



PRODUCT DATA SHEET

January, 2001

THOMPSON 6TSC PUMP

GENERAL INFORMATION

This pump uses an oil-lubricated two-cylinder piston compressor that is driven by v-belt off the shaft. Forcing air through an air/water separator creates a vacuum. A float operated valve installed in the separator prevents liquid but allows air to exit the separation chamber.

PERFORMANCE DATA

➤ Minimum Speed:	- 1000 rpm
➤ Maximum Speed:	- 2200 rpm ⁽⁵⁾
➤ Minimum Shutoff Head:	- 38 feet (16 psi) ⁽¹⁾ @ 1000 rpm
➤ Maximum Shutoff Head:	- 171 feet (74 psi) ⁽¹⁾ @ 2200 rpm ⁽⁵⁾
➤ Maximum Suction Lift:	- 28 feet ⁽²⁾
➤ Minimum Flow:	- 150 GPM
➤ Maximum Flow:	- 1700 GPM
➤ Maximum Suction Press:	- 50 PSI
➤ Maximum Casing Press:	- 100 PSI
➤ Maximum Temperature:	- 175°F
➤ Maximum Solids Size:	- 3" spherical diameter

PUMP SPECIFICATIONS

➤ Impeller:	- 11.25" dia., two-vane, semi-open with full rear shroud and rear equalizing vanes
➤ Wearplate Clearance:	- 0.025" – 0.040" (rear) 0.010" – 0.020" (front)
➤ Bearing Lubrication:	- No. 2 grease
➤ Vacuum System:	- Quincy 216P, V-belt driven, air-cooled, two-cylinder, 2.85 HP @ 60 psi, 3.00" bore x 2.50" stroke, 12.5 cfm @ 900 RPM, turbine oil lubricated
➤ Mech. Seal Lubrication:	- No. 2 grease
➤ Dead Head Pressure:	-
@ 1600 RPM:	- 41 psi - 42 psi
@ 1800 RPM:	- 52 psi - 54 psi

PHYSICAL SPECIFICATIONS

➤ Suction Size:	- Six-inch 125# Male NPT
➤ Discharge Size:	- Six-inch 125# Male NPT
➤ Total Weight:	- 3000 lbs. (approx.) ⁽⁴⁾
➤ Overall Height:	- 7'- 1"
➤ Overall Width:	- 6'- 3 ½"
➤ Overall Length:	- 13'- 4"

MATERIAL SPECIFICATIONS

➤ Casing/Volute:	- Cast iron
➤ Shaft Sleeve:	- 304 stainless steel
➤ Wearplate:	- Cast iron, rubber lined
➤ Mechanical Seal Faces:	- Tungsten Carbide
➤ Vacuum Chamber:	- Carbon Steel
➤ Venturi:	- Bronze
➤ Pump Shaft:	- SAE 4140
➤ Elastomers:	- Viton
➤ Impeller:	- Ductile iron, 65-45-12
➤ Discharge Check Valve:	- C.I./Brass seat/Buna N
➤ Suction Check Valve:	- None

ENGINE SPECIFICATIONS

➤ Engine Make/Model:	- John Deere 4045D-85
➤ Max. Continuous BHP:	- 63 hp @ 1800 rpm
➤ Crankcase Oil:	- 9 quarts of SAE15W-40 ⁽³⁾
➤ Oil Press @ 850 RPM:	- 15 psi min.
➤ Safety Shutdowns:	- High coolant temperature & low oil pressure
➤ Grease Lubrication:	- No. 2 ⁽³⁾
➤ Fuel Capacity:	- 61 gallons of No.2 diesel
➤ Run Time:	- 24 hours
➤ Coolant Capacity/Type:	- 9 qt. 50/50 water/antifreeze
➤ Slow Idle Speed:	- 850 rpm
➤ Number of Cylinders:	- Four
➤ Bore x Stroke:	- 4.19"x 5"
➤ Fuel Filter:	- John Deere RE60021
➤ Oil Filter:	- John Deere RE59754
➤ Engine Air Filter:	- John Deere CO85041

Notes:

- ⁽¹⁾ Based on 1.0 specific gravity
- ⁽²⁾ Depends on flowrate and pump speed. See pump curve.
- ⁽³⁾ Midrange compromise. See John Deere manual
- ⁽⁴⁾ Includes weight of trailer (no fuel), pump and engine
- ⁽⁵⁾ **WARNING** – this speed is for intermittent duty only. Maximum continuous duty speed is 2000 RPM.