



**PRODUCT DATA SHEET**

February, 2001

**THOMPSON 6JSC 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**

➤ <b>Minimum Speed:</b>	-	1200 rpm
➤ <b>Maximum Speed:</b>	-	1800 rpm
➤ <b>Minimum Shutoff Head:</b>	-	130 feet (56 psi) <sup>(1)</sup>
➤ <b>Maximum Shutoff Head:</b>	-	300 feet (130 psi) <sup>(1)</sup>
➤ <b>Maximum Suction Lift:</b>	-	28 feet <sup>(2)</sup>
➤ <b>Minimum Flow:</b>	-	500 gpm
➤ <b>Maximum Flow:</b>	-	4600 gpm
➤ <b>Maximum Suction Press:</b>	-	100 psi
➤ <b>Maximum Casing Press:</b>	-	175 psi
➤ <b>Maximum Temperature:</b>	-	175 °F
➤ <b>Maximum Solids Size:</b>	-	3 3/8" spherical diameter

**PUMP SPECIFICATIONS**

➤ <b>Impeller:</b>	-	16" diameter, cast iron, two-vane, non-clogging, enclosed and rear equalizing vanes
➤ <b>Wear ring Clearance:</b>	-	Single suction, requires no adjustment, replaceable
➤ <b>Bearing Lubrication:</b>	-	No. 2 grease
➤ <b>Vacuum System:</b>	-	Quincy 216P, V-belt driven, air-cooled, two-cylinder, 2.85 HP @ 60 psi, 3.00" bore x 2.5" stroke, 12.5 cfm @ 900 RPM, turbine oil lubricated
➤ <b>Mech. Seal Lubrication:</b>	-	Run-dry oil lubricated
➤ <b>Dead Head Pressure:</b> @ 1600 RPM: @ 1800 RPM:	-	101 psi - 104 psi 126 psi - 130 psi

**PHYSICAL SPECIFICATIONS**

➤ <b>Suction Size:</b>	-	10-inch 125# Male NPT
➤ <b>Discharge Size:</b>	-	6-inch 125# Male NPT
➤ <b>Total Weight:</b>	-	6000 lbs. (approx.) <sup>(4)</sup>
➤ <b>Overall Height:</b>	-	7'-2"
➤ <b>Overall Width:</b>	-	6'-3 1/2"
➤ <b>Overall Length:</b>	-	15'-2"

**MATERIAL SPECIFICATIONS**

➤ <b>Casing/Volute:</b>	-	Cast iron
➤ <b>Shaft Sleeve:</b>	-	416 stainless steel
➤ <b>Wear ring:</b>	-	Cast iron
➤ <b>Mechanical Seal Faces:</b>	-	Tungsten Carbide / Silicon Carbide
➤ <b>Vacuum Chamber:</b>	-	Carbon Steel
➤ <b>NRV (vac system):</b>	-	8" Flapper-style
➤ <b>Pump Shaft:</b>	-	SAE 1144
➤ <b>Elastomers:</b>	-	Viton
➤ <b>Impeller:</b>	-	Cast iron
➤ <b>Discharge Check Valve:</b>	-	C.I./Brass seat/Buna N
➤ <b>Suction Check Valve:</b>	-	None

**ENGINE SPECIFICATIONS**

➤ <b>Engine Make/Model:</b>	-	John Deere 6081AP2-225
➤ <b>Max. Continuous BHP:</b>	-	219 hp @ 1800 rpm <sup>(5)</sup>
➤ <b>Crankcase Oil:</b>	-	33.75 Qt. of SAE15W-40 <sup>(3)</sup>
➤ <b>Oil Press @ 850 RPM:</b>	-	30 psi min.
➤ <b>Safety Shutdowns:</b>	-	High coolant temperature & low oil pressure
➤ <b>Grease Lubrication:</b>	-	No. 2 <sup>(3)</sup>
➤ <b>Fuel Capacity:</b>	-	73 gallons of No.2 diesel
➤ <b>Run Time:</b>	-	7 1/2 hours @ 1800 rpm
➤ <b>Coolant Capacity/Type:</b>	-	60 qt. 50/50 water/antifreeze
➤ <b>Slow Idle Speed:</b>	-	850 rpm
➤ <b>Number of Cylinders:</b>	-	Six
➤ <b>Bore x Stroke:</b>	-	4.56"x 5.06"
➤ <b>Fuel Filter:</b>	-	John Deere AR86745
➤ <b>Oil Filter:</b>	-	John Deere RE57394
➤ <b>Engine Air Filter:</b>	-	John Deere G140054

**Notes:**

- <sup>(1)</sup> Based on 1.0 specific gravity
- <sup>(2)</sup> Depends on flowrate and pump speed
- <sup>(3)</sup> Midrange compromise. See John Deere manual
- <sup>(4)</sup> Includes weight of trailer, pump and engine
- <sup>(5)</sup> **WARNING** – this is the rated speed for the **ENGINE ONLY**. Do not run at this speed. Pump is only rated for 2000 RPM.