

ROTATING RIGHT

## MODEL 30T-2 SINGLE ACTING TRIPLEX PUMP



### 30T-2

A 30 horsepower 2 1/4" stroke horizontal triplex single acting plunger pump. Available in nickel-aluminum-bronze fluid end material at pump speeds up to 500 RPM and three accessory gear reduction unit ratios.

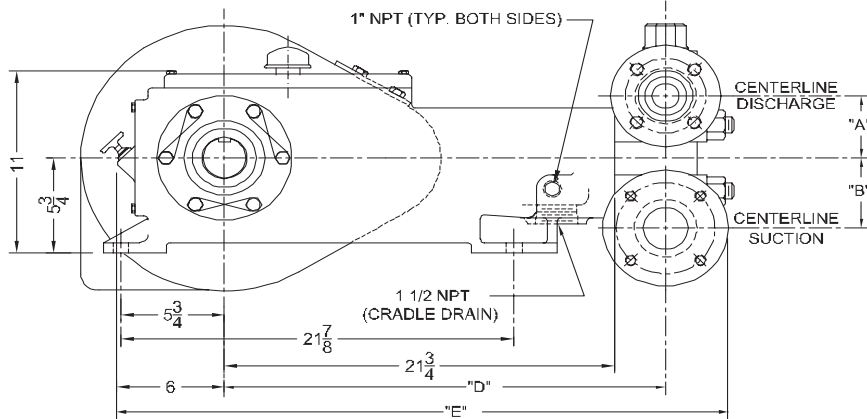
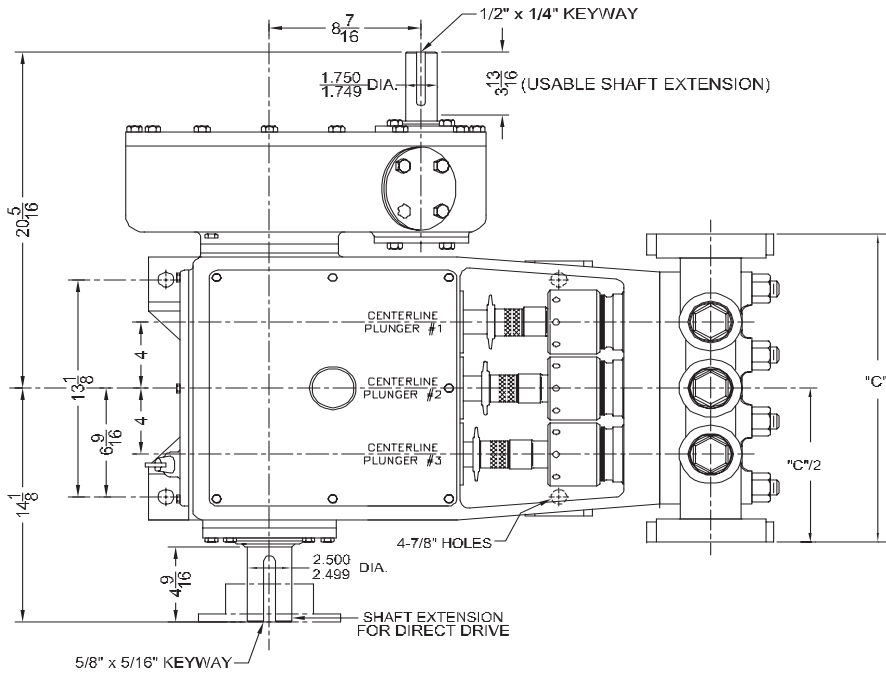
#### Power End Features

- Cast iron power frame
- Heavy-duty, tapered roller crankshaft bearings
- Precision type, aluminum alloy crankpin bearings
- Aluminum connecting rods
- Alloy steel crosshead pins
- Alloy steel crankshaft with ground journals & polished throws
- Bronze bearing crosshead pin bushings
- Cast iron crossheads with upper/lower oil grooves
- Stainless Steel intermediate rods
- Flooded sump, splash distribution lubrication
- Rated rod load is 3565 lbs.

#### Fluid End Features

- Threaded type valve covers
- 17-4 Stainless Steel removable stuffing boxes and nuts
- Plungers-Solid Ceramic or Tungsten Carbide Coated
- General Service, Molded Lip or Aramid Fiber plunger packing
- Mission Spherical suction and discharge valves
- Valve Seat & Valve Body: Nitronic 50
- Spring: Inconel
- Cage: 316L Stainless Steel
- Severe duty valves with inserts available,

# 30T-2 Triplex Plunger Pump



## Specifications

### Pump Size

(maximum plunger size x stroke length in.(mm)  
2 1/4 x 2 (57.2 x 50.8)

**Rated bhp** at 500 rpm (kw): 30 (22.4)

**Rated plunger load** pounds(Kg): 3565 (1617)

**Maximum discharge pressure:** psi(kPa)

L model: 2000 (13,788)

H model: 5000 (34,470)

**Crankshaft extension:** in.(mm)

Diameter: 2.5/2.499 (63.5/63.4746)

Length: 4 9/16 (115.9)

Keyway (width x depth):

5/8 x 5/16 (15.88 x 7.94)

Maximum recommended sheave

in.(mm): 37.5 (952.5)

Minimum recommended sheave

in.(mm): 20 (508)

For larger sizes: **Contact Factory**

**Pinion shaft extension,**

if gear reducer is supplied in.(mm)

For belt or chain drive:

**Contact Factory**

For direct drive:

Diameter: 1.75/1.749 (44.5/44.425)

Length: 3 13/16 (96.8)

Keyway (width x depth):

1/2 x 1/4 (12.7 x 6.4)

**Accessory gear reduction unit ratio:**

3.50:1, 3.83:1, 4.2:1

**Oil Capacity** gallons (L)

Crankcase: 1.2 (4.5)

Gear Reducer: 2/3 (2.5)

**Weight,** pump only on

wood shipping skids pounds (Kg): 640 (290)

Gear reducer, approximate pounds (Kg):

300 (136.08)

Pump Model	Flange Connections		Dimensions in inches (mm)				
	Discharge Connection Sizes	Suction Connection Sizes	A	B	C	D	E
30T-2L Threaded	1 1/2 (38.10) FNPT	2 1/2 (63.5) FNPT	3 3/4	4 1/4	15 3/4	24 9/16	32 7/8
30T-2L Flanged	1 1/2 (38.10) API-2000 RJ	2 1/2 (63.5) ANSI-150 FF	3 3/4	4 1/4	18 1/4	24 9/16	34 1/16
30T-2H	1 (25.4) ANSI-2500 RJ	2 (50.8) ANSI-300 FF	3 5/8	4	17 1/2	24 5/16	33 9/16

# 30T-2 Triplex Plunger Pump

## Performance Data

PUMP	English Units					200 * RPM		300 RPM		350 RPM		400 RPM		450 RPM		500 RPM	
	Plunger Dia. In.	Plunger Area Sq. In.	BPD per RPM	GPM per RPM	Max. Press. PSI	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
30T-2L	2.250	3.9761	3.5410	0.1033	897	709	20.66	1063	30.99	1240	36.16	1417	41.32	1594	46.49	1771	51.65
	2.000	3.1416	2.7980	0.0816	1135	560	16.32	840	24.48	980	28.56	1120	32.64	1260	36.72	1399	40.80
	1.750	2.4053	2.1430	0.0625	1482	429	12.50	643	18.75	751	21.88	858	25.00	965	28.13	1072	31.25
	1.500	1.7671	1.5737	0.0459	2000	315	9.18	473	13.77	551	16.07	630	18.36	709	20.66	787	22.95
30T-2H	1.500	1.7671	1.5737	0.0459	2000	315	9.18	473	13.77	551	16.07	630	18.36	709	20.66	787	22.95
	1.375	1.4849	1.3234	0.0386	2401	265	7.72	398	11.58	464	13.51	530	15.44	596	17.37	662	19.30
	1.250	1.2272	1.0937	0.0319	2905	219	6.38	329	9.57	383	11.17	438	12.76	493	14.36	547	15.95
	1.125	0.9940	0.8846	0.0258	3586	177	5.16	266	7.74	310	9.03	354	10.32	399	11.61	443	12.90
	1.000	0.7854	0.6994	0.0204	4539	140	4.08	210	6.12	245	7.14	280	8.16	315	9.18	350	10.20
	0.938	0.6910	0.6137	0.0179	5000	123	3.58	185	5.37	215	6.27	246	7.16	277	8.06	307	8.95
Brake Horsepower Required						12.0		18.0		21.0		24		27		30	

PUMP	Metric Units					200 * RPM		300 RPM		350 RPM		400 RPM		450 RPM		500 RPM	
	Plunger Dia. mm	Plunger Area cm²	M³/Hr per RPM	L/Sec. per RPM	Max. Press. kPa	M³/Hr	L/Sec.	M³/Hr	L/Sec.	M³/Hr	L/Sec.	M³/Hr	L/Sec.	M³/Hr	L/Sec.	M³/Hr	L/Sec.
30T-2L	57	25.652	0.0235	0.0065	6185	4.69	1.30	7.04	1.96	8.21	2.28	9.38	2.61	10.56	2.93	11.73	3.26
	51	20.268	0.0185	0.0051	7826	3.71	1.03	5.56	1.54	6.49	1.80	7.41	2.06	8.34	2.32	9.27	2.57
	44	15.518	0.0142	0.0039	10218	2.84	0.79	4.26	1.18	4.97	1.38	5.68	1.58	6.39	1.77	7.10	1.97
	38	11.401	0.0104	0.0029	13790	2.08	0.58	3.13	0.87	3.65	1.01	4.17	1.16	4.69	1.30	5.21	1.45
30T-2H	38	11.401	0.0104	0.0029	13790	2.08	0.58	3.13	0.87	3.65	1.01	4.17	1.16	4.69	1.30	5.21	1.45
	35	9.580	0.0088	0.0024	16554	1.75	0.49	2.63	0.73	3.07	0.85	3.51	0.97	3.94	1.10	4.38	1.22
	32	7.917	0.0072	0.0020	20029	1.45	0.40	2.17	0.60	2.54	0.70	2.90	0.81	3.26	0.91	3.62	1.01
	29	6.413	0.0059	0.0016	24725	1.17	0.33	1.76	0.49	2.05	0.57	2.34	0.65	2.64	0.73	2.93	0.81
	25	5.067	0.0046	0.0013	31295	0.93	0.26	1.39	0.39	1.62	0.45	1.85	0.51	2.08	0.58	2.32	0.64
	24	4.458	0.0041	0.0011	34474	0.81	0.23	1.22	0.34	1.42	0.40	1.63	0.45	1.83	0.51	2.03	0.56
Kilowatts Required						8.9		13.4		15.7		18		20		22	

Volumetric Rate is based on 100% Volumetric Efficiency. Brake Horsepower/Kilowatts Required is based on 90% Mechanical Efficiency. \* For operation below 200 RPM, auxiliary lubrication system required. Not all plunger sizes are shown. Contact National-Oilwell for additional information.

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.

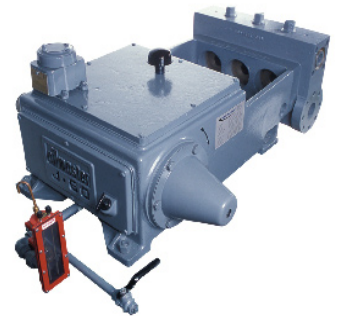


Our expendables inventory includes plungers, packing, brass, valves, bearings, crankshafts, connecting rods and seals.



## 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.



**Head Office:**  
6120 Davies Road  
Edmonton, AB  
T6E 4M9

Phone: (780) 485-2010 • Toll Free: (866) 707-7867  
Fax: (780) 485-1938  
• Calgary • Drayton Valley • Lloydminster  
[www.rotatingright.com](http://www.rotatingright.com)