



## Technical specifications and instructions



### **68 Frame Block-Style Stainless Steel Plunger pump**

**Standard model      6831**

**Flushed model      6831K**

### Specifications (\*)

**Model 6831-6831K**

**Flow**                      150 l/min  
**Pressure range**        7 to 160 bar  
**RPM**                      625 RPM

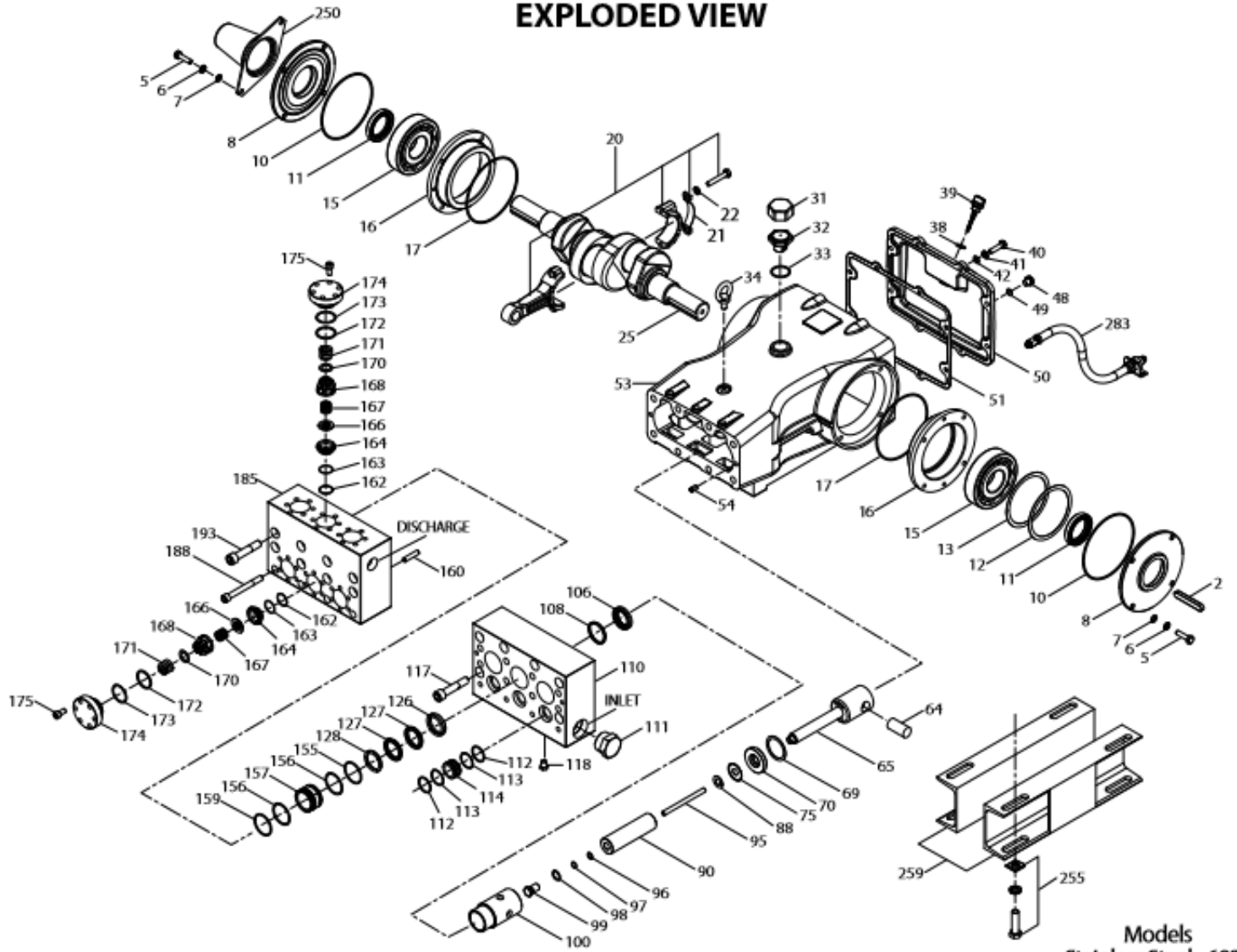
### Common specifications

<b>Inlet pressure range</b>	Flooded to 3,5 bar
<b>Bore</b>	40 mm
<b>Stroke</b>	65,5 mm
<b>Crankcase capacity</b>	9,46 L
<b>Maximum liquid temperature</b>	60° C
<b>Inlet ports (2)</b>	1-1/2" NPTF
<b>Flushing ports (2)</b>	1/2" NPTF
<b>Discharge ports (2)</b>	1" NPTF
<b>Shaft diameter</b>	45 mm
<b>Weight</b>	161 kg
<b>Dimensions</b>	755 x 610 x 305 mm

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

# Exploded View

## EXPLODED VIEW



Models  
Stainless Steel - 6831  
Flushed - 6831K  
April 2017

# Parts list

Item	Num. 6831	Mat.	Num. 6831K	Mat.	Description	Qty
2	43048	STL	43048	STL	Key (M14x9x90)	1
5	89728	S	89728	S	Screw, HH (M10x40)	8
6	15847	S	15847	S	Lockwasher (M10)	8
7	19934	S	19934	S	Washer, flat (M10)	8
8	29443	AL	29443	AL	Cover, bearing – outer (see TB 118)	2
10	29444	NBR	29444	NBR	O-ring, bearing cover – 70D	2
11	11443	NBR	11443	NBR	Seal, oil, crankshaft – 70D	2
12	126594	STCP R	126594	STCP R	Washer, shim (M120x0,3)	0-2
13	126595	STCP R	126595	STCP R	Washer, shim (M120x0,5)	0-2
15	29441	STL	29441	STL	Bearing, roller	2
16	29442	STL	29442	STL	Cover, bearing – inner	2
17	29444	NBR	29444	NBR	O-ring, bearing cover – 70D	2
20	126612	BBHS	126612	BBHS	Assembly, connecting rod (inclds 21,22)	3
21	126560	STCP R	126560	STCP R	Washer, locking	3
22	126593	STCP R	126593	STCP R	Washer, shim (M10,5x1,5)	6
25	29440	FCM	29440	FCM	Crankshaft, dual shaft	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, filler cap – 70D	1
34	126743	STCP R	126743	STCP R	Bolt, eye (M12) (for lifting pump only)	1
38	129343	RBR	129343	RBR	Gasket, flat flex	1
39	27769	ABS	27769	ABS	Dipstick	1
40	89627	S	89627	S	Screw, HH (M10x30)	8
41	15847	S	15847	S	Lockwasher (M10)	8
42	19934	S	19934	S	Washer, flat (M10)	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	29438	AL	29438	AL	Cover, rear (see TB 118)	1
51	129386	NBR	129386	NBR	Gasket, rear cover	1
53	45303	AL	45303	AL	Crankcase (incl 34,54) (see TB 118)	1
54	43282	S	43282	S	Pin, guide	2
64	29481	CM	29481	CM	Pin, crosshead	3
65	48735	SSZZ	48735	SSZZ	Rod, plunger	3
69	126588	STCP R	126588	STCP R	Washer, oil seal	3
70	29454	NBR	29454	NBR	Seal, oil, crankcase – 80D	3
75	43865	S	43865	S	Slinger, barrier	3
88	45676	S	45676	S	Washer, keyhole (M16)	3
90	43921	CC	43921	CC	Plunger (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 – 70D	3
98	44085	SS	44085	SS	Gasket, plunger retainer	3
99	44084	SS	44084	SS	Retainer, plunger (M10)	3
100	703084	D	703084	D	Retainer, seal	3
106	44113	NBR	44113	NBR	Seal, LPS w/SS-Spg	3
	44740	FPM	44740	FPM	Seal, LPS w/SS-Spg	3
108	45381	SS	45381	SS	Spacer, LPS	3
110	<b>701321</b>	<b>SS</b>	-	-	Manifold, inlet, block-style	1
	-	-	<b>701322</b>	<b>SS</b>	Manifold, inlet, block-style, flushed (1/2" NPTF ports)	1
111	701116	SS	701116	SS	Plug, inlet manifold (1-1/2" NPTM)	1
112	701632	NBR	701632	NBR	O-ring, spacer	6
	701328	FPM	701328	FPM	O-ring, spacer	6
113	701329	PTFE	701329	PTFE	Back-up-ring, spacer	6
114	701327	SS	701327	SS	Spacer, inlet	3
117	89694	S	89694	S	Screw HSH (M16x110)	6
118	<b>701077</b>	<b>SS</b>	-	-	Plug (1/4" NPTM)	3
126	45367	SS	45367	SS	Adapter, female	3
127	44609	STG	44609	STG	V-packing	6
	44741	SFG	44741	SFG	V-packing	6

128	704480	SS	704480	SS	Adapter, male	3
155	48860	NBR	48860	NBR	O-ring, V-packing spacer, inner – 90D	3
	20137	FPM	20137	FPM	O-ring, V-packing spacer, inner – 70D	3
156	48362	D	48362	D	Back-up-ring, V-packing, spacer	6
157	45369	SS	45369	SS	Spacer, V-packing	3
159	48860	NBR	48860	NBR	O-ring, V-packing spacer, outer – 90D	3
	20137	FPM	20137	FPM	O-ring, V-packing spacer, outer – 70D	3
160	44756	S	44756	S	Pin, guide	2
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 – 70D	6
164	44612	SS	44612	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, retainer	6
171	44644	SS	44644	SS	Spring, coil	6
172	89827	NBR	89827	NBR	O-ring, valve plug – 90D	6
	11747	FPM	11747	FPM	O-ring, valve plug – 90D	6
173	48364	D	48364	D	Back-up-ring, valve plug	6
174	701432	SS	701432	SS	Plug, valve	6
175	87951	S	87951	S	Screw, HSH (M10x30)	36
185	701431	SS	701431	SS	Manifold, discharge, block-style	1
188	701279	S	701279	S	Screw, HSH (M12x100), lower	4
193	89694	S	89694	S	Screw, HSH (M16x110), upper	8
250	29445	AL	29445	AL	Protector, shaft (see TB 118)	1
255	33243	STZP	33243	STZP	Kit, mount (included w/pump)	2
259	126604	STCP R	126604	STCP R	Rail, box (included w/pump)	2
275	990014	STL	990014	STL	Hub, “B” M45 w/keyway (see TB 003)	1
283	34314	-	34314	-	Kit, oil drain (3/8” x 48”) (see TB 118)	1
299	<b>910003</b>	<b>SS</b>	-	-	Head, complete, block-style w/NBR seals & O-rings	1
	-	-	<b>910004</b>	<b>SS</b>	Head, complete, block-style, flushed w/NBR seals & O-rings	1
300	701647	NBR*	701647	NBR*	Kit, seal (incl. 97,106,112,113,127,155,156,159)	1
	33708	FPM	33708	FPM	Kit, seal (incl. 97,106,112,113,127,155,156,159)	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
-	819010	F	819010	F	Assembly, crankcase, cast iron conversion	1
370	-	-	<b>990663</b>	-	Assembly, flushing, 19L, 115V, 1.1 Amp, 1/2”NPT	1

**Bold print part numbers are unique to a particular pump model. Italics are optional items.** R Components comply with RoHS directive. \* Review individual parts in each kit for material code identification.

See 'Tech Bulletins' 002, 003, 024, 036, 074, 083, 084, 095, 105 and 118 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	316 stainless steel
AL	Aluminum	NBR	Medium nitrile (Buna-N)	SSZZ	316SS / zamak
BBHS	Brass / high strength	PE	Polyethylene	STCP	Steel/chrome plated
CC	Ceramic	PTFE	Pure polytetrafluoroethylene	STG	Special blend PTFE white
CM	Chrome-moly	PVDF	Polyvinylidene fluoride	STL	Steel
D	Delryn	RBR	Rubber	STZP	Steel / zinc plated
F	Cast iron	S	304 stainless steel		
FCM	Forged chrome-moly	SFG	Special blend FPM		