



## SPECIAL FEATURES

### WET END

- **Manifold:**
  - **Forged Brass:** Strength and no porosity – long life. higher hydrostatic pressures – safety, performance.
  - **Inlet and Discharge Ports:** Heavy bosses for added strength.
  - **Offset Discharge Ports:** High efficiency, smooth flow.
  - **Bolts:** Eight bolts, 8mm, grade 8.8.
- **Valves:**
  - **Valve Caps:** Stainless steel on pumps rated at 3200 PSI and higher, better hydrostatic loads. Machined brass on pumps <3200 PSI.
  - **Ultra Form Cages:** Durable, strength, and long life.
  - **Poppets, Seat and Spring:** 303 and 400 series stainless steel.
- **Packing and Plungers:**
  - **High Pressure Packing:** "V" style (D-1) Buna-N (cotton duct weave base) strong and tightens under load.
  - **Low Pressure Seals:** "U" cup double lip Buna-N for a good positive seat.
  - **Support and Guides:** Machined brass, 1-piece construction to assure proper plunger alignment and to maximize packing and seal life.
  - **Plungers:** Are a special aluminum oxide blend, solid ceramic for long life, strong durability and more resilient.

- **Plunger Rods:** Stainless steel construction for strength (no plating to scrape off), back-up and O-ring plunger sealing system.
- **Rod Pins:** Precision ground and hardened steel, oversized for load disbursement.
- **Connecting Rods:** One-piece special allow aluminum or bronze for higher pressure, oversized for maximum strength, load disbursement, and life. Heavy pin area construction, for added load strength.
- **Crankshaft:** Forged, precision ground and hardened for extremely long life and durability.
- **Oil Seals and O-rings:** Triple lip oil seals, long life and much less leak prone. All are constructed of Buna-N rubber. The O-rings have stainless steel garder springs to assure constant tension on the sealing surface.
- **Oil Drains:** Quantity of two (2). One in the rear cover and one in the bottom of the crankcase.
- **Oil Capacity:** 15.5 oz.

### EXTRA FEATURES

- **Dyno Proven:** All pumps are dyno tested to assure the theoretical design meets the actual design.
- **Valve Design:** Each pump series has a valve design that optimizes its highest efficiency.

### DRIVE END

- **Bearings:** Oversized tapered roller bearing for maximum life and load disbursement.
- **Bearing Support:** Precision die-cast and machined to assure concentricity and alignment.
- **Crankcase:** Precision die-cast, large cooling fins and anodized (for maximum heat dissipation).
- **Rear Cover:** Precision die-cast, O-ring sealed and bayonet style sight glass for positive sealing and locking (no threads to loosen).