



Technical specifications and instructions



35 Frame Plunger Pumps

Forged brass model

3545HS

Stainless steel model

3541HS

Specifications (*)

Model 3545HS – 3541HS

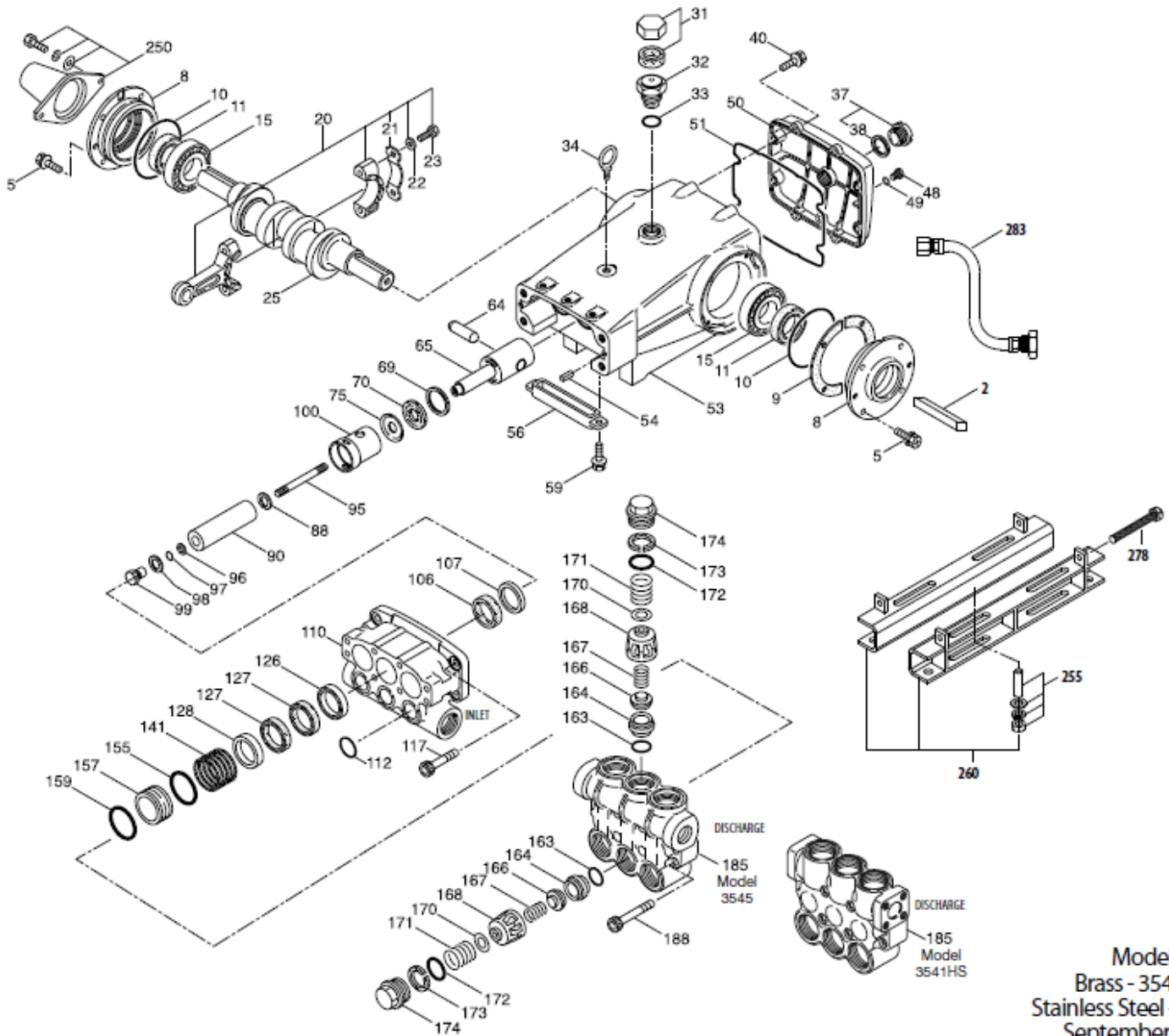
Flow	189 L/min
Pressure range	6,9 to 103 bar
RPM	850 RPM
Inlet pressure range	Flooded to 4.8 bar
Stroke	48 mm

Common specifications

Bore	45 mm
Crankcase capacity	4 L
Maximum liquid temperature	60° C
Inlet ports (2)	1-1/2" NPTF
Discharge ports (2)	1 NPTF
Shaft diameter	35 mm
Weight	63 kg
Dimensions (3545)	606 x 460 x 247 mm

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

Exploded View



Model
Brass - 3545HS
Stainless Steel - 3541HS
September 2017

Parts list

Item	Num.	Mat.	Num.	Mat.	Description	Qty
	3545HS		3541HS			
2	34021	STL	34021	STL	Key (M10x8x70)	1
5	125753	S	125753	S	Screw, HH sems (M8x25)	8
8	44542	AL	44542	AL	Cover, bearing (see TB 118)	2
9	815279	FBR	815279	FBR	Shim, split 2-pc	4
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	126725	BZ	126725	BZ	Rod, connecting assy (incl. 21,22,23)	3
21	126749	STCP R	126749	STCP R	Washer, locking (M10)	6
22	126593	STCP R	126593	STCP R	Washer, flat (M10)	6
23	122045	STZP	122045	STZP	Screw, HH (M10x55)	3
25	29325	FCM	29325	FCM	Crankshaft, dual end	1
31	828710	PE	828710	PE	Protector, 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
34	126743	STCP R	126743	STCP R	Bolt, eye (M12x1,75) (for lifting pump only)	1
37	92241	-	92241	-	Gauge, oil, bubble w/gasket	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, crankcase cover – 70D	1
53	44487	AL	44487	AL	Crankcase assy (incl. 34,54) (see TB 118)	1
54	27488	S	27488	S	Pin, guide	2
56	27790	POP	27790	POP	Pan, oil	1
59	92538	S	92538	S	Screw, HHC sems (M6x16)	2
64	43864	CM	43864	CM	Pin, crosshead	3
65	49166	SSHB	49166	SSHB	Rod, plunger	3
69	126587	STCP R	126587	STCP R	Washer, oil seal	3
70	100488	NBR	100488	NBR	Seal, oil, crankcase	3
	44739	FPM	44739	FPM	Seal, oil, crankcase	3
75	43865	S	43865	S	Slinger, barrier	3
88	45676	S	45676	S	Washer, keyhole (M16)	3
90	46806	CC	46806	CC	Plunger (M45x145)	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
	11375	FPM	11375	FPM	O-ring, plunger retainer	3
	# 701490	EPDM	# 701490	EPDM	O-ring, plunger retainer	3
98	44085	SS	44085	SS	Gasket, retainer	3
99	+ 44084	SS	+ 44084	SS	Retainer, plunger (M10)	3
100	44119	PPG	44119	PPG	Retainer, seal (see TB 105)	3
106	46809	NBR	48384	NBR	Seal, LPS w/S-spg	3
	702013	SFTB	702013	SFTB	Seal, LPS w/SS-spg	3
	# 46945	EPDM	# 46945	EPDM	Seal, LPS w/SS-spg	3
107	46811	BB	48380	D	Spacer, LPS	3
110	49482	BBCP R	48375	SS	Manifold, inlet	1
112	18688	NBR	18688	NBR	O-ring, inlet manifold – 70D	3
	11739	FPM	11739	FPM	O-ring, inlet manifold	3
	# 701659	EPDM	# 701659	EPDM	O-ring, inlet manifold – 70D	3
117	44585	S	44585	S	Screw, HSH (M14x40)	4
126	46812	BB	48383	D	Adapter, female	3
127	46813	STGS	46813	STGS	V-packing	6
128	46814	BB	48386	SS	Adapter, male	3
141	49483	SS	49483	SS	Spring, coil, large (see TB 107)	3
155	17784	NBR	17784	NBR	O-ring, V-packing spacer – 80D	3
	20138	FPM	20138	FPM	O-ring, V-packing spacer – 80D	3
	# 701658	EPDM	# 701658	EPDM	O-ring, V-packing spacer – 80D	3
157	49484	BB	49506	SS	Spacer, V-packing (see TB 107)	3
159	17784	NBR	17784	NBR	O-ring, V-packing spacer – 80D	3

	20138	FPM	20138	FPM	O-ring, V-packing spacer – 80D	3
	# 701658	EPDM	# 701658	EPDM	O-ring, V-packing spacer – 80D	3
163	26143	NBR	26143	NBR	O-ring, seat – 80D	6
	14331	FPM	14331	FPM	O-ring, seat – 70D	6
	# 701660	EPDM	# 701660	EPDM	O-ring, seat	6
164	46822	S	48393	SS	Seat	6
166	43932	S	44108	SS	Valve	6
167	44109	SS	44109	SS	Spring, valve	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
	11747	FPM	11747	FPM	O-ring, valve plug – 90D	6
	# 701494	EPDM	# 701494	EPDM	O-ring, valve plug – 70D	6
173	48364	D	48364	D	Back-up-ring, valve plug	6
174	46444	FBB	49300	SSD	Plug, valve	6
185	49486	BBCP R	49302	SSD	Manifold, discharge	1
188	89981	S	89981	S	Screw, HSH (M12x70)	8
250	44516	NY	44516	NY	Protector, shaft w/2 screws, washers, lockwashers (included w/pump)	1
255	34018	STZP R	34039	S	Kit, direct mount	1
260	92674	STZP R	126611DSS	S	Mounting, box assy (incls 34018 for 3545HS)	1
275	990013	STL	990013	STL	Hub B, 35mm w/keyway (see TB 003)	1
278	80540	STZP	80540	STZP	Screw, HH (M12x100) (rail adjusting screw)	1
283	34314	-	34314	-	Kit, oil drain (3/8" x 48")	1
299	818428	BBCP R	818371	SS	Head, complete w/NBR seals & O-rings	1
300	33234	NBR*	33834	NBR*	Kit, seal (97,106,112,127,155,159) standard	1
	31261	FPM	31261	FPM	Kit, seal (97,106,112,127,155,159)	1
	# 33223	EPDM*	# 33223	EPDM*	Kit, seal (97,106,112,127,155,159)	1
310	33235	NBR	33835	NBR	Kit, valve (163,164,166,167,168,170,172,173) standard	2
	31262	FPM	31262	FPM	Kit, valve (163,164,166,167,168,170,172,173)	2
	# 31235	EPDM	# 31235	EPDM	Kit, valve (163,164,166,167,168,170,172,173)	2
-	819000	F	819000	F	Assy crankcase, cast iron conversion	1

Bold part numbers are unique to a particular pump model. Italics are optional items. # Silicone oil/grease required. R components comply with RoHS Directive. * Review individual parts in each kit for material code identification. See Tech Bulletins 002, 003, 024, 036, 041, 043, 053, 074, 083, 099, 105, 107, 109 and 118 for additional information.

Material codes (not part or part number)

ABS	ABS plastic	FBR	Fiber	S	304SS
AL	Aluminum	FCM	Forged chrome-moly	SFTB	Special blend PTFE black
BB	Brass	FPM	Fluorocarbon	SS	316SS
BBCP	Brass / chrome plated	NBR	Medium nitrile (Buna-N)	SSD	Duplex stainless steel
BZ	Bronze	NBRS	Buna, silicone free	SSHB	316 SS / High strength brass
CC	Ceramic	NY	Nylon	STCP	Steel / chrome plated
CM	Chrome-moly	PE	Polyethylene	STGS	Special blend PTFE white silicon.free
D	Acetal	POP	Polypropylene	STL	Steel
EPDM	Ethylene propylene diene monomer	PPG	Glass filled polypropylene	STZP	Steel / zinc plated
F	Cast iron	PTFE	Pure polytetrafluorethylene	TNM	Special high strength
FBB	Forged brass	PVDF	Polyvinylidene fluoride		