

5200 Series Pump Unit



Part No. F27700F

- **Three Independent Hydraulic Pump Systems •**
- **Centralized Operator Station For Hydraulic & Electrical Controls •**
- **Variable Volume, Pressure Compensated Hydraulics •**



**5200 Pump Unit Shown
With Skid & Yoke**

FEATURES

- Pump Unit hydraulics; high pressure system supplies oil for the two jacking cylinders (8,000 psi) (and IJS cylinders 8,000 psi, if used) and the low pressure system (3,000/5,000 psi; 5,000 psi requires TBM Series II) supplies oil to the TBM and conveyor.
- Equipped with one hydraulic oil reservoir; a 240 gal (908 L) reservoir for the boring head feed and jacking hydraulic systems.
- All hydraulic return oil is filtered with in-tank filtration.
- High flow (19 GPM) hydraulics for quick advancement and retraction of the jacking cylinders.
- Simple operator controls for ease of selecting boring head feed hydraulics of 30/60/90/120 GPM.
- Input power is monitored for proper three phase electrical power.
- Main disconnect switch controls incoming power.
- A single water cooling system with one supply connection for the boring head feed and jacking systems.
- The operator panel E-Stop button is standard equipment. An optional remote E-Stop with 100 ft cable allows support personnel to use the E-Stop in the launch shaft area.
- Electric motors are fully enclosed and fan cooled.
- The low pressure circuit is powered by two 100 HP electric motors for the boring head feed system.
- The high pressure circuit is powered by one 60 HP electric motor for the jacking system.
- A 120-volt on-board oil fill pump transfers oil from supply container through oil filters before entering hydraulic reservoir.
- A removable vandal resistant door protects operator controls during off hours on job site.

SPECIFICATIONS

Hydraulic Supply

- Three independent hydraulic systems for jacking and TBM supply functions.
- Single hydraulic oil cooler for the jacking and TBM hydraulic systems. Clean cooling water (10 GPM minimum; may need additional per job requirement) must be supplied for heat exchangers.

Low Pressure (TBM & conveyor) maximum pressure 3,000 psi.

- A 100 HP (74 kW) electric motor provides power for 30/60 GPM variable volume, pressure compensated pump @ 3,000 psi. A second 100 HP electric motor provides power for an additional 30/60 GPM variable volume, pressure compensated pump @ 3,000 psi.

High Pressure (jacking cylinders) 8,000 psi, (IJS cylinders) 8,000 psi

- A 60 HP electric motor provides power for 0 to 12 GPM variable volume, pressure compensated pump @ 8,000 psi.

Dimensions:

Height 90" (2,286 mm)
Width 107" (2,718 mm)
Depth 64" (1,626 mm)

Weight:

With Oil 17,200 lbs. (7,802 kg)

Thrust:

Total 400 ton (363 t)
(Two 200 ton, 36" stroke cylinders)

Electrical

Supply 480V, 60 Hz, 3 Phase
Cable 4/0 x 100'



The 5200 Series Pump Unit is equipped with electric motor controls for ease of controlling the boring head supply and jacking system electric motors. Hourmeters for each system are also included to help determine maintenance intervals.



Input power is clearly monitored for proper three phase electrical power with Phase Error indicator lights.



Easy-to-use operator controls for selecting boring head supply feed hydraulics (30/60/90/120 GPM).



All return oil is filtered prior to entering hydraulic reservoir.



The return filters are equipped with a remote filter indicators to prevent under or over servicing of the filter elements.



One water supply and one water discharge connections for a single water cooling system for the boring head and jacking circuits.



User friendly jacking cylinder, skid lock and travel controls.



Load Sense, Variable Volume, Pressure Compensated Pumps



Individual pressure gauges to monitor the boring head supply and jacking systems.

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