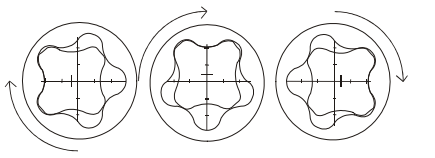
www.dyna-drill.com
USA: 23400 Colonial Parkway, Katy, TX 77493
Canada: Bay E.; 2802- 5th Street, Nisku, Alberta T9E-0H1 Tel: (780) 955-7711, Fax: (780) 955-7833
Dubai: Oilfields Supply Center, Bldg B-30, P.O. Box 261039, Dubai, UAE, Tel: 011-971-4-8100310

Model No.: DD475784.5-SX

4.75" 7/8 Lobes 4.5 Stages



POWER SECTION

FIT INFORMATION - MINOR DIAMETER (in)				
	DynaPower			
Stator Size	HR	XR	XP	XE
1 Undersize	2.737*		2.737	2.737*
Standard	2.746	2.759	2.752	2.746*
1 Oversize	2.763		2.763*	2.763*
2 Oversize		2.773		
Nominal Fit at 75˚F				
1 Undersize	0.011*		0.011	0.011*
Standard	0.002	-0.011	-0.004	0.002*
1 Oversize	-0.015		-0.015*	-0.015*
2 Oversize		-0.025		

*Pending production measurements

ROTOR SPECIFICATIONS		STATOR SPECIFICATIONS	
Overall Length** (in)	220.0	Overall Length (in)	229.3
Contour Length** (in)	214.3	Cutback #1** (in)	8.0
Eccentricity (in)	0.172	Cutback #2** (in)	8.0
Major Diameter (in)	3.091	Tube O.D. (in)	4.75
Weight (lb)	323	Tube I.D. (in)	3.75
Head Diameter*** (in)	2.75	Weight (lb)	425
Material**	17-4SS		
Thread Form***	2 3/8 HEF Mod Flat		

**Representative options given. Verify specific requirements before placing order.
***Customer specified

PERFORMANCE SPECIFICATIONS						
			HR	XR	XP	XE
Torque Slope	5.185 ft-lb/psi	Max. Diff. Press. (psi)	1010	1010	1130	1240
Flow Range	150 to 300 GPM	Max. Torque (ft-lb)	5250	5250	5830	6420
RPG	0.463 rev/gal	Stall Diff. Press. (psi)	1520	1520	1690	1860
Speed Range	69 to 139 RPM	Stall Torque (ft-lb)	7870	7870	8750	9620
Off Bottom Press.	70 psi	Max. Recommended (HP)	124	118	115	124
		PSI Per Stage	225	225	250	275
		PSI Per Cavity	35	35	39	43
		Temperature Slope (in/˚F)	0.000235	0.000222	0.000235	0.000244

TEMPERATURE RECOMMENDATIONS BASED ON FIT

Most Optimal — Least Optimal

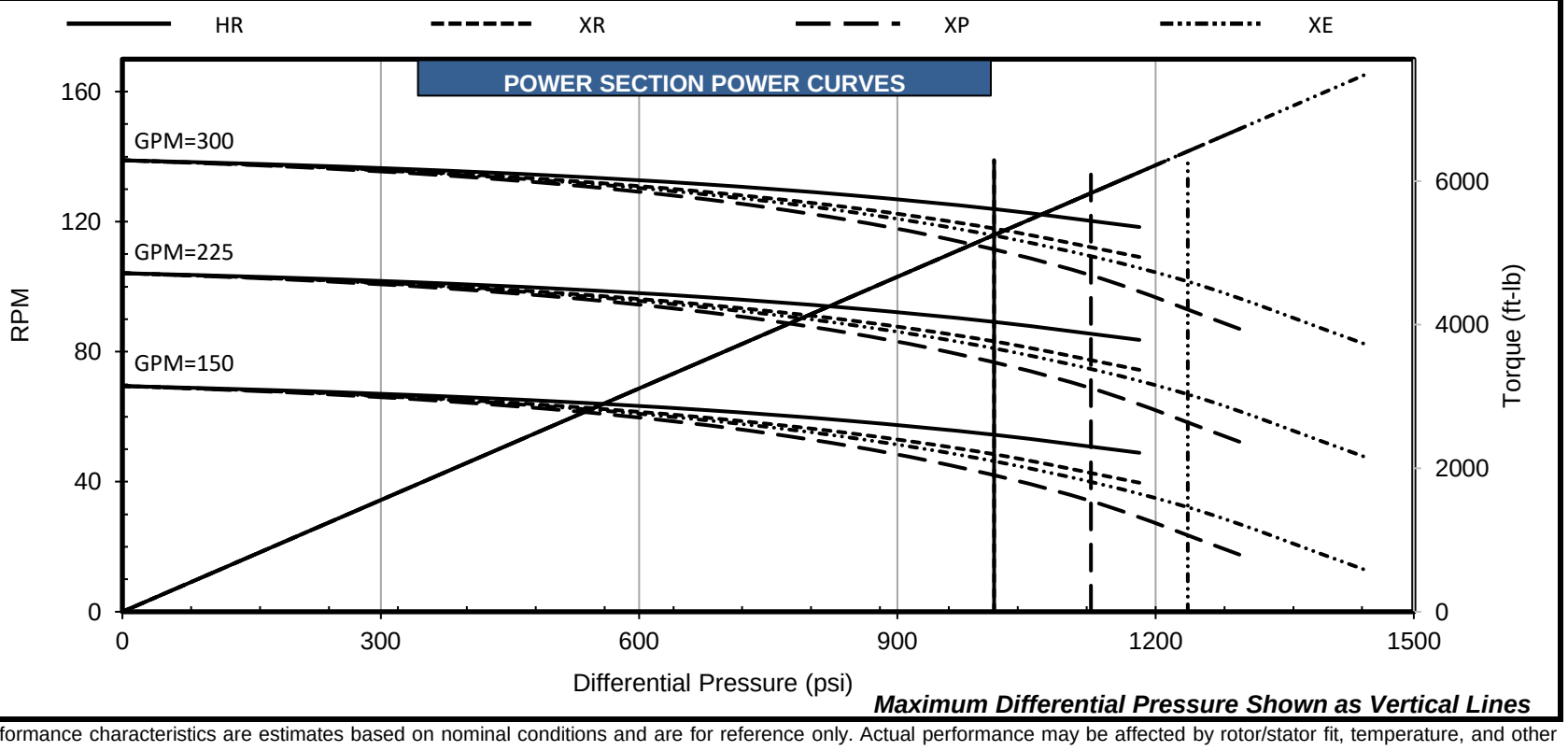
HR	Temperature [°F]									
Fit	150	175	200	225	250	275	300	325	350	375
0.016										
0										
-0.008										
-0.016										
-0.032										
-0.048										

XR	Temperature [°F]									
Fit	150	175	200	225	250	275	300	325	350	375
0.016										
0										
-0.008										
-0.016										
-0.032										
-0.048										

XP	Temperature [°F]									
Fit	150	175	200	225	250	275	300	325	350	375
0.016										
0										
-0.008										
-0.016										
-0.032										
-0.048										

XE	Temperature [°F]									
Fit	150	175	200	225	250	275	300	325	350	375
0.016										
0										
-0.008										
-0.016										
-0.032										
-0.048										

Fit / temperature guidance assumes run conditions and mud compatibility effects from global data analysis at max flow and recommended differential pressure for maximum life.



Maximum Differential Pressure Shown as Vertical Lines

Performance characteristics are estimates based on nominal conditions and are for reference only. Actual performance may be affected by rotor/stator fit, temperature, and other operating conditions. The torque may exceed the capacity of connected components and threads. Operating above the recommended limits of either the power section or connected components may reduce product life and result in damage to the power section and connected components. Data is subject to change without notice.

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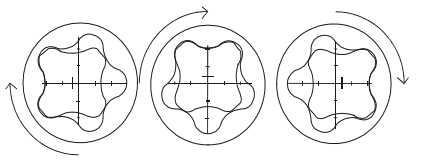


POWER SECTION

FIT INFORMATION - MINOR DIAMETER (mm)				
	DynaPower			
Stator Size	HR	XR	XP	XE
1 Undersize	69.52*		69.52	69.52*
Standard	69.75	70.08	69.90	69.75*
1 Oversize	70.18		70.18*	70.18*
2 Oversize		70.43		
Nominal Fit at 75˚F				
1 Undersize	0.28*		0.28	0.28*
Standard	0.05	-0.28	-0.10	0.05*
1 Oversize	-0.38		-0.38*	-0.38*
2 Oversize		-0.64		

*Pending production measurements

ROTOR SPECIFICATIONS	
Overall Length** (mm)	5588.0
Contour Length** (mm)	5443.2
Eccentricity (mm)	4.36
Major Diameter (mm)	78.51
Weight (kg)	147
Head Diameter*** (mm)	69.85
Material**	17-4SS
Thread Form***	2 3/8 HEF Mod Flat

STATOR SPECIFICATIONS	
Overall Length (mm)	5824.2
Cutback #1** (mm)	203.2
Cutback #2** (mm)	203.2
Tube O.D. (mm)	120.7
Tube I.D. (mm)	95.3
Weight (kg)	193

**Representative options given. Verify specific requirements before placing order.
***Customer specified

PERFORMANCE SPECIFICATIONS						
			HR	XR	XP	XE
Torque Slope	1.020 Nm/kPa	Max. Diff. Press. (kPa)	6964	6964	7791	8550
Flow Range	568 to 1136 Litre/min	Max. Torque (Nm)	7118	7118	7904	8704
RPG	0.122 rev/litre	Stall Diff. Press. (kPa)	10480	10480	11652	12824
Speed Range	69 to 139 RPM	Stall Torque (Nm)	10670	10670	11863	13043
Off Bottom Press.	483 kPa	Max. Recommended (kW)	92	88	86	93
		kPa Per Stage	1551	1551	1724	1896
		kPa Per Cavity	241	241	269	296
		Temperature Slope (mm/˚C)	0.0108	0.0102	0.0108	0.0112

TEMPERATURE RECOMMENDATIONS BASED ON FIT

Most Optimal — Least Optimal

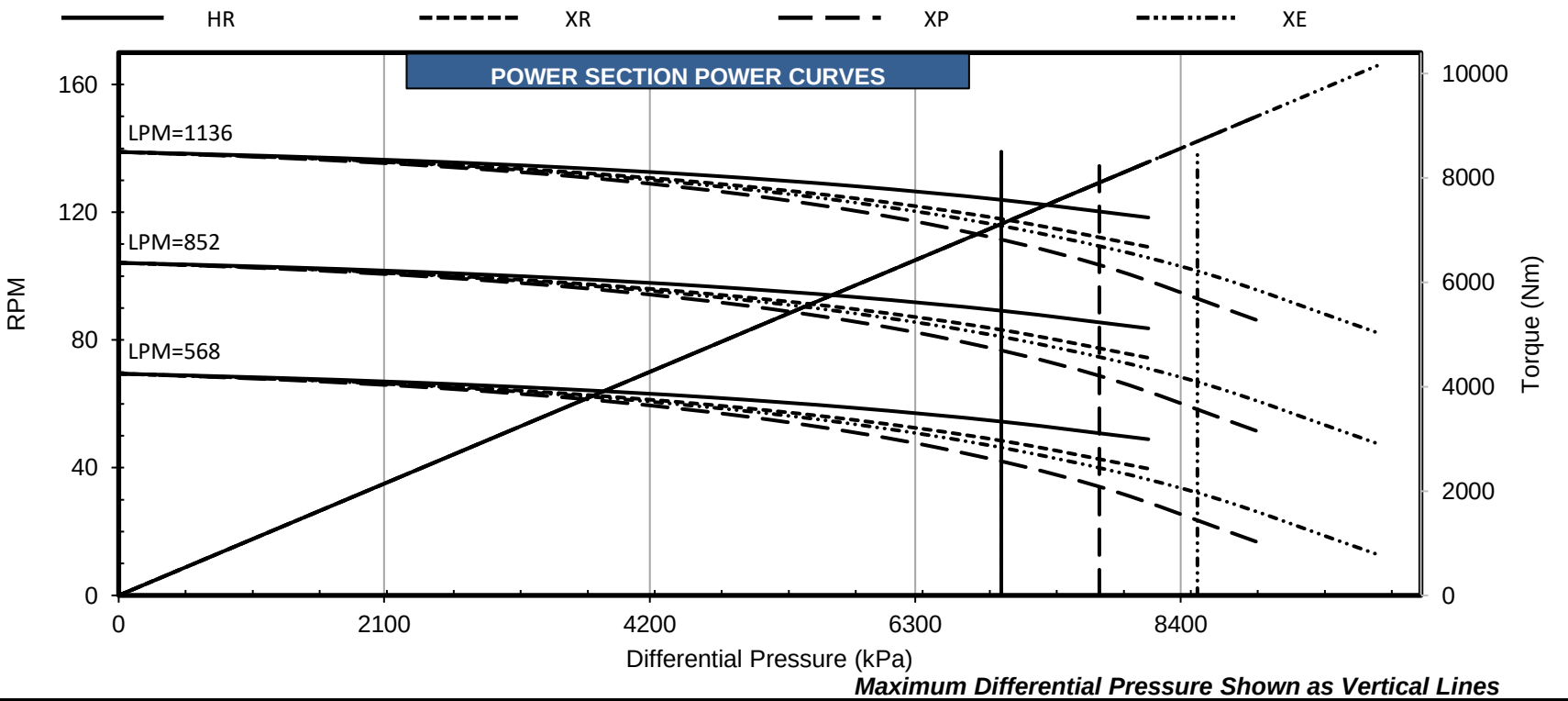
HR	Temperature [°C]									
Fit	66	79	93	107	121	135	149	163	177	191
0.41										
0.00										
-0.20										
-0.41										
-0.81										
-1.22										

XR	Temperature [°C]									
Fit	66	79	93	107	121	135	149	163	177	191
0.41										
0.00										
-0.20										
-0.41										
-0.81										
-1.22										

XP	Temperature [°C]									
Fit	66	79	93	107	121	135	149	163	177	191
0.41										
0.00										
-0.20										
-0.41										
-0.81										
-1.22										

XE	Temperature [°C]									
Fit	66	79	93	107	121	135	149	163	177	191
0.41										
0.00										
-0.20										
-0.41										
-0.81										
-1.22										

Fit / temperature guidance assumes run conditions and mud compatibility effects from global data analysis at max flow and recommended differential pressure for maximum life.



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