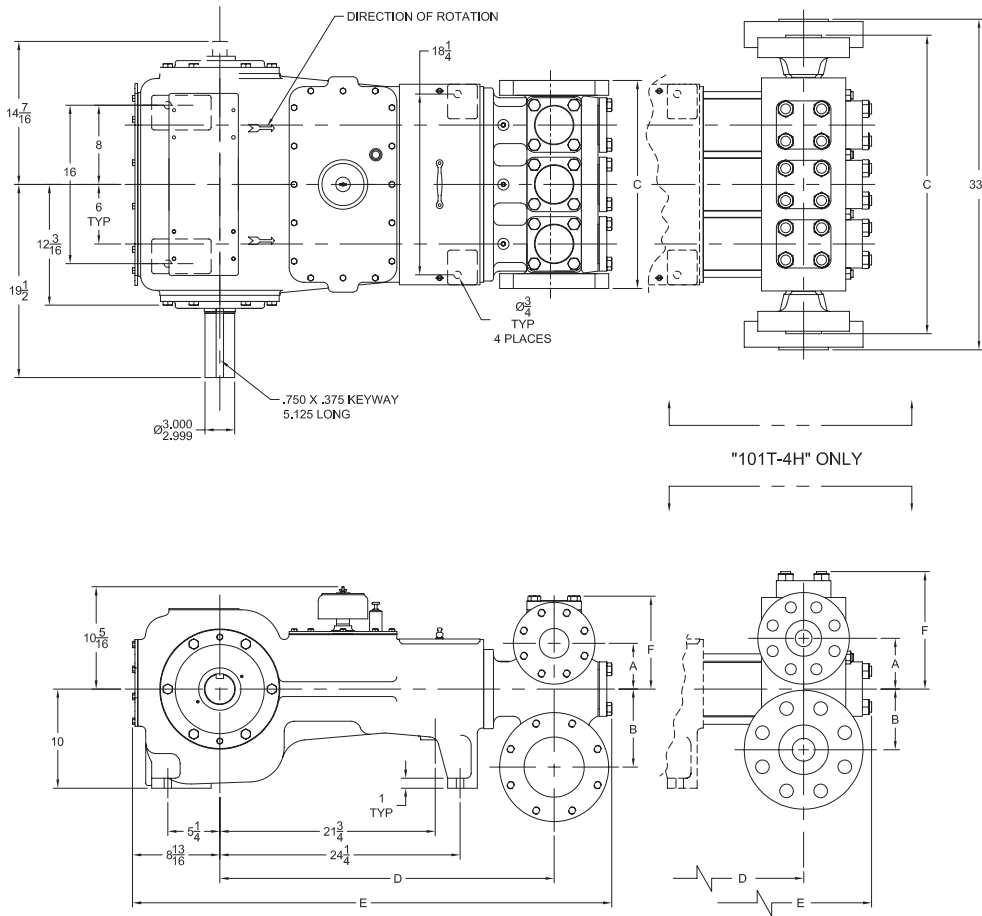


101T-4 Triplex Plunger Pump



Specifications

Pump Size:

maximum plunger size x stroke length, in.(mm):
3.375 x 4.500 (85.725 x 114.3)

Rated BHP (kW) at 400 RPM: 100 (75)

Rated plunger load, pounds (kg): 6600 (2994)

Maximum discharge pressure: psi (kPa)

"L" model: 1220 (8408)

"M" model: 2744 (18919)

"H" model: 5378 (37081)

Crankshaft extension:

Diameter, in.(mm): 3.000 (95.25)

Length, in.(mm): 5.13 (130.3)

Keyway width x depth, in.(mm):

3/4 x 3/8 (19.1 x 9.5)

Maximum recommended sheave diameter,
in.(mm): 50 (1270)

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: 2.000 (50.8)

Length: 4.25 (108.0)

Keyway width x depth:

1/2 x 1/4 (12.70 x 6.35)

Accessory gear reduction unit:

3.00:1, 3.12:1, 3.23:1, 3.36:1, 3.49:1,

3.62:1, 3.78:1, 3.94:1, 4.11:1, 4.29:1,

4.48:1, 4.69:1, 4.93:1, 5.17:1

Oil Capacity, gallons (L)

Crankcase: 6 (22.71)

Gear Reducer - varies with ratio:

1.25 to 1.50 (4.73 to 5.68)

Weight, pump only on

wood shipping skids, pounds (kg)

"L" model: 1740 (649.4)

"M" model: 1600 (597.2)

"H" model: 1820 (679.3)

Standard Materials for Fluid Ends:

"L" model

Cast Duplex Stainless Steel

Cast Nickel-Aluminium-Bronze

Forged/Plate Carbon Steel

"M" model

Cast Duplex Stainless Steel

Cast Nickel-Aluminium-Bronze

Forged/Plate Carbon Steel

"H" model

Forged/Plate Carbon Steel

| Pump Model | Flange Connections | | Dimensions (Inches) | | | | | |
|------------|----------------------------|--------------------------|---------------------|--------|--------|--------|---------|--------|
| | Discharge Connection Sizes | Suction Connection Sizes | A | B | C | D | E | F |
| 101T-4L | 3 ANSI 600 FF | 6 ANSI 150 FF | 4 5/8 | 7 7/8 | 21 | 33 3/4 | 48 3/8 | 9 3/8 |
| 101T-4M | 2 ANSI 1500 FF | 4 ANSI 300 FF | 5 1/16 | 6 3/16 | 21 | 33 3/8 | 47 9/16 | 9 |
| 101T-4H | 2 ANSI 2500 RJ | 3 ANSI 2500 RJ | 5 1/8 | 6 1/8 | 30 1/8 | 36 3/4 | 52 7/16 | 11 7/8 |

101T-4 Triplex Plunger Pump

Performance Data

| PUMP | English Units | | | | | 50 RPM | | 150 RPM | | 250 RPM | | 300 RPM | | 350 RPM | | 400 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 |
| 101T-4L (T100-4) | 3.375 | 8.9462 | 17.9255 | 0.5228 | 738 | 897 | 26.1 | 2689 | 78.4 | 4482 | 130.7 | 5378 | 156.8 | 6274 | 183.0 | 7171 | 209.1 |
| | 3.250 | 8.2958 | 16.6223 | 0.4848 | 796 | 832 | 24.2 | 2494 | 72.7 | 4156 | 121.2 | 4987 | 145.4 | 5818 | 169.7 | 6649 | 193.9 |
| | 3.125 | 7.6699 | 15.3682 | 0.4482 | 861 | 769 | 22.4 | 2306 | 67.2 | 3843 | 112.1 | 4611 | 134.5 | 5379 | 156.9 | 6148 | 179.3 |
| | 3.000 | 7.0686 | 14.1634 | 0.4131 | 934 | 709 | 20.7 | 2125 | 62.0 | 3541 | 103.3 | 4250 | 123.9 | 4958 | 144.6 | 5666 | 165.2 |
| | 2.875 | 6.4918 | 13.0077 | 0.3794 | 1017 | 651 | 19.0 | 1952 | 56.9 | 3252 | 94.8 | 3903 | 113.8 | 4553 | 132.8 | 5204 | 151.8 |
| | 2.750 | 5.9396 | 11.9012 | 0.3471 | 1111 | 596 | 17.4 | 1786 | 52.1 | 2976 | 86.8 | 3571 | 104.1 | 4166 | 121.5 | 4761 | 138.8 |
| | 2.625 | 5.4119 | 10.8438 | 0.3163 | 1220 | 543 | 15.8 | 1627 | 47.4 | 2711 | 79.1 | 3254 | 94.9 | 3796 | 110.7 | 4338 | 126.5 |
| 101T-4M (T100-3) | 2.500 | 4.9087 | 9.8357 | 0.2869 | 1345 | 492 | 14.3 | 1476 | 43.0 | 2459 | 71.7 | 2951 | 86.1 | 3443 | 100.4 | 3935 | 114.7 |
| | 2.375 | 4.4301 | 8.8767 | 0.2589 | 1490 | 444 | 12.9 | 1332 | 38.8 | 2220 | 64.7 | 2664 | 77.7 | 3107 | 90.6 | 3551 | 103.6 |
| | 2.250 | 3.9761 | 7.9669 | 0.2324 | 1660 | 399 | 11.6 | 1196 | 34.9 | 1992 | 58.1 | 2391 | 69.7 | 2789 | 81.3 | 3187 | 92.9 |
| | 2.125 | 3.5466 | 7.1063 | 0.2073 | 1861 | 356 | 10.4 | 1066 | 31.1 | 1777 | 51.8 | 2132 | 62.2 | 2488 | 72.5 | 2843 | 82.9 |
| | 2.000 | 3.1416 | 6.2948 | 0.1836 | 2101 | 315 | 9.2 | 945 | 27.5 | 1574 | 45.9 | 1889 | 55.1 | 2204 | 64.3 | 2518 | 73.4 |
| | 1.875 | 2.7612 | 5.5326 | 0.1614 | 2390 | 277 | 8.1 | 830 | 24.2 | 1384 | 40.3 | 1660 | 48.4 | 1937 | 56.5 | 2214 | 64.5 |
| | 1.750 | 2.4053 | 4.8195 | 0.1406 | 2744 | 241 | 7.0 | 723 | 21.1 | 1205 | 35.1 | 1446 | 42.2 | 1687 | 49.2 | 1928 | 56.2 |
| 101T-4H (T100-2) | 1.625 | 2.0739 | 4.1556 | 0.1212 | 3182 | 208 | 6.1 | 624 | 18.2 | 1039 | 30.3 | 1247 | 36.4 | 1455 | 42.4 | 1663 | 48.5 |
| | 1.500 | 1.7671 | 3.5408 | 0.1033 | 3735 | 178 | 5.2 | 532 | 15.5 | 886 | 25.8 | 1063 | 31.0 | 1240 | 36.1 | 1417 | 41.3 |
| | 1.375 | 1.4849 | 2.9753 | 0.0868 | 4445 | 149 | 4.3 | 447 | 13.0 | 744 | 21.7 | 893 | 26.0 | 1042 | 30.4 | 1191 | 34.7 |
| | 1.250 | 1.2272 | 2.4589 | 0.0717 | 5378 | 123 | 3.6 | 369 | 10.8 | 615 | 17.9 | 738 | 21.5 | 861 | 25.1 | 984 | 28.7 |
| | Brake Horsepower Required | | | | | 13 | | 38 | | 63 | | 75 | | 88 | | 100 | |

| PUMP | Metric Units | | | | | 50 RPM | | 150 RPM | | 250 RPM | | 300 RPM | | 350 RPM | | 400 RPM | |
|---------------------|--------------------|------------------------------|----------------------------|----------------|-----------------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|
| | Plunger Dia. mm | Plunger Area cm ² | M ³ /Hr per RPM | L/Sec. per RPM | Max. Press. kPa | M ³ /Hr | L/Sec. | M ³ /Hr | L/Sec. | M ³ /Hr | L/Sec. | M ³ /Hr | L/Sec. | M ³ /Hr | L/Sec. | M ³ /Hr | L/Sec. |
| 101T-4L (T100-4) | 86 | 57.717 | 0.1187 | 0.0330 | 5087 | 5.9 | 1.6 | 17.8 | 4.9 | 29.7 | 8.2 | 35.6 | 9.9 | 41.6 | 11.5 | 47.5 | 13.2 |
| | 83 | 53.521 | 0.1101 | 0.0306 | 5485 | 5.5 | 1.5 | 16.5 | 4.6 | 27.5 | 7.6 | 33.0 | 9.2 | 38.5 | 10.7 | 44.0 | 12.2 |
| | 79 | 49.483 | 0.1018 | 0.0283 | 5933 | 5.1 | 1.4 | 15.3 | 4.2 | 25.4 | 7.1 | 30.5 | 8.5 | 35.6 | 9.9 | 40.7 | 11.3 |
| | 76 | 45.604 | 0.0938 | 0.0261 | 6438 | 4.7 | 1.3 | 14.1 | 3.9 | 23.5 | 6.5 | 28.1 | 7.8 | 32.8 | 9.1 | 37.5 | 10.4 |
| | 73 | 41.883 | 0.0862 | 0.0239 | 7010 | 4.3 | 1.2 | 12.9 | 3.6 | 21.5 | 6.0 | 25.8 | 7.2 | 30.2 | 8.4 | 34.5 | 9.6 |
| | 70 | 38.320 | 0.0788 | 0.0219 | 7661 | 3.9 | 1.1 | 11.8 | 3.3 | 19.7 | 5.5 | 23.6 | 6.6 | 27.6 | 7.7 | 31.5 | 8.8 |
| | 67 | 34.915 | 0.0718 | 0.0200 | 8408 | 3.6 | 1.0 | 10.8 | 3.0 | 18.0 | 5.0 | 21.5 | 6.0 | 25.1 | 7.0 | 28.7 | 8.0 |
| 101T-4M (T100-3) | 64 | 31.669 | 0.0651 | 0.0181 | 9270 | 3.3 | 0.90 | 9.8 | 2.7 | 16.3 | 4.5 | 19.5 | 5.4 | 22.8 | 6.3 | 26.1 | 7.2 |
| | 60 | 28.581 | 0.0588 | 0.0163 | 10272 | 2.9 | 0.82 | 8.8 | 2.5 | 14.7 | 4.1 | 17.6 | 4.9 | 20.6 | 5.7 | 23.5 | 6.5 |
| | 57 | 25.652 | 0.0528 | 0.0147 | 11445 | 2.6 | 0.73 | 7.9 | 2.2 | 13.2 | 3.7 | 15.8 | 4.4 | 18.5 | 5.1 | 21.1 | 5.9 |
| | 54 | 22.881 | 0.0471 | 0.0131 | 12831 | 2.4 | 0.65 | 7.1 | 2.0 | 11.8 | 3.3 | 14.1 | 3.9 | 16.5 | 4.6 | 18.8 | 5.2 |
| | 51 | 20.268 | 0.0417 | 0.0116 | 14485 | 2.1 | 0.58 | 6.3 | 1.7 | 10.4 | 2.9 | 12.5 | 3.5 | 14.6 | 4.1 | 16.7 | 4.6 |
| | 48 | 17.814 | 0.0366 | 0.0102 | 16481 | 1.8 | 0.51 | 5.5 | 1.5 | 9.2 | 2.5 | 11.0 | 3.1 | 12.8 | 3.6 | 14.7 | 4.1 |
| | 44 | 15.518 | 0.0319 | 0.0089 | 18919 | 1.6 | 0.44 | 4.8 | 1.3 | 8.0 | 2.2 | 9.6 | 2.7 | 11.2 | 3.1 | 12.8 | 3.5 |
| 101T-4H (T100-2) | 41 | 13.380 | 0.0275 | 0.0076 | 21942 | 1.4 | 0.38 | 4.1 | 1.1 | 6.9 | 1.9 | 8.3 | 2.3 | 9.6 | 2.7 | 11.0 | 3.1 |
| | 38 | 11.401 | 0.0235 | 0.0065 | 25751 | 1.2 | 0.33 | 3.5 | 1.0 | 5.9 | 1.6 | 7.0 | 2.0 | 8.2 | 2.3 | 9.4 | 2.6 |
| | 35 | 9.580 | 0.0197 | 0.0055 | 30646 | 1.0 | 0.27 | 3.0 | 0.82 | 4.9 | 1.4 | 5.9 | 1.6 | 6.9 | 1.9 | 7.9 | 2.2 |
| | 32 | 7.917 | 0.0163 | 0.0045 | 37081 | 0.8 | 0.23 | 2.4 | 0.68 | 4.1 | 1.1 | 4.9 | 1.4 | 5.7 | 1.6 | 6.5 | 1.8 |
| | Kilowatts Required | | | | | 10 | | 28 | | 47 | | 56 | | 65 | | 75 | |

For operation below 100 RPM, an auxiliary lubrication system is required.

Volumetric Rate is based on 100% Volumetric Efficiency. Brake Horsepower/Kilowatts Required is based on 90% Mechanical Efficiency.

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