

# Plunger Pumps

## FEATURING

**MANIFOLD:** High strength forged brass or nickel plated for long term use.

**BOLTS:** Eight 10mm grade 8.8.

**PLUNGERS:** A special thick solid ceramic for long life, strong durability and more resilience.

**CRANKCASE:** Precision die-cast, large cooling fins and anodized for maximum heat dissipation. Bayonet style sight glass located in the rear and side cover, fill and side and bottom drain plugs.

**BEARINGS:** Oversized premium tapered roller bearing for maximum life and load distribution.

**BEARINGS SUPPORTS:** Precision die-cast and machined to assure concentricity and alignment.

**VALVES, SEATS, AND SPRINGS:** Stainless steel with specially designed Ultra Form cages to provide long life and positive seating.

**SEALS AND V-PACKINGS:** Continuously lubricating for extended life. Triple lip oil seal for assured crankcase seal.

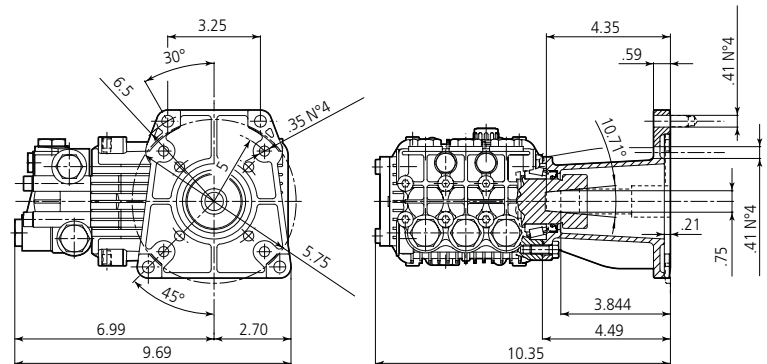
**PLUNGER RODS:** High strength stainless steel, for heavy duty use.

**CONNECTING RODS:** Two-piece special alloy aluminum based material, oversized for maximum strength, load disbursement, and long life. Heavy pin area construction, for added load strength.

## DIMENSIONS



GRKV V version + F35 Conical hollow shaft pump



## SPECIFICATIONS

| MODEL          | MAX GPM | MAX LMP | MAX PSI | MAX BAR | POWER EBHP | BORE DIA MM | STROKE MM | CRANKSHAFT ID STAMP | WEIGHT LBS. |
|----------------|---------|---------|---------|---------|------------|-------------|-----------|---------------------|-------------|
| GRKV4G35HV-F35 | 4.0     | 15.1    | 3500    | 240     | 9.5        | 18          | 7.0       | 8                   | 23          |

Oil Capacity = 15.3 oz

Maximum Fluid Temperature = 140° F

Inlet Thread = 1/2" F

Discharge Thread = 3/8" F

### Torque Specifications Inch pounds (ft. lbs)

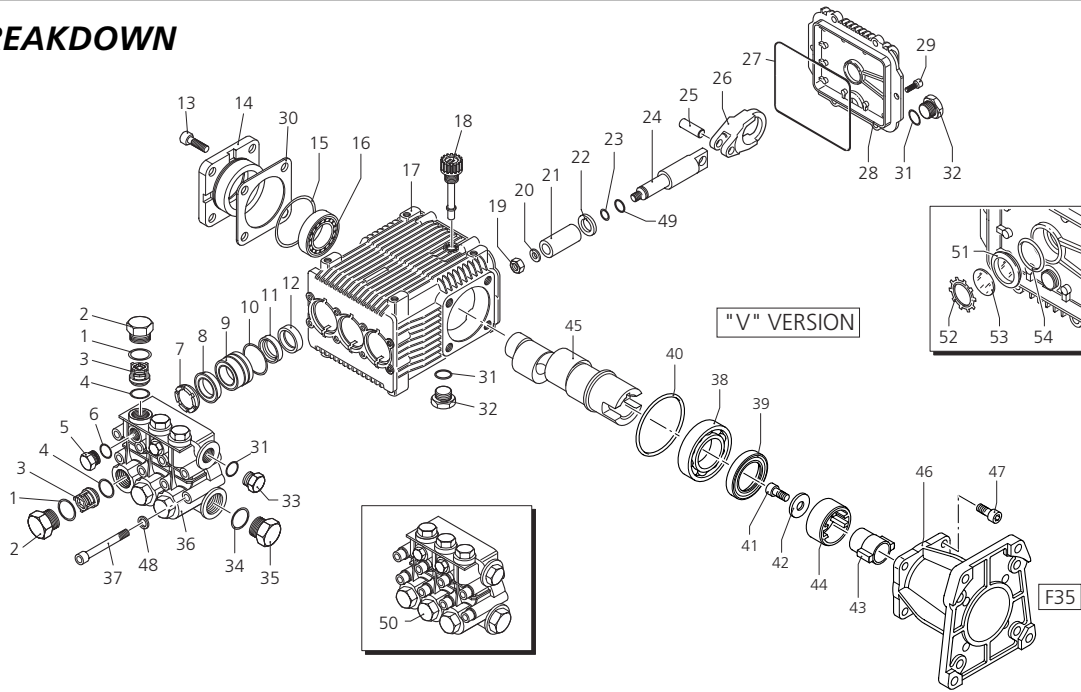
| HEAD     | PISTON NUT | REAR COVER | SIDE COVER | VALVE CAP | CON RODS |
|----------|------------|------------|------------|-----------|----------|
| 217 (18) | 106 (8.8)  | 89 (7.5)   | 217 (18)   | 478 (40)  | N/A      |

Engine crankshaft coupling bolt: 221 (18)

**SPECIAL NOTE:** Use AR64516 Oil. First change oil after 50 hours of use. Then every 500 hours. This oil is specially formulated to provide correct lubrication properties for our pumps. **No** other oil is factory approved for these pumps.



**PARTS BREAKDOWN**



| Pos. | Code    | Description        | Qty. | Pos. | Code    | Description        | Qty. | Legend    |           |  |  |
|------|---------|--------------------|------|------|---------|--------------------|------|-----------|-----------|--|--|
| 1    | 960160  | O-Ring             | 6    | 35   | 820361  | Plug 1/2" G        | ○ 1  | Ø 18      | Ø 18      |  |  |
| 2    | 960090  | Plug               | ○ 6  | 35   | 960870  | Plug 1/2" G Nickel | □ 1  | For ○     | For □     |  |  |
| 3    | 960850  | Plug               | □ 6  | 36   | 1381071 | Pump head          | ○ 1  | GRKV4G30A | GRKV4G35H |  |  |
| 3    | 889052  | Complete valve     | 6    | 36   | 1381070 | Pump head          | □ 1  | GRKV4G30  |           |  |  |
| 4    | 880830  | O-Ring             | 6    | 37   | 820150  | Screw              | 8    |           |           |  |  |
| 5    | 880830  | Plug 1/4" G        | ○ 2  | 38   | 1380320 | Bearing            | 1    |           |           |  |  |
| 5    | 1380690 | Plug 1/4" G Nickel | □ 2  | 39   | 621170  | Seal               | 1    |           |           |  |  |
| 6    | 820510  | O-Ring             | 2    | 40   | 1380220 | O-Ring             | 1    |           |           |  |  |
| 7    | 960110  | Support ring       | 3    | 41   | 620440  | Screw              | 1    |           |           |  |  |
| 8    | 880320  | Gasket             | 3    | 42   | 2280450 | Washer             | 1    |           |           |  |  |
| 9    | 1380090 | Piston guide       | 3    | 43   | 2280410 | Coupling           | 1    |           |           |  |  |
| 10   | 961240  | O-Ring             | 3    | 44   | 2280420 | Coupling snap ring | 1    |           |           |  |  |
| 11   | 880330  | Gasket             | 3    | 45   | 2280440 | Hollowshaft        | 1    |           |           |  |  |
| 12   | 1383130 | Seal               | 3    | 46   | 2280430 | Gas engine flange  | 1    |           |           |  |  |
| 13   | 850370  | Screw              | 4    | 47   | 180030  | Screw              | 4    |           |           |  |  |
| 14   | 1380050 | Bearing support    | 1    | 48   | 1381850 | Washer             | 8    |           |           |  |  |
| 15   | 640030  | O-Ring             | 1    | 49   | 1080401 | Ring               | 3    |           |           |  |  |
| 16   | 2280240 | Bearing            | 1    | 50   | 1389232 | Pump head assembly | ○ 1  |           |           |  |  |
| 17   | 1382770 | Pump housing       | 1    | 50   | 1389224 | Pump head assembly | □ 1  |           |           |  |  |
| 18   | 880130  | Oil cap            | 1    | 51   | 1260250 | Oil indicator      | 1    |           |           |  |  |
| 19   | 962010  | Nut                | 3    | 52   | 1260430 | Snap ring          | 1    |           |           |  |  |
| 20   | 962000  | Washer             | 3    | 53   | 1780690 | Disc               | 1    |           |           |  |  |
| 21   | 1380940 | Ceramic piston     | 3    | 54   | 1140450 | O-Ring             | 1    |           |           |  |  |
| 22   | 1380950 | Spacer             | 3    |      |         |                    |      |           |           |  |  |
| 23   | 600180  | O-Ring             | 3    |      |         |                    |      |           |           |  |  |
| 24   | 1380920 | Guiding piston     | 3    |      |         |                    |      |           |           |  |  |
| 25   | 1380060 | Piston pin         | 3    |      |         |                    |      |           |           |  |  |
| 26   | 1383050 | Aluminum con rod   | 3    |      |         |                    |      |           |           |  |  |
| 26   | 1383020 | Bronze con rod     | 3    |      |         |                    |      |           |           |  |  |
| 27   | 1780510 | O-Ring             | 1    |      |         |                    |      |           |           |  |  |
| 28   | 1789010 | Complete cover     | 1    |      |         |                    |      |           |           |  |  |
| 29   | 1343510 | Screw              | 6    |      |         |                    |      |           |           |  |  |
| 30   | 1380120 | 0,10 mm shim       | 1-3  |      |         |                    |      |           |           |  |  |
| 30   | 1380130 | 0,20 mm shim       | 1-3  |      |         |                    |      |           |           |  |  |
| 30   | 1380530 | 0,25 mm shim       | 1-3  |      |         |                    |      |           |           |  |  |
| 30   | 1382810 | 0,05 mm shim       | 1-3  |      |         |                    |      |           |           |  |  |
| 31   | 740290  | O-Ring             | 3    |      |         |                    |      |           |           |  |  |
| 32   | 1980740 | Plug 3/8" G        | 2    |      |         |                    |      |           |           |  |  |
| 33   | 1980740 | Plug 3/8" G        | ○ 1  |      |         |                    |      |           |           |  |  |
| 33   | 1981180 | Plug 3/8" G        | □ 1  |      |         |                    |      |           |           |  |  |
| 34   | 180101  | O-Ring             | 1    |      |         |                    |      |           |           |  |  |

| Repair Kits  |           |           |           |
|--------------|-----------|-----------|-----------|
| Water Seal   | Valve     | Pistons   | Oil Seals |
| Kit 1857     | Kit 1828  | Kit 2546  | Kit 1856  |
| Pos. Qty.    | Pos. Qty. | Pos. Qty. | Pos. Qty. |
| 8 3          | 3 6       | 19 3      | 12 3      |
| 10 3         | 4 6       | 20 3      | 14 1      |
| 11 3         |           | 21 3      | 27 1      |
|              |           | 22 3      | 39 1      |
|              |           | 23 3      | 40 1      |
|              |           | 49 3      |           |
| Support Ring | Mounting  |           |           |
| Kit 1829     | Kit 2504  |           |           |
| Pos. Qty.    | Pos. Qty. |           |           |
| 7 3          | 41 1      |           |           |
|              | 42 1      |           |           |
|              | 43 1      |           |           |
|              | 44 1      |           |           |

| Special Parts |                       |      |
|---------------|-----------------------|------|
| Code          | Description           | Qty. |
| 2809          | Viton water seals Ø18 | 1    |

