

ROTATING RIGHT

MODEL W-1300 SINGLE ACTING WELL SERVICE PUMP



W-1300

A 1300 horsepower 8" stroke intermittent duty single acting well service plunger pump. Equipped with forged alloy steel mono-block fluid end and rated at pump speeds up to 330 RPM and maximum discharge pressures up to 15,000 psi. Equipped with external gear reduction unit. This type of pump is available with a 7" or 7 1/2" plunger size.

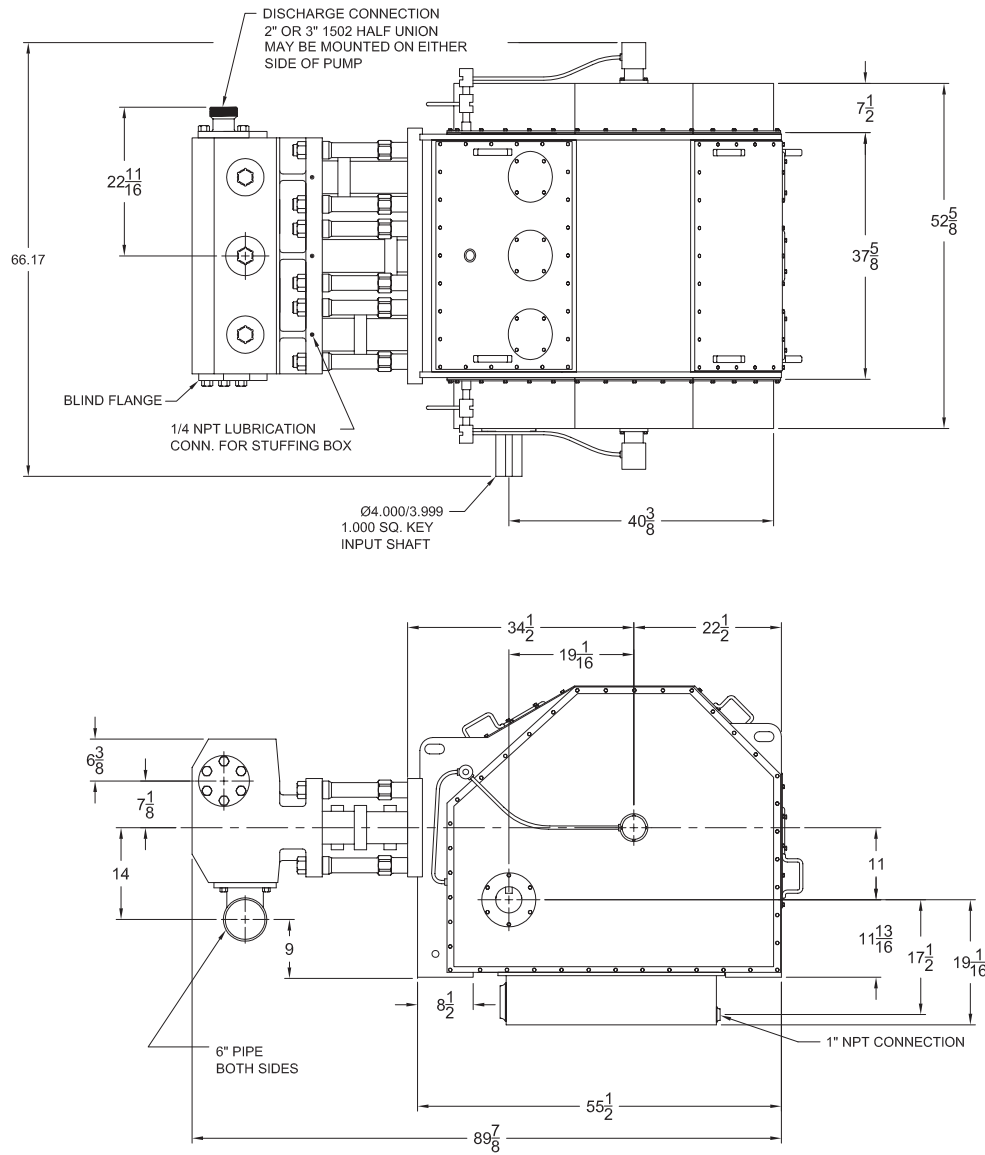
Power End Features:

- Alloy steel power frame
- Helical gears
- Roller main bearings
- Alloy steel crankshaft
- Replaceable bronze crosshead guides
- Spherical roller pinion bearings
- 7.0:1.0 Gear Reduction

Fluid End Features

- Alloy steel mono-block forging
- Autofrettaged fluid block
- Multiple discharge ports
- Mechanical oil drip packing lubricator
- Optional Air/Hydraulic packing lubricator
- 2" 1502 Discharge connection
- 3" 1502 Discharge connection
- Roughneck/service master II valves and seats
- Up to 7" or 7 1/2" inch plunger size

W-1300 Triplex Plunger Pump



Specifications

Pump Type:

Horizontal Reciprocating Power Pump Positive Displacement with Single-Acting Plungers

Maximum Input Horsepower:

1,300 Intermittent, 650 Continuous

Stroke Length:

8 inches

Maximum Rod Load:

200,000 lbs.

Approximate Weight:

11,000 lbs.

Pump Power End:

Fabricated of High Strength Steel

Gears:

Double Helical

Gear Ratio:

7.0:1 or 7.5:1

Rod Bearings:

Shell Type Replaceable

Main Bearings:

Straight Roller

Pinion Bearings:

Spherical Roller

Crankshaft:

One Piece Forged Alloy Steel

Connecting Rod:

One Piece Forged Steel with Knuckle Joint

Crosshead Guide:

Bronze Replaceable

Fluid End:

Plunger Type Monoblock Design. Machined From High Strength Alloy Steel, Heat Treated and Ultrasonic Tested

Autofrettagged*

Plunger Diameter:

3.75 to 7.5 inches

Discharge Outlet:

2-inch 1502 Half Union Forged Steel Connection - Either Side

Suction Inlet:

6-inch Pipe

Valves and Seats:

Hardened Steel, Replaceable Insert

Power End Lubrication:

35 GPM Required, Optional Hydraulic Lubrication System w/ Removable Bolt on Sump

Packing Lubrication:

Optional Air Driven Air/Oil or Mechanical Oil Drip System Available

| Pump Model | Flange Connections | |
|------------|--|--------------------------|
| | Discharge Connection Sizes | Suction Connection Sizes |
| W-1300 | 2 (50.8) 1502 Half Union 3 (76.2) 1502 (Optional) | 6 (152.4) Grooved Pipe |

Dimensions (Inches)

| FE Size | A | B | C | D | E | F | G |
|---------|--------|-------|-------|---------|-------|----------|-------|
| 4 | 24 3/4 | 8 1/8 | 3 1/4 | 11 9/64 | 7 1/8 | 14 1/16 | 8 3/4 |
| 4 1/2 | 24 3/4 | 8 1/8 | 3 1/2 | 11 9/64 | 7 1/8 | 14 1/16 | 8 3/4 |
| 5 | 24 3/4 | 8 1/8 | 3 1/2 | 11 9/64 | 7 1/8 | 14 1/16 | 8 3/4 |
| 5 1/2 | 24 3/4 | 7 1/8 | 3 | 11 1/2 | 7 5/8 | 15 3/16 | 7 5/8 |
| 5 3/4 | 24 3/4 | 7 1/8 | 3 | 11 1/2 | 7 5/8 | 15 3/16 | 7 5/8 |
| 6 1/2 | 25 | 7 7/8 | 4 | 11 1/2 | 8 1/2 | 15 11/16 | 7 1/8 |
| 6 3/4 | 25 | 7 7/8 | 4 | 11 1/2 | 8 1/2 | 15 11/16 | 7 1/8 |

W-1300 Triplex Plunger Pump

Performance Data

| Plunger Diameter | Displacement Factors* @ 100% V. E. U.S. Gal. per Rev. | Pump Speed in Crankshaft Revolutions Per Minute (RPM) | | | | | | | | | | |
|--------------------------------|---|---|------------|--------------------|------------|--------------------|------------|--------------------|------------|--------------------|------------|--|
| | | 100 | | | 150 | | 200 | | 250 | | 330 | |
| | | Flow @ 100% V. E. | Max Press. | Flow @ 100% V. E. | Max Press. | Flow @ 100% V. E. | Max Press. | Flow @ 100% V. E. | Max Press. | Flow @ 100% V. E. | Max Press. | |
| | | U.S. Gal. per Min. | @ Flow | U.S. Gal. per Min. | @ Flow | U.S. Gal. per Min. | @ Flow | U.S. Gal. per Min. | @ Flow | U.S. Gal. per Min. | @ Flow | |
| Inches | GPR | GPM | PSIG | GPM | PSIG | GPM | PSIG | GPM | PSIG | GPM | PSIG | |
| 7.50 | 4.590 | 459 | 4126 | 689 | 2715 | 918 | 2063 | 1148 | 1651 | 1515 | 1250 | |
| 7.00 | 3.999 | 400 | 4736 | 600 | 3157 | 800 | 2368 | 1000 | 1849 | 1320 | 1435 | |
| 6.75 | 3.713 | 371 | 5101 | 557 | 3401 | 743 | 2550 | 928 | 2040 | 1225 | 1546 | |
| 6.50 | 3.448 | 345 | 5493 | 517 | 3662 | 690 | 2746 | 862 | 2197 | 1138 | 1665 | |
| 6.00 | 2.938 | 294 | 6446 | 441 | 4298 | 588 | 3223 | 735 | 2579 | 970 | 1953 | |
| 5.75 | 2.698 | 270 | 7020 | 405 | 4680 | 540 | 3510 | 675 | 2808 | 890 | 2127 | |
| 5.50 | 2.468 | 247 | 7670 | 370 | 5120 | 494 | 3830 | 617 | 3070 | 814 | 2330 | |
| 5.00 | 2.040 | 204 | 9284 | 306 | 6189 | 408 | 4642 | 510 | 3714 | 673 | 2813 | |
| 4.50 | 1.652 | 165 | 11465 | 248 | 7643 | 330 | 5732 | 413 | 4586 | 545 | 3474 | |
| 4.00 | 1.306 | 131 | 14502 | 196 | 9668 | 261 | 7251 | 327 | 5801 | 431 | 4395 | |
| 3.75 | 1.147 | 115 | 16512 *** | 172 | 11008 | 229 | 8256 | 287 | 6605 | 379 | 5004 | |
| Input Power | Brake** Horsepower | 1300 | | 1300 | | 1300 | | 1300 | | 1300 | | |
| Pinion RPM @ 7.50:1 Gear Ratio | | 750 | | 1125 | | 1500 | | 1875 | | 2475 | | |
| Pinion RPM @ 7.00:1 Gear Ratio | | 700 | | 1050 | | 1400 | | 1750 | | 2310 | | |

* V.E. = VOLUMETRIC EFFICIENCY, **BHP (Brake Horsepower) is based on 85% Mechanical Efficiency *** Applications at pressures above 15,000 PSIG must be approved by National Oilwell Engineering Department

The information and data on this sheet is accurate to the best of our knowledge and belief, but are intended for general information only. Applications suggested for the materials are described only to help readers make their own evaluations and decisions, and are neither guarantees nor to be construed as express or implied warranties of suitability for these or other applications. National Oilwell makes no warranty either express or implied beyond that stipulated in National Oilwell Standard Terms and Conditions of Sale.

Accessories

Rotating Right offers a full line of accessories to ensure long trouble free and safe operation of your multiplex pumps.

Accessories Include:

- Pulsation Dampeners - Suction & Discharge
- Vibration Shock Switches
- Liquid Level Gauges & Switches
- Pressure Safety Valves
- Plunger Lubricators
- Fire Safety Valves
- High Discharge Pressure Switch
- Condensate Drain
- N.A.C.E. Valving
- Lubricator Level Controller
- API Valves
- Drive Options



Expendables



With our worldwide buying power Rotating Right is well equipped to provide a wide range of replacement parts & expendables for virtually all multiplex plunger pumps regardless of make or model.

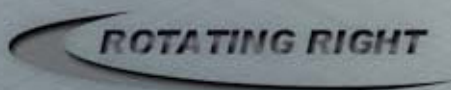
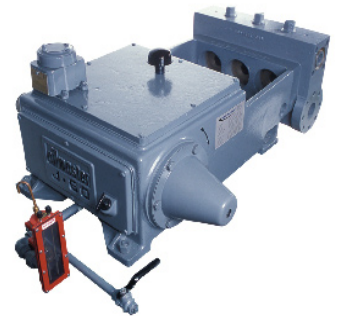


Our expendables inventory includes plungers, packing, brass, valves, bearings, crankshafts, connecting rods and seals.



Repair & Overhauls

Rotating Right service technicians follow strict quality control procedures for every pump repair and overhaul. The use of consistent and reliable re-manufacturing techniques ensure your equipment is returned to you in "Like New" condition.



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