



PRODUCT DATA SHEET

October, 2000

THOMPSON 4TS PUMP

GENERAL INFORMATION

This is a self-priming heavy-duty open trash pump. It must be filled with water (liquid) prior to starting. The vacuum produced as the impeller rotates draws air into the pump from the suction line and mixes with the liquid in the pump. The air is expelled but the liquid recirculates in the pump until all air is evacuated from the suction line. The pump is now primed and operates like a regular centrifugal pump.

PERFORMANCE DATA

➤ Minimum Speed:	- 1400 rpm
➤ Maximum Speed:	- 2000 rpm
➤ Minimum Shutoff Head:	- 55 feet (24 psi) ⁽¹⁾
➤ Maximum Shutoff Head:	- 112 feet (48 psi) ⁽¹⁾
➤ Maximum Suction Lift:	- 28 feet ⁽²⁾
➤ Minimum Flow:	- 100 gpm
➤ Maximum Flow:	- 900 gpm
➤ Maximum Suction Press:	- 30 psi
➤ Maximum Casing Press:	- 100 psi
➤ Maximum Temperature:	- 150°F
➤ Maximum Solids Size:	- 3" spherical diameter

PUMP SPECIFICATIONS

➤ Impeller:	- 9.75" diameter, semi-open, two-vane, with rear equalizing vanes
➤ Wearplate Clearance:	- 0.010" – 0.020" (rear) 0.010" – 0.020" (front)
➤ Bearing Lubrication:	- No. 2 grease
➤ Vacuum System:	- None
➤ Mech. Seal Lubrication:	- No. 2 grease
➤ Dead Head Pressure:	-
@ 1600 RPM:	- 27 psi – 30 psi
@ 1800 RPM:	- 35 psi – 39 psi

PHYSICAL SPECIFICATIONS

➤ Suction Size:	- Four-inch 125# Male NPT
➤ Discharge Size:	- Four-inch 125# Male NPT
➤ Total Weight:	- 2000 lbs. (approx.) ⁽⁴⁾
➤ Overall Height:	- 5'-10"
➤ Overall Width:	- 5'-4"
➤ Overall Length:	- 9'-7"

MATERIAL SPECIFICATIONS

➤ Casing/Volute:	- Cast iron
➤ Shaft Sleeve:	- 304 stainless steel
➤ Wearplate:	- Cast iron, rubber lined
➤ Mechanical Seal Faces:	- Tungsten / tungsten
➤ Pump Shaft:	- 1018 Carbon steel
➤ Elastomers:	- Buna-N
➤ Impeller:	- Ductile iron
➤ Suction Check Valve:	- Two-ply Nitrile, canvas reinforced & weighted

ENGINE SPECIFICATIONS

➤ Engine Make/Model:	- John Deere 4020D
➤ Max. Continuous BHP:	- 25hp @ 1800 rpm
➤ Crankcase Oil:	- 10 quarts of SAE10W40 ⁽³⁾
➤ Oil Press @ 800 RPM:	- 15 psi min.
➤ Safety Shutdowns:	- High water temperature & low oil pressure
➤ Grease Lubrication:	- No. 2 ⁽³⁾
➤ Fuel Capacity:	- 46 gallons of No.2 diesel
➤ Fuel Consumption:	- 1.3 gal/hr @ 2000 RPM
➤ Run Time:	- 35 hours ⁽⁵⁾
➤ Coolant Capacity/Type:	- 4.9 qt. 50/50 water/antifreeze
➤ Slow Idle Speed:	- 1300 rpm
➤ Number of Cyinders:	- Four
➤ Bore x Stroke:	- 3.31"x3.54"
➤ Fuel Filter:	- John Deere T111383
➤ Oil Filter:	- Fram PH3593A
➤ Engine Air Filter:	- Donaldson P821575

Notes:

- ⁽¹⁾ Based on 1.0 specific gravity
- ⁽²⁾ Depends on flowrate and pump speed
- ⁽³⁾ Midrange compromise. See John Deere manual
- ⁽⁴⁾ Includes weight of trailer, pump and engine
- ⁽⁵⁾ At 1800 RPM. Run time increases with reduced speed and decreases with higher speed.

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