



Technical specifications and instructions



25 Frame Plunger pump

Standard brass model

2510

Stainless steel model

2511

Specifications (*)

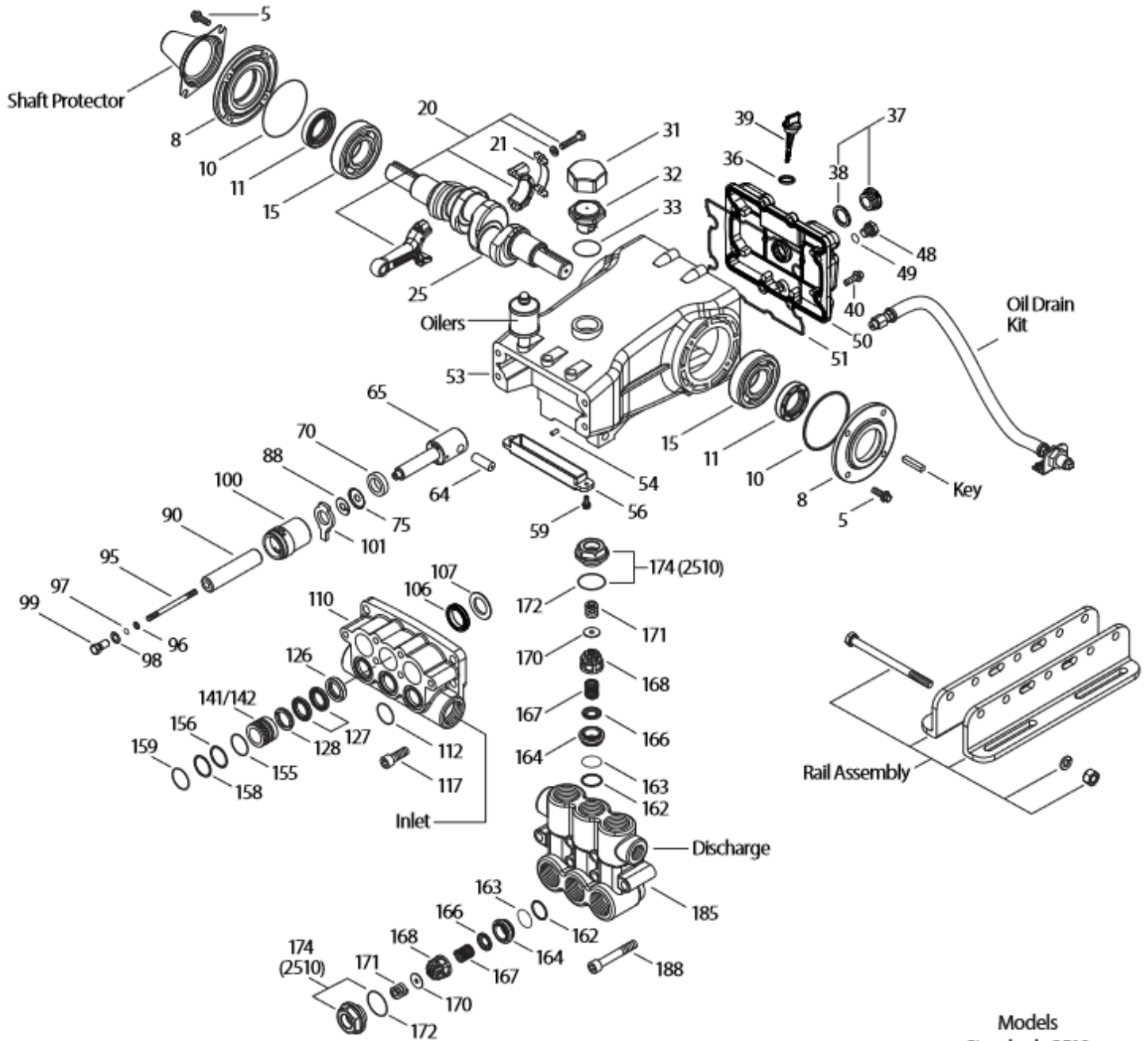
	Model 2510	Model 2511
Flow	76 L/min	76 L/min
Pressure range	6,9 to 138 bar	6,9 to 103 bar
RPM	1450 RPM	1450 RPM
Inlet pressure range	Flooded to 4,9 bar	Flooded to 4,9 bar
Stroke	38,5 mm	38,5 mm

Common specifications

Bore	25 mm
Crankcase capacity	2,5 L
Maximum liquid temperature	60° C
Inlet ports (2)	1-1/4" NPTF
Discharge ports (2)	3/4" NPTF
Shaft diameter	30 mm
Weight (2510)	36 kg
Weight (2511)	34 kg
Dimensions	519 x 382 x 215 mm

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

Exploded View



Models
Standard - 2510
Stainless Steel - 2511
January 2019

Parts list

Item	Num. 2510	Mat.	Num. 2511	Mat.	Description	Qty
5	126544	STCP R	125753	S	Screw, sems HHC (M8x25)	8
8	49533	ALE	49533	ALE	Cover, bearing (see TB 118)	2
10	27772	NBR	27772	NBR	O-ring, bearing cover – 70D	2
11	27771	NBR	27771	NBR	Seal, oil, crankshaft – 70D	2
15	26512	STL R	26512	STL R	Bearing, ball	2
20	48613	TNM	48613	TNM	Rod, Connecting assembly (incl. lockwasher, washer, screw)	3
21	126562	STCP R	126562	STCP R	Washer, locking	3
25	49795	FCM	49759	FCM	Crankshaft, dual end	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, oil filler cap – 70D	1
36	129343	RBR	129343	RBR	Gasket, flat	1
37	92241	-	92241	-	Gasket, oil, bubble w/gasket – 80D	1
38	44428	NBR	44428	NBR	Gasket, flat, oil gauge – 80D	1
39	27769	ABS	27769	ABS	Dip stick	1
40	126544	STCP R	125753	S	Screw, sems HHC (M8x25)	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	133582	ALE	133582	ALE	Cover, rear (see TB 118 and 126)	1
51	27767	NBR	27767	NBR	O-ring, rear cover – 70D	1
53	49528	ALE	49528	ALE	Crankcase with guide pins (see TB 118)	1
54	27488	S	27488	S	Pin, guide	2
56	27790	POP	27790	POP	Pan, oil	1
59	125824	STCP R	92538	S	Screw, sems HHC (M6x16)	2
64	27784	CM	27784	CM	Pin, crosshead	3
65	48719	SSHS	48719	SSHS	Rod, plunger	3
70	27785	NBR	27785	NBR	Seal, crankcase oil – 70D	3
75	110669	S	110669	S	Slinger, barrier	3
88	110670	S	110670	S	Washer, keyhole	3
90	48535	CC	48535	CC	Plunger, ceramic (M25x110)	3
95	126549	STCP R	48679	SS	Stud, plunger retainer (M7x103)	3
96	20184	PTFE	20184	PTFE	Back-up-ring, plunger retainer	3
97	14190	NBR	14190	NBR	O-ring, plunger retainer – 70D	3
98	44069	SS	44069	SS	Gasket, plunger retainer	3
99	44068	SS	44068	SS	Retainer, plunger (M7)	3
100	49788	NY	49788	NY	Retainer, LPS, front (03/11)	3
	49789	NY	49789	NY	Retainer, LPS, rear (03/11)	3
101	48487	-	48487	-	Wick, long tab	3
106	44086	NBR	44086	NBR	Seal, LPS w/SS-Spg	3
107	48537	BB	48668	SS	Washer, LPS	3
110	48536	BBCP	48667	SS	Manifold, inlet	1
112	11379	NBR	11379	NBR	O-ring, inlet manifold – 70D	3
117	126510	STCP R	88398	S	Screw, HSH (M12x35 and M12x40)	4
126	48538	BB	48669	D	Adapter, female	3
	-	-	76667	SS	Adapter, female	3
127	44610	STG	44610	STG	V-packing	6
128	48539	BB	113025	SS	Adapter, male	3
141	48672	SS	48672	SS	Spring, coil {12/02}	18
142	48550	BB	48670	SS	Spacer w/coil springs	3
155	17629	NBR	17629	NBR	O-ring, spacer-rear – 80D	3
156	28243	PTFE	28243	PTFE	Back-up-ring, spacer-rear	3
158	28243	PTFE	28243	PTFE	Back-up-ring, spacer-front	3
159	17629	NBR	17629	NBR	O-ring, spacer-front – 80D	3
162	48363	D	48363	D	Back-up-ring, seat	6
163	26142	NBR	26142	NBR	O-ring, seat – 80D	6
164	48544	S	48676	SS	Seat	6
166	45839	SS	45839	SS	Valve	6
167	45840	SS	45840	SS	Spring	6
168	110682	PVDF	110682	PVDF	Retainer, spring	6
170	44794	SS	44794	SS	Washer, spring retainer	6

171	48689	SS	48689	SS	Spring, coil {12/02}	6
172	17667	NBR	17667	NBR	O-ring, valve plug – 80D	6
174	120693	BBCP	49295	SS	Plug, valve (w/o-ring model 2510 only)	6
185	48543	BBCP	48674	SS	Manifold, discharge	1
188	126511	STCP R	88399	S	Screw, HSH (M12x80)	6

Bold print part numbers are unique to a particular pump model. Italics are optional items. { } Date of latest production change. R Components comply with RoHS directive. * Review material codes for individual items (STG generally may be used as alternate). See 'Tech Bulletins' 003, 024, 035, 036, 043, 074, 083, 085, 095, 118 and 126 for additional information.

MATERIAL CODES (not part or part number)

ABS	ABS plastic	FPM	Fluorocarbon	SSHS	316SS / high strength
ALE	Aluminum Epoxy	NBR	Medium nitrile (Buna-N)	STCP	Steel / chrome plated
BB	Brass	NY	Nylon	STG	Special blend PTFE white
BBCP	Brass / chrome plated	PE	Polyethylene	STHT	Special PTFE high temp
CC	Ceramic	POP	Polypropylene	STL	Steel
CM	Chrome-moly	PTFE	Pure polytetrafluoroethylene	ST2	Special PTFE 2
D	Acetal	PVDF	Polyvinylidene fluoride	STZP	Steel / zinc plated
FCM	Forged chrome-moly	S	304SS	TNM	Special high strength
		SS	316SS		

OPTIONAL PARTS & ACCESSORIES

PART	DESCRIPTION	QTY
31280	Seal kit – Standard NBR 2510	1
76180	Seal kit – Standard NBR 2511	1
31285	Valve kit - Standard NBR 2510	2
31270	Valve kit - Standard NBR 2511	2
30614	Mount, rail assembly	1
26516	Protector, shaft	1
30278	Oiler (1 oz)	1
34334	Kit, oil drain	1
30696	Plier, reverse	1

SERVICE PARTS

PART	DESCRIPTION	QTY
990036	Key, (M8 x 7 x 40)	1
6119	Lubricant, Anti-seize (2oz) (2531, 2531C)	1
6124	Gasket, liquid (3 oz)	1
816747	Head, complete - 2510 w/NBR seals & O-rings	1
816785	Head, complete - 2511 w/NBR seals & O-rings	1

SEAL KITS - 1 seal kit required per pump

Pump model	NBR (STD)	FPM (.0110)	EPDM (.0220) #	STHT (.3400)		
2510	31280*	31380*	76200*	76376		
2511	76180	31380*	76200*	76376		
Items incl.					Description	Qty
97	14190	14161	48239	14190	O-ring, plunger retainer	3
106	44086	45846	49196	76086	Seal, LPS w/SS-spring	3
112	11379	14183	701491	11379	O-ring, inlet manifold	3
126	48669		48669		Adapter, female	3
127	44610	44610	44610	44610	V-packing	6
155	17629	14183	701491	17629	O-ring, spacer, rear	3
156	28243	28243	28243	28243	Back-up-ring, spacer, rear	3
158	28243	28243	28243	28243	Back-up-ring, spacer, front	3
159	17629	14183	701491	17629	O-ring, spacer, front	3

Silicone/oil/grease required * Review material codes for individual items (STG generally may be used as alternative)

VALVE KITS - : 2 valve kits required per pump

Pump model	NBR (STD)	FPM (.0110)	EPDM (.0220) #		
2510	31285	31385	76197		
2511	31270	31275	76370		
Items incl.				Description	Qty
162	48363	48363	48363	Back-up-ring, valve seat	3
163	26142	14330	701493	O-ring, valve seat	3
164	48544	48544	48544	Seat, stepped (2510)	3
	48676	48676	48676	Seat, stepped (2511)	3
166	45839	45839	45839	Valve	3
167	45840	45840	45840	Spring	3
168	110682	110682	110682	Retainer, spring	3
170	44794	44794	44794	Washer, spring retainer	3
172	17667	11745	48240	O-ring, valve plug	3

Silicone/oil/grease required