

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

3841 K

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

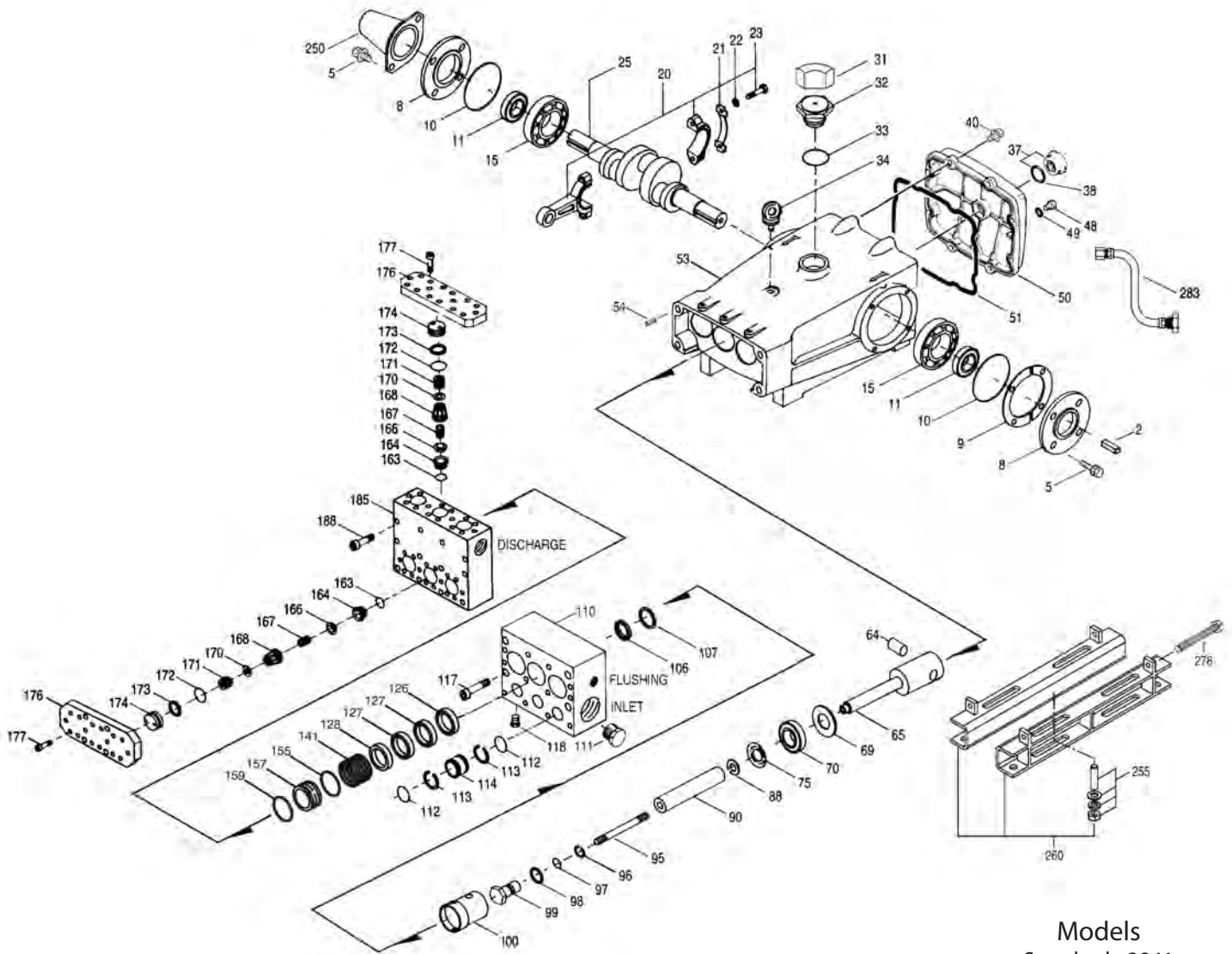
DETERMINING THE PUMP R.P.M.	$\frac{\text{Rated gpm}}{\text{Rated rpm}}$	=	$\frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$
DETERMINING THE REQUIRED H.P.	$\frac{\text{gpm} \times \text{psi}}{1460}$	=	Electric Brake H. P. Required
DETERMINING MOTOR PULLEY SIZE	$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}}$	=	$\frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$

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, Antisize (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.

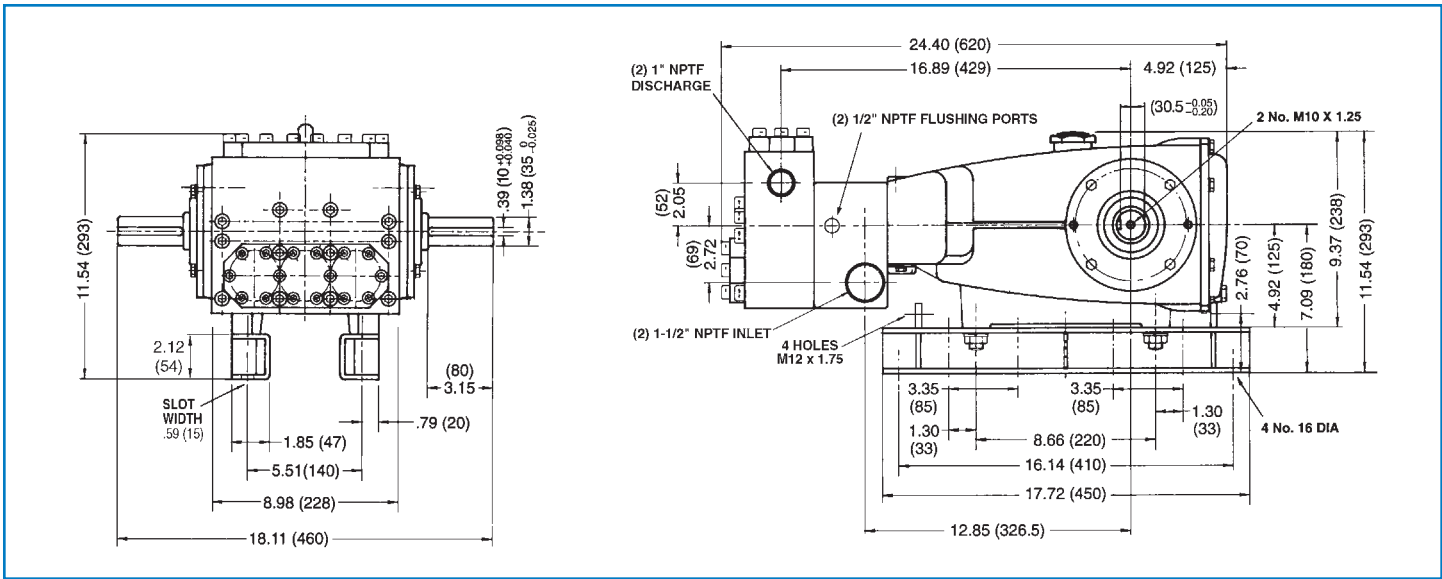
See Tech Bulletins 002, 003, 024, 035, 036, 041, 043, 053, 074, 077, 083, 095, 105 and 107 for additional information. **C.A.T. highly recommended for pressurized inlet, R.O. and industrial applications.**

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



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