



## Technical specifications and instructions



**35 Frame  
Plunger pump**

**Standard Brass**

**3535HS**

**Stainless steel**

**3531HS**

**Nickel aluminum bronze**

**3537HS**

### Specifications (\*)

**Model 3535HS-3531HS-3537HS**

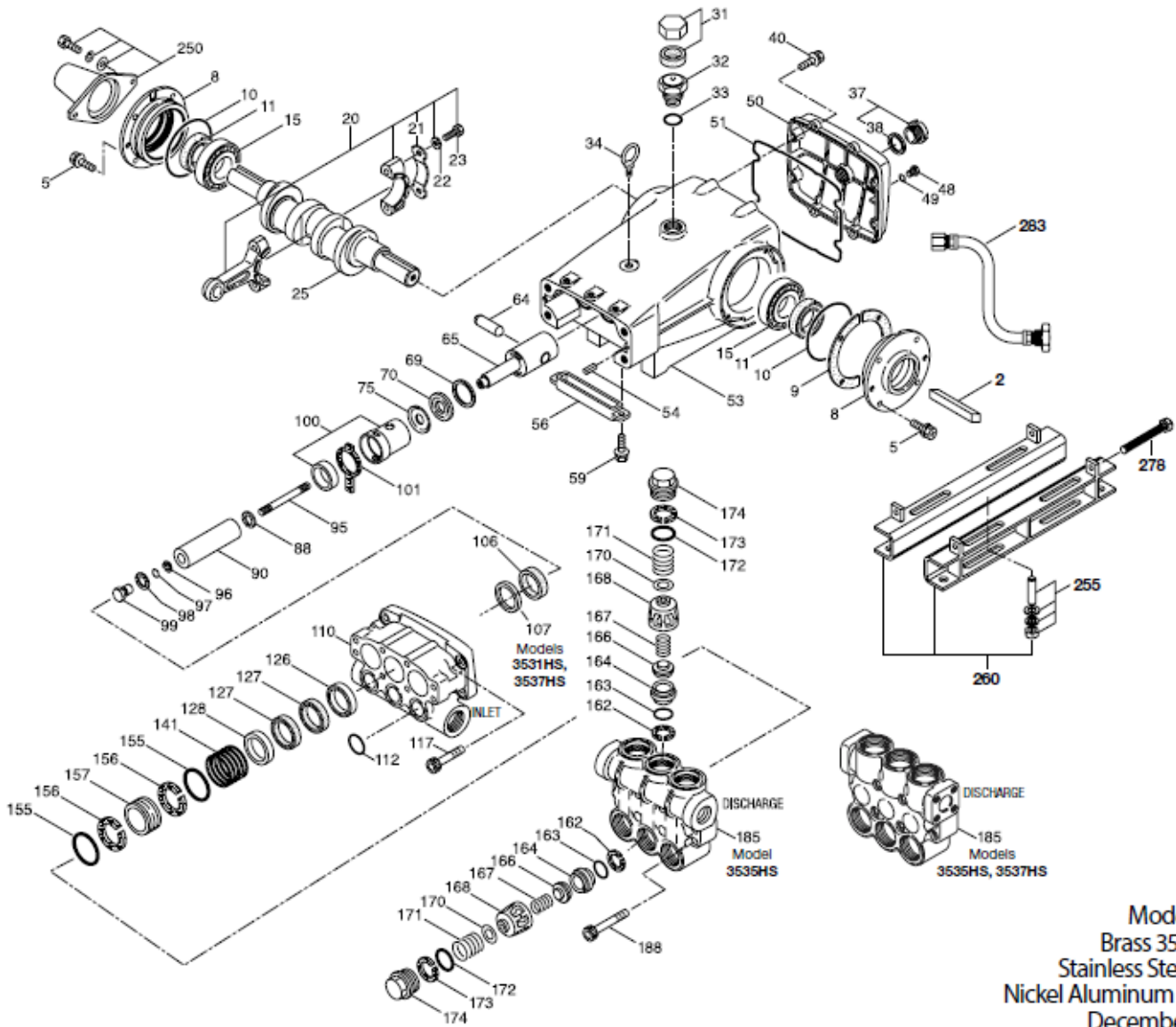
<b>Flow</b>	151 L/min
<b>Pressure range</b>	7 to 138 bar
<b>RPM</b>	888 RPM
<b>Inlet pressure range</b>	Flooded to 4,8 bar
<b>Stroke</b>	48 mm

### Common specifications

<b>Bore</b>	40 mm
<b>Crankcase capacity</b>	4 L
<b>Maximum liquid temperature</b>	70° C
<b>Inlet ports (2)</b>	1-1/2" NPTF
<b>Discharge ports (2)</b>	1 NPTF
<b>Shaft diameter</b>	35mm
<b>Weight</b>	63 kg
<b>Dimensions</b>	618 x 460 x 247mm

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

# Exploded View



Models  
Brass 3535HS  
Stainless Steel 3531HS  
Nickel Aluminum Bronze 3537HS  
December 2017

# Parts list

lt.	Num.	Mat.	Num.	Mat.	Num.	Mat.	Description	Qty
	<b>3535HS</b>		<b>3531HS</b>		<b>3537HS</b>			
2	34021	STL	34021	STL	34021	STL	Key (M10x8x70)	1
5	125753	S	125753	S	125753	S	Screw, HHC sems (M8x25)	8
8	44542	AL	44542	AL	44542	AL	Cover, bearing (see TB 118)	2
9	815279	FBR	815279	FBR	815279	FBR	Shim, split, 2-pc	2
10	12398	NBR	12398	NBR	12398	NBR	O-ring, bearing cover – 70D	2
11	13296	NBR	13296	NBR	13296	NBR	Seal, oil, crankshaft	2
15	29326	STL	29326	STL	29326	STL	Bearing, roller	2
20	126725	BZ R	126725	BZ R	126725	BZ R	Rod, connecting assy (incl. 21,22,23)	3
21	126749	STCP R	126749	STCP R	126749	STCP R	Locking washer (M10)	3
22	126593	STCP R	126593	STCP R	126593	STCP R	Washer, flat (M10.5)	6
23	122045	STZP	122045	STZP	122045	STZP	Screw, HH (M10x55)	6
25	29325	FCM	29325	FCM	29325	FCM	Crankshaft, dual end	1
31	828710	PE	828710	PE	828710	PE	Protector, oil cap w/ foam gasket	1
32	43211	ABS	43211	ABS	43211	ABS	Cap, oil filler	1
33	14177	NBR	14177	NBR	14177	NBR	O-ring, oil filler cap – 70D	1
34	126743	STCP R	126743	STCP R	126743	STCP R	Bolt, eye (M12x1,75) (for lifting pump only)	1
37	92241	-	92241	-	92241	-	Gauge, oil, bubble w/gasket	1
38	44428	NBR	44428	NBR	44428	NBR	Gasket, flat oil gauge – 80D	1
40	125753	S	125753	S	125753	S	Screw, HHC sems (M8x25)	8
48	25625	STCP	25625	STCP	25625	STCP	Plug, drain (1/4" x 19 BSP)	1
49	23170	NBR	23170	NBR	23170	NBR	O-ring, drain plug – 70D	1
50	45936	AL	45936	AL	45936	AL	Cover, rear (see TB 118)	1
51	16612	NBR	16612	NBR	16612	NBR	O-ring, crankcase cover – 70D	1
53	44487	AL	44487	AL	44487	AL	Crankcase assy (incl. 34,54) (see TB 118)	1
54	27488	S	27488	S	27488	S	Pins, guide	2
56	27790	POP	27790	POP	27790	POP	Pan, oil	1
59	92538	S	92538	S	92538	S	Screw, HHC sems (M6x16)	2
64	43864	CM	43864	CM	43864	CM	Pin, crosshead	3
65	49166	SSHB	49166	SSHB	49166	SSHB	Rod, plunger	3
69	126587	STCP R	126587	STCP R	126587	STCP R	Washer, oil seal	3
70	100488	NBRS	100488	NBRS	100488	NBRS	Seal, oil, crankcase	3
	44739	FPM	44739	FPM	44739	FPM	Seal, oil, crankcase	3
75	43865	S	43865	S	43865	S	Slinger, barrier	3
88	45676	S	45676	S	45676	S	Washer, keyhole (M16)	3
90	43921	CC	43921	CC	43921	CC	Plunger (M40x145)	3
95	+ 89778	SS	+ 89778	SS	+ 89778	SS	Stud, plunger retainer (M10x135)	3
96	20189	PTFE	20189	PTFE	20189	PTFE	Back-up-ring, plunger retainer	3
97	11345	NBR	11345	NBR	11345	NBR	O-ring, plunger retainer – 70D	3
	11375	FPM	11375	FPM	11375	FPM	O-ring, plunger retainer	3
	# 701490	EPDM	# 701490	EPDM	# 701490	EPDM	O-ring, plunger retainer	3
98	44085	SS	44085	SS	44085	SS	Gasket, retainer	3
99	+ 44084	SS	+ 44084	SS	+ 44084	SS	Retainer, plunger (M10)	3
100	814279	PVDF	814279	PVDF	814279	PVDF	Retainer, seal, 2-pc (see TB 105)	3
101	44112	-	44112	-	44112	-	Wick, long tab	3
106	+ 44113	NBR	+ 44113	NBR	+ 44113	NBR	Seal, LPS w/SS-spg	3
	44740	FPM	44740	FPM	44740	FPM	Seal, LPS w/SS-spg	3
	# 46955	EPDM	# 46955	EPDM	# 46955	EPDM	Seal, LPS w/S-spg	3
107	-	-	45381	SS	44115	NAB	Spacer, Lo-pressure seal	3
110	49464	BBCP R	45365	SS	45124	NAB	Manifold, inlet	1
112	11379	NBR	11379	NBR	11379	NBR	O-ring, inlet manifold – 70D	3
	14183	FPM	14183	FPM	14183	FPM	O-ring, inlet manifold	3
	# 701491	EPDM	# 701491	EPDM	# 701491	EPDM	O-ring, inlet manifold – 70D	3
117	# 44585	S	# 44585	S	# 44585	S	Screw, HSH (M14x40)	4
126	46494	BB	48391	D	48391	D	Adapter, female (see TB 087)	3
	-	-	45367	SS	45367	SS	Adapter, female	3
127	44609	STG	44609	STG	44609	STG	V-packing	6
	44741	SFG	44741	SFG	44741	SFG	V-packing	6
128	43928	BB	45368	SS	45368	SS	Adapter, male	3
141	49519	SS	49519	SS	49519	SS	Spring, large coil (see TB 108)	3
155	48860	NBR	48860	NBR	48860	NBR	O-ring, V-packing spacer – 90D	6
	20137	FPM	20137	FPM	20137	FPM	O-ring, V-packing spacer – 70D	6

	701492	EPDM	# 701492	EPDM	# 701492	EPDM	O-ring, V-packing spacer	6
156	# 48362	D	# 48362	D	# 48362	D	Back-up-ring, V-packing spacer	6
157	<b>49478</b>	<b>BB</b>	<b>49520</b>	<b>SS</b>	<b>49521</b>	<b>NAB</b>	Spacer, V-packing (see TB 108)	3
162	48363	D	48363	D	48363	D	Back-up-ring, valve seat	6
163	26142	NBR	26142	NBR	26142	NBR	O-ring, seat – 80D	6
	14330	FPM	14330	FPM	14330	FPM	O-ring, seat	6
	# 701493	EPDM	# 701493	EPDM	# 701493	EPDM	O-ring, seat	6
164	<b>44727</b>	<b>S</b>	<b>44612</b>	<b>SS</b>	<b>44612</b>	<b>SS</b>	Seat, stepped	6
166	<b>43932</b>	<b>S</b>	<b>44108</b>	<b>SS</b>	<b>44108</b>	<b>SS</b>	Valve	6
167	44109	SS	44109	SS	44109	SS	Spring	6
168	44728	PVDF	44728	PVDF	44728	PVDF	Retainer, spring	6
170	44729	SS	44729	SS	44729	SS	Washer, spring retainer	6
171	44644	SS	44644	SS	44644	SS	Coil spring (70 kg), valve plug	6
172	89827	NBR	89827	NBR	89827	NBR	O-ring, valve plug – 90D	6
	11747	FPM	11747	FPM	11747	FPM	O-ring, valve plug – 90D	6
	# 701494	EPDM	# 701494	EPDM	# 701494	EPDM	O-ring, valve plug – 70D	6
173	48364	D	48364	D	48364	D	Back-up-ring, valve plug	6
174	<b>46444</b>	<b>FBB</b>	<b>49300</b>	<b>SSD</b>	<b>44643</b>	<b>NAB</b>	Plug, valve	6
185	<b>49465</b>	<b>BBCP R</b>	<b>49299</b>	<b>SSD</b>	<b>76335</b>	<b>NAB</b>	Manifold, discharge (see TB 099 & 109)	1
188	89981	S	89981	S	89981	S	Screw, HSH (M12x70)	8
250	44516	NY	44516	NY	44516	NY	Protector, shaft w/2 screw, lockwashers, washer (included with pump)	1
255	34018	STZP R	34018	STZP R	34018	STZP R	Kit, direct mount	1
260	92674	STZP R	92674	STZP R	92674	STZP R	Mounting, box assy (incl. 34018)	1
278	80540	STZP	80540	STZP	80540	STZP	Screw, HH (M12x100) (rail adjusting screw)	1
279	30278	STZP	30278	STZP	30278	STZP	Oiler	3
283	34314	-	34314	-	34314	-	Kit, oil drain (3/8" x 48")	1
299	<b>818427</b>	<b>BBCP R</b>	<b>818372</b>	<b>SS</b>	<b>814522</b>	<b>NAB</b>	Head, complete w/NBR seals & O-rings <b>standard</b>	1
300	31040	NBR*	31040	NBR*	31040	NBR*	Kit, seal (97,106,112,127,155,156,158,159) <b>standard</b>	1
	33055	FPM	33055	FPM	33055	FPM	Kit, seal (97,106,112,127,155,156,158,159)	1
	# 33262	EPDM*	# 33262	EPDM*	# 33262	EPDM*	Kit, seal (97,106,112,127,155,156,158,159)	1
310	<b>34235</b>	<b>NBR</b>	<b>34017</b>	<b>NBR</b>	<b>34017</b>	<b>NBR</b>	Kit, valve (162,163,164,166,167,168,170,172,173) <b>st.</b>	2
	31955	FPM	31955	FPM	31955	FPM	Kit, valve (162,163,164,166,167,168,170,172,173)	2
	# 31952	EPDM	# 31952	EPDM	# 31952	EPDM	Kit, valve (162,163,164,166,167,168,170,172,173)	2

**Bold print part numbers are unique to a particular pump model. Italics are optional items. { }** Date of latest production change.  
# silicone/grease required. R Components comply with RoHS directive. \* Review material codes for individual items.  
See 'Tech Bulletins' 003, 024, 035, 036, 040, 041, 043, 050, 052, 053, 069, 074, 077, 083, 095, 099, 105, 108, 109 and 118 for additional information.

Material codes (not part or part number)

ABS	ABS plastic	FCM	Forged chrome-moly	SFG	Special blend FPM
AL	Aluminum	FPM	Fluorocarbon	SS	316 SS
BB	Brass	NAB	Nickel aluminum bronze	SSD	Duplex stainless steel
BBCP	Brass / chrome plated	NBR	Medium nitrile (Buna-N)	SSHB	316 SS w/ high strength brass
BZ	Bronze	NBRs	Buna, silicone free	STCP	Steel / chrome plated
CC	Ceramic	NY	Nylon	STG	Special blend PTFE white
CM	Chrome-moly	PE	Polyethylene	STL	Steel
D	Acetal	POP	Polypropylene	STZP	Steel / zinc plated
EPDM	Ethylene propylene diene mon.	PTFE	Pure polytetrafluoroethylene	ZP	Zinc plated
FBB	Forged Brass	PVDF	Polyvinylidene fluoride		
FBR	Fiber	S	304 SS		