

Series

P-300

Plunger Pumps from Wheatley

P-364 Triplex

P-330A Triplex

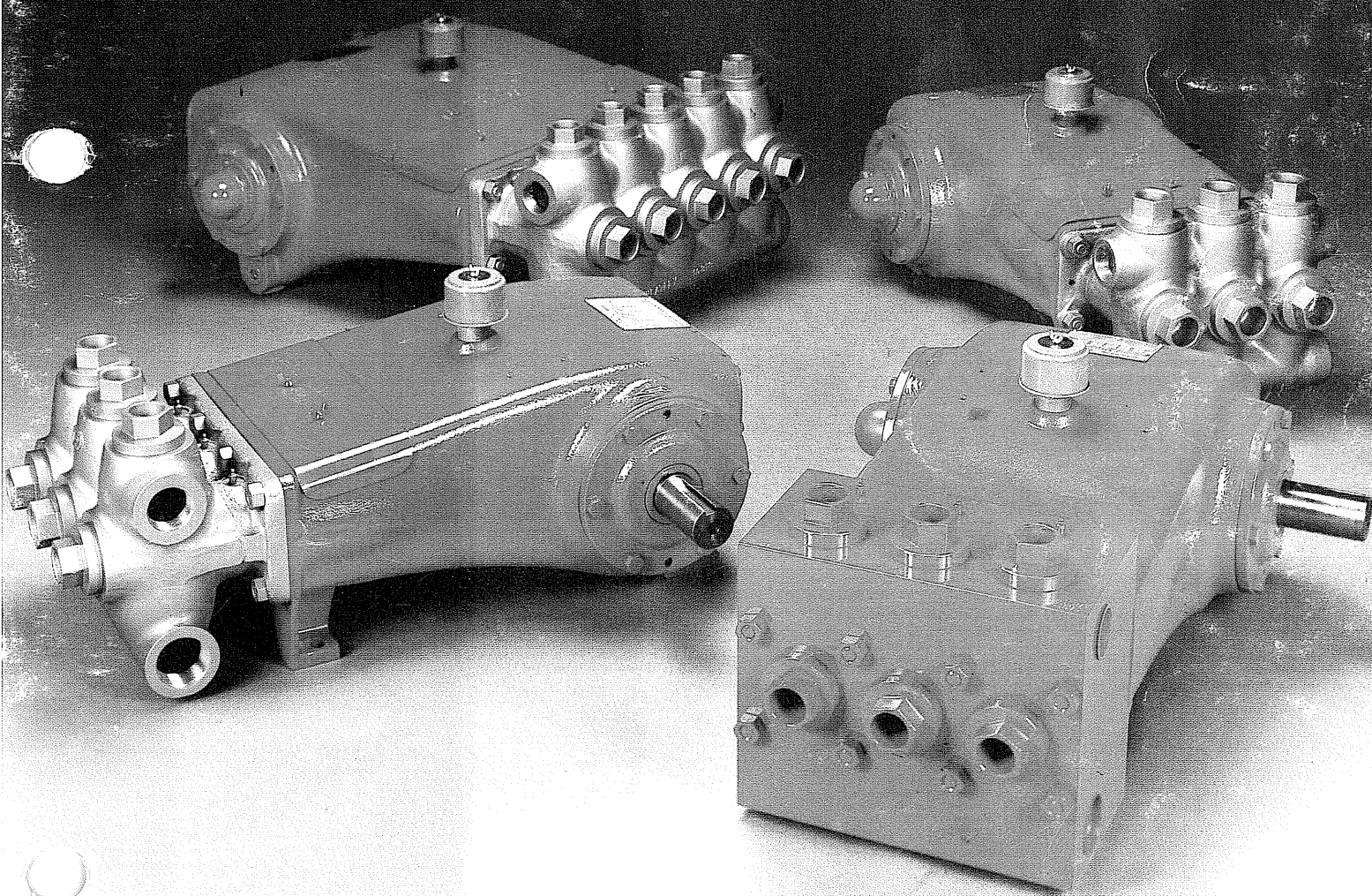
P-323 Triplex

P-313 Triplex

5P-330A Quintuplex

5P-323A Quintuplex

5P-313 Quintuplex



WHEATLEY
PUMP AND VALVE INC.

Triplex and Quintuplex Plunger Pumps for a Broad Range of Applications

Field Proven Reliability Since 1916

Founded in 1916, Wheatley Pump and Valve Inc. has an established reputation for providing quality, dependable products to the worldwide petroleum industry. For more than 70 years Wheatley's advanced technology has solved industry's flow control problems. The result is a complete line of reciprocating plunger pumps, from 6 to 1800 horsepower, ideally suited for salt water disposal, water-blast, reverse osmosis, and a variety of other industrial applications.

Built Tough From the Same Mold

Designed for durability, easy maintenance, and simple installation, the Wheatley P-300 series share many common components which come from the same tough mold. Whether your application is low pressure or high, in volumes from 1.4 to 238 gallons per minute, a P-300 series pump can handle it. Choose Wheatley pumps for continuous high volumetric efficiency, day after day . . . year after year.

Power End Features:

Wheatley's Exclusive Offset Crankshaft

By offsetting the crankshaft, our engineers have reduced vertical thrust loads by more than 40 percent. Crankshaft vibration is virtually eliminated and friction, heat and wear are significantly reduced.

Low Profile Power Frame

Wheatley pumps feature a low profile power end making them particularly suitable for close-quarter applications. Our power frames are manufactured from close-grained, one-piece castings. They are precision-bored to provide dimensional stability and matched alignment of the stuffing box, wiper box, crosshead, pony rod and plunger.

High Capacity Roller Bearings

We have simplified the alignment of the high-capacity tapered roller bearings to allow for easy adjustment from outside the pump. Bearing housings are precision-machined and interchangeable.

Reciprocating Members are in Compression

Unlike vertical, indirect-acting pump designs, the reciprocating components in Wheatley pumps are loaded in compression during the pumping stroke. As a result, connecting rod bolts do not stretch, crossheads and rods are not subject to tensile fatigue cracking. Connecting rod caps do not carry the full pumping loads.

Fluid End Features:

Your Choice of Materials

All Wheatley fluid ends are precision-machined to exacting tolerances. P-300 series fluid ends are available in aluminum bronze, ductile iron, cast steel, forged steel or forged stainless steel to meet your application requirements. Other materials are available on request.

Dual suction and discharge connections provide for the attachment of relief valves, bypass circuits, pressure gauges, dampeners or other accessories.

Wheatley Quality Plungers

To provide maximum versatility, plungers are available in several high quality materials. For the ultimate in plunger surface hardness, the exclusive Wheataloy™ plunger is made from a stainless steel body coated with a special nickel alloy. Other available materials are chrome oxide, and, for maximum corrosion resistance, solid ceramic plungers. You may choose either Wheataloy or solid ceramic plungers at no extra charge.

Packing

Wheatley offers several packing options, at no extra charge, to meet most pumping applications. The following table describes our standard packing availability. Other packing materials are available on request.

STYLE	DESCRIPTION/APPLICATION
838	Hard-core, non-adjustable for general service. Lubrication required.
845	Hard-core, non-adjustable for broader temperature range. Lubrication preferred.
255	Adjustable braided for Amine, Glycol or similar service. No lubrication required.
265	Adjustable alternating rings of flax and lead for higher temperature applications. No lubrication required.

Precision Pump Valves

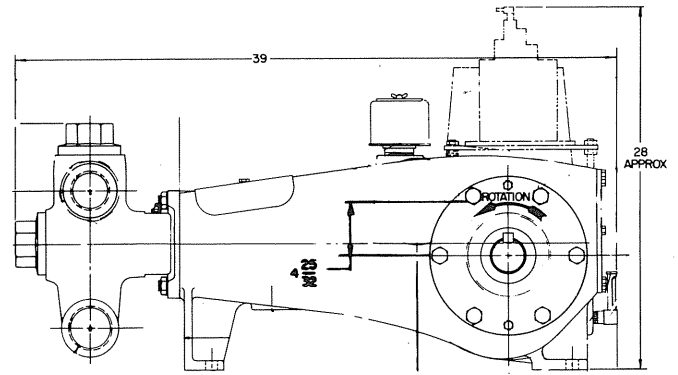
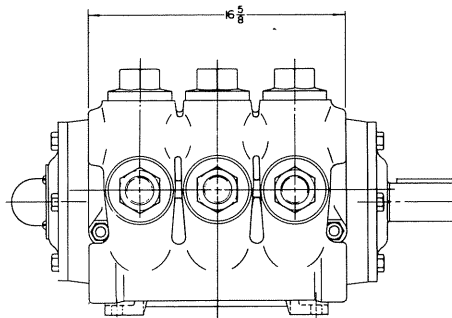
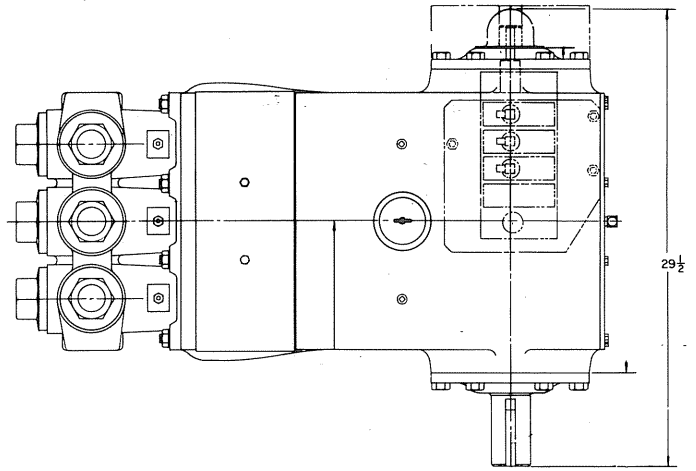
Precision machining and strict quality control standards assure proper valve standoff and maximum operating life. Standard valve construction features Celcon¹ or formed stainless steel discs with stainless steel seats. Synthetic seal wing-guided valves are optional. Other seat and disc materials are also available to meet your application requirements.

Fluid End Options:

FLUID END MATERIAL	PUMP MODEL						
	P-330A	P-364	P-323	P-313	5P-330A	5P-323A	5P-313
FORGED STEEL	●		●		●	●	
ALUMINUM BRONZE	●	●	●		●	●	
FORGED 15-5PH STAINLESS STEEL				●			●
DUCTILE IRON	●		●		●	●	
CAST STEEL			●				

Wheatley pumps are available skid-mounted with either engine or electric motor drive.

P-364



All dimensions are approximate. For exact specifications, request drawings from factory.

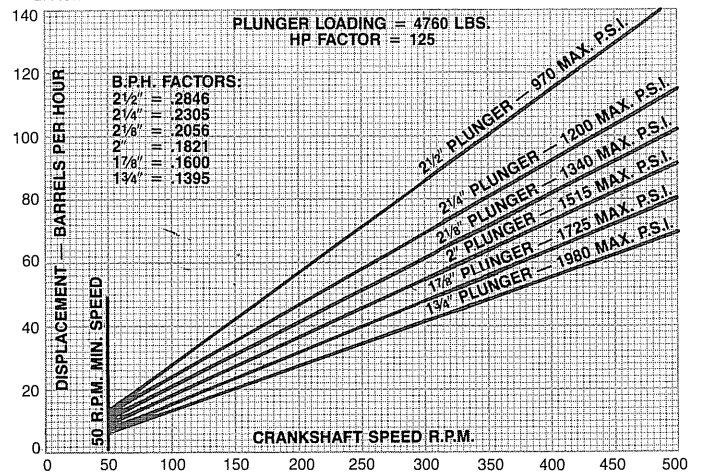
**P-364
PERFORMANCE CHART**

DISPLACEMENT VOLUMES (100% V.E.)			PUMP SPEED IN CRANKSHAFT REVOLUTIONS PER MINUTE					
GPM	BPH	BPD	1 3/4" 1980 PSI	1 7/8" 1725 PSI	2" 1515 PSI	2 1/8" 1340 PSI	2 1/4" 1200 PSI	2 1/2" 970 PSI
7.0	10	240	72	62	55	73	65	53
10.5	15	360	108	94	82	109	97	80
14.0	20	480	143	125	110	146	130	108
17.5	25	600	179	156	137	182	162	135
21.0	30	720	215	187	165	219	195	162
24.5	35	840	251	219	192	256	228	189
28.0	40	960	287	250	220	293	261	216
31.5	45	1080	323	281	247	330	297	243
35.0	50	1200	358	312	275	367	324	270
38.5	55	1320	394	344	302	404	361	297
42.0	60	1440	430	375	329	441	398	324
43.5	65	1560	466	406	357	478	435	351
49.0	70	1680		437	384	515	472	378
52.5	75	1800		469	412	552	509	405
56.0	80	1920		500	439	589	546	432
59.5	85	2040			467	626	583	459
63.0	90	2160			494	663	620	486
66.5	95	2280				700	657	513
70.0	100	2400				737	694	540
73.5	105	2520				774	731	567
77.0	110	2640				811	768	594
80.5	115	2760				848	805	621
84.0	120	2880				885	842	648
87.5	125	3000				922	879	675
91.0	130	3120				959	916	702
94.5	135	3240				996	953	729
98.0	140	3360				1033	990	756
GPM FACTOR			.0977	.1120	.1275	.1439	.1614	.1992
BPH FACTOR			.1395	.1600	.1821	.2056	.2305	.2846

500 R.P.M. MAX.
H.P. = BPH X PSI ÷ 2200

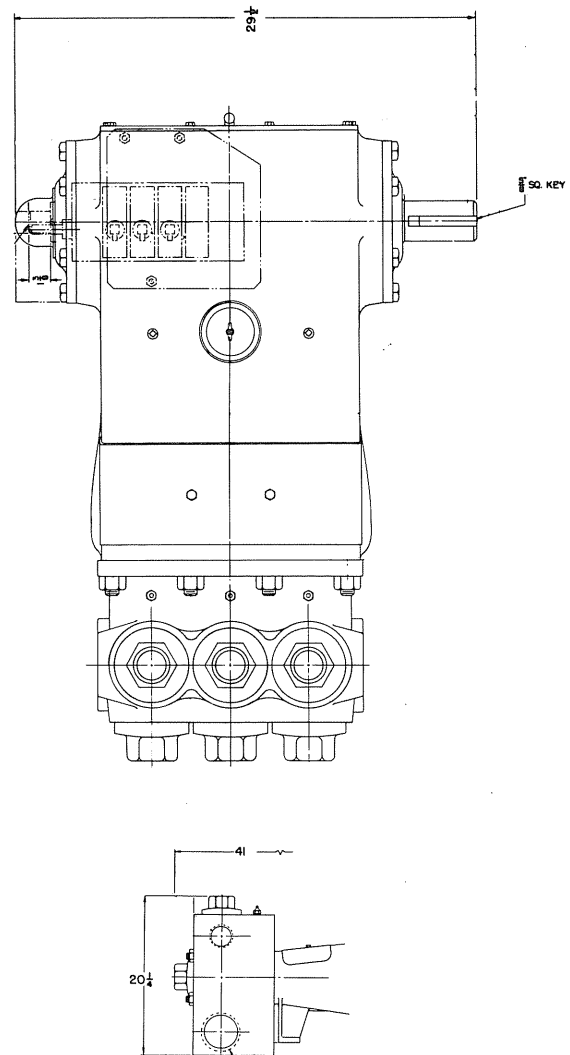
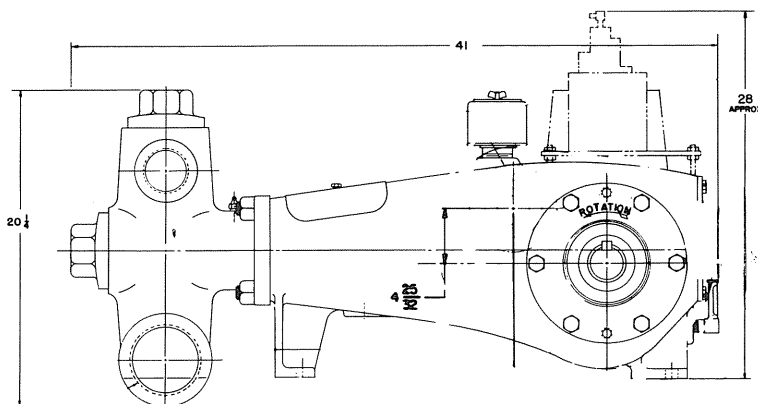
All Figures Based on 100% Volumetric Efficiency in Water.

P-364 PERFORMANCE CHART
1 3/4" TO 2 1/2" X 3 1/8" TRIPLEX PLUNGER PUMP, DISPLACEMENT BASED ON 100% VOLUMETRIC EFFICIENCY. POWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

P-330A



All dimensions are approximate. For exact specifications, request drawings from factory.

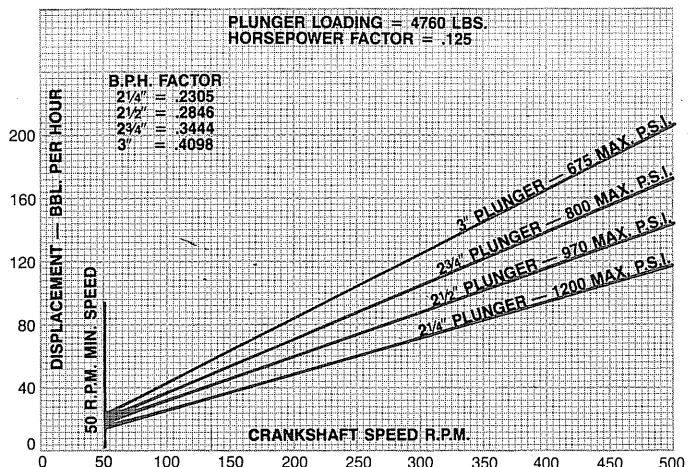
**P330-A
PERFORMANCE CHART**

DISPLACEMENT VOLUMES (100% V.E.)			PUMP SPEED IN CRANKSHAFT REVOLUTIONS PER MINUTE			
GPM	BPH	BPD	2 1/4" 1200 PSI	2 1/2" 970 PSI	2 3/4" 800 PSI	3" 675 PSI
10.5	15	360	65	53		
14	20	480	87	70	58	
17.5	25	600	108	88	73	61
21	30	720	130	105	87	73
24.5	35	840	152	123	102	85
28	40	960	174	141	116	98
31.5	45	1080	195	158	131	110
35	50	1200	217	176	145	122
38.5	55	1320	239	193	160	134
42	60	1440	260	211	174	146
45.5	65	1560	282	228	189	159
49	70	1680	304	246	203	171
52.5	75	1800	325	264	218	183
56	80	1920	347	281	232	195
59.5	85	2040	369	299	247	207
63	90	2160	390	316	261	220
66.5	95	2280	412	334	276	232
70	100	2400	434	351	290	244
77	110	2640	477	387	319	268
84	120	2880		422	348	293
91	130	3120		457	378	317
98	140	3360		492	407	342
105	150	3600			436	366
112	160	3840			465	390
119	170	4080			494	415
126	180	4320				439
133	190	4560				464
140	200	4800				488
GPM Factor			.1614	.1992	.2411	.2869
BPH Factor			.2305	.2846	.3444	.4098

500 RPM MAX.
H.P. = BPH X PSI ÷ 2200

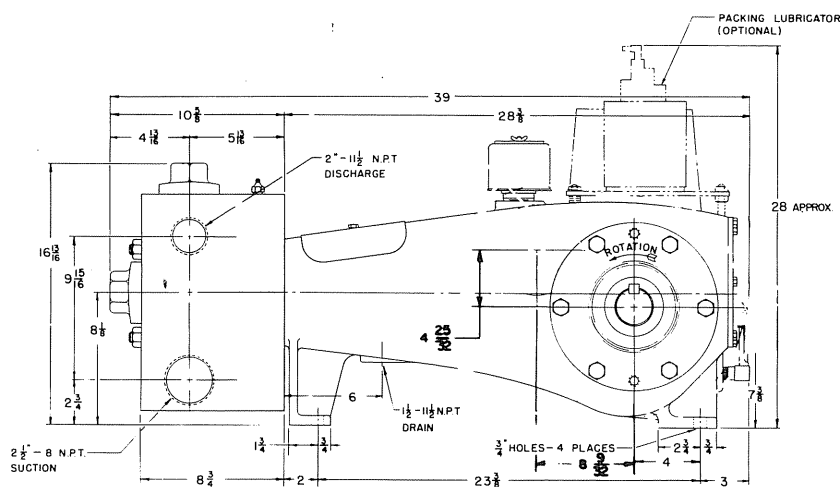
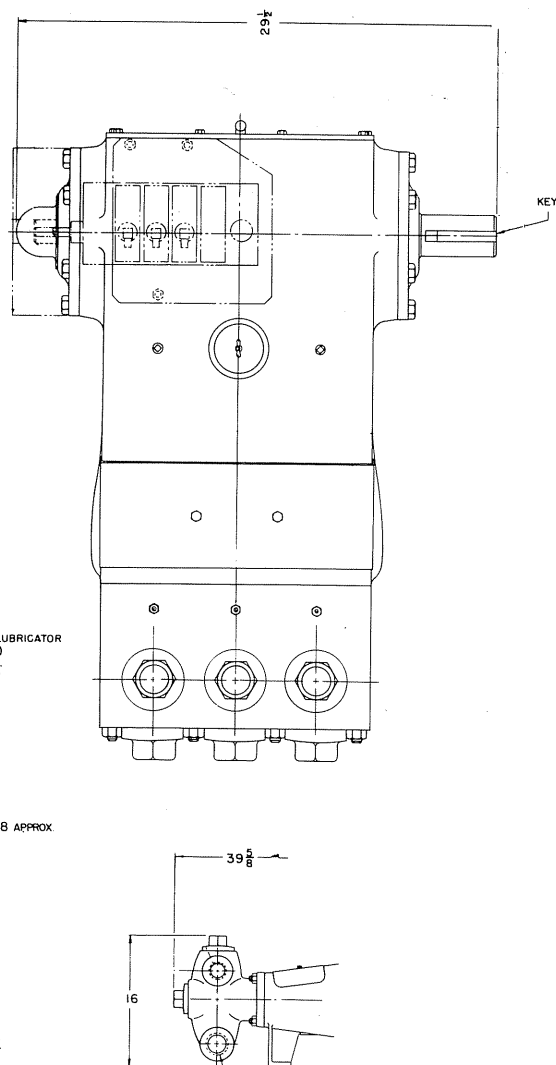
All Figures Based On 100% Volumetric Efficiency in Water.

P-330A PERFORMANCE CHART
2 1/4" TO 3" X 3/8" TRIPLEX PLUNGER PUMP. VOLUME BASED ON 100% VOLUMETRIC EFFICIENCY.
HORSEPOWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

P-323

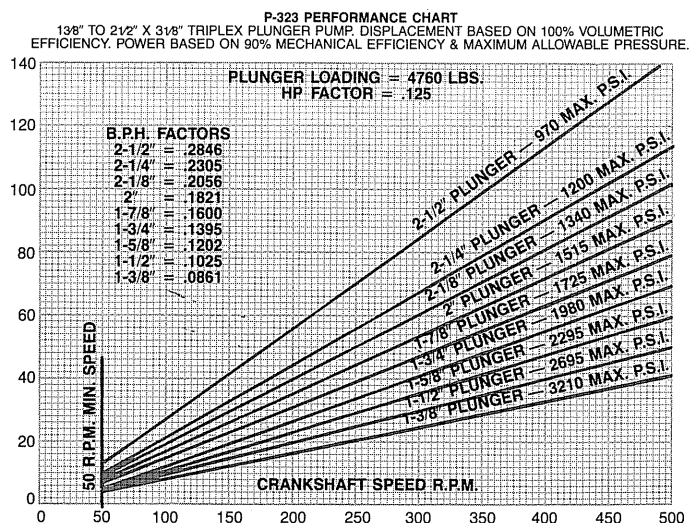


All dimensions are approximate. For exact specifications, request drawings from factory.

**P-323
PERFORMANCE CHART**

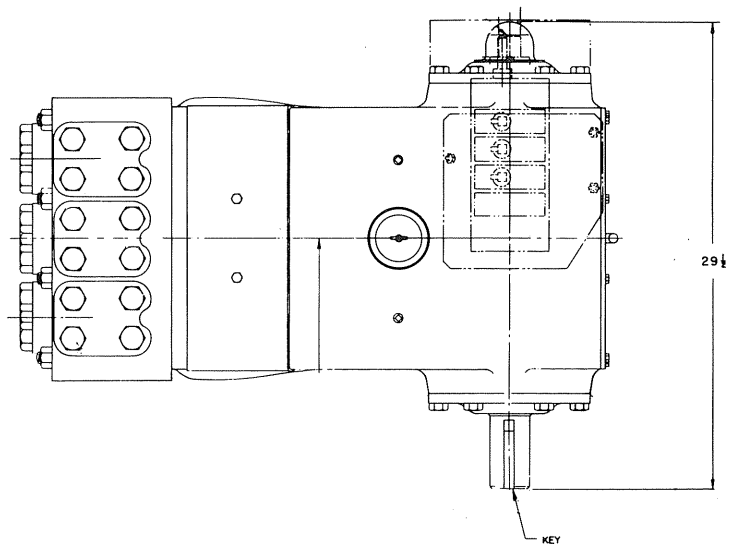
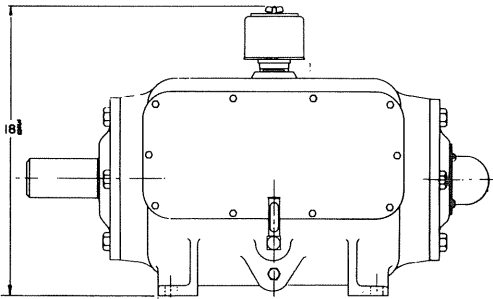
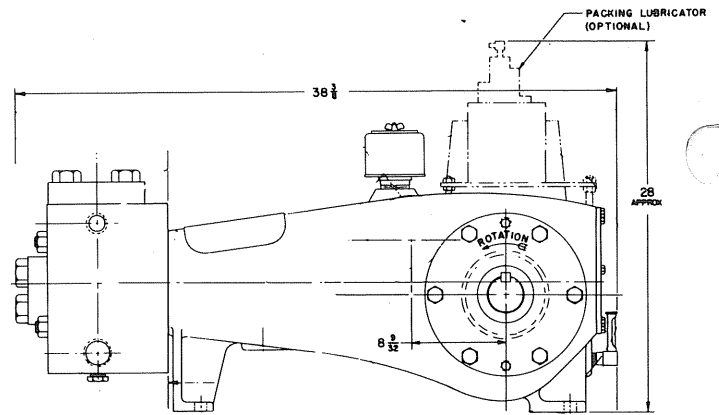
DISPLACEMENT VOLUMES (100% VOL. EFF.)			PUMP SPEED IN CRANKSHAFT REVOLUTIONS PER MINUTE								
			1-3/8"	1-1/2"	1-5/8"	1-3/4"	1-7/8"	2"	2-1/8"	2-1/4"	2-1/2"
GPM	BPH	BPD	3210 PSI	2695 PSI	2295 PSI	1980 PSI	1725 PSI	1515 PSI	1340 PSI	1200 PSI	970 PSI
3.5	5	120	58								
7.0	10	240	116	98	83	72	62	55			
10.5	15	360	174	146	125	108	94	82	73	65	53
14.0	20	480	232	195	166	143	125	110	97	87	70
17.5	25	600	290	244	208	179	156	137	122	108	88
21.0	30	720	348	293	250	215	187	165	146	130	105
24.5	35	840	407	341	291	251	219	192	170	152	123
28.0	40	960	465	390	333	287	250	220	195	174	141
31.5	45	1080		439	374	323	281	247	219	195	158
35.0	50	1200		488	416	358	312	275	243	217	176
38.5	55	1320			458	394	344	302	267	239	193
42.0	60	1440			499	430	375	329	292	260	211
43.5	65	1560				466	406	357	316	282	228
49.0	70	1680					437	384	340	304	246
52.5	75	1800					469	412	365	325	264
56.0	80	1920					500	439	389	347	281
59.5	85	2040						467	413	369	299
63.0	90	2160						494	438	390	316
66.5	95	2280							462	412	334
70.0	100	2400							486	434	351
73.5	105	2520								456	369
77.0	110	2640								477	387
80.5	115	2760								499	404
84.0	120	2880									422
87.5	125	3000									439
91.0	130	3120									457
94.5	135	3240									474
98.0	140	3360									492
GPM Factor			.0603	.0718	.0841	.0977	.1120	.1275	.1439	.1614	.1992
BPH Factor			.0861	.1025	.1202	.1395	.1600	.1821	.2056	.2305	.2846

500 RPM MAX.
H.P. = BPH X PSI ÷ 2200
All Figures Based On 100% Volumetric Efficiency in Water.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

P-313



All dimensions are approximate. For exact specifications, request drawings from factory.

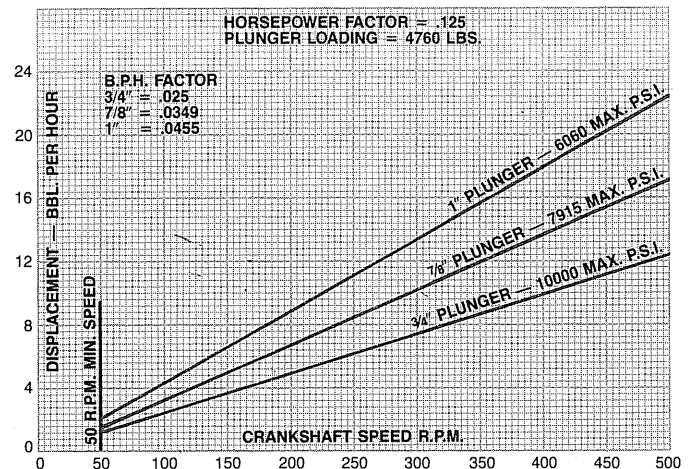
**P-313
PERFORMANCE CHART**

DISPLACEMENT VOLUMES (100% V.E.)			PUMP SPEED IN CRANKSHAFT REVOLUTIONS PER MINUTE		
GPM	BPH	BPD	3/4" 10000 PSI	7/8" 7915 PSI	1" 6060 PSI
1.4	2	48	78	57	
2.1	3	72	117	86	66
2.8	4	96	156	115	88
3.5	5	120	195	143	110
4.2	6	144	234	172	132
4.9	7	168	273	201	154
5.6	8	192	312	229	176
6.3	9	216	351	258	198
7.0	10	240	390	287	220
7.7	11	264	429	316	242
8.4	12	288	468	344	264
9.1	13	312		373	285
9.8	14	336		402	307
10.5	15	360		430	329
11.2	16	384		459	351
11.9	17	408		488	373
12.6	18	432			395
13.3	19	456			417
14.0	20	480			439
14.7	21	504			461
15.4	22	528			483
GPM Factor			.0179	.0244	.0319
BPH Factor			.0256	.0349	.0455

500 MAX. R.P.M.
H.P. = BPH X PSI ÷ 2200

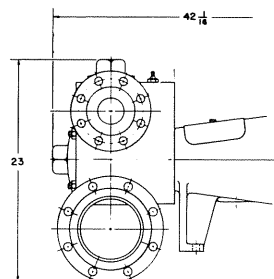
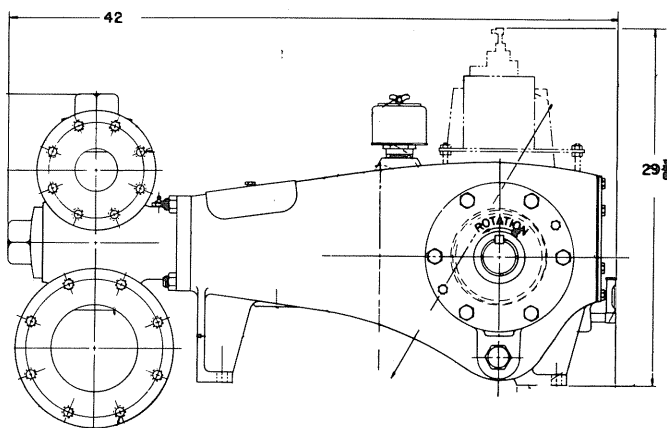
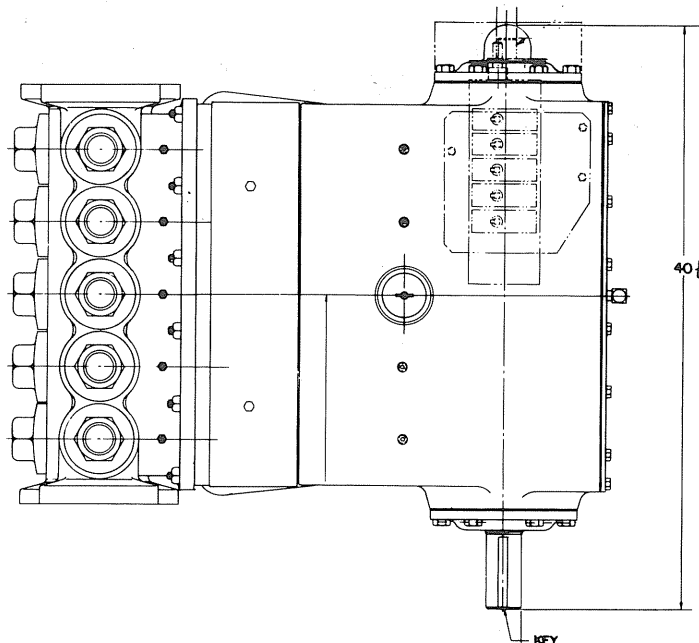
All Figures Based on 100% Volumetric Efficiency in Water.

P-313 PERFORMANCE CHART
3/4" TO 1" X 3 1/8" TRIPLEX PLUNGER PUMP. VOLUME BASED ON 100% VOLUMETRIC EFFICIENCY.
HORSEPOWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

5P-330A



All dimensions are approximate. For exact specifications, request drawings from factory.

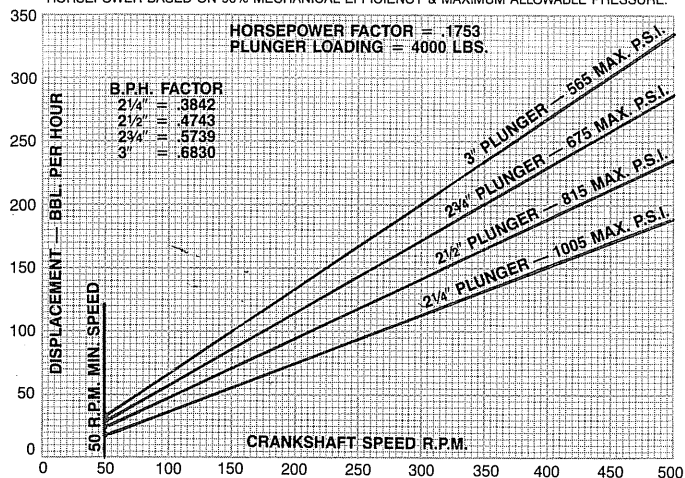
5P-330A
PERFORMANCE CHART

DISPLACEMENT VOLUMES (100% V.E.)			PUMP SPEED IN CRANKSHAFT REVOLUTIONS PER MINUTE			
GPM	BPH	BPD	2 1/4" 1005 PSI	2 1/2" 815 PSI	2 3/4" 675 PSI	3" 565 PSI
14	20	480	52			
21	30	720	78	63	52	
28	40	960	104	84	70	59
35	50	1200	130	105	87	73
42	60	1440	156	126	105	88
49	70	1680	182	148	122	102
56	80	1920	208	169	139	117
63	90	2160	234	190	157	132
70	100	2400	260	211	174	146
77	110	2640	286	232	192	161
84	120	2880	312	253	209	176
91	130	3120	338	274	227	190
98	140	3360	364	295	244	205
105	150	3600	390	316	261	220
112	160	3840	416	337	279	234
119	170	4080	442	358	296	249
126	180	4320	468	379	314	264
133	190	4560	495	401	331	278
140	200	4800		422	348	293
147	210	5040		443	366	307
154	220	5280		464	383	322
161	230	5520		485	401	337
168	240	5760			418	351
175	250	6000			436	366
182	260	6240			453	381
189	270	6480			470	395
196	280	6720			488	410
203	290	6960				425
210	300	7200				439
217	310	7440				454
224	320	7680				468
231	330	7920				483
238	340	8160				498
GPM Factor			.2689	.3320	.4017	.4781
BPH Factor			.3842	.1743	.5739	.6830

500 RM MAX.
H.P. = BPH X PSI ÷ 2200

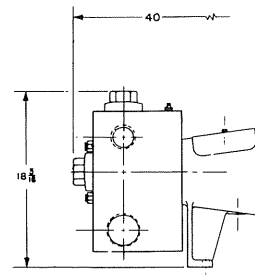
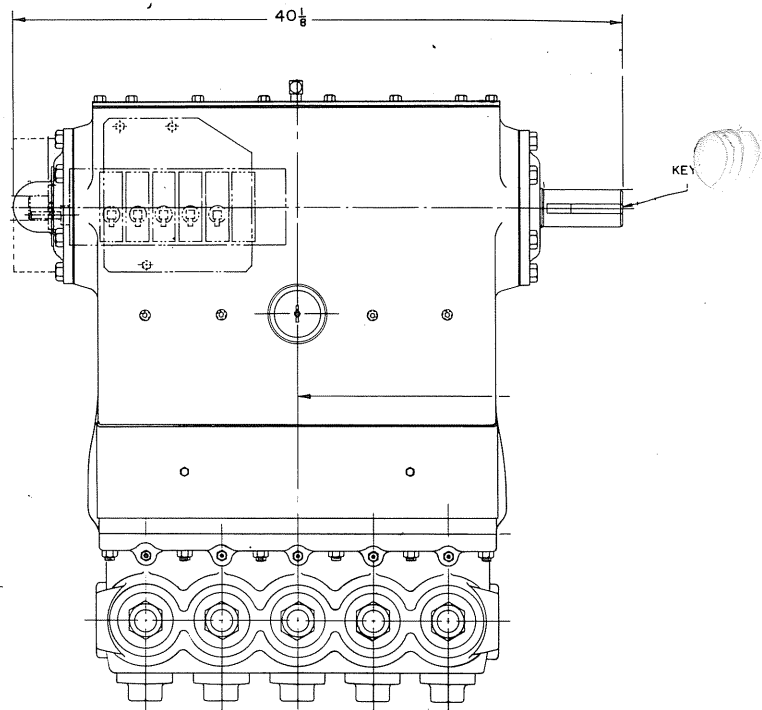
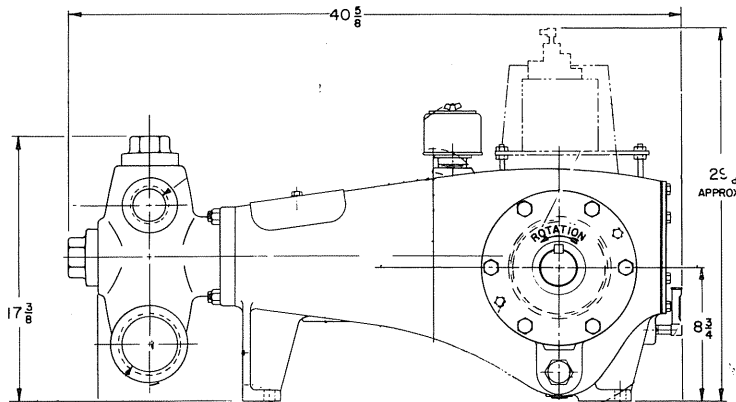
All Figures Based on 100% Volumetric Efficiency in Water.

5P-330A PERFORMANCE CHART
2 1/4" TO 3" X 3 1/8" QUINTUPLEX PLUNGER PUMP. VOLUME BASED ON 100% VOLUMETRIC EFFICIENCY.
HORSEPOWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

5P-323A



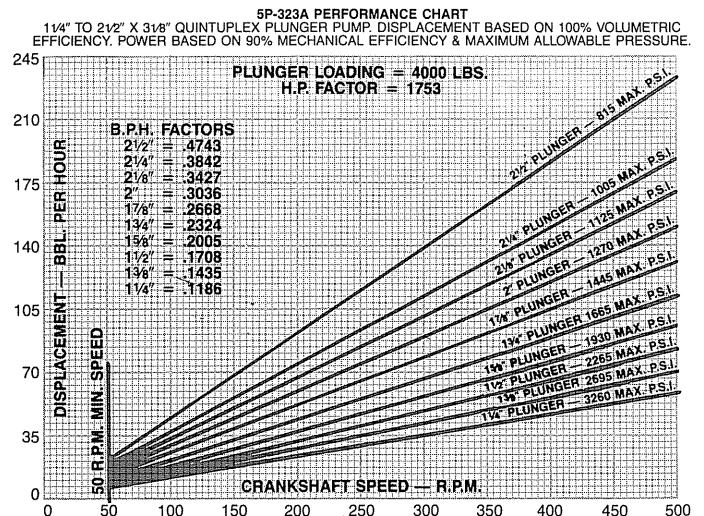
All dimensions are approximate. For exact specifications, request drawings from factory.

**5P-323A
PERFORMANCE CHART**

Displacement Volumes (100% Vol. Eff.)			Pump Speed in Crankshaft Revolutions per Minute									
			1 1/4"	1 3/8"	1 1/2"	1 5/8"	1 3/4"	1 7/8"	2"	2 1/8"	2 1/4"	2 1/2"
GPM	BPH	BPD	3260 PSI	2695 PSI	2265 PSI	1930 PSI	1665 PSI	1445 PSI	1270 PSI	1125 PSI	1005 PSI	815 PSI
7.0	10	240	84	70	59	50	65	56				
10.3	15	360	126	105	88	75	86	75				
14.0	20	480	169	139	117	100	100	86	66	58	52	
17.5	25	600	211	174	147	125	103	94	82	73	65	53
21.0	30	720	253	209	176	150	129	112	99	87	78	63
24.5	35	840	295	244	205	175	131	131	115	102	91	74
28.0	40	960	337	279	234	200	172	150	132	117	104	84
31.5	45	1080	379	314	263	224	194	169	148	131	117	95
33.0	50	1200	422	348	293	249	213	187	165	146	130	103
36.5	55	1320	464	383	322	274	237	206	181	160	143	116
42.0	60	1440		418	351	299	258	225	198	175	156	127
45.5	65	1560		453	381	324	280	244	214	196	169	137
49.0	70	1680		488	410	349	301	262	231	204	182	148
52.9	75	1800			439	374	323	281	247	219	195	158
56.0	80	1920			468	399	344	300	264	233	208	169
59.5	85	2040			498	424	366	319	280	248	221	179
63.0	90	2160				449	387	337	296	263	234	190
66.5	95	2280				474	409	356	313	277	247	200
70.0	100	2400				499	430	375	329	292	260	211
77.0	110	2640					473	412	362	321	286	232
84.0	120	2880						450	395	350	312	253
91.0	130	3120						487	423	379	338	274
98.0	140	3360							461	408	364	295
105.0	150	3600							494	438	390	316
112.0	160	3840								467	416	337
119.0	170	4080								496	442	358
126.0	180	4320									469	379
133.0	190	4560									495	401
140.0	200	4800										422
147.0	210	5040										443
154.0	220	5280										464
161.0	230	5520										485
GPM Factor			.0830	.1005	.1196	.1404	.1627	.1868	.2125	.2390	.2689	.3317
BPH Factor			.1186	.1435	.1708	.2005	.2324	.2668	.3036	.3427	.3842	.4743

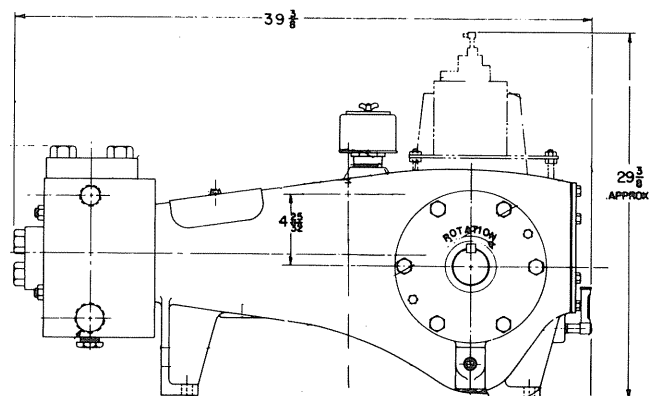
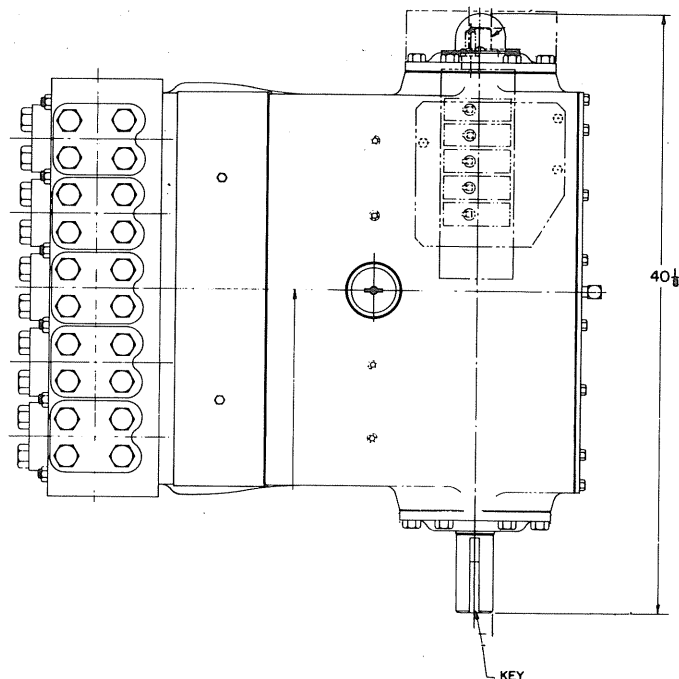
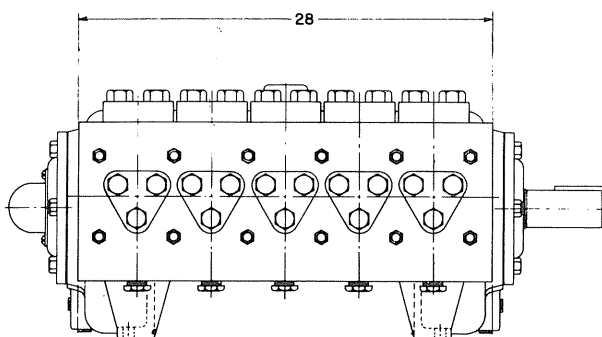
500 MAX. R.P.M.
H.P. = BPH X PSI ÷ 2200

All Figures Based on 100% Volumetric Efficiency in Water.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

5P-313



**5P-313
PERFORMANCE CHART**

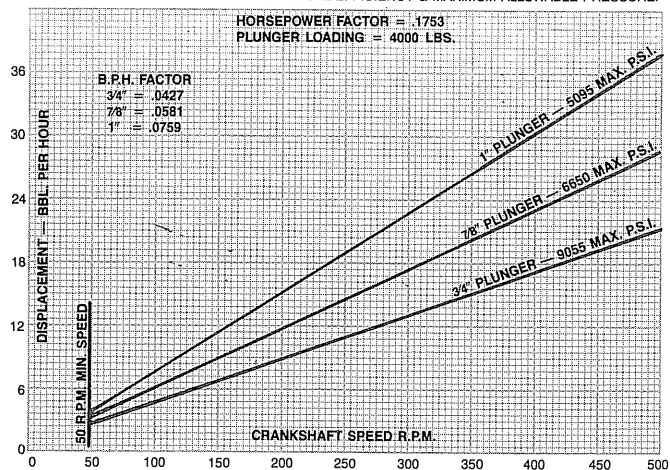
Displacement Volumes (100% V.E.)			Pump Speed in Crankshaft Revolutions Per Minute		
GPM	BPH	BPD	3/4" 9055 PSI	7/8" 6650 PSI	1" 5095 PSI
2.1	3	72	70	52	
2.8	4	96	94	69	53
3.5	5	120	117	86	66
4.2	6	144	141	103	79
4.9	7	168	164	120	92
5.6	8	192	187	138	105
6.3	9	216	211	155	119
7.0	10	240	234	172	132
7.7	11	264	258	189	145
8.4	12	288	281	207	158
9.1	13	312	305	224	171
9.8	14	336	328	241	184
10.5	15	360	351	258	198
11.2	16	384	375	275	211
11.9	17	408	398	293	224
12.6	18	432	422	310	237
13.3	19	456	445	327	250
14.0	20	480	468	344	264
15.4	22	528		379	290
16.8	24	576		413	316
18.2	26	624		447	343
19.6	28	672		482	369
21.0	30	720			395
22.4	32	768			422
23.8	34	816			448
25.2	36	864			474
26.6	38	912			500
GPM Factor			.0299	.0407	.0531
BPH Factor			.0427	.0581	.0759

500 R.P.M. MAX.
H.P. = BPH X PSI ÷ 2200

All Figures Based on 100% Volumetric Efficiency in Water.

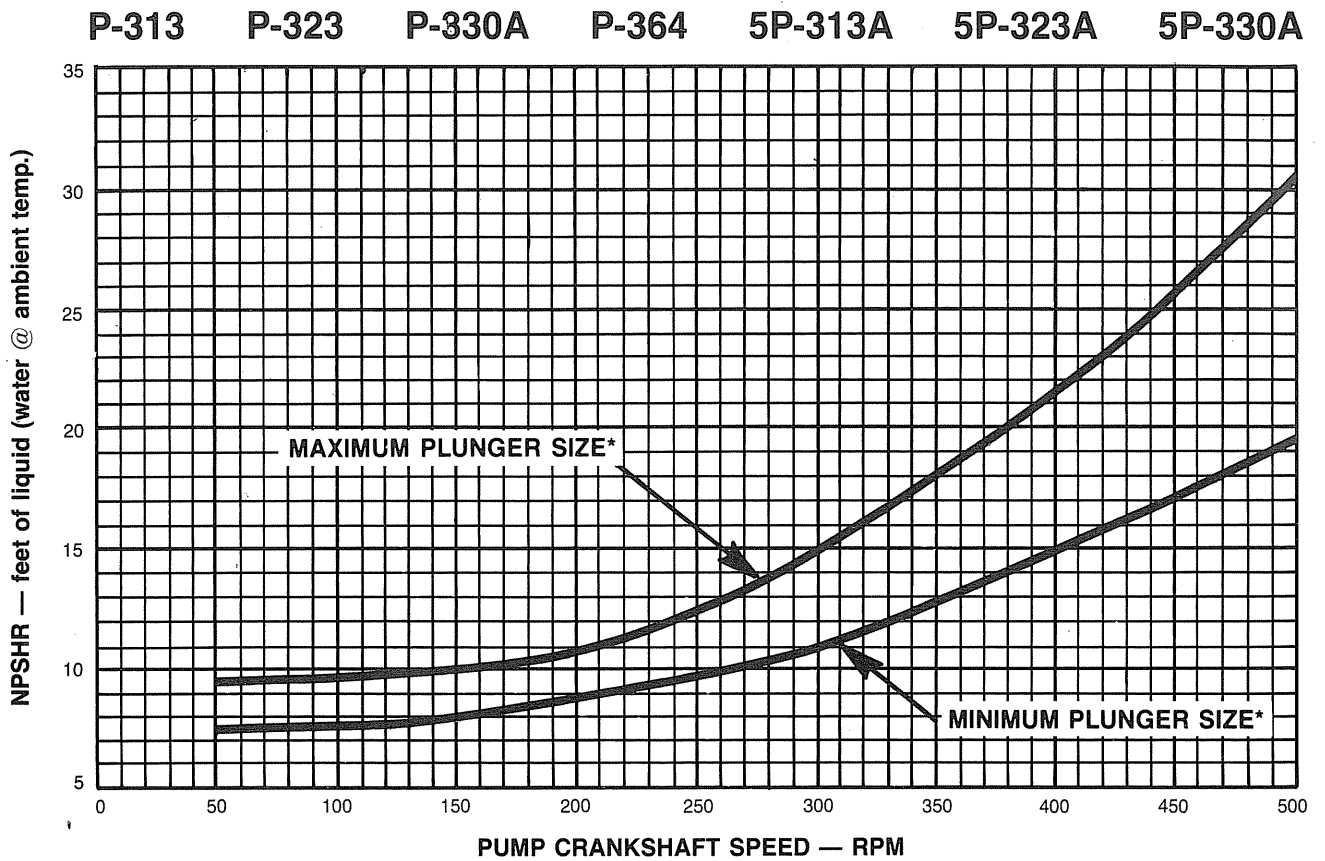
All dimensions are approximate. For exact specifications, request drawings from factory.

5P-313 PERFORMANCE CHART
3/4" TO 1" X 3 1/8" QUINTUPLEX PLUNGER PUMP. VOLUME BASED ON 100% VOLUMETRIC EFFICIENCY.
HORSEPOWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE.



*Consult factory for viscosity above 300 SSU, temperatures above 180°F and continuous pump speeds above 400 RPM.

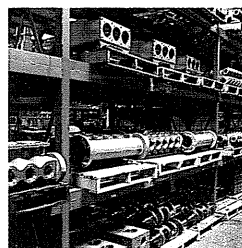
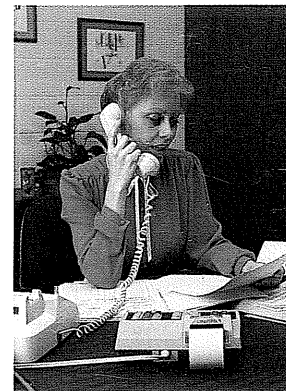
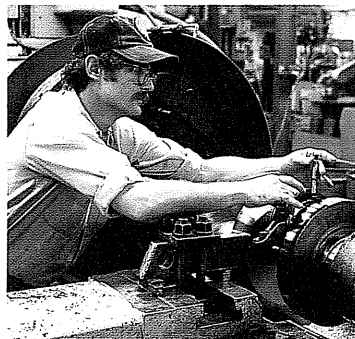
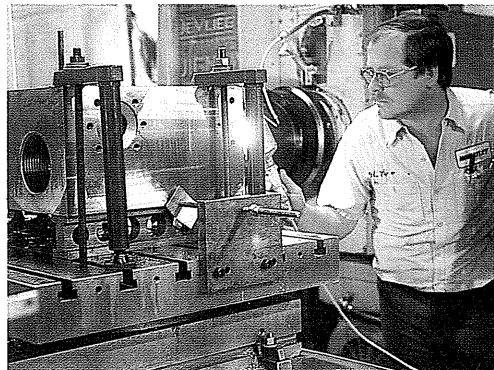
NET POSITIVE SUCTION HEAD REQUIRED (NPSHR)



*Refer to the individual pump model performance curve for minimum and maximum plunger sizes. Interpolate for all plunger sizes between minimum and maximum to obtain the corresponding NPSHR value.

The 300 Pump Series

P-364	5P-330A
P-330A	5P-323A
P-323	5P-313
P-313	



For more than 70 years Wheatley has been applying new technology and advanced engineering to solve industry's flow control problems, no matter what type of application is required. We offer a broad line of 46 low-profile plunger and piston pumps to fit a variety of pumping applications. Here are just a few: Reverse Osmosis • Fluid Transfer • Saltwater Injection and Disposal • Pressure Cleaning • Glycol Systems • Well Servicing • Hydraulic Systems • Timber Debarking • Inhibitor Injection • Steel Mills • Hydrocarbon Processing • Boiler Feed • LPG Storage and Pipelines.

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