

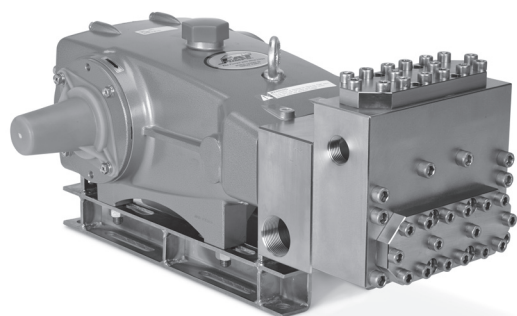
DATA SHEET

38 FRAME BLOCK-STYLE PLUNGER PUMPS



**Stainless Steel
Model:** **3841**

**Stainless Steel
Flushed Model:** **3841K**



Model 3841 Shown
(Shaft protector included and 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 low-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.
- Special flushed inlet manifold 3841K permits flush for added cooling with high-temperatures and lubrication with low-lubricity liquids.
- Standard NBR seals with alternative options for temperature and chemical compatibility.

SPECIFICATIONS

	U.S. Measure	Metric Measure
Flow	45 gpm	170 lpm
Pressure Range	100 – 1000 psi	6.9 – 70 bar
Pump RPM*	765 rpm	765 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Max. Liquid Temp. (NBR)	140° F	60° C

Alternative seals available for higher temperatures up to 180° F

Bore	1.772"	45 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 Qts.	4 l
Inlet Ports (2)	1 ½" NPT(F)	1 ½" NPT(F)
Flush Ports (2)	½" NPT(F)	½" 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	24.40 x 18.11 x 9.37"	620 x 460 x 238 mm

*Pump is minimum 100 RPM

ALTERNATIVE SEAL CONFIGURATION

MATERIAL	SUFFIX CODE	MAXIMUM TEMPERATURE	
NBR	—	160° F	(71° C)
FPM	.0110	180° F	(82° C)
EPDM	.0220	160° F	(71° C)

See **Tech Bulletin 002** for inlet conditions and RPM at high temperature.

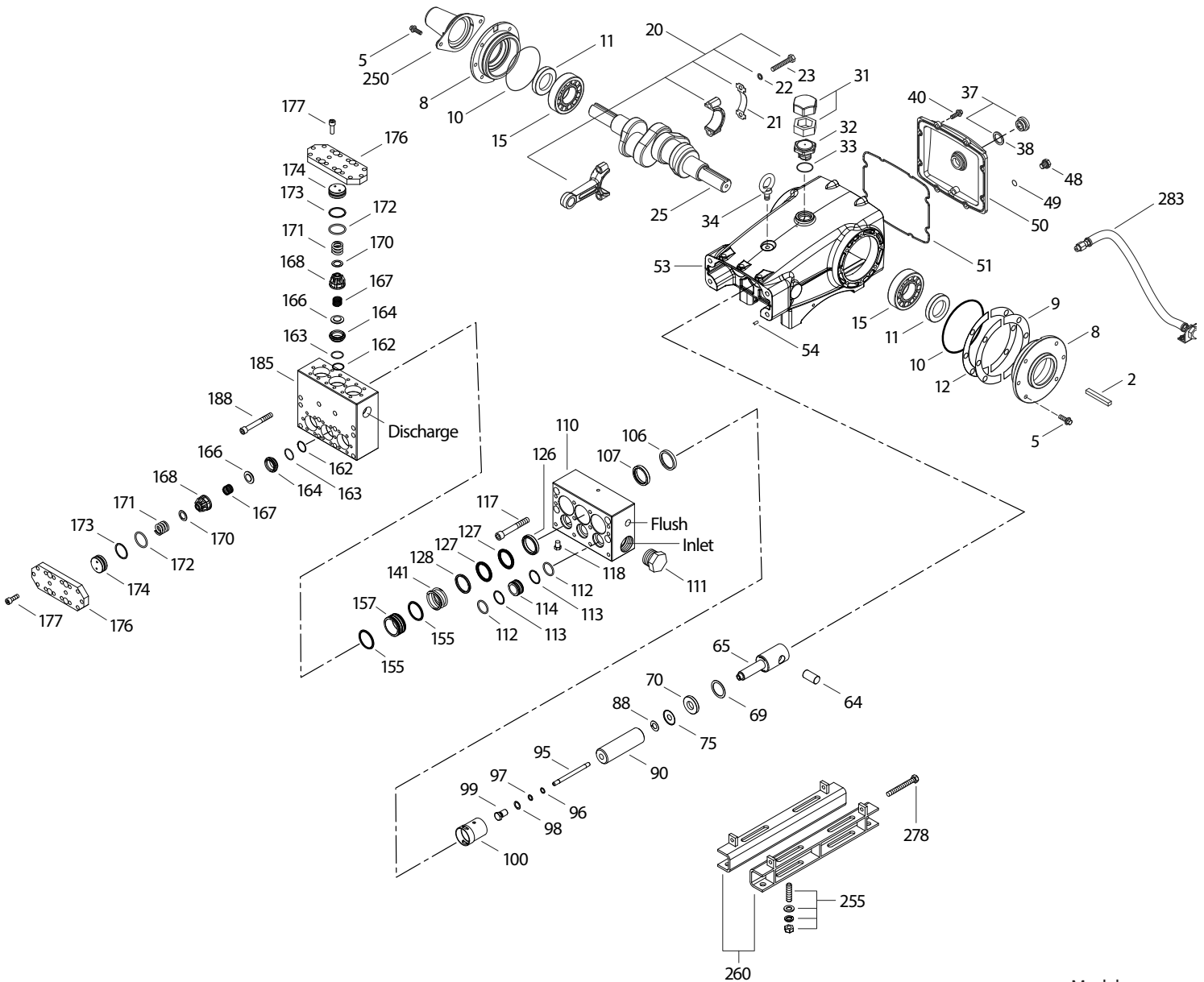
DETERMINING THE PUMP R.P.M.	Rated gpm	=	"Desired" gpm
	Rated rpm	=	"Desired" rpm
DETERMINING THE REQUIRED H.P.	HP (Electric Brake)	=	$\frac{\text{gpm} \times \text{psi}}{1460}$
DETERMINING MOTOR PULLEY SIZE	Motor Pulley O.D. Pump rpm	=	$\frac{\text{Pump Pulley O.D.} \times \text{Motor rpm}}{\text{Pump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

Refer to pump **Service Manual** for repair procedure and additional technical information.

PARTS LIST

ITEM	PN	MATL	PN	MATL	DESCRIPTION	QTY
	3841		3841K			
2	34021	STL	34021	STL	Key (M10 x 8 x 70)	1
5	96049	S	96049	S	Screw, HH Sems (M10 x 25) (See Tech Bulletin 074, 125)	8
8	134604	ALE	134604	ALE	Cover, Bearing (See Tech Bulletin 118, 125)	2
9	815279	FBR	815279	FBR	Shim, Split 2-Piece (See Tech Bulletin 125)	0-2
10	12398	NBR	12398	NBR	O-Ring, Bearing Cover - 70D	2
11	13296	NBR	13296	NBR	Seal, Oil, Crankshaft	2
12	855049	S	855049	S	Shim, Split 2-Piece	0-2
15	29326	STL	29326	STL	Bearing, Roller	2
20	121467	TNM	121467	TNM	Rod, Connecting Assembly (Includes: 21, 22, 23) [10/00] (See Tech Bulletin 074)	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 (M10 x 55)	6
25	29325	FCM	29325	FCM	Crankshaft, Dual End (M48)	1
31	828710	PE	828710	PE	Protector, Oil Cap with 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	PC	92241	PC	Gauge, Oil, Bubble with Gasket - 80D (See Tech Bulletin 074)	1
38	44428	NBR	44428	NBR	Gasket, Flat - 80D	1
40	125753	S	125753	S	Screw, HH Sems (M8 x 25) (See Tech Bulletin 074)	8
48	25625	STCP	25625	STCP	Plug, Drain (1/4" x 19BSP)	1
49	23170	NBR	23170	NBR	O-Ring, Drain Plug - 70D	1
50	45936	ALE	45936	ALE	Cover, Rear (See Tech Bulletin 118)	1
51	16612	NBR	16612	NBR	O-Ring, Rear Cover - 70D	1
53	134784	ALE	134784	ALE	Crankcase Assembly (Includes: 34, 54) (See Tech Bulletin 118, 125)	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	NBRS	100488	NBRS	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 (M45 x 145)	3
95	89778	SS	89778	SS	Stud, Plunger Retainer (M10 x 135)	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) (See Tech Bulletin 074)	3
100	44119	PPG	44119	PPG	Retainer, Seal	3
106	48384	NBR	48384	NBR	Seal, LPS with SS-Spring	3
	702013	SFTB	702013	SFTB	Seal, LPS with SS-Spring	3
	46945	EPDM	46945	EPDM	Seal, LPS with SS-Spring	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 (M14 x 100)	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	6
	20138	FPM	20138	FPM	O-Ring, V-Packing Spacer - 80D	6
	701658	EPDM	701658	EPDM	O-Ring, V-Packing Spacer - 80D	6
157	49506	SS	49506	SS	Spacer, V-Packing (See Tech Bulletin 107)	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 (M10 x 30) (See Tech Bulletin 074)	32
185	701866	SS	701866	SS	Manifold, Discharge, Block-Style	1
188	701279	S	701279	S	Screw, HSH (M12 x 100) (See Tech Bulletin 074)	12
196	701342	SS	701342	SS	Plug, Discharge (1" NPT) Not Shown	1
250	855042	NY	855042	NY	Protector, Shaft with 2 Screws, Lockwashers and Washers (Included with Pump) (See Tech Bulletin 125)	1
255	34039	S	34039	S	Assembly, Direct Mount	1
260	92674	STZPR	92674	STZPR	Mount, Rail Assembly (Includes: 34018)	1
	76514	S	76514	S	Mount, Rail Assembly	1
275	990013	STL	990013	STL	Hub, "B" (35mm with keyway) (See Tech Bulletin 003)	1
278	80540	ZP	80540	ZP	Screw, HH (M12 x 100) (Rail Adjusting Screw)	2
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
	—	—	901411	SS	Head, Complete, Block-Style, Flushed	1

EXPLODED VIEW



Models
Standard – 3841
Flushed – 3841K
September 2020

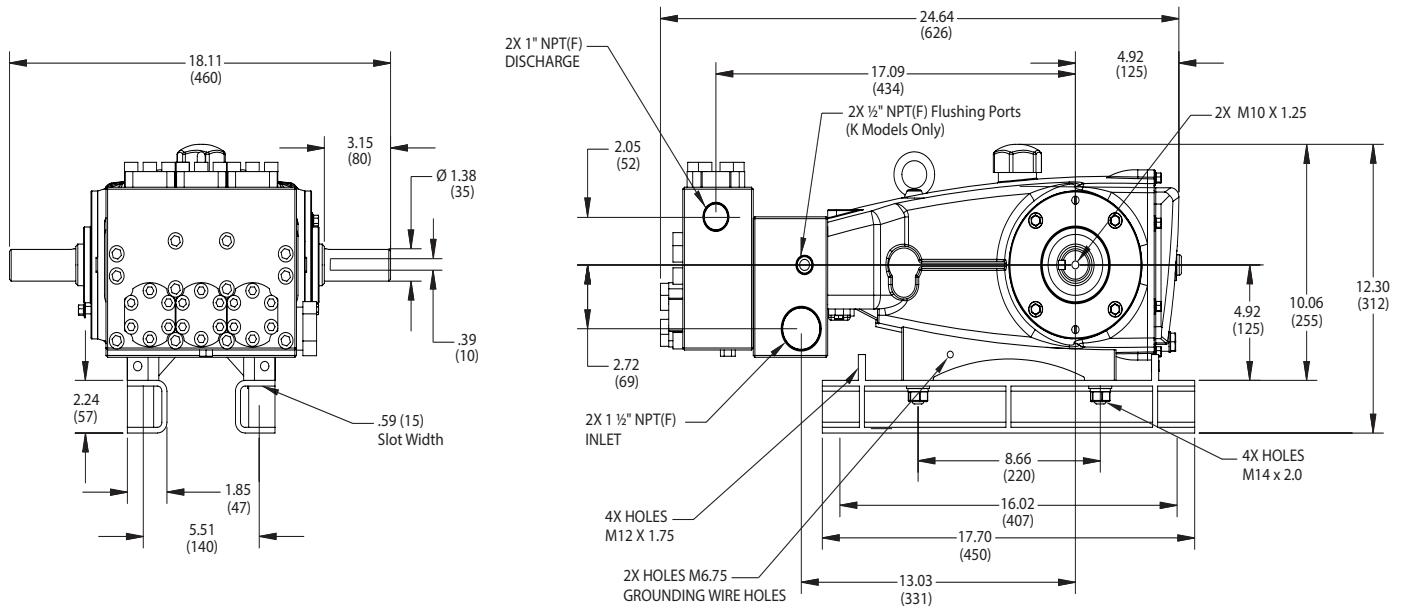
ITEM	PN	MATL	PN	MATL	DESCRIPTION	QTY
	3841		3841K			
300	31934	NBR	31934	NBR	Kit, Seal (Includes: 97, 106, 112, 113, 127, 155)	1
	31961	FPM	31961	FPM	Kit, Seal (Includes: 97, 106, 112, 113, 127, 155)	1
	◆ 31923	EPDM	◆ 31923	EPDM	Kit, Seal (Includes: 97, 106, 112, 113, 127, 155)	1
310	33835	NBR	33835	NBR	Kit, Valve, Preassembled (Includes: 163, 164, 166, 167, 168, 170, 172, 173)	2
	31262	FPM	31262	FPM	Kit, Valve, Preassembled (Includes: 163, 164, 166, 167, 168, 170, 172, 173)	2
	◆ 31264	EPDM	◆ 31264	EPDM	Kit, Valve, Preassembled (Includes: 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
—	6100	—	6100	—	Oil, Case (12–21 oz. Bottles) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	1
—	6119	—	6119	—	Lubricant, Antisieze (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. For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy 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 PC=Poly Carbonate PE=Polyethylene POP=Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SFG=Special Blend FPM SS=316SS SSL=316SS/Low Carbon SSHB=316SS/High-Strength Brass SSZZ=316SS/Zamak STG=Special Blend PTFE White STL=Steel STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated TNM=Special High Strength ZP=Zinc Plated



Models 3841, 3841K

⚠ 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/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/literature/cat-pumps-limited-warranty