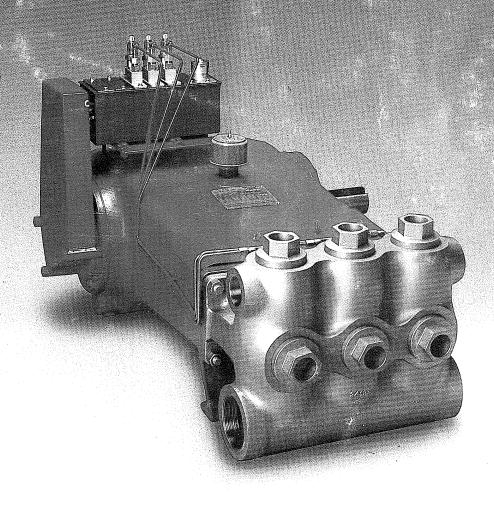
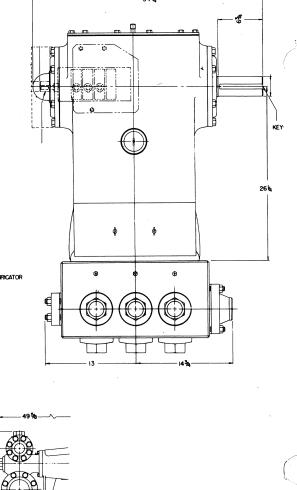
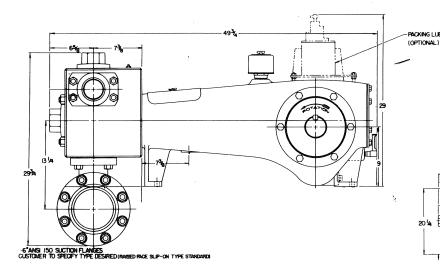
# Model HP-100 HP-100L Triplex HP-100M Triplex Plunger Pumps from Wheatley





# HP-100L







| Displacement Volumes<br>(100% V.E.) |            |      | Pump Speeds in Crankshaft<br>Revolutions Per Minute |               |                  |                  |  |
|-------------------------------------|------------|------|---|---------------|------------------|------------------|--|
| GPM                                 | ВРН        | BPD  | 23/4"<br>1110 psi                                   | 3"<br>935 psi | 31/4"<br>800 psi | 33⁄8″<br>740 psi |  |
| 21                                  | 30         | 720  | 60  | 61            |                  |                  |  |
| 28                                  | 40         | 960  | 81  | 68            | 58               | 54               |  |
| 35                                  | 50         | 1200 | 101   | 85            | 72               | 67               |  |
| 42                                  | 60         | 1440 | 121   | 102           | 87               | 80               |  |
| 49                                  | 70         | 1680 | 141   | 119           | 101              | 94               |  |
| 56                                  | 80         | 1920 | 161   | 135           | 115              | 107              |  |
| 63                                  | 90         | 2160 | 181   | 152           | 130              | 120              |  |
| 70                                  | 100        | 2400 | 201   | 169           | 144              | 134              |  |
| 84                                  | 120        | 2880 | 242   | 203           | 173              | 161              |  |
| 91                                  | 130        | 3120 | 262   | 220           | 188              | 174              |  |
| 98                                  | 140        | 3360 | 282   | 237           | 202              | 187              |  |
| 105                                 | 150        | 3600 | 302   | 254           | 216              | 201              |  |
| 112                                 | 160        | 3840 | 322   | 271           | 231              | 214              |  |
| 119                                 | 170        | 4080 | 343   | 288           | 245              | 227              |  |
| 126                                 | 180        | 4320 | 363   | 305           | 260              | 241              |  |
| 140                                 | 200        | 4800 | 403   | 339           | 289              | 268              |  |
| 154                                 | 220        | 5280 | 443   | 372           | 317              | 294              |  |
| 168                                 | 240        | 5760 | 484   | 406           | 346              | 321              |  |
| 182                                 | 260        | 6240 |   | 440           | 375              | 348              |  |
| 196                                 | 280        | 6720 |   | 474           | 404              | 375              |  |
| 210                                 | 300        | 7200 |   |               | 433              | 401              |  |
| 224                                 | 320        | 7680 |   |               | 462              | 428              |  |
| 252                                 | 340        | 8160 |   |               | 490              | 455              |  |
| 266                                 | 360        | 8640 |   |               |                  | 481              |  |
|                                     | GPM FACTOR |      | .3471   | .4131         | .4748            | .5228            |  |
|                                     | GPH FACTOR |      |   | .5907         | .6932            | .7476            |  |

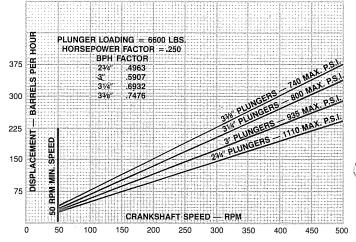
 $\label{eq:local_local_local_local} \mbox{Input H.P.} = \mbox{BPH x PSI} + 2200 \\ \mbox{All figures based on 100% volumetric efficiency in water.}$ 

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

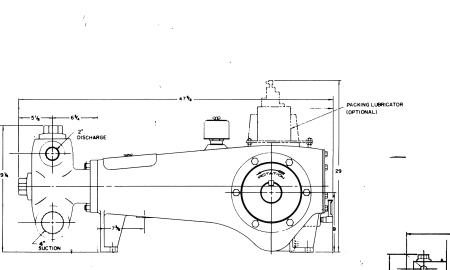
## HP-100L PERFORMANCE CHART

234" TO 336" X 41/2" TRIPLEX PLUNGER PUMP—VOLUME BASED ON 100% VOLUMETRIC EFF.

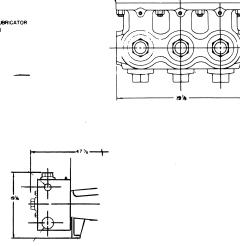
POWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE PRESSURE



# HP-100M



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



3 000 DIA

# HP-100M PERFORMANCE CHART

15/8" to 21/2" x 41/2" Triplex Plunger Pump

|             | Displacement |                        |                           |          |          |          |          |          |          |  |
|-------------|--------------|------------------------|---------------------------|----------|----------|----------|----------|----------|----------|--|
|             | Volumes      |                        | Pump Speeds in Crankshaft |          |          |          |          |          |          |  |
| (100% V.E.) |              | Revolutions Per Minute |                           |          |          |          |          |          |          |  |
|             |              |                        | 15⁄8″                     | 13⁄4″    | 17/8"    | 2in      | 21/8"    | 21/4"    | 21/2"    |  |
| GPM         | BPH          | BPD                    | 3180 psi                  | 2745 psi | 2390 psi | 2100 psi | 1860 psi | 1660 psi | 1345 psi |  |
| 7           | 10           | 240                    | 59                        | 50       | 43       | 38       | 34       | 30       | 24       |  |
| 14          | 20           | 480                    | 116                       | 100      | 87       | 76       | 68       | 60       | 49       |  |
| 21          | 30           | 720                    | 174                       | 150      | 130      | 115      | 101      | 90       | 73       |  |
| 28          | 40           | 960                    | 231                       | 200      | 174      | 153      | 135      | 121      | 98       |  |
| 35          | 50           | 1200                   | 289                       | 249      | 217      | 191      | 169      | 151      | 122      |  |
| 42          | 60           | 1440                   | 347                       | 299      | 261      | 229      | 203      | 181      | 147      |  |
| 49          | 70           | 1680                   | 405                       | 350      | 304      | 267      | 237      | 211      | 171      |  |
| 56          | 80           | 1920                   | 463                       | 399      | 348      | 305      | 271      | 241      | 195      |  |
| 63          | 90           | 2160                   |                           | 449      | 391      | 344      | 304      | 271      | 220      |  |
| 70          | 100          | 2400                   |                           | 499      | 434      | 382      | 338      | 302      | 244      |  |
| 77          | 110          | 2640                   |                           |          | 478      | 420      | 372      | 332      | 269      |  |
| 84          | 120          | 2880                   |                           |          |          | 458      | 406      | 362      | 293      |  |
| 91          | 130          | 3120                   |                           |          |          | 496      | 440      | 392      | 318      |  |
| 98          | 140          | 3360                   |                           |          |          |          | 473      | 422      | 342      |  |
| 105         | 150          | 3600                   |                           |          |          |          |          | 452      | 366      |  |
| 112         | 160          | 3840                   |                           |          |          |          |          | 483      | 391      |  |
| 119         | 170          | 4080                   |                           | 4.       |          |          |          |          | 415      |  |
| 126         | 180          | 4320                   |                           |          |          |          |          |          | 440      |  |
| 133         | 190          | 4560                   |                           |          |          |          |          |          | 464      |  |
| 140         | 200          | 4800                   |                           |          |          |          |          |          | 489      |  |
| GPN         | GPM FACTOR   |                        | .1211                     | .1404    | .1612    | .1834    | .2071    | .2322    | .2866    |  |
| BPH FACTOR  |              | .1729                  | .2006                     | .2302    | .2620    | .2957    | .3316    | .4093    |          |  |

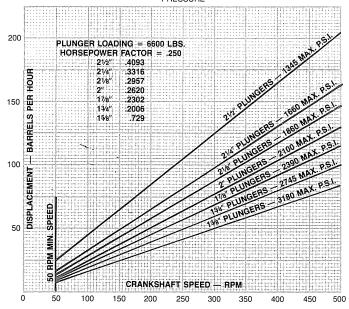
Input H.P. = BPH x PSI + 2200
All figures based on 100% volumetric efficiency in water.

HP-100M PERFORMANCE CHART

156" TO 2½" X 4½" TRIPLEX PLUNGER PUMP—VOLUME BASED ON 100%

VOLUMETRIC EFF.

POWER BASED ON 90% MECHANICAL EFFICIENCY & MAXIMUM ALLOWABLE
PRESSURE



# Model HP-100 for Medium and Low Pressure **Applications**

Field Proven Reliability Since 1916

Founded in 1916, Wheatley Pump and Valve Inc. has the reputation for providing quality, dependable products to the petroleum and other industries, worldwide. 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.

From 7 to 250 Gallons Per Minute

For moderate pressure, medium volume applications, the HP-100L delivers up to 250 gallons per minute at 740 psi. For higher pressure applications, the HP-100M delivers up to 56 gallons per minute at 3,180 psi.

Designed for durability, easy maintenance, and simple installation, the HP-100 maintains 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 precisionmachined and interchangeable.

# Fluid End Features:

Your Choice of Materials

All Wheatley fluid ends are precision-machined to exacting tolerances. HP-100 fluid ends are available in your choice of ductile iron, aluminum bronze, or forged steel. Special alloy materials can be furnished to meet difficult requirements.

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

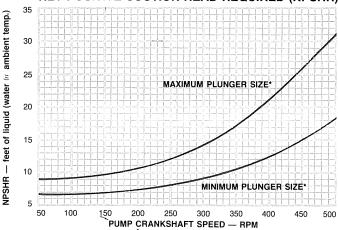
Wheatley offers several packing options, at no extra charge, to meet most pumping applications. The following table describes our standard packing availability. Other packing materials are available on request.

| STYLE | DESCRIPTION/APPLICATION   |
|-------|---|
| 838   | Hard-core, non-adjustable for general service.<br>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 Celcon<sup>1</sup> 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.

### **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.

<sup>1</sup>Trademark of Celanese Corporation

