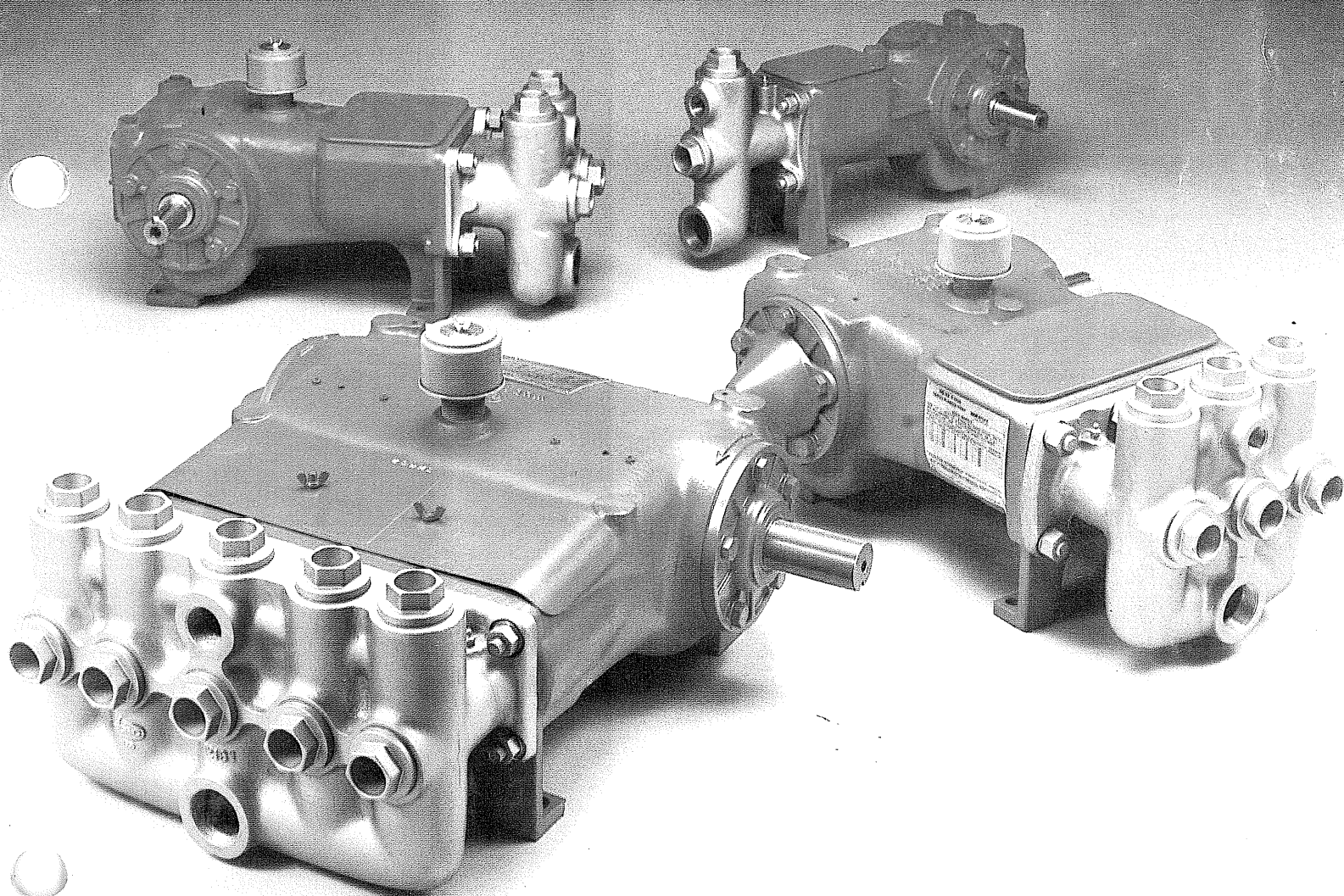


Series

200

P-50A Simplex
P-100 Duplex
P-200 Triplex
5P-200A Quintuplex

Plunger Pumps from Wheatley



WHEATLEY
PUMP AND VALVE INC.

Series 200 Plunger Pumps Designed for High Pressure, Low Volume 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 nearly 70 years we have been applying advanced technology to solve industry's flow control problems. The result is a complete line of reciprocating plunger pumps ideally suited for salt water disposal, water-blast, reverse osmosis, and a variety of other industrial applications.

Built Tough From the Same Mold

The Series 200 plunger pumps are Wheatley's high pressure, low volume quadruplets. Designated the P-50A (simplex), P-100 (duplex), P-200 (triplex), and 5P-200A (quintuplex), all models share common components which come from the same tough mold.

Designed for stability, easy maintenance, and simple installation, Wheatley's Series 200 plunger pumps provide continuous high volumetric efficiency, day after day . . . year after year.

Power End

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 many vertical, indirect-acting pump designs, the reciprocating components in Wheatley pumps are all 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. The 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. Our high quality fluid ends are available in your choice of forged alloy steel, forged stainless steel, cast aluminum bronze, or ductile iron.

Suction and discharge connections are designed for simplified piping layout. 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, we manufacture plungers from 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.

Precision Pump Valves

Wheatley Pump valves are precision-machined to match their mating surfaces. Precision machining and strict quality control standards assure proper valve standoff and maximum operating life. Standard valve construction features Celcon™ discs with stainless steel seats. Several seat and disc materials are optionally available depending on your application requirements.

Packing

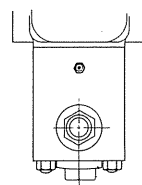
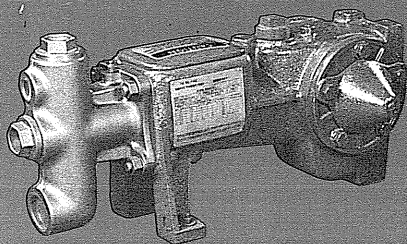
Standard packing is non-adjustable, hard-core "J" type. A variety of packing types is available for most pumping applications.

Pump Options:

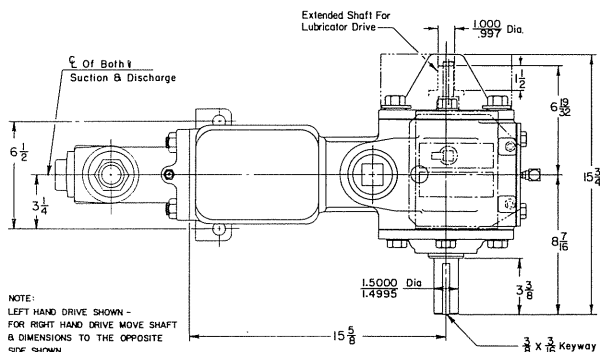
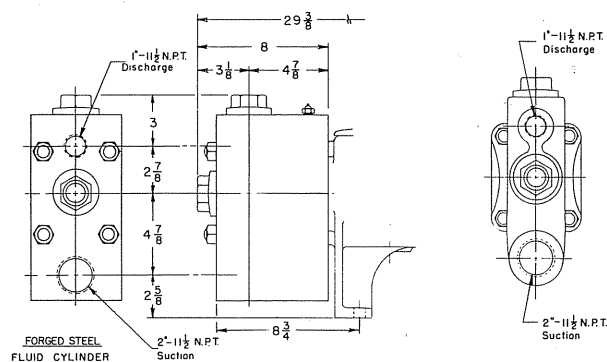
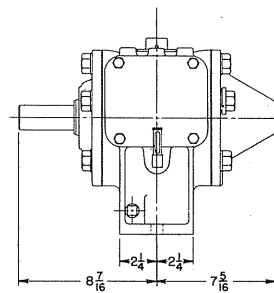
PUMP MODEL:	P50A	P100A	P200B	P200H	5P200A
FORGED STEEL	•	•	•	•	•
FORGED 316 STAINLESS STEEL	•	•	•	•	•
ALUMINUM BRONZE	•	•	•		•
FORGED 15-5PH STAINLESS STEEL				•	
DUCTILE IRON	•	•	•		•

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

P-50

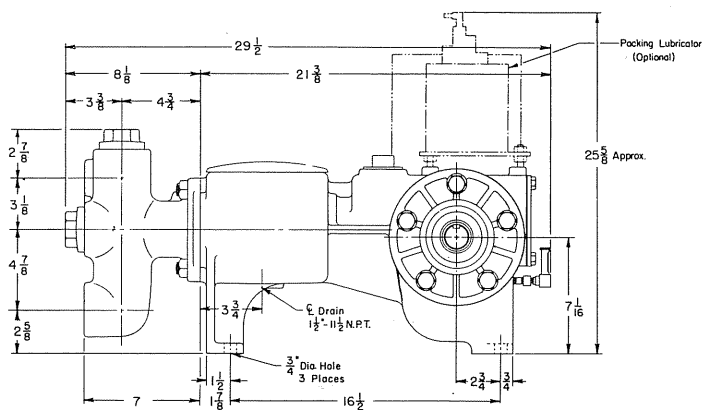


NOTE:
FOR INSTALLATION PURPOSES -
TOLERANCES FOR ALL DIMENSIONS
(UNLESS OTHERWISE NOTED) ARE
± 1/16" (± 1.6 mm).



NOTE:
LEFT HAND DRIVE SHOWN -
FOR RIGHT HAND DRIVE MOVE SHAFT
& DIMENSIONS TO THE OPPOSITE
SIDE SHOWN.

CAST ALUMINUM BRONZE OR DUCTILE IRON
FLUID CYLINDER



Dimensions are for estimating purposes only.
For certified drawings, please contact factory.

**P-50A
PERFORMANCE CHART**
1 1/8" to 1 3/4" x 2 3/16" Simplex Plunger Pump

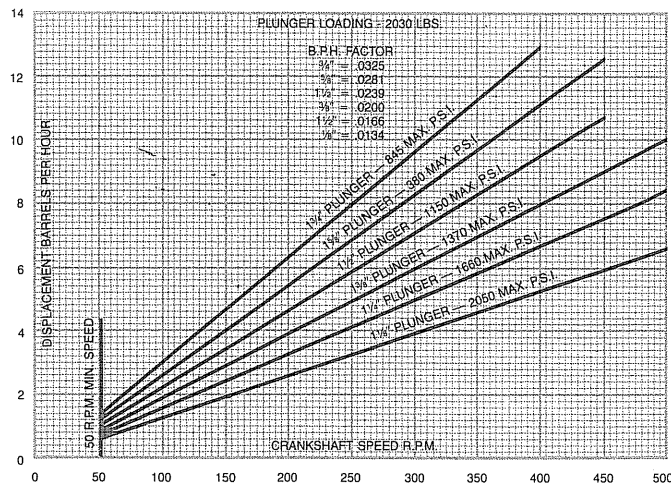
Displacement Volumes (100% V.E.)			Pump Speed In Crankshaft Revolutions Per Minute					
GPM	BPH	BPD	1 1/8" 2050 PSI	1 1/4" 1660 PSI	1 3/8" 1370 PSI	1 1/2" 1150 PSI	1 5/8" 980 PSI	1 3/4" 845 PSI
.7	1.0	24	75	60	50	43	37	32
1.05	1.5	36	112	90	75	63	53	46
1.40	2.0	48	149	120	100	84	71	61
1.75	2.5	60	187	150	125	105	89	77
2.10	3.0	72	224	181	150	125	107	92
2.45	3.5	84	261	211	175	146	125	108
2.80	4.0	96	299	241	200	167	143	123
3.15	4.5	108	336	271	225	188	160	138
3.50	5.0	120	373	301	250	209	178	154
3.85	5.5	132	410	331	275	230	196	169
4.20	6.0	144	448	361	300	251	214	184
4.55	6.5	156	485	392	325	272	232	200
4.90	7.0	168		422	350	293	249	215
5.25	7.5	180		452	375	314	267	230
5.60	8.0	192		482	400	335	285	246
5.95	8.5	204			425	356	303	261
6.30	9.0	216			450	376	321	277
6.65	9.5	228			475	397	339	292
7.00	10.0	240			500	418	356	307
7.35	10.5	252				439	374	323
7.70	11.0	264					392	338
8.05	11.5	276					409	353
8.40	12.0	288					427	369
8.75	12.5	300					445	384
9.10	13.0	312						400
9.45	13.5	324						
9.80	14.0	336						
10.15	14.5	348						
G.P.M. Factor			.0094	.0116	.0140	.0167	.0197	.0227
B.P.H. Factor			.0134	.0166	.0200	.0239	.0281	.0325

$$(V\text{-Belt Drive}) BPH = \frac{BPH \times PSI}{1765} \quad (\text{Gear Motor Drive}) BPH = \frac{BPH \times PSI}{1640}$$

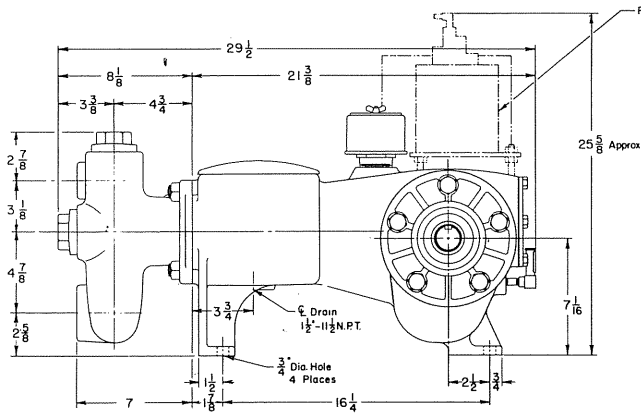
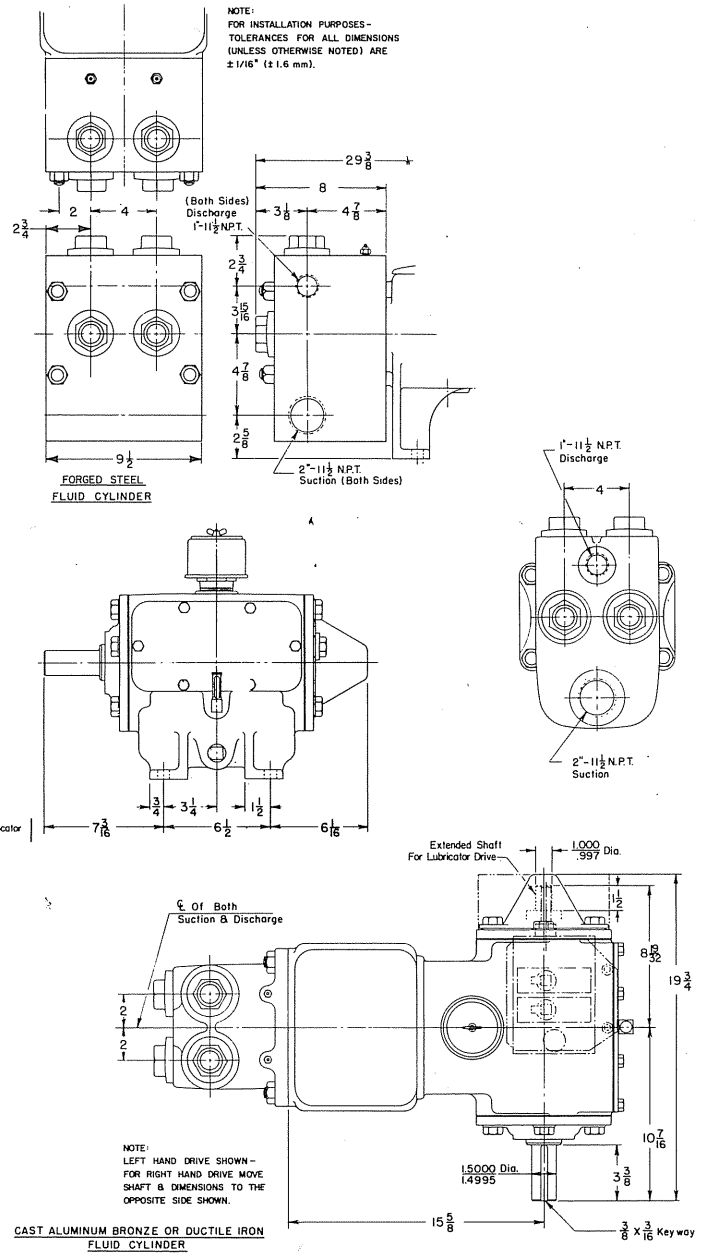
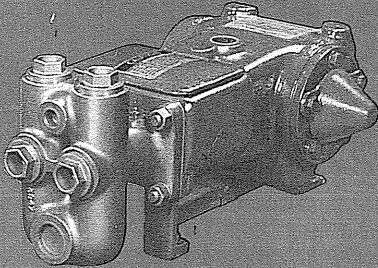
All Figures Based On 100% Volumetric Efficiency In Water

$$GPM = .7 \times BPH$$

P-50A PERFORMANCE CHART
1 1/8" to 1 3/4" x 2 3/16" Simplex Plunger Pump Displacement Based On 100% Volumetric
Efficiency. Power Based On Maximum Allowable Pressure And Type Drive



P-100



**P-100A
PERFORMANCE CHART**
1 1/8" to 1 3/4" x 2 3/8" Duplex Plunger Pump

Displacement Volumes (100% V.E.)			Pump Speed In Crankshaft Revolutions Per Minute					
GPM	BPH	BPD	1 1/8" PSI 2050	1 1/4" PSI 1660	1 3/8" PSI 1370	1 1/2" PSI 1150	1 5/8" PSI 980	1 3/4" PSI 845
1.4	2	48	75	60	50	63	53	
2.1	3	72	112	90	75	84	71	61
2.8	4	96	149	120	100	105	89	77
3.5	5	120	187	151	125	126	107	92
4.2	6	144	224	181	150	146	125	108
4.9	7	168	261	211	175	167	143	123
5.6	8	192	299	241	200	188	160	138
6.3	9	216	336	271	224	209	178	154
7.0	10	240	373	301	249	230	196	169
7.7	11	264	410	331	274	251	214	184
8.4	12	288	448	361	299	272	232	200
9.1	13	312	485	392	324	293	250	215
9.8	14	336		422	349	314	267	230
10.5	15	360		452	374	335	285	246
11.2	16	384		482	399	356	303	261
11.9	17	408			424	377	321	276
12.6	18	432			449	397	339	292
13.3	19	456			474	418	357	307
14.0	20	480			499		374	323
14.7	21	504					392	338
15.4	22	528					410	353
16.1	23	552					428	369
16.8	24	576					446	384
17.5	25	600						399
18.2	26	624						
G.P.M. Factor			.0188	.0232	.0281	.0335	.0393	.0456
B.P.H. Factor			.0268	.0332	.0401	.0478	.0561	.0651

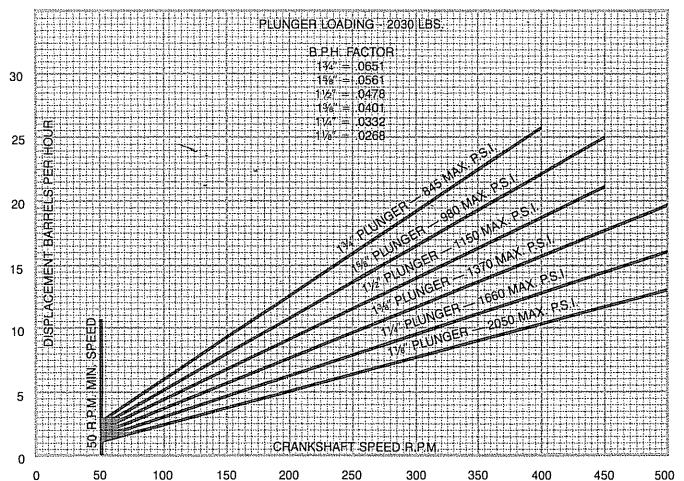
$$\text{BHP} = \frac{\text{BPH} \times \text{PSI}}{1955}$$

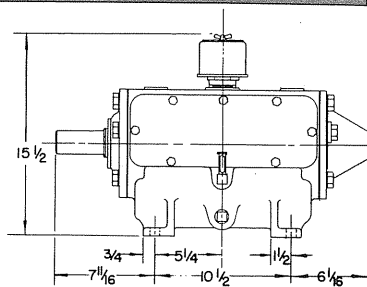
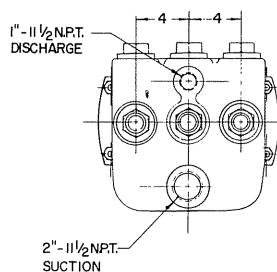
All Figures Based On 100% Volumetric Efficiency In Water

$$\text{GPM} = .7 \times \text{BPH}$$

Dimensions are for estimating purposes only.
For certified drawings, please contact factory.

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





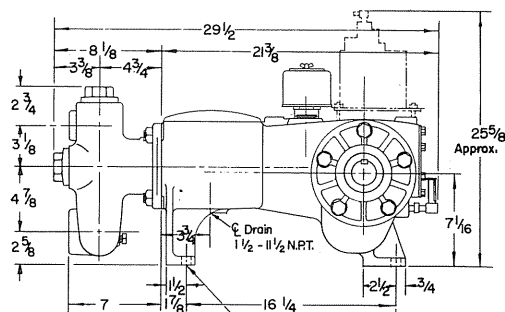
P-200B
PERFORMANCE CHART
1 1/8" to 1 3/4" x 2 3/16" Triplex Plunger Pump

Displacement Volumes (100% V.E.)			Pump Speed In Crankshaft Revolutions Per Minute					
GPM	BPH	BPD	1½" 2050 PSI	1¼" 1660 PSI	1⅜" 1370 PSI	1½" 1150 PSI	1⅞" 980 PSI	1¾" 845 PSI
1.4	2	48	50	60	50			
2.1	3	72	74	80	66	56		
2.8	4	96	99	100	83	70	59	51
3.5	5	120	124	120	100	84	71	61
4.2	6	144	149	141	116	98	83	72
4.9	7	168	174	161	133	112	95	82
5.6	8	192	198	181	149	126	107	92
6.3	9	216	223	201	166	139	119	102
7.0	10	240	248	221	182	153	131	113
7.7	11	264	273	241	199	167	143	123
8.4	12	288	297	261	216	181	154	133
9.1	13	312	322	281	232	195	166	143
9.8	14	336	347	301	249	209	178	154
10.5	15	360	372	321	265	223	190	164
11.2	16	384	397	341	282	237	202	174
11.9	17	408	421	361	299	251	214	184
12.6	18	432	446	382	315	265	226	195
13.3	19	456	471	402	332	279	238	205
14.0	20	480	496	422	348	293	249	215
14.7	21	504		442	365	307	261	225
15.4	22	528		462	381	321	273	236
16.1	23	552		482	398	335	285	246
16.8	24	576			415	349	297	256
17.5	25	600			431	363	309	266
18.2	26	624			448	377	321	277
18.9	27	648			464	390	333	287
19.6	28	672			481	404	344	297
20.3	29	696			498	418	356	307
21.0	30	720				446	380	328
22.8	32	768				474	404	348
23.6	34	816				502	428	369
25.2	36	864					451	389
26.6	38	912					475	410
28.0	40	960					499	430
29.4	42	1008						451
30.8	44	1056						471
32.2	46	1104						492
33.6	48	1152						
G.P.M. Factor			.0282	.0349	.0422	.0502	.0589	.0683
B.P.H. Factor			.0403	.0498	.0603	.0717	.0842	.0976

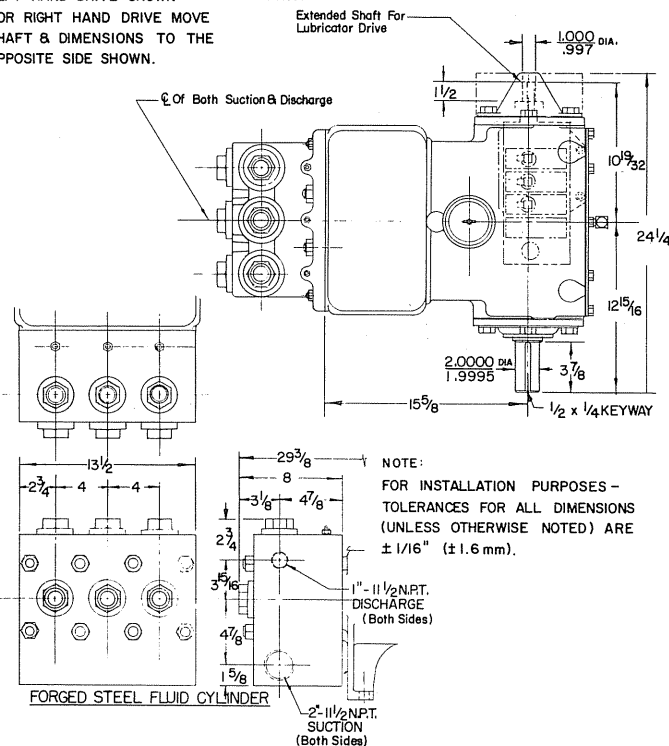
$$\text{BHP} = \frac{\text{BPH} \times \text{PSI}}{2200}$$

All Figures Based On 100% Volumetric Efficiency In Water

$$\text{GPM} = .7 \times \text{BPH}$$



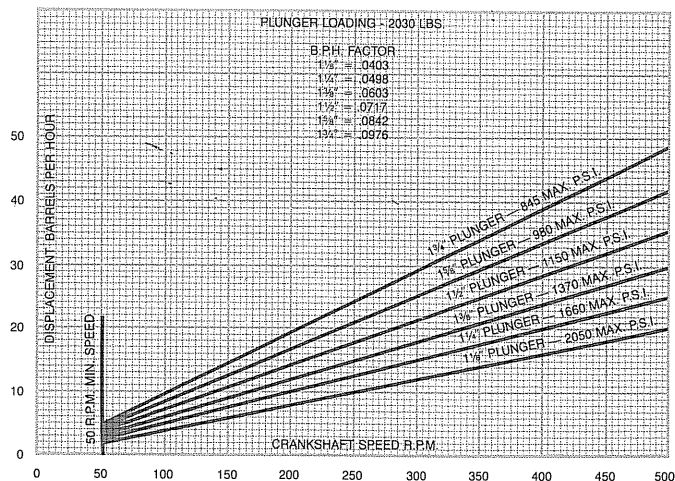
NOTE:
LEFT HAND DRIVE SHOWN -
FOR RIGHT HAND DRIVE MOVE
SHAFT & DIMENSIONS TO THE
OPPOSITE SIDE SHOWN.

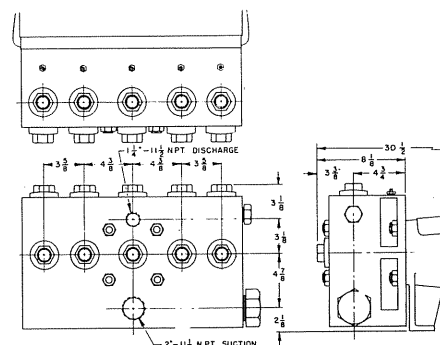
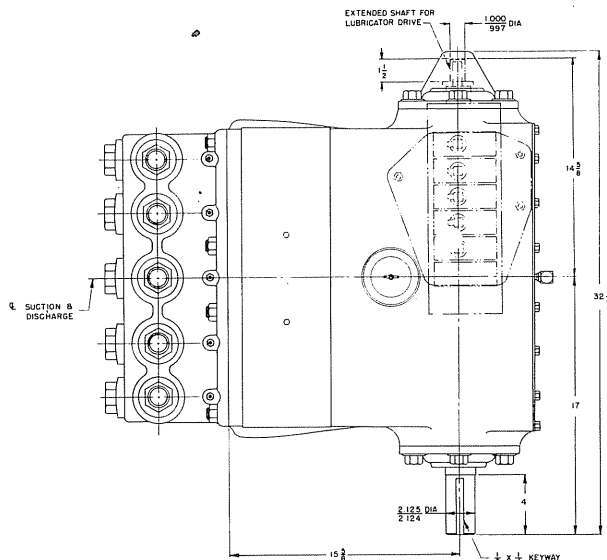


CAST ALUMINUM BRONZE OR DUCTILE IRON
FLUID CYLINDER

Dimensions are for estimating purposes only.
For certified drawings, please contact factory.

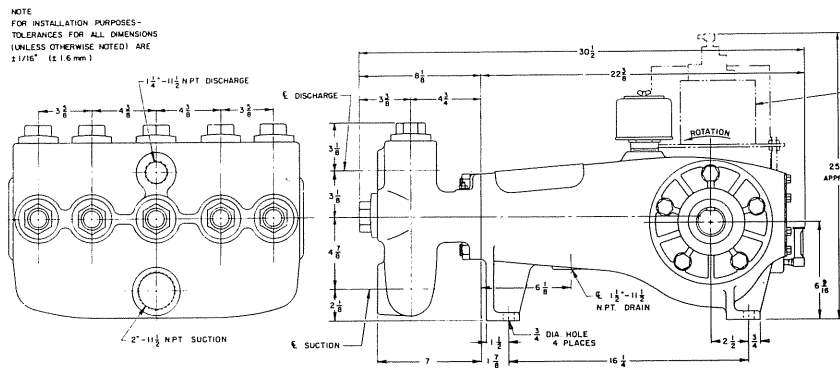
P-200B PERFORMANCE CHART
1 1/8" TO 1 3/4" X 2 3/8" TRIPLEX PLUNGER PUMP DISPLACEMENT BASED ON 100% VOLUMETRIC EFFICIENCY. POWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE



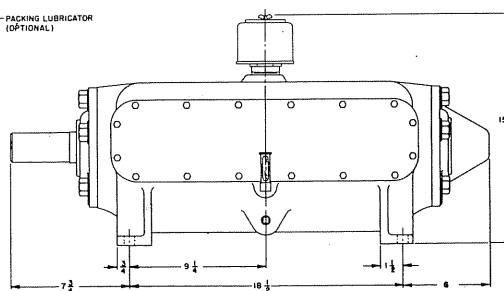


NOTE:
LEFT HAND DRIVE SHOWN-
FOR RIGHT HAND DRIVE MOVE
SHAFT & DIMENSIONS TO THE
OPPOSITE SIDE SHOWN.

FORGED STEEL FLUID CYLINDER



CAST ALUMINUM BRONZE OR DUCTILE IRON
FLUID CYLINDER



Dimensions are for estimating purposes only.
For certified drawings, please contact factory.

Displacement Volumes (100% V.E.)			Pump Speed In Crankshaft Revolutions Per Minute					
GPM	BPH	BPD	1 1/8" 2050 PSI	1 1/4" 1660 PSI	1 3/8" 1370 PSI	1 1/2" 1150 PSI	1 5/8" 980 PSI	1 3/4" 845 PSI
7	10	240	144	117	97	81	69	60
10.5	15	360	216	176	145	122	104	90
14	20	480	289	234	193	163	139	119
17.5	25	600	361	293	242	203	173	149
21	30	720	433	351	290	244	208	179
24.5	35	840		410	339	285	242	209
28	40	960		468	387	325	277	239
31.5	45	1080			435	366	312	269
35	50	1200			484	407	347	298
38.5	55	1320				447	381	329
42	60	1440				488	416	359
45.5	65	1560					450	388
49	70	1680					485	418
52.5	75	1800						448
56	80	1920						478
G.P.M. Factor			.04841	.05977	.07233	.08606	.10100	.11714
B.P.H. Factor			.06916	.08538	.10333	.12294	.14429	.16734

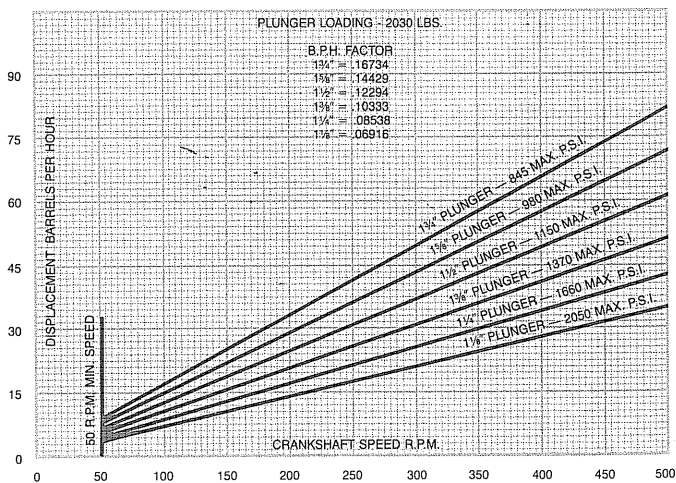
500 RPM Max.

$$\text{BHP} = \frac{\text{BPH} \times \text{PSI}}{2200}$$

All Figures Based On 100% Volumetric Efficiency In Water

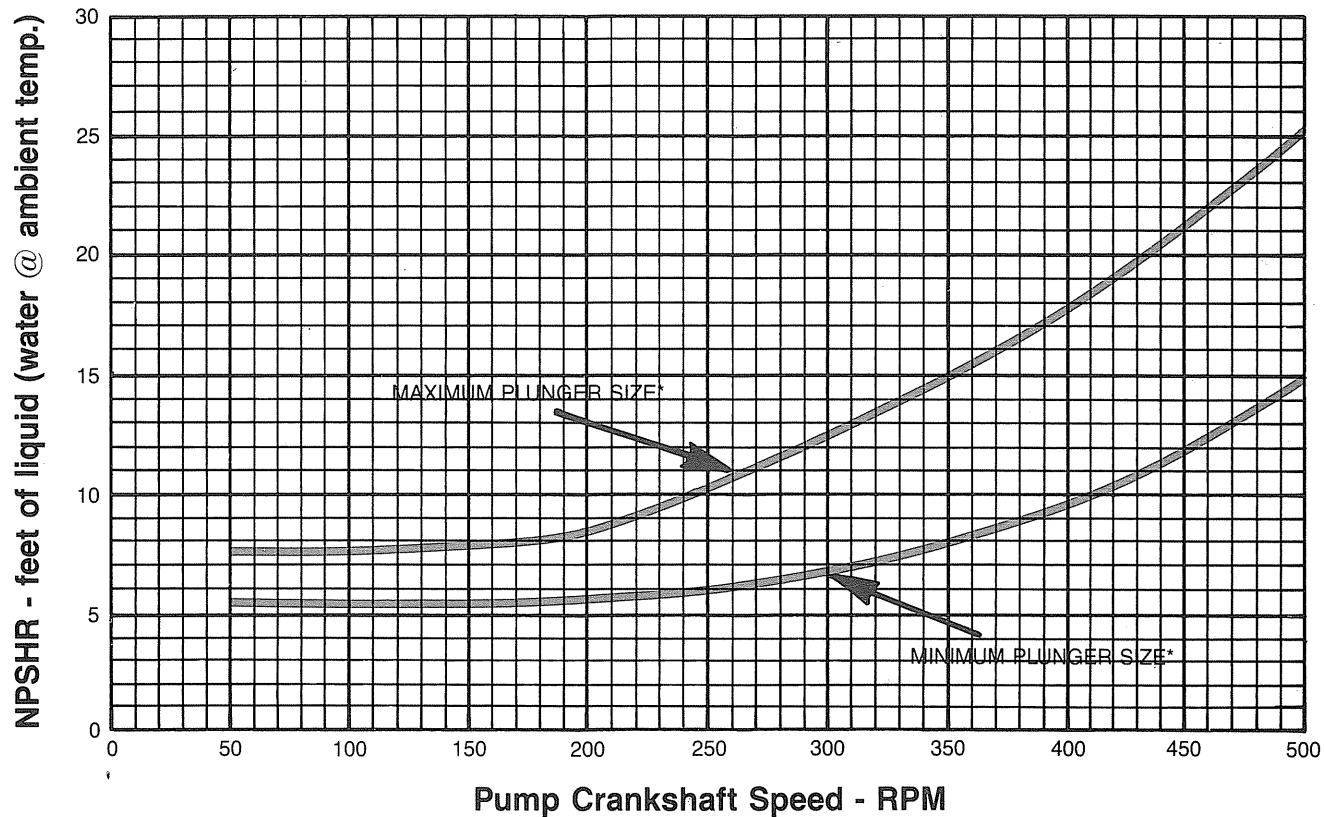
$$\text{GPM} = .7 \times \text{BPH}$$

5P-200A PERFORMANCE CHART
 1 1/4" TO 1 3/4" X 2 1/4" QUNITUPLEX PLUNGER PUMP DISPLACEMENT BASED ON 100% VOLUMETRIC
 EFFICIENCY. POWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE



Net Positive Suction Head Required (NPSHR) Curves for Wheatley Pump Models

P-50A P-100A 5P-200A P-50B P-200B P-50H P-200H



* 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.

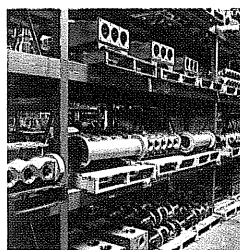
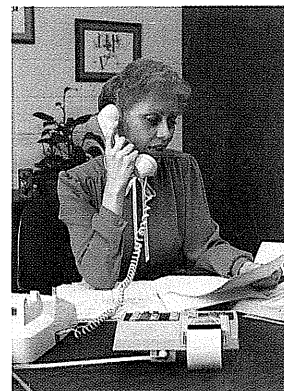
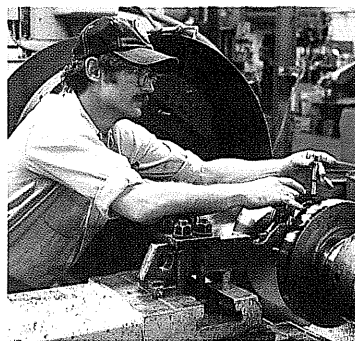
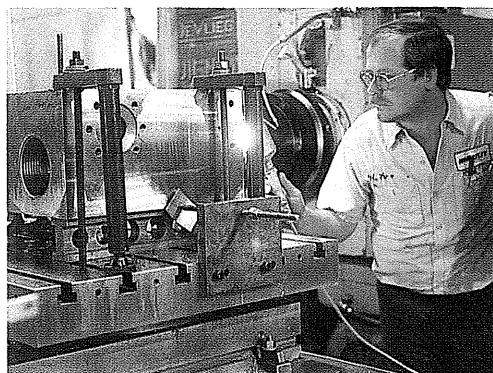
The P-200 Pump Series

P-50A Simplex

P-100 Duplex

P-200 Triplex

5P-200A Quintuplex



Wheatley has an established reputation for providing quality, dependable products to the worldwide petroleum industry.

For over 65 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. Wheatley offers a broad line of 46 low-profile plunger and piston pumps to fit a variety of pumping applications. Here are just a few: Glycol Systems • Hydraulic Systems • Saltwater Injection and Disposal • LPG Storage and Pipelines • Crude Oil Transfer • Well Servicing • Steel Mills • Inhibitor Injection • High-pressure Boiler Feed • Hydrocarbon Processing.

Wheatley's advanced engineering is supported by exact manufacturing processes. It is this commitment to quality that has made Wheatley plunger and piston pumps the most sought-after solution for flow control problems. When you need a highly efficient reciprocating pump from 6 to 1800 horsepower, Wheatley delivers. Day after day . . . year after year.

Your high quality Wheatley pump is an investment in long-term performance. With genuine Wheatley parts, you have the craftsmanship and precision engineering only an original equipment manufacturer can offer. Why put your investment at risk to save a few pennies? Genuine Wheatley parts are readily available at competitive prices.

WHEATLEY
PUMP AND VALVE INC.
A MOORCO Company.

3303 Charles Page Boulevard • P.O. Box 3249 • Tulsa, Oklahoma 74101 • (918) 587-6731 • ITT Telex 4637050

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