



PRODUCT DATA SHEET

December, 2002

12" PA12A60 GORMAN-RUPP PUMP

GENERAL INFORMATION

This pump is fitted with a compressor / ejector priming system to create a vacuum on the inlet to the pump. This allows the pump to automatically prime and reprime.

PERFORMANCE DATA

➤ Minimum Speed:	- 1400 RPM engine (770 RPM pump speed)
➤ Maximum Speed:	- 2200 RPM engine (1200 rpm pump speed)
➤ Minimum Shutoff Head:	- 44 feet (19 psi) ⁽¹⁾ @ 1400 RPM
➤ Maximum Shutoff Head:	- 109 feet (47 psi) ⁽¹⁾ @ 2200 RPM
➤ Maximum Suction Lift:	- 25 feet ⁽⁶⁾ (@2000 gpm, 2200 RPM)
➤ Minimum Flow:	- 1100 gpm @ 2200 RPM
➤ Maximum Flow:	- 6000 gpm @ 2200 RPM
➤ Maximum Casing Press:	- 71 psi
➤ Maximum Temperature:	- 160°F
➤ Maximum Solids Size:	- 3" spherical diameter

PUMP SPECIFICATIONS

➤ Impeller:	- 15-½", three vanes
➤ Bearing Lubrication:	- SAE No. 30 oil
➤ Vacuum System:	- Quincy 270P piston compressor, belt driven, 35 cfm at 900 RPM
➤ Speed Reduction:	- Pulley/Belt, 1.82:1 ratio
➤ Mech. Seal Lubrication:	- SAE No. 30 oil
➤ Dead Head Pressure:	-
@ 1600 RPM:	58 feet (25 psi)
@ 1800 RPM:	73 feet (31 psi)
@ 2000 RPM:	90 feet (39 psi)

PHYSICAL SPECIFICATIONS

➤ Suction Size:	- 12" flange
➤ Discharge Size:	- 12" flange
➤ Total Weight:	- 4510 lbs. ⁽²⁾ 5793 lbs. ⁽⁵⁾
➤ Overall Height:	- 7'-2"
➤ Overall Width:	- 5'-1" (skid to skid + flange extension) 6'-5" (skid to far-side filter element)
➤ Overall Length:	- 10'-0"

MATERIAL SPECIFICATIONS

➤ Pump Casing:	- Gray Iron No. 30
➤ Shaft Sleeve:	- 304 stainless steel
➤ Wear Rings:	- Impeller – D.I. No. 80-60-03 Suct. Head – Bronze C83600
➤ Mechanical Seal Faces:	- Silicon carbide/ Silicon carb.
➤ Priming Chamber:	- Gray Iron No. 30
➤ Pump Shaft:	- 17-4 PH stainless steel
➤ O-rings:	- Viton & Buna-N
➤ Impeller:	- Ductile iron No. 60-40-18
➤ Check Valve Body:	- Gray Iron No. 30
➤ Check Valve Flapper:	- Buna-N
➤ Flanges:	- Gray Iron No. 30

ENGINE SPECIFICATIONS

➤ Engine Make/Model:	- John Deere 6068T
➤ Aspiration:	- Turbocharged
➤ Max. Continuous BHP:	- 170 @ 2800 RPM ⁽⁷⁾
➤ Crankcase Oil:	- 20 quarts of SAE 10W40 ⁽³⁾
➤ Oil Press @ 800 RPM:	- 15 psi min.
➤ Safety Shutdowns:	- High water temperature & low oil pressure
➤ Fuel Capacity/Type:	- 171 gallons of No. 2 diesel
➤ Fuel Consumption:	- 7.1 gal/hr @ 2200 rpm
➤ Run Time:	- 24 hours ⁽⁴⁾
➤ Coolant:	- 6 gal. 50/50 water/antifreeze
➤ Number of Cyinders:	- Six
➤ Bore x Stroke:	- 4.19"x5.00"
➤ Displacement:	- 414 cu. In.

Notes:

- ⁽¹⁾ Based on 1.0 specific gravity
- ⁽²⁾ Includes weight of skid, pump, engine and empty fuel tank.
- ⁽³⁾ Midrange compromise. See John Deere manual.
- ⁽⁴⁾ At 2200 RPM. Run time increases with reduced speed.
- ⁽⁵⁾ Includes weight of skid, pump, engine and full fuel tank.
- ⁽⁶⁾ Varies with flowrate and pump speed.
- ⁽⁷⁾ This is the rated speed of the engine. *Do not exceed 2200 RPM.*

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