

Model 3841 Shown
(Shaft Protector included, mounting rails sold separately)

FEATURES

- Triplex design delivers high efficiency and low pulsation.
- Durable dual V-Packings are lubricated and cooled by pumped liquid.
- Pre-set Lo-Pressure Seals provide secondary protection against external leaks and require no packing adjustments.
- Special high-density, polished, concentric plungers provide a true wear surface and extended seal life.
- Specially formulated Seals and V-Packings offer unmatched performance and extended life.
- Interchangeable inlet and discharge valves for easy servicing.
- Wet-end easily serviced without entering crankcase.
- Optimal cast iron crankcase for hazardous environments.
- Special flushed inlet manifold (K Model) permits flush for added cooling with high temperature liquids and lubrication with low lubricity liquids.

⚠ 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.

38 Frame Block-Style Stainless Steel Plunger Pump

Standard
Models

3841

Flushed
Models

3841K

SPECIFICATIONS

| | U.S. Measure | Metric Measure |
|--|----------------------|----------------------|
| Flow..... | 45 gpm | (170 lpm) |
| Pressure Range..... | 100 to 1000 psi | (7 to 70 bar) |
| Inlet Pressure Range*..... | Flooded to 70 psi | (Flooded to 4.9 bar) |
| RPM..... | 765 rpm | (765 rpm) |
| Bore..... | 1.772" | (45 mm) |
| Stroke..... | 1.890" | (48 mm) |
| Crankcase Capacity..... | 4.2 Qts. | (4 L) |
| Maximum Liquid Temperature..... | 140°F | (60°C) |
| Above 130°F call CAT PUMPS for inlet conditions and elastomer recommendations. | | |
| Inlet Ports (2)..... | 1-1/2" NPTF | (1-1/2" NPTF) |
| Flushing Ports (2)*(3841K)..... | 1/2" NPTF | (1/2" NPTF) |
| Discharge Ports (2)..... | 1" NPTF | (1" NPTF) |
| Shaft Diameter..... | 1.378" | (35 mm) |
| Weight..... | 139 lbs. | (63 kg) |
| Dimensions..... | 24.4 x 18.11 x 9.37" | (620 x 460 x 238 mm) |

* K Models: Special Flushed Inlet Manifold permits external flush for added cooling with high temperature liquids and lubrication with low lubricity liquids.

ELECTRIC HORSEPOWER REQUIREMENTS

| FLOW | | PRESSURE | | | RPM |
|-------------|-----|------------|------------|-------------|-----|
| | | psi 800 | psi 900 | psi 1000 | |
| U.S. gpm | lpm | bar 55 | bar 63 | bar 70 | |
| 45 | 170 | 24.7 | 27.8 | 30.9 | 765 |
| 40 | 151 | 22.0 | 24.7 | 27.4 | 680 |
| 35 | 133 | 19.2 | 21.6 | 24.0 | 595 |

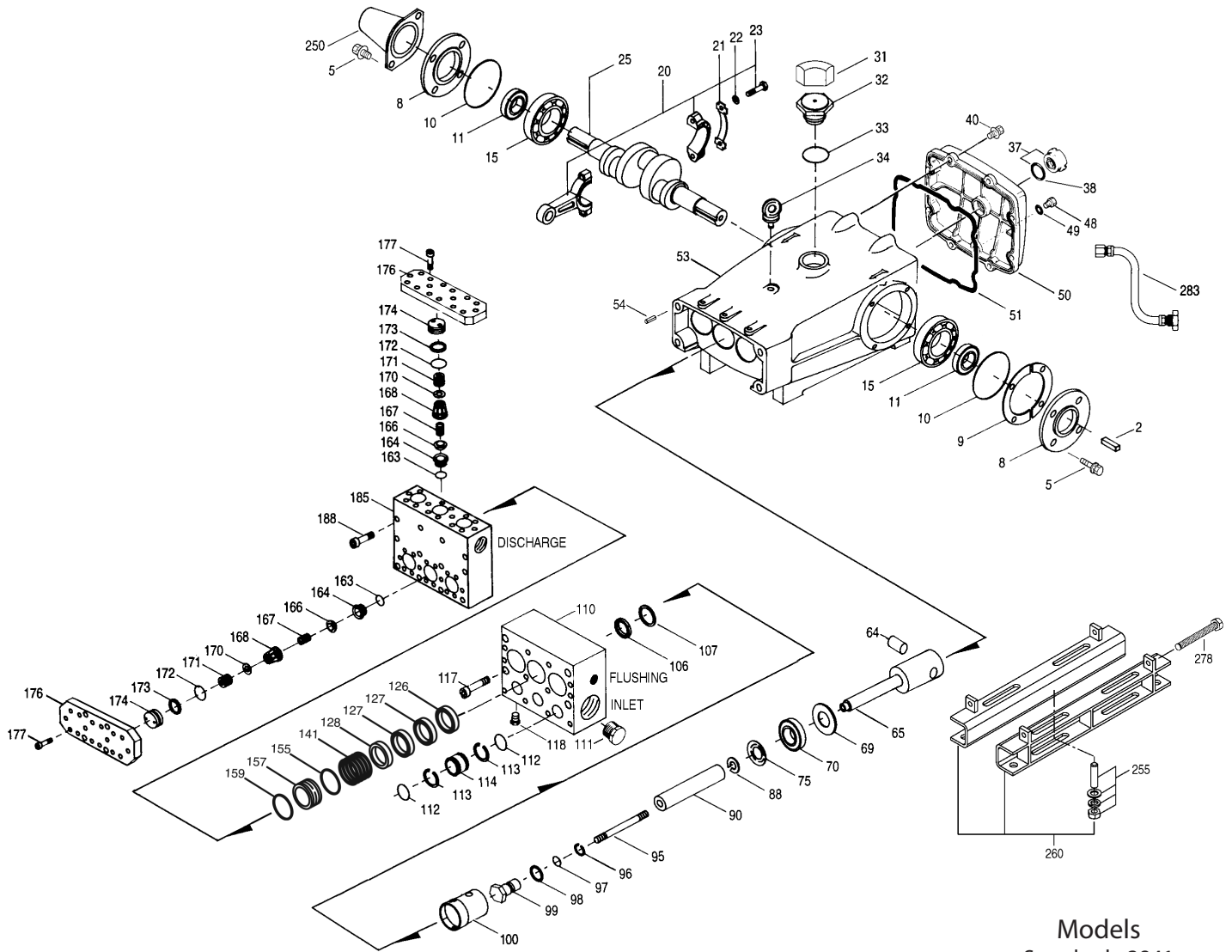
| | | | |
|--|-------------------------------|---|----------------------------------|
| DETERMINING THE PUMP R.P.M. | Rated gpm Rated rpm | = | "Desired" gpm "Desired" rpm |
| DETERMINING THE REQUIRED H.P. | gpm x psi 1460 | = | Electric Brake H. P. Required |
| DETERMINING MOTOR PULLEY SIZE | Motor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

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

PARTS LIST

| ITEM | PART NUMBER | | DESCRIPTION | QTY |
|------|---------------|---------------|---|-----|
| | 3841 MATL | 3841K MATL | | |
| 2 | 34021 STL | 34021 STL | Key (M10x8x70) | 1 |
| 5 | 125753 S | 125753 S | Screw, HH Sems (M8x25) | 8 |
| 8 | 44542 AL | 44542 AL | Cover, Bearing | 2 |
| 9 | 815279 FBR | 815279 FBR | Shim, Split 2-Pc | 0-2 |
| 10 | 12398 NBR | 12398 NBR | O-Ring, Bearing Cover - 70D | 2 |
| 11 | 13296 NBR | 13296 NBR | Seal, Oil, Crankshaft | 2 |
| 15 | 29326 STL | 29326 STL | Bearing, Roller | 2 |
| 20 | 121467 TNM | 121467 TNM | Rod, Connecting Assy (Incls: 21,22,23) [10/00] | 3 |
| 21 | 126749 STCP R | 126749 STCP R | Washer, Locking | 3 |
| 22 | 126593 STCP R | 126593 STCP R | Washer, Flat (M10) | 6 |
| 23 | 122045 STZP | 122045 STZP | Screw, HH (M10x55) | 6 |
| 25 | 29325 FCM | 29325 FCM | Crankshaft, Dual End (M48) | 1 |
| 31 | 828710 PE | 828710 PE | Protector, Oil Cap w/Foam Gasket | 1 |
| 32 | 43211 ABS | 43211 ABS | Cap, Oil Filler | 1 |
| 33 | 14177 NBR | 14177 NBR | O-Ring, Oil Filler Cap - 70D | 1 |
| 34 | 126743 STCP R | 126743 STCP R | Bolt, Eye (M12x1.75) (For Lifting Pump Only) | 1 |
| 37 | 92241 — | 92241 — | Gauge, Oil, Bubble w/Gasket - 80D | 1 |
| 38 | 44428 NBR | 44428 NBR | Gasket, Flat - 80D | 1 |
| 40 | 125753 S | 125753 S | Screw, HH Sems (M8x25) | 8 |
| 48 | 25625 STCP | 25625 STCP | Plug, Drain (1/4"x19BSP) | 1 |
| 49 | 23170 NBR | 23170 NBR | O-Ring, Drain Plug - 70D | 1 |
| 50 | 45936 AL | 45936 AL | Cover, Rear | 1 |
| 51 | 16612 NBR | 16612 NBR | O-Ring, Rear Cover - 70D | 1 |
| 53 | 44487 AL | 44487 AL | Crankcase Assy (Incls: 34, 54) | 1 |
| 54 | 27488 S | 27488 S | Pin, Guide | 2 |
| 64 | 43864 CM | 43864 CM | Pin, Crosshead | 3 |
| 65 | 45116 STCP | 45116 STCP | Rod, Plunger | 3 |
| 69 | 126587 STZP | 126587 STZP | Washer, Oil Seal | 3 |
| 70 | 100488 NBR | 100488 NBR | Seal, Oil, Crankcase | 3 |
| | 44739 FPM | 44739 FPM | Seal, Oil, Crankcase | 3 |
| 75 | 43865 S | 43865 S | Slinger, Barrier | 3 |
| 88 | 45676 S | 45676 S | Washer, Keyhole (M16) | 3 |
| 90 | 46806 CC | 46806 CC | Plunger (M45x145) | 3 |
| 95 | 89778 SS | 89778 SS | Stud, Plunger Retainer (M10x135) | 3 |
| 96 | 20189 PTFE | 20189 PTFE | Back-up-Ring, Plunger Retainer | 3 |
| 97 | 11345 NBR | 11345 NBR | O-Ring, Plunger Retainer - 70D | 3 |
| | 11375 FPM | 11375 FPM | O-Ring, Plunger Retainer | 3 |
| | ◆ 701490 EPDM | ◆ 701490 EPDM | O-Ring, Plunger Retainer | 3 |
| 98 | 44085 SS | 44085 SS | Gasket, Plunger Retainer | 3 |
| 99 | 44084 SS | 44084 SS | Retainer, Plunger (M10) | 3 |
| 100 | 44119 PPG | 44119 PPG | Retainer, Seal | 3 |
| 106 | 48384 NBR | 48384 NBR | Seal, LPS w/SS-Spg | 3 |
| | 702013 SFTB | 702013 SFTB | Seal, LPS w/SS-Spg | 3 |
| | ◆ 46945 EPDM | ◆ 46945 EPDM | Seal, LPS w/SS-Spg | 3 |
| 107 | 48380 D | 48380 D | Spacer, LPS | 3 |
| 110 | 701865 SS | — | Manifold, Inlet, Block-Style | 1 |
| | — | 701982 SS | Manifold, Inlet, Block-Style, Flushed (1/2" NPTF Flush) | 1 |
| 111 | 701116 SS | 701116 SS | Plug, Inlet (1-1/2" NPT) | 1 |
| 112 | 701632 NBR | 701632 NBR | O-Ring, Inlet Spacer | 6 |
| | 701328 FPM | 701328 FPM | O-Ring, Inlet Spacer | 6 |
| | ◆ 701973 EPDM | ◆ 701973 EPDM | O-Ring, Inlet Spacer | 6 |
| 113 | 701329 PTFE | 701329 PTFE | Back-up-Ring, Inlet Spacer | 6 |
| 114 | 701327 SS | 701327 SS | Spacer, Inlet | 3 |
| 117 | 701252 SS | 701252 SS | Screw, HSH (M14x100) | 4 |
| 118 | 701077 SS | — | Plug (1/4" NPT) | 3 |
| 126 | 48383 D | 48383 D | Adapter, Female | 3 |
| 127 | 46813 STGS | 46813 STGS | V-Packing | 6 |
| | 703080 SFTB | 703080 SFTB | V-Packing | 6 |
| 128 | 48386 SS | 48386 SS | Adapter, Male | 3 |
| 141 | 49483 SS | 49483 SS | Spring, Coil, Large [See Tech Bulletin 107] | 3 |
| 155 | 17784 NBR | 17784 NBR | O-Ring, V-Packing Spacer - 80D | 3 |
| | 20138 FPM | 20138 FPM | O-Ring, V-Packing Spacer - 80D | 3 |
| | ◆ 701658 EPDM | ◆ 701658 EPDM | O-Ring, V-Packing Spacer - 80D | 3 |
| 157 | 49506 SS | 49506 SS | Spacer, V-Packing [See Tech Bulletin 107] | 3 |
| 159 | 17784 NBR | 17784 NBR | O-Ring, V-Packing Spacer - 80D | 3 |
| | 20138 FPM | 20138 FPM | O-Ring, V-Packing Spacer - 80D | 3 |
| | ◆ 701658 EPDM | ◆ 701658 EPDM | O-Ring, V-Packing Spacer - 80D | 3 |
| 163 | 26143 NBR | 26143 NBR | O-Ring, Seat - 80D | 6 |
| | 14331 FPM | 14331 FPM | O-Ring, Seat - 70D | 6 |
| | ◆ 701660 EPDM | ◆ 701660 EPDM | O-Ring, Seat | 6 |
| 164 | 48393 SS | 48393 SS | Seat | 6 |
| 166 | 44108 SS | 44108 SS | Valve | 6 |
| 167 | 44109 SS | 44109 SS | Spring | 6 |
| 168 | 44728 PVDF | 44728 PVDF | Retainer, Spring | 6 |
| 170 | 44729 SS | 44729 SS | Washer, Spring Retainer | 6 |
| 171 | 44644 SS | 44644 SS | Spring, Coil (70kg), Valve Plug | 6 |
| 172 | 89827 NBR | 89827 NBR | O-Ring, Valve Plug - 90D | 6 |
| | 11747 FPM | 11747 FPM | O-Ring, Valve Plug - 90D | 6 |
| | ◆ 701494 EPDM | ◆ 701494 EPDM | O-Ring, Valve Plug - 70D | 6 |
| 173 | 48364 D | 48364 D | Back-up-Ring, Valve Plug | 6 |
| 174 | 701278 SS | 701278 SS | Plug, Valve | 6 |
| 176 | 701316 SS | 701316 SS | Cover, Valve | 2 |
| 177 | 87951 S | 87951 S | Screw, HSH (M10x30) | 32 |
| 185 | 701866 SS | 701866 SS | Manifold, Discharge, Block-Style | 1 |
| 188 | 701279 S | 701279 S | Screw, HSH (M12x100) | 12 |
| 196 | 701342 SS | 701342 SS | Plug, Discharge (1" NPT) Not Shown | 1 |

EXPLODED VIEW



Models
Standard - 3841
Flushed - 3841K
February 2014

| | 3841 | MATL | 3841K | MATL | | |
|-----|---------------|-------------|---------------|-------------|---|---|
| 250 | 44516 | NY | 44516 | NY | Protector, Shaft w/2 Screws, Lockwashers and Washers (Included with Pump) | 1 |
| 255 | 34039 | S | 34039 | S | Assy, Direct Mount | 1 |
| 260 | 92674 | STZP R | 92674 | STZP R | Mount, Rail Assy (Incls: 34018) | 1 |
| 275 | 990013 | STL | 990013 | STL | Hub, "B" (35mm w/keyway) [Tech Bulletin 003] | 1 |
| 278 | 80540 | ZP | 80540 | ZP | Screw, HH (M12x100) (Rail Adjusting Screw) | 1 |
| 283 | 34314 | — | 34314 | — | Kit, Oil Drain (3/8" x 48") | 1 |
| 290 | 6124 | — | 6124 | — | Gasket, Liquid (3 oz.) | 1 |
| 299 | 901410 | SS | — | — | Head, Complete, Block-Style | 1 |
| 300 | — | — | 901411 | SS | Head, Complete, Block-Style, Flushed | 1 |
| | 31934 | NBR | 31934 | NBR | Kit, Seal (Incls: 97, 106, 112, 113, 127, 155, 159) | 1 |
| | 31961 | FPM | 31961 | FPM | Kit, Seal (Incls: 97, 106, 112, 113, 127, 155, 159) | 1 |
| | ◆ 31923 | EPDM | ◆ 31923 | EPDM | Kit, Seal (Incls: 97, 106, 112, 113, 127, 155, 159) | 1 |
| 310 | 33835 | NBR | 33835 | NBR | Kit, Valve, Preassembled (Incls: 163, 164, 166, 167, 168, 170, 172, 173) | 2 |
| | 31262 | FPM | 31262 | FPM | Kit, Valve, Preassembled (Incls: 163, 164, 166, 167, 168, 170, 172, 173) | 2 |
| | ◆ 31264 | EPDM | ◆ 31264 | EPDM | Kit, Valve, Preassembled (Incls: 163, 164, 166, 167, 168, 170, 172, 173) | 2 |
| — | 819000 | F | 819000 | F | Assembly, Crankcase, Cast Iron Conversion | 1 |
| 370 | — | — | 990663 | — | Assembly, Flushing, 5 gal., 115V, 1.1 Amp, 1/2" NPT | 1 |
| 390 | 714500 | SS | 714500 | SS | C.A.T. (Inlet pressure stabilizer for RO and boosted applications) | 1 |
| 391 | 714506 | SS | 714506 | SS | Adapter (2 per C.A.T.) (See Data Sheet for complete selection) | 2 |
| 392 | 701828 | SS | 701828 | SS | Elbow Assy used with Adapter Assy 714506 | 1 |
| — | 6100 | — | 6100 | — | Oil, Case (12-21 oz. Bottles) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up) | 1 |
| — | 6119 | — | 6119 | — | Lubricant, Antisizee (2 oz) | 1 |

Bold print part numbers are unique to a particular pump model. Italics are optional items.

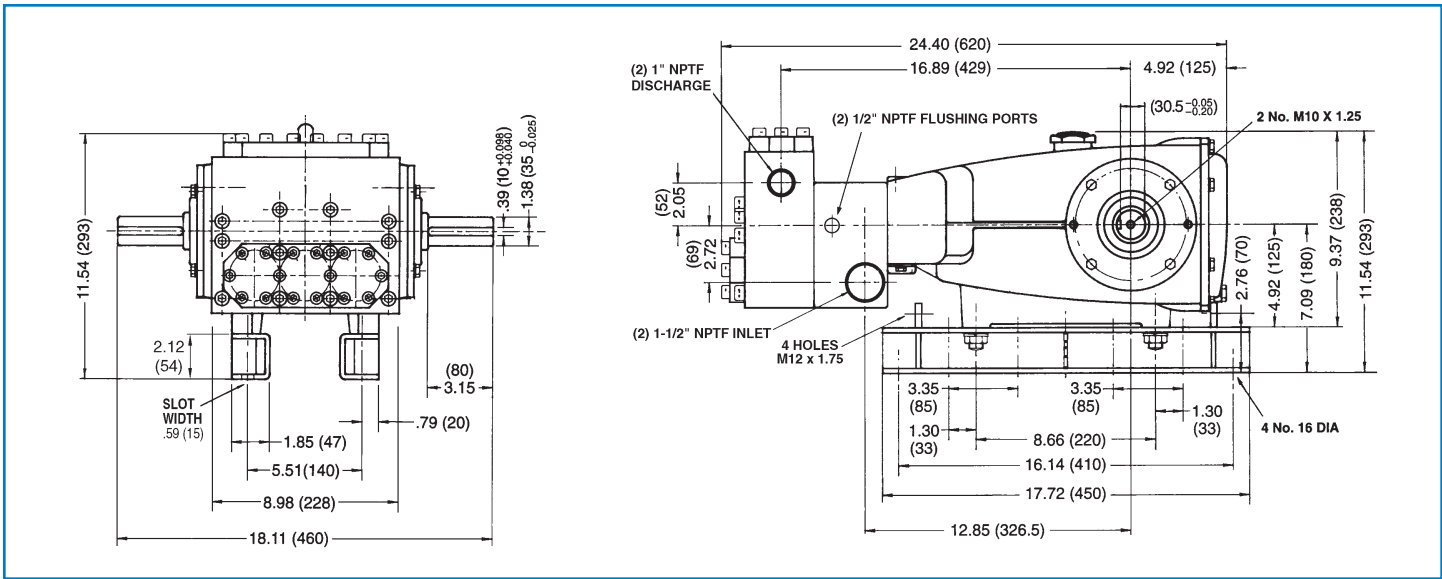
[] Date of latest production change. ◆ Silicone oil/grease required. R Components comply with RoHS Directive.

See Tech Bulletins 002, 003, 024, 035, 036, 041, 043, 053, 074, 077, 083, 095, 105 and 107 for additional information. **C.A.T. highly recommended for pressurized inlet, R.O. and industrial applications.**

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum CC=Ceramic CM=Chrome-Moly D=Acetal EPDM=Ethylene Propylene Diene Monomer F=Cast Iron FBR=Fiber

FCM=Forged Chrome-moly FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) NBRs=Buna, Silicone Free NY=Nylon PPG=Glass Filled Polypropylene PTFE=Pure Polytetrafluoroethylene PE=Polyethylene PVDF=Polyvinylidene Fluoride S=304SS SS=316SS SFTB=Special Blend PTFE Black SSZZ=316SS/Zamak STGS=Special Blend PTFE White STL=Steel

STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated TNM=Special High Strength ZP=Zinc Plated



Models 3841, 3841K



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