



Technical specifications and instructions



7 Frame Plunger pump

Model 700

Gearbox Model 700G1

Specifications (*)

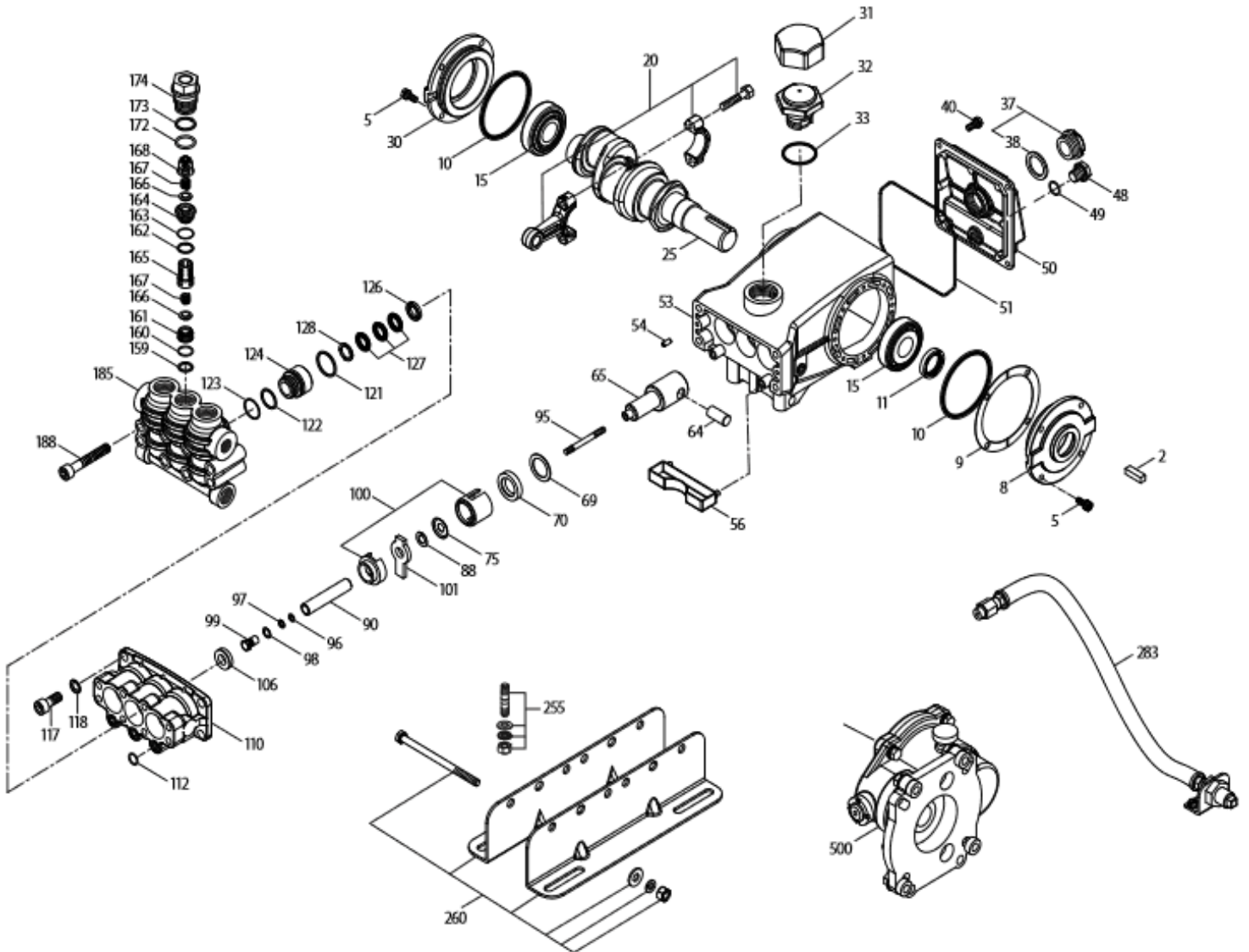
	Model 700	Model 700G1
Flow	15 l/min	17 l/min
Pressure range	7 to 345 bar	7 to 345 bar
RPM	1450 RPM	1700 RPM
Engine RPM		3465 RPM
Inlet pressure range	flooded to 4 bar	flooded to 4 bar

Common specifications

Bore	14 mm
Stroke	24 mm
Crankcase capacity	0,75 l
Maximum liquid temperature	71° C
Inlet ports (2)	1/2" NPTF
Discharge ports (2)	3/8" NPTF
Shaft diameter	24 mm
Weight (w/o gearbox)	12,9 kg
Dimensions	356,6 x 235 x 164 mm
Dimensions w/gearbox	356,6 x 273 x 166 mm

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

Exploded View



MODELS 700, 700G1
May 2019

Parts list

Item	Num.	Mat.	Description	Qty
	700			
	700G1			
2	30067	STL	Key (M8x7,5x25)	1
5	125824	STCP R	Screw, HHC sems (M6x16)	8/4
8	133571	ALE	Cover, bearing (see TB 118, 123)	1
9	815280	FBR	Shim, split, 2 pc	1
10	12393	NBR	O-ring, bearing cover	2/1
11	43222	NBR	Seal, oil, crankshaft – 70D	1/0
15	43221	STL	Bearing, roller	2
20	48863	TNM	Rod, connecting	3
25	119234	FCM	Crankshaft, single end (M24 w/60 mm extension)	1
	46554	FCM	Crankshaft, single end (M24 w/34 mm ext)(gearbox only)	1
30	133752	ALE	Cover, blind bearing (see TB 118,123)	1
31	828710	PE	Protector, oil cap w/foam gasket	1
32	44666	RTP	Cap, oil filler, domed	1
33	14177	NBR	O-ring, oil filler cap – 70D	1
37	92241	-	Gauge, oil, bubble w/gasket – 80D	1
38	44428	NBR	Gasket, flat, oil gauge – 80D	1
40	125824	STCP R	Screw, HHC Sems (M6x16)	4
48	25625	STCP	Plug, drain (1/4" x 19 BSP)	1
49	23170	NBR	O-ring, drain plug – 70D	1
50	133569	ALE	Cover, rear (see TB 118,123)	1
51	14047	NBR	O-ring, rear cover – 70D	1
53	133593	ALE	Crankcase w/guide pins (see TB 118,123)	1
54	27488	S	Pin, guide	2
56	43240	POP	Pan, oil	1
64	43237	CM	Pin, crosshead	3
65	49892	SZZ	Rod, plunger	3
69	126589	STCP R	Washer, oil seal	3
70	43228	NBR	Seal, oil, crankcase	3
75	43328	S	Slinger, barrier	3
88	45697	S	Washer, keyhole (M18x10)	3
90	45890	CC	Plunger (M14x72)	3
95	126558	STCP R	Stud, plunger retainer (M6x64.5)	3
96	43235	PTFE	Back-up-ring, plunger retainer	3
97	17399	NBR	O-ring, plunger retainer – 80D	3
	14160	FPM	O-ring, plunger retainer – 80D	3
98	45891	CU	Gasket, plunger retainer	3
99	46504	S	Retainer, plunger (M6)	3
100	45689	PVDF	Retainer, seal, 2 pc (see TB 105)	3
101	43571	-	Wick, long tab	3
106	45188	NBR	Seal, LPS w/S-Spg	3
	704649	ST4	Seal, LPS w/NIH-Spg	3
110	49797	BB	Manifold, inlet	1
112	11343	NBR	O-ring, inlet manifold – 70D	3
	14186	FPM	O-ring, inlet manifold – 70D	3
117	49679	S	Screw, HSH (M10x35)	4
118	49680	S	Washer	4
121	14200	NBR	O-ring, V-packing spacer – 70D	3
	11719	FPM	O-ring, V-packing spacer	3
122	49840	PTFE	Back-up-ring, V-packing spacer	3
123	49839	NBR	O-ring, V-packing spacer – 90D	3
	11686	FPM	O-ring, V-packing spacer – 80D	3
124	49838	BB	Spacer, V-packing	3
126	45896	BB	Adapter, female	3

127	45895	SNG	V-packing	9
	704666	ST4	V-packing	9
128	46567	BB	Adapter, male	3
159	49861	PTFE	Back-up-ring, inlet valve seat	3
160	11346	NBR	O-ring, inlet valve seat – 70D	3
	11376	FPM	O-ring, inlet valve seat – 70D	3
161	49846	S	Seat, inlet	3
162	49844	PTFE	Back-up-ring, discharge valve seat	3
163	49845	NBR	O-ring, discharge valve seat – 70D	3
	49894	FPM	O-ring, discharge valve seat – 70D	3
164	49843	S	Seat, discharge	3
165	49847	PVDF	Retainer, spring, inlet	3
166	46562	S	Valve	6
167	43750	S	Spring	6
168	44565	PVDF	Retainer, spring, discharge	3
172	49382	NBR	O-ring, valve plug – 90D	3
	49897	FPM	O-ring, valve plug – 90D	3
173	49850	PTFB	Back-up-ring, valve plug	3
174	49849	BB	Plug, valve	3
185	49798	BB	Head, manifold (M10)	1
188	49852	S	Screw, HSH (M10x65)	8
255	30243	STZP	Mount, direct	1
260	30645	STZP R	Mount, rail, Assy (2.95 x 11.81)	1
	30611	STZP R	Mount, rail, Assy (2.09 x 9.45)	1
265	30660	-	Mount assy (incl.30645,33000,30206,43256,30067)	1
269	30206	F	Pulley (10")(see TB 003)	1
274	33000	STL	Hub (M24), H series (see TB 003)	1
283	34334	-	Kit, oil drain (3/8" x 24") (see individual datasheet)	1
	76334	-	Kit, oil indicator (3/8" x 24") (see individual datasheet)	1
299	818537	FBB	Head, complete w/NBR seals & O-rings	1
300	76079	NBR	Kit, seal (incl.97,101,106,112,121,122,123,127) standard	1
	76032	FPM	Kit, seal (incl.97,101,106,112,121,122,123,127)	1
	76578	NBR*	Kit, seal (incl.97,101,106,112,121,122,123,127)	1
310	76081	NBR	Kit valve (incl.159-168,172,173) standard	1
	76034	FPM	Kit valve (incl.159-168,172,173)	1
350	30696	STZP	Pliers, Reverse	1
500	8071	-	Gearbox 1" (see 8051 datasheet) (700G1)	1

Italics are optional items. { } Date of latest production change. R Components comply with RoHS Directive. **Bold print part numbers are unique to a particular pump model.**

See 'Tech Bulletins' 024, 036, 043, 061, 064, 067, 074, 083, 105, 118 and 123 for additional information.

Material codes: (not part or part number)

AL	Aluminium	FPM	Fluorocarbon	ST4	Special PTFE 4
ALE	Aluminum Epoxy	NBR	Medium nitrile (Buna-N)	STCP	Steel/chrome plated
BB	Brass	PE	Polyethylene	STL	Steel
CC	Ceramic	POP	Polypropylene	STZP	Steel/zinc plated
CM	Chrome-moly	PTFB	Polytetrafluoroethylene with 60% bronze	SZZ	3044 SS / zamak
CU	Copper	PTFE	Pure polytetrafluoroethylene	TNM	Special high strength
F	Cast iron	PVDF	Polyvinylidene fluoride		
FBB	Forged Brass	RTP	Reinforced composite		
FBR	Fiber	S	304SS		
FCM	Forged chrome-moly	SNG	Special blend (Buna)		