPa	Max Diff Press psi (kPa)	NBR-HR 1060 (7290 )
Flow Range	120 to 210 GPM 450 to 790 Litre/min	Max Torque ft-lb (Nm)	1520 (2060 )
Rotation	1.846 Rev/Gal 0.488 Rev/Litre	Stall Diff Press psi (kPa)	1590 (10940 )
Speed Range	221 to 390 RPM	Stall Torque ft-lb (Nm)	2280 (3100 )
Off Bottom Press	71 psi 490 kPa	Max Recommended HP(kW)	101 (75)



Copyright 2015 Dyna-Drill. All rights reserved.



# **Dyna-Drill**

23400 Colonial Pkwy.  
Katy, Texas 77493

Tel. 281-227-1250

[www.dyna-drill.com](http://www.dyna-drill.com)