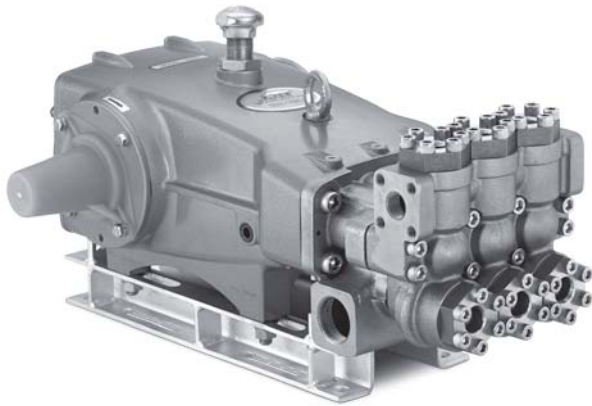


DATA SHEET

35 FRAME PLUNGER PUMPS



Nickel Aluminum 3517.44101
Bronze Model:



Model 3517.44101 Shown
 (Shaft protector included, mounting rails sold separately)

| SPECIFICATIONS | U.S. | Metric |
|-------------------------|-----------------------|--------------------|
| Flow | 14 gpm | 53 lpm |
| Pressure Range | 100 - 3000 psi | 6.9 - 207 bar |
| Pump RPM* | 800 rpm | 800 rpm |
| Inlet Pressure Range | Flooded to 70 psi | Flooded to 4.8 bar |
| Bore | 0.984" | 25 mm |
| Stroke | 1.890" | 48 mm |
| Crankcase Capacity | 4.2 qts | 4 l |
| Max. Liquid Temperature | 240° F | 115° C |
| Inlet Ports (2) | 1-1/2" NPT(F) | 1-1/2" NPT(F) |
| Discharge Ports (2) | 1" NPT(F) | 1" NPT(F) |
| Pulley Mounting | Either Side | Either Side |
| Shaft Diameter | 1.378" | 35 mm |
| Weight | 139 lbs. | 63 kg |
| Dimensions | 24.51 x 18.11 x 9.72" | 623 x 460 x 247 mm |

*Pump minimum is 100 RPM.

FEATURES

- Field- tested, high pressure triplex pump configured for high temperature TEG (triethylene glycol) applications up to 240°F/115°C. May be used in other high temperature applications with fluids possessing adequate lubrication properties. Contact Cat Pumps for more information.
- Positive displacement technology for optimum energy efficiency.
- Re-configured pump .44101 option consists of following materials:
 - O-Ring material throughout the pump: Fluoropolymer elastomers.
 - Oil filler cap assembly: Brass adapters, chrome-plated steel vented cap.
 - Rear sight gauge assembly: Aluminum sight adapter and stainless steel sight gauge.
 - Seal retainers: Aluminum.
 - Low-pressure seals and V-Packings: Special PTFE blends.

ELECTRIC HORSEPOWER REQUIREMENTS

| FLOW | | PRESSURE | | | RPM |
|-------------|-----|-------------|-------------|-------------|-----|
| | | psi 2000 | psi 2500 | psi 3000 | |
| U.S. gpm | lpm | bar 138 | bar 172 | bar 207 | |
| 14 | 53 | 19.2 | 24.0 | 28.8 | 800 |
| 12 | 45 | 16.4 | 20.5 | 24.7 | 685 |
| 10 | 38 | 13.7 | 17.1 | 20.5 | 571 |

| | | | |
|--------------------------|-------------------|---|------------------|
| DETERMINING | Rated gpm | = | "Desired" gpm |
| THE PUMP R.P.M. | Rated rpm | = | "Desired" rpm |
| DETERMINING | gpm x psi | = | Electric Brake |
| THE REQUIRED H.P. | 1460 | = | H. P. Required |
| DETERMINING | Motor Pulley O.D. | = | Pump Pulley O.D. |
| MOTOR PULLEY SIZE | Pump rpm | = | Motor rpm |

See complete Drive Packages [Incls: Pulleys, Belts, Hubs, Key] Tech Bulletin 003.
 Refer to pump **Service Manual** for repair procedure and additional technical information.

PARTS LIST

| ITEM | PART NUMBER | MATL | DESCRIPTION | QTY |
|------|-------------|--------|---|-----|
| 5 | 125753 | S | Screw, HHC Sems (M8 x 25) | 8 |
| 8 | 44542 | AL | Cover, Bearing (See Tech Bulletin 118) | 2 |
| 9 | 815279 | FBR | Shim, Split 2-piece | 2 |
| 10 | 76173 | FPM | O-Ring, Bearing Cover | 2 |
| 11 | 76172 | FPM | Seal, Oil, Crankshaft | 2 |
| 15 | 29326 | STL | Bearing, Roller | 2 |
| 20 | 121467 | TNM | Rod, Connecting Assy (Incls: 21, 22, 23) | 3 |
| 21 | 126749 | STCP R | Washer, Locking | 3 |
| 22 | 126593 | STCP R | Shim, Washer (M10.5) | 6 |
| 23 | 122045 | STZP | Screw, HH (M10 x 55) | 6 |
| 25 | 29325 | FCM | Crankshaft, Dual End | 1 |
| 31 | 76411 | BB | Adapter, 3/4"NPT(F) | 1 |
| 32 | 992623 | BB | Nipple, Close 3/4"NPT(M) | 1 |
| 33 | 76331 | STCP | Cap, Vented | 1 |
| 34 | 126743 | STCP R | Bolt, Eye (M12 x 1.75) (For lifting Pump Only) | 1 |
| 36 | 76792 | SS | Gauge, Sight | 1 |
| 37 | 76791 | AL | Adapter, Sight | 1 |
| 38 | 44428 | NBR | Gasket, Flat, Adapter - 80D | 1 |
| 40 | 125753 | S | Screw, HHC Sems (M8 x 25) | 8 |
| 48 | 25625 | STCP | Plug, Drain (1/4" x 19BSP) | 1 |
| 49 | 30322 | FPM | O-Ring, Drain Plug | 1 |
| 50 | 45936 | AL | Cover, Rear (See Tech Bulletin 118) | 1 |
| 51 | 76174 | FPM | O-Ring, Rear Cover - 75D | 1 |
| 53 | 44487 | AL | Crankcase Assy (Incls: 34,54) (See Tech Bulletin 118) | 1 |
| 54 | 27488 | S | Pin, Guide | 2 |
| 64 | 43864 | CM | Pin, Crosshead | 3 |
| 65 | 45116 | SSZZ | Rod, Plunger | 3 |
| 69 | 126587 | STCP R | Washer, Oil Seal | 3 |
| 70 | 44739 | FPM | Seal, Oil, Crankcase | 3 |
| 75 | 43865 | S | Slinger, Barrier | 3 |
| 88 | 45676 | S | Washer, Keyhole | 3 |
| 90 | 43866 | CC | Plunger (M25 x 145) | 3 |
| 95 | 89778 | SS | Stud, Plunger Retainer (M10 x 135) | 3 |
| 96 | 20189 | PTFE | Back-up-Ring, Plunger Retainer | 3 |
| 97 | 11375 | FPM | O-Ring, Plunger Retainer | 3 |
| 98 | 44085 | SS | Gasket, Plunger Retainer | 3 |
| 99 | 44084 | SS | Retainer, Plunger (M10) | 3 |
| 100 | 999324 | AL | Retainer, Seal | 3 |
| 104 | 44826 | FPM | O-Ring, Adapter-70D | 3 |
| 105 | 44088 | NAB | Adapter, LPS | 3 |
| 106 | 76086 | ST2 | Seal, LPS w/S-Spg | 3 |
| 107 | 44089 | SS | Washer, LPS | 3 |
| 110 | 44206 | NAB | Manifold, Inlet | 1 |
| 112 | 14183 | FPM | O-Ring, Inlet Manifold | 3 |
| 117 | 44585 | S | Screw, HSH (M14 x 40) | 4 |
| 123 | 13266 | FPM | O-Ring, Inlet Manifold | 3 |
| 124 | 44090 | NAB | Cylinder, V-Packing | 3 |
| 126 | 44091 | NAB | Adapter, Female | 3 |
| 127 | 76611 | ST4 | V-Packing | 6 |
| 128 | 44092 | NAB | Adapter, Male | 3 |
| 155 | 14183 | FPM | O-Ring, V-Packing Spacer - 70D | 6 |
| 156 | 28243 | PTFE | Backup-Ring, V-Packing Spacer | 6 |
| 157 | 44093 | NAB | Spacer, V-Packing | 3 |
| 162 | 21985 | PTFE | Back-up-Ring, Valve Seat | 6 |
| 163 | 11377 | FPM | O-Ring, Valve Seat - 80D | 6 |
| 164 | 44080 | SS | Seat | 6 |
| 166 | 44081 | SS | Valve | 6 |
| 167 | 44082 | SS | Spring | 6 |
| 168 | 44735 | PVDF | Retainer, Spring | 6 |
| 170 | 44794 | SS | Washer, Spring Retainer | 6 |
| 171 | 44793 | SS | Spring, Coil | 6 |
| 172 | 11720 | FPM | O-Ring, Valve Plug - 70D | 6 |
| 173 | 20224 | PTFE | Back-up-Ring, Valve Plug | 6 |
| 174 | 44795 | NAB | Plug, Valve | 6 |
| 185 | 46565 | NAB | Manifold, Discharge | 1 |
| 188 | 89981 | S | Screw, HSH (M12 x 70) | 8 |
| 250 | 44516 | NY | Protector, Shaft | 1 |

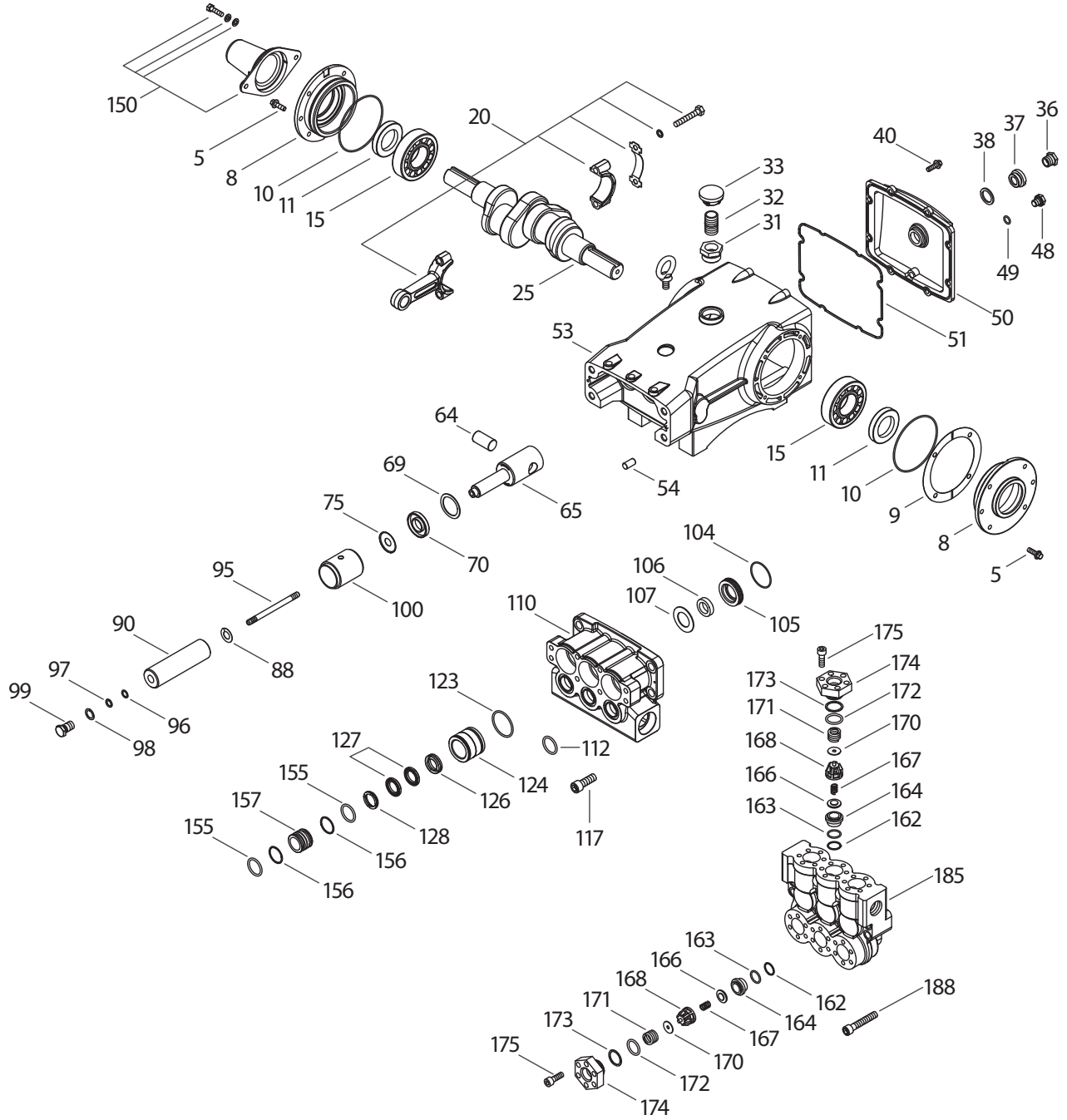
Repair Kits/Parts and Optional Parts/Accessories On Page 4

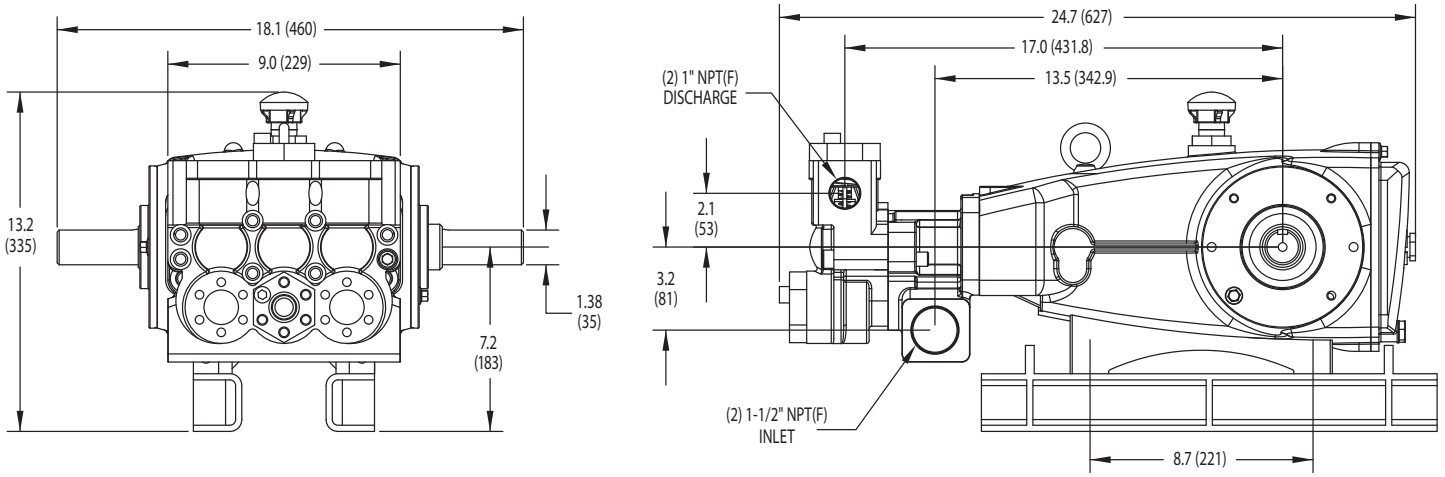
R Components comply with RoHS Directive.

View Tech Bulletins 002, 003, 024, 040, 041, 050, 052, 053, 064, 069, 074, 083, 100, 105, 109, 114 and 118 for additional information.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-Moly FBB=Forged/Brass FBR=Fiber
 FCM=Forged Chrome-moly FPM=Fluorocarbon NAB=Nickel Aluminum Bronze NBR=Medium Nitrile (Buna-N) NY=Nylon PTFE=Pure Polytetrafluoroethylene
 PVDF=Polyvinylidene Fluoride S=304SS SS=316SS STL=Steel ST2=Spial PTFE2 ST4=Special PTFE4 STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated
 SSZZ=316SS/Zamak TNM=Special High Strength

EXPLODED VIEW



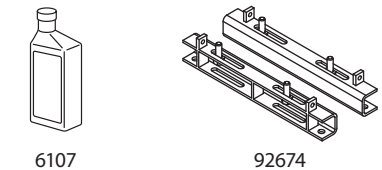
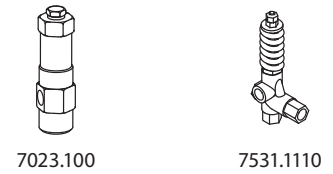


REPAIR KITS AND PARTS

| PART NUMBER | DESCRIPTION | QTY |
|-------------|---|-----|
| 76447 | Kit, Seal (Includes Items 97, 104, 106, 112, 123, 127, 155 and 156) | 1 |
| 701798 | Kit, Valve (Includes Items 162, 163, 164, 166,167, 168, 170, 172 and 173) | 2 |
| 6107 | Oil, Bottle (21 oz.) ISO 68 Hydraulic | 4 |
| 34021 | Key (M10x8x70) | 1 |

OPTIONAL PARTS AND ACCESSORIES

| PART NUMBER | DESCRIPTION | QTY |
|-------------|---|-----|
| 7023.100 | Regulator (Primary Pressure Control) | 1 |
| 7531.1110 | Relief Valve (Secondary Pressure Control) | 1 |
| 9941 | Pop-Off Valve (Secondary Pressure Control) | 1 |
| 6076 | Pressure Gauge | 1 |
| 6030 | Accumulator | 1 |
| 92674 | Mounting Rail Assembly | 1 |
| 76334 | Kit, Oil Indicator (3/8" x 24") See Individual Data Sheet | 1 |
| 34334 | Kit, Oil Drain (3/8" x 24") See Individual Data Sheet | 1 |
| 30696 | Pliers (Reverse) | 1 |
| 44050 | Tool, Sight Gauge Removal | 1 |



⚠ CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



CAT PUMPS
 1681 - 94TH LANE N.E. MINNEAPOLIS, MN 55449-4324
 PHONE (763) 780-5440 — FAX (763) 780-2958
 e-mail: techsupport@catpumps.com
www.catpumps.com