



Technical specifications and instructions



38 Frame Block-Style Stainless Steel Plunger pump

Standard models

3821, 3831

Flushed models

3821K, 3831K

Specifications (*)

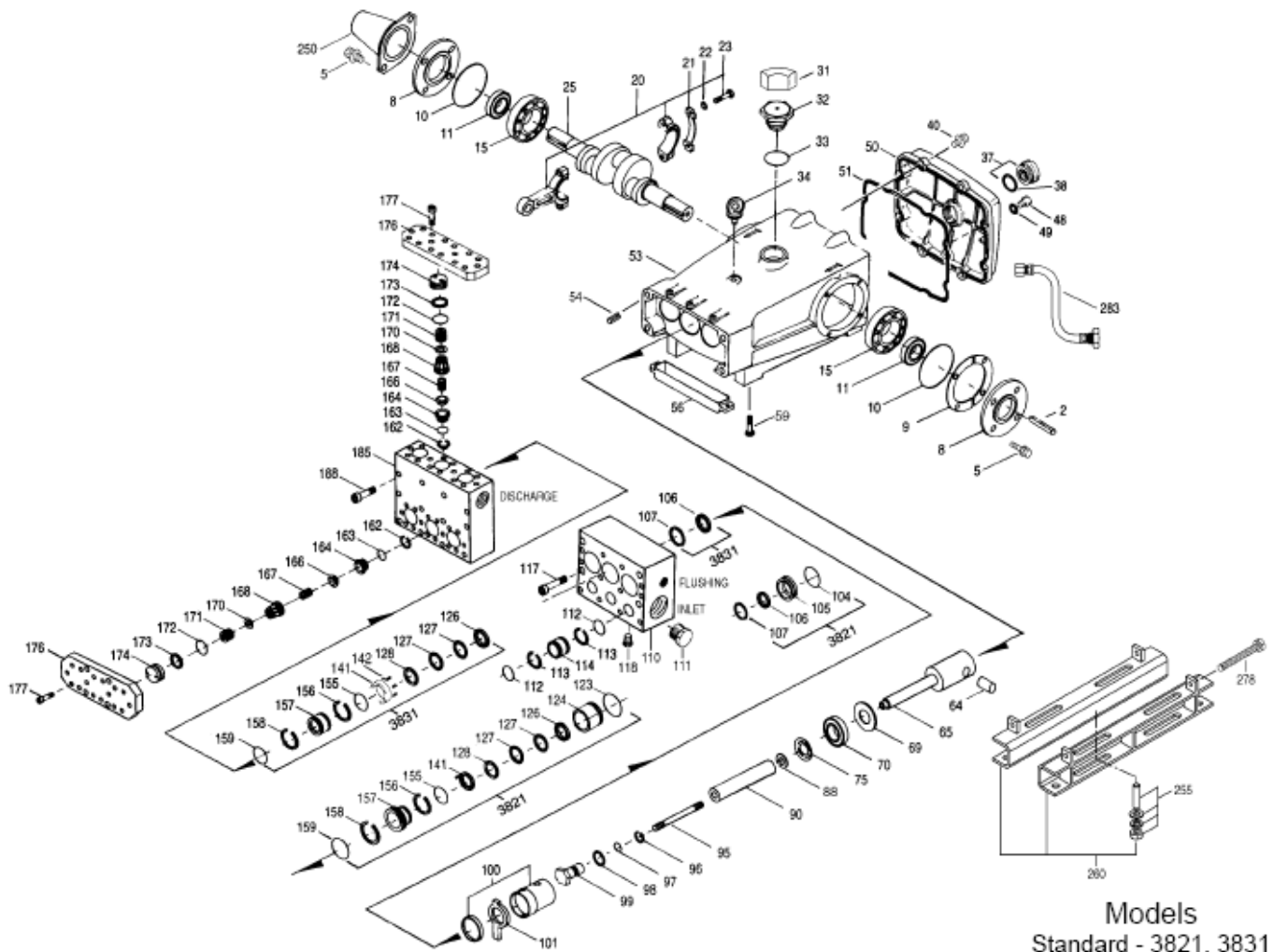
	Model 3821-3821K	Model 3831-3831K
Flow	88 l/min	137,5 l/min
Pressure range	7 to 140 bar	7 to 85 bar
RPM	800 RPM	800 RPM
Bore	32 mm	40 mm

Common specifications

Inlet pressure range	Flooded to 4,9 bar
Stroke	48 mm
Crankcase capacity	4 L
Maximum liquid temperature	71° C
Inlet ports (2)	1-1/2" NPTF
Flushing ports (2)	1/2" NPTF
Discharge ports (2)	1" NPTF
Shaft diameter	35 mm
Weight	75 kg
Dimensions	620 x 460 x 238 mm

(*) Abnormalities permitted only after consultation and written confirmation from Cat Pumps.

Exploded View



Models
Standard - 3821, 3831
Flushed - 3821K, 3831K

Parts list

Item	Num. 3821 3821K	Mat.	Num. 3831 3831K	Mat.	Description	Qty
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	4
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 (incl 21,22,23) {10/00}	3
21	126749	STCP R	126749	STCP R	Washer, locking (M10)	3
22	126574	STCP R	126574	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	-	828710	-	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	1
38	44428	NBR	44428	NBR	Gasket, flat, oil gauge – 80D	1
40	125753	S	125753	S	Screw, HH sems (M8 x 25)	8
48	25625	STCP	25625	STCP	Plug, drain (1/4" x 19 BSP)	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, cover – 70D	1
53	44487	AL	44487	AL	Crankcase assy (incl 34,54)	1
54	27488	S	27488	S	Pin, guide	2
56	27790	POP	27790	POP	Pan, oil	1
59	92538	S	92538	S	Screw, HHC sems (M6x16)	2
64	43864	CM	43864	CM	Pin, crosshead	3
65	45116	SSZZ	45116	SSZZ	Rod, plunger	3
69	126587	STCP R	126587	STCP R	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	43957	CC	43921	CC	Plunger (M32x145)(M40x145)	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	814279	PVDF	814279	PVDF	Retainer, seal, 2-pc	3
101	44106	-	44112	-	Wick, long tab	3
104	43875	NBR	-	-	O-ring, inlet adapter – 70D	3
	44826	FPM	-	-	O-ring, inlet adapter – 70D	3
	# 701656	EPDM	-	-	O-ring, inlet adapter – 70D	3
105	45562	SS	-	-	Adapter, inlet	3
106	44098	NBR	44113	NBR	Seal, LPS w/SS-Spg	3
	44827	FPM	44740	FPM	Seal, LPS w/SS-Spg	3
	# 48244	EPDM	# 46955	EPDM	Seal, LPS w/S-Spg	3
107	44101	SS	45381	SS	Washer, LPS	3
110	701286	SSL	701286	SSL	Manifold, inlet, block-style (3821-3831)	1
	701408	SSL	701408	SSL	Manifold, inlet, block-style, flushed (3821K-3831K)	1
111	701116	SS	701116	SS	Plug, inlet (1-1/2" NPT)	1
112	701794	NBR	701794	NBR	O-ring, inlet spacer – 70D	6
	701318	FPM	701318	FPM	O-ring, inlet spacer – 75D	6
	# 701495	EPDM	# 701495	EPDM	O-ring, inlet spacer – 70D	6
113	701319	PTFE	701319	PTFE	Back-up-ring, inlet spacer	6
114	701317	SS	701317	SS	Spacer, inlet	3
117	701252	SS	701252	SS	Screw HSH (M14x100)	4
118	701077	SS	701077	SS	Plug (1/4" NPT) (3821-3831)	1
123	12391	NBR	-	-	O-ring, V-packing cylinder – 70D	3
	13266	FPM	-	-	O-ring, V-packing cylinder – 70D	3
	# 701657	EPDM	-	-	O-ring, V-packing cylinder – 70D	3
124	45563	SSL	-	-	Cylinder, V-packing	3
126	45564	SS	45367	SS	Adapter, female	3

127	+ 44608	STG*	+ 44609	STG*	V-packing	6
	44829	SFG	44741	SFG	V-packing	6
128	45565	SS	45368	SS	Adapter, male	3
141	45113	SS	45113	SS	Spring, coil	6/18
142	45566	SS	45382	SS	Spacer w/coil springs	3
155	48861	NBR	48860	NBR	O-ring, V-packing spacer – 90D	3
	11748	FPM	20137	FPM	O-ring, V-packing spacer	3
	# 701749	EPDM	# 701492	EPDM	O-ring, V-packing spacer	3
156	48362	D	48362	D	Back-up-ring, V-packing spacer	3
157	45674	SS	45369	SS	Spacer, V-packing	3
158	48371	D	48362	D	Back-up-ring, V-packing spacer	3
159	48860	NBR	48860	NBR	O-ring, V-packing spacer – 90D	3
	20137	FPM	20137	FPM	O-ring, V-packing spacer	3
	# 701492	EPDM	# 701492	EPDM	O-ring, V-packing spacer	3
162	48363	D	48363	D	Back-up-ring, seat	6
163	26142	NBR	26142	NBR	O-ring, seat – 80D	6
	14330	FPM	14330	FPM	O-ring, seat	6
	# 701493	EPDM	# 701493	EPDM	O-ring, seat	6
164	44612	SS	44612	SS	Seat, stepped	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 (70 kg), 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	701315	SSL	701315	SSL	Manifold, discharge, block-style	1
188	701279	S	701279	S	Screw HSH (M12x100)	12
196	701342	SS	701342	SS	Plug, discharge (1" NPT)	1
250	44516	NY	44516	NY	Protector, shaft (w/2 screws, lockwashers, washers) (incl with pump)	1
255	34039	S	34039	S	Assy, direct mount	1
260	92674	STZP	92674	STZP	Mount, rail, assy (incl:34018)	1
275	990013	STL	990013	STL	Hub, "B" (35mm w/keyway) (see TB 003)	1
278	80540	ZP	80540	ZP	Screw, HH (M12x100) (rail adjusting screw)	1
279	30278	STZP	30278	STZP	Oiler	3
281	30967	-	30967	-	Glass, oiler	3
282	10069	NBR	10069	NBR	Gasket, oiler	3
283	34314	-	34314	-	Kit, oil drain (3/8"x 48")	1
299	901401	SSL	901400	SSL	Head, complete, block-style (3821-3831)	1
	901405	SSL	901404	SSL	Head, complete, block-style (3821K-3831K)	1
300	701699	NBR	701698	NBR	Kit, seal (incl. 97,104,106,112,113,123,127,155,156,158,159)	1
	33269	FPM	33268	FPM	Kit, seal (incl. 97,104,106,112,113,123,127,155,156,158,159)	1
	# 701714	EPDM	# 701797	EPDM	Kit, seal (incl. 97,104,106,112,113,123,127,155,156,158,159)	1
310	34017	NBR	34017	NBR	Kit, valve (incl. 162,163,164,166,167,168,170,172,173)	2
	31955	FPM	31955	FPM	Kit, valve (incl. 162,163,164,166,167,168,170,172,173)	2
	# 31952	EPDM	# 31952	EPDM	Kit, valve (incl. 162,163,164,166,167,168,170,172,173)	2
-	819000	F	819000	F	Assembly, crankcase, cast iron conversion	1
370	990663	-	990663	-	Assembly, flushing, 19L, 115V, 1.1 Amp, 1/2"NPT (3821K-3831K)	1
390	714500	SS	714500	SS	C.A.T. (Captive Acceleration Tube)	1
391	714506	SS	714506	SS	Adapter (2 per C.A.T.)	1
392	701828	SS	701828	SS	Elbow assy used with adapter assy 714506	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. + Production parts are different than replacement parts. R Components comply with RoHS directive. * Review individual parts in each kit for material identification. See 'Tech Bulletins' 002, 003, 024, 035, 036, 041, 043, 053, 074, 077, 083, 095 and 105 for additional information.
C.A.T. highly recommended for pressurized inlet, R.O. and industrial applications.

Material codes: (not part or part number)

ABS	ABS plastic	FPM	Fluorocarbon	SS	316SS
AL	Aluminum	NBR	Medium nitrile (Buna-N)	SSL	316SS / low carbon
CC	Ceramic	NBRS	Buna, silicone free	SSZZ	316SS / zamak
CM	Chrome-moly	NY	Nylon	STG	Special blend PTFE white
D	Acetal	POP	Polypropylene	STL	Steel
EPDM	Ethylene propylene diene mon.	PTFE	Pure polytetrafluoroethylene	STZP	Steel / zinc plated
F	Cast iron	PVDF	Polyvinylidene fluoride	TNM	Special high strength
FBR	Fiber	S	304SS	ZP	Zinc plated
FCM	Forged chrome-moly	SFG	Special blend FPM		

