



Technical specifications and instructions



35 Frame Plunger pump

Brass

3520

Flushed Brass

3520C

Nickel aluminum bronze

3527

Specifications (*)

Model 3520 - 3520C - 3527

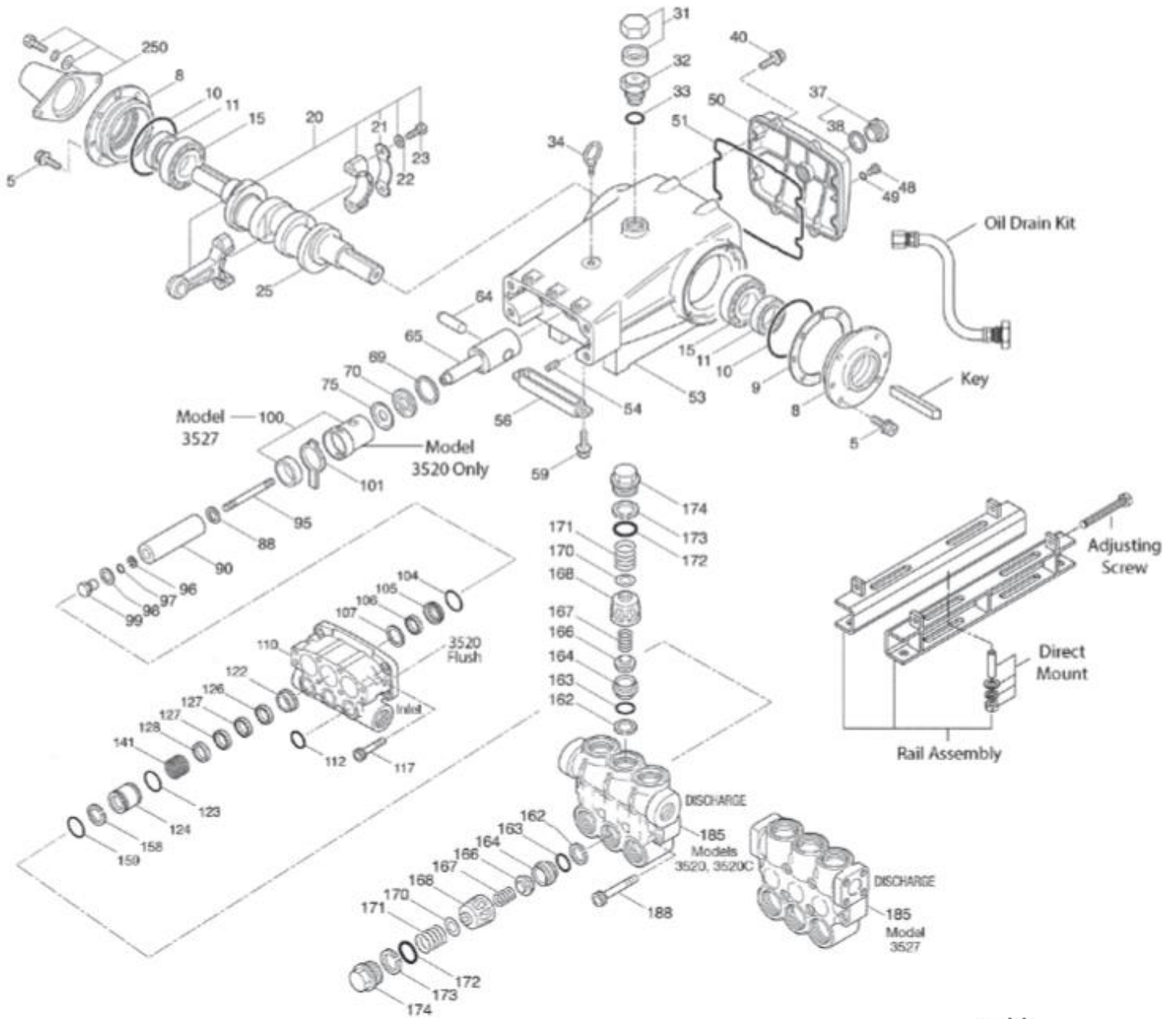
Flow	94,6 L/min
Pressure range	7 to 140 bar
RPM	870 RPM
Inlet pressure range	Flooded to 4,8 bar
Stroke	48 mm

Common specifications

Bore	32 mm
Crankcase capacity	4 L
Maximum liquid temperature	71° C
Inlet ports (2)	1-1/2" NPTF
Flushed ports (2)	1/4" NPTF
Discharge ports (2)	1 NPTF
Shaft diameter	35mm
Weight	63 kg
Dimensions (3520, 3520C)	606 x 460 x 247 mm
Dimensions (3527)	618 x 460 x 247 mm

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

Exploded View



Models
Brass 3520, 3520C
Nickel Aluminum Bronze 3527
August 2018

Parts list

lt.	Num. 3520/C	Mat.	Num. 3527	Mat.	Description	Qt
5	96049	S	96049	S	Screw, HHC sems (M10x25) (see TB 125)	8
8	134604	AL	134604	AL	Cover, bearing (see TB 118,125)	2
9	815279	FBR	815279	FBR	Shim, split, 2-pc (see TB 125)	2
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	3
22	126593	STCP R	126593	STCP R	Washer, flat (M10.5)	6
23	122045	STZP	122045	STZP	Screw, HH (M10x55)	6
25	29325	FCM	29325	FCM	Crankshaft, dual end (M48)	1
31	828710	PE	828710	PE	Protector, oil cap w/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 – 80D	1
38	44428	NBR	44428	NBR	Gasket, flat oil gauge – 80D	1
40	125753	S	125753	S	Screw, HHC sems (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	45936	AL	45936	AL	Cover, rear (see TB 118)	1
51	16612	NBR	16612	NBR	O-ring, cover – 70D	1
53	134784	AL	134784	AL	Crankcase assy (incl. 34,54) (see TB 118, 125, 126)	1
54	27488	S	27488	S	Pins, guide	2
56	27790	POP	27790	POP	Pan, oil	1
59	92538	S	92538	S	Screw, HHS 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	NBR	100488	NBR	Seal, oil, crankcase	3
75	43865	S	43865	S	Slinger, barrier	3
88	45676	S	45676	S	Washer, keyhole (M16)	3
90	43957	CC	43957	CC	Plunger (M32x145)	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
98	44085	SS	44085	SS	Gasket, retainer	3
99	+ 44084	SS	44084	SS	Retainer, plunger (M10)	3
100	44119	PPG	814279	PVDF	Retainer, seal (see TB 105)	3
101	44106	-	44106	-	Wick, long tab	3
104	43875	NBR	43875	NBR	O-ring, inlet adapter – 70D	3
105	49741	BB	45562	SS	Adapter, inlet	3
106	44098	NBR	44098	NBR	Seal, LPS w/SS-spg	3
107	43962	S	44101	SS	Washer	3
110	49464	BBCP R	45124	NAB	Manifold, inlet	1
	49464C	BBCP R	-	-	Manifold, inlet, flushed (1/4" flush ports)	1
112	11379	NBR	11379	NBR	O-ring, inlet manifold – 70D	3
117	44585	S	44585	S	Screw, HSH (M14x40)	4
122	49744	BB	49782	SS	Spacer (See TB 114)	3
123	12391	NBR	12391	NBR	O-ring, V-packing cylinder – 70D	3
124	49742	BB	49783	SS	Cylinder, V-packing (see TB 114)	3
126	43963	BB	48390	D	Adapter, female	3
	-	-	45564	SS	<i>Adapter, female</i>	3
127	+ 44608	STG	44608	STG	V-packing	6
128	43965	BB	45565	SS	Adapter, male	3
141	49743	SS	49743	SS	Spring, coil (see TB 114)	3
158	48362	D	48362	D	Back-up-ring, V-packing cylinder	3
159	48860	NBR	48860	NBR	O-ring, V-packing cylinder – 90D	3
162	48363	D	48363	D	Back-up-ring, valve seat	6
163	26142	NBR	26142	NBR	O-ring, seat – 80D	6
164	44727	S	44612	SS	Seat, stepped	6
166	43932	S	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	Coil spring (70 kg), valve plug	6
172	89827	NBR	89827	NBR	O-ring, valve plug – 90D	6
173	48364	D	48364	D	Back-up-ring, valve plug	6
174	46444	FBB	44643	NAB	Plug, valve {02/06}	6

185	49465	BBCP R	49249	NAB	Manifold, discharge (see TB 099, 109)	1
188	89981	S	89981	S	Screw, HSH (M12x70)	8
250	855042	NY	855042	NY	Protector, shaft w/2 screws, lockwashers, washers (includes w/pump) (see TB 125)	1

Bold print part numbers are unique to a particular pump model. Italics are optional items. { } Date of latest production change. + Production parts are different from service parts. R Components comply with RoHS directive.

See 'Tech Bulletins' 024, 040, 041, 050, 052, 053, 064, 069, 074, 083, 099, 100, 105, 109, 114, 118, 125 and 126 for additional information.

Material codes: (not part or part number)

ABS	ABS plastic	FCM	Forged chrome-moly	SFG	Special blend FPM
AL	Aluminum	NAB	Nickel aluminum bronze	SS	316 SS
BB	Brass	NBR	Medium nitrile (Buna-N)	SSZZ	316 SS / zamak
BBCP	Brass/chrome plated	NBRs	Buna, silicone free	ST 2	Special PTFE 2
CC	Ceramic	NY	Nylon	STCP	Steel / chrome plated
CM	Chrome-moly	PE	Polyethylene	STG	Special blend PTFE white
D	Acetal	POP	Polypropylene	STL	Steel
EPDM	Ethylene propylene diene mon.	PPG	Glass filled polypropylene	STZP	Steel / zinc plated
F	Cast iron	PTFE	Pure polytetrafluoroethylene	TNM	Special high strength
FBR	Fiber	PVDF	Polyvinylidene fluoride	ZP	Zinc plated
FPM	Fluorocarbon	S	304 SS		

OPTIONAL PARTS & ACCESSORIES

PART	DESCRIPTION	QTY
76841	Seal kit – Standard NBR	1
34235	Valve kit (3520, 3520C) – Standard NBR	2
34017	Valve kit (3527) – Standard NBR	2
92674	Mount, Rail assembly	1
34018	Mount, direct (STZP R)	1
34039	Mount, direct (S)	1
990013	Hub, "B", 35 mm (STL) (not shown)	1
80540	Screwing, adjusting M12 x 100	1
030278	Oiler (1 oz) (not shown)	3
34314	Kit, oil drain	1
30696	Plier, reverse (not shown)	1

SERVICE PARTS

PART	DESCRIPTION	QTY
34021	Key, M10 x 8 x 70)	1
818473	Head, complete w/NBR seals & O-rings – model 3520	1
815438	Head, complete w/NBR seals & O-rings – model 3527	1
819000	Assy, crankcase, cast iron conversion	1

SEAL KITS - 1 seal kit required per pump

Pump model	NBR (standard)	FPM (0.0110)	EPDM (0.0220) #	IPFE (0.0770)		
3520/C, 3527	76841*	76842	76843*	76844*		
Items incl.					Description	Qty
97	11345	11375	701490	702961	O-ring, plunger retainer	3
104	43875	44826	701656	702977	O-ring, inlet adapter	3
106	44098	44827	48244	76298	Seal, LPS w/SS-spg	3
112	11379	14183	701491	702705	O-ring, Inlet Manifold	3
123	12391	13266	701657	703481	O-ring, V-packing cylinder	3
127	44608	44829	44608	44608	V-packing	6
158	48362	48362	48362	20464	Back-up-ring, V-packing cylinder	3
159	48860	20137	701492	703159	O-ring, V-packing Cylinder	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 (standard)	FPM (0.0110)	EPDM (0.0220) #	IPFE (0.0770)		
3520/C	34235	31955	31952	76617		
3527	34017	31955	31952	76617		
Items incl.					Description	Qty
162	48363	48363	48363	48363	Backup-ring, valve seat	3
163	26142	14330	701493	702808	O-ring, valve seat	3
164	44727	44612	44612	44612	Seat, stepped (3520, 3520C)	3
	44612	44612	44612	44612	Seat, stepped (3527)	3
166	43932	44108	44108	44108	Valve (3520, 3520C)	3
	44108	44108	44108	44108	Valve (3527)	3
167	44109	44109	44109	44109	Spring	3
168	44728	44728	44728	44728	Retainer, spring	3
170	44729	44729	44729	44729	Washer, spring retainer	3
172	89827	11747	701494	703169	O-ring, Valve plug	3
173	48364	48364	48364	48364	Back-up-ring, Valve plug	3

Silicone/oil/grease required

