



## Technical specifications and instructions



### **7CP Plunger pump**

**Direct drive model 7CP6110CS**

**Belt-drive model 7CP6170**

**Gearbox model 7CP6110CSG1  
7CP6170G1**

#### Specifications (\*)

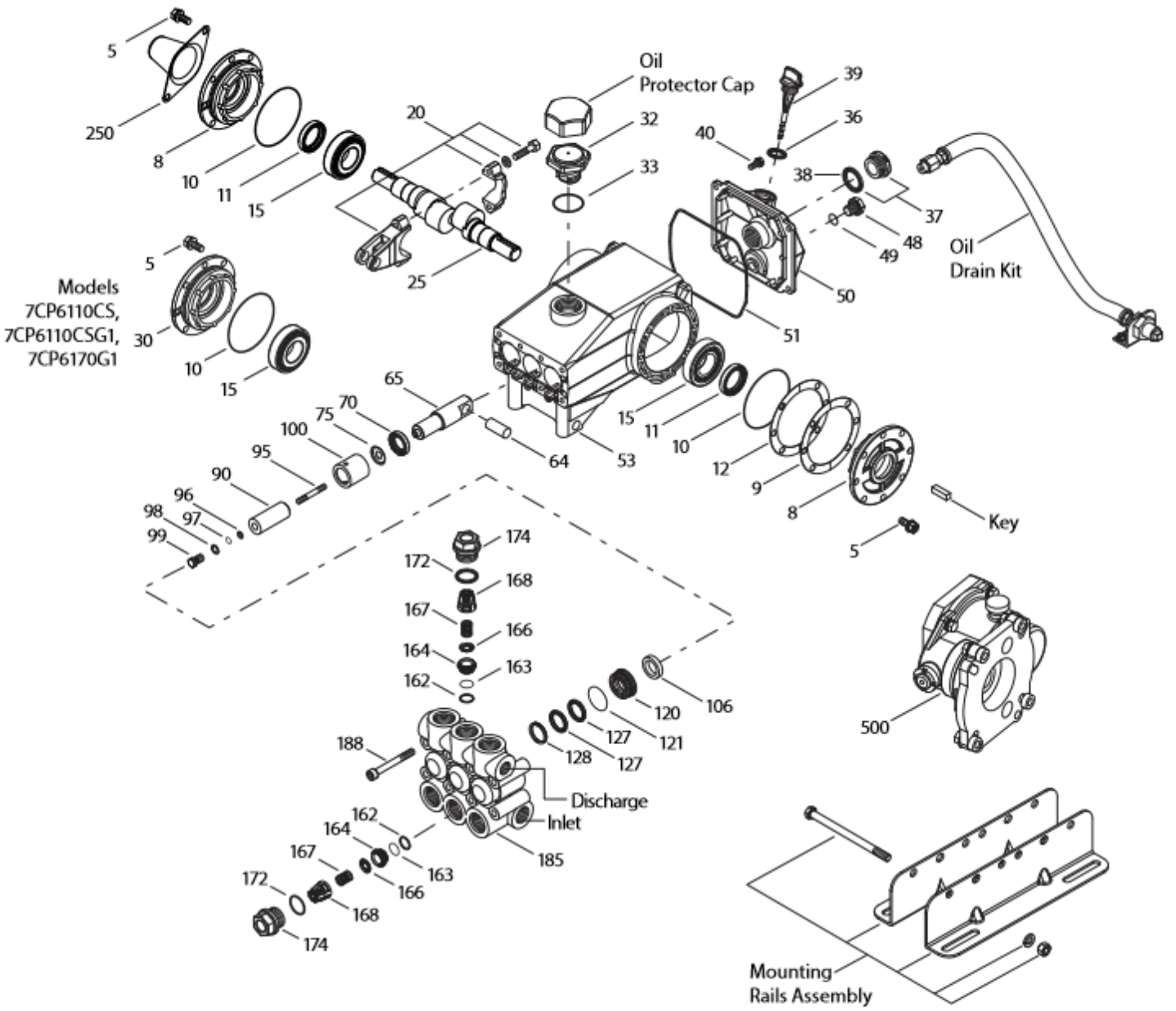
	<b>Model 7CP6110CS</b>	<b>Model 7CP6170</b>	<b>Model 7CP6110CSG1</b>	<b>Model 7CP6170G1</b>
<b>Flow</b>	40 l/min	41,6 l/min	38 l/min	45 l/min
<b>Pressure range</b>	6,9 to 138 bar	6,9 to 138 bar	6,9 to 138 bar	6,9 to 124 bar
<b>RPM pump</b>	1750 RPM	1450 RPM	1667 RPM	1600 RPM
<b>RPM engine</b>	-	-	3400 RPM	3264 RPM
<b>Stroke</b>	21,7 mm	26 mm	21,7 mm	26 mm
<b>Weight</b>	13,2 kg	13,5 kg	17,5 kg	17,5 kg
<b>Dimensions</b>	342x235x175 mm	342x283x175 mm	342x311x177 mm	342x311x177 mm

#### Common specifications

<b>Inlet pressure range</b>	Flooded to 4.8 bar
<b>Bore</b>	22 mm
<b>Crankcase capacity</b>	1.15 L
<b>Maximum liquid temperature</b>	60° C
<b>Inlet ports (2)</b>	3/4" NPTF
<b>Discharge ports (2)</b>	1/2" NPTF
<b>Shaft diameter</b>	24 mm

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

# Exploded View



Models  
7CP6110CS, 7CP6170  
7CP6110CSG1, 7CP6170G1  
June 2020

# Parts list

Item	Num.	Mat.	Description	Qty
5	126540	STCP R	Screw, HHC sems (M8x20) (see TB 074)	8
8	131405	AL	Cover, bearing (see TB 123)	1/2
9	49503	FBR	Shim, split, 2-pc, outer (see TB 123)	0-6
10	12393	NBR	O-ring, bearing cover – 70D	2
11	49190	NBR	Seal, oil, crankshaft	1/2
12	49504	S	Shim, split, 2-pc, inner (see TB 123)	0-4
15	63479	STL	Bearing, roller	2
20	48727	TNM	Rod, Connecting assembly {2/03} (see TB 074)	3
25	<b>49498</b>	<b>FCM</b>	Crankshaft, single-end (M21,7) (7CP6110CS,7CP6110CSG1)	1
	<b>49649</b>	<b>FCM</b>	Crankshaft, single-end (M26) (7CP6170G1)	1
	<b>46963</b>	<b>FCM</b>	Crankshaft, dual-end (M26) (7CP6170)	1
30	<b>131407</b>	<b>ALE</b>	Cover, blind bearing (7CP6110CS, 7CP6110CSG1, 7CP6170G1) (see TB 123)	1
32	43211	ABS	Cap, oil filler	1
33	14177	NBR	O-ring, oil filler cap – 70D	1
36	129343	RBR	Gasket, flat	1
37	92241	PC	Gauge, oil, bubble w/gasket – 80D (see TB 074)	1
38	44428	NBR	Gasket, flat, oil gauge – 80D	1
39	49948	ABS	Stick, dip {11/12} (see TB 130)	1
40	125824	STCP R	Screw, HHC sems (M6x16) (see TB 074)	4
48	25625	STCP	Plug, drain (1/4" x 19 BSP)	1
49	23170	NBR	O-ring, drain plug – 70D	1
50	131403	ALE	Cover, rear (see TB 123)	1
51	14030	NBR	O-ring, rear cover – 70D	1
53	131400	ALE	Crankcase (see TB 123)	1
64	46969	CM	Pin, crosshead	3
65	46968	BBNP	Rod, plunger	3
70	48281	NBR	Seal, oil, crankcase	3
75	43328	S	Slinger, barrier	3
90	48559	CC	Plunger, ceramic (M22x55)	3
95	126555	STCP R	Stud, plunger retainer (M6x50)	3
96	43235	PTFE	Back-up-ring, plunger retainer	3
97	17399	NBR	O-ring, plunger retainer – 80D	3
98	45891	CU	Gasket	3
99	46504	S	Retainer, plunger (M6) (see TB 074)	3
100	46964	NY	Retainer, seal	3
106	49644	NBR	Seal, LPS w/SS-Spg	3
120	48279	BB	Case, seal	3
121	13984	NBR	O-ring, seal case – 70D	3
127	48278	STG	V-packing	6
128	48280	BB	Adapter, male	3
162	43248	PTFE	Back-up-ring, seat	6
163	43249	NBR	O-ring, seat – 80D	6
164	44718	S	Seat	6
166	43721	S	Valve	6
167	43751	S	Spring	6
168	44564	PVDF	Retainer, spring	6
172	17617	NBR	O-ring, valve plug – 90D	6
174	43850	BB	Plug, valve (see TB 074)	6
185	48274	FBB	Head, manifold	1
188	126513	STCP R	Screw, HSH (M8x70) (see TB 074)	8
500	8081	-	<i>Gearbox 1" shaft (see individual datasheet)</i>	1

**Bold print numbers are unique to a particular pump model. Italics are optional items. { }** Date of latest production change. + Production parts are different than service parts. R Components comply with RoHS directive. \* Review individual parts in each kit for material code identification. For additional technical information see [www.catpumps.com/literature/tech-bulletins](http://www.catpumps.com/literature/tech-bulletins).

**MATERIAL CODES** (not part or part number)

ABS	ABS plastic	FBB	Forged brass	RBR	Rubber
ALE	Aluminum epoxy	FBR	Fiber	S	304SS
BB	Brass	FCM	Forged chrome-moly	STCP	Steel / chrome plated
BBNP	Brass nickel plated	FPM	Fluorocarbon	STG	Special blend PTFE white
CC	Ceramic	NBR	Medium nitrile (Buna-N)	STHT	Special PTFE high temp
CM	Chrome-moly	NY	Nylon	STL	Steel
CU	Copper	PC	Poly Carbonate	STZP	Steel / zinc plated
EPDM	Ethylene Propylene diene mon.	PTFE	Pure Polytetrafluoroethylene	TNM	Special high strength
F	Cast iron	PVDF	Polyvinylidene fluoride		

**OPTIONAL PARTS AND ACCESSORIES**

Part	Description	Qty
30067	Key (M8 x 7,5 x 25)	1
30613	Mount rail assembly 5,75"	1
76513	Mount rail assembly 6,25"	1
1202220	Protector, shaft (7CP6170)	1
828710	Protector, oil cap	1
34334	Kit, oil drain	1
30206	Pulley, 10", 2 groove "H"	1
33000	Hub, H, 24 mm	1
30696	Plier, reverse	1

**SERVICE PARTS**

Part	Description	Qty
76933	Kit, seal – standard NBR	1
34920	Kit, valve – standard NBR	2
6107	Oil, bottle (21oz.)	1-2
6119	Lubricant, anti-seize (2 oz.)	1
6124	Gasket, iquid (3 oz.)	1
816764	Head complete – w/NBR seals & O-rings	1

**SEAL KITS** - 1 seal kit required per pump

Pump Models	NBR	FPM	EPDM #	STHT		
7CP6110CS, 7CP6170 7CP6110CSG1, 7CP6170G1	<b>76933</b>	<b>76950</b>	<b>31936</b>	<b>76068</b>		
Item (included in seal kits)					Description	Qty
97	17399	14160	46204	17399	O-ring, plunger retainer	3
106	49644	49704	48650	76704	Seal, LPS with SS-spring	3
121	13984	14333	48649	13984	O-ring, seal case	3
127	48278	48278	48278	48278	V-packing	6

# Silicone oil/grease required

**VALVE KITS** – 2 valve kits required per pump

Pump Models	NBR STHT	FPM	EPDM #			
7CP6110CS, 7CP6170 7CP6110CSG1, 7CP6170G1	<b>34920</b>	<b>31256</b>	<b>31253</b>			
Item (included in valve kits)				Description	Qty	
162	43248	43248	43248	Back-up ring, valve seat	3	
163	43249	44383	46206	O-ring, valve seat	3	
164	44718	44718	44718	Seat	3	
166	43721	43721	43721	Valve	3	
167	43751	43751	43751	Spring	3	
168	44564	44564	44564	Retainer, spring	3	
172	17617	11691	46207	O-ring, valve plug	3	

# Silicone oil/grease required