



Technical specifications and instructions



15 Frame Plunger pump

Standard Brass	1540E
Flushed	1540EC
Stainless Steel	1541
SS Flushed	1541C

Specifications (*)

Model 1540E - 1540EC - 1541 – 1541C

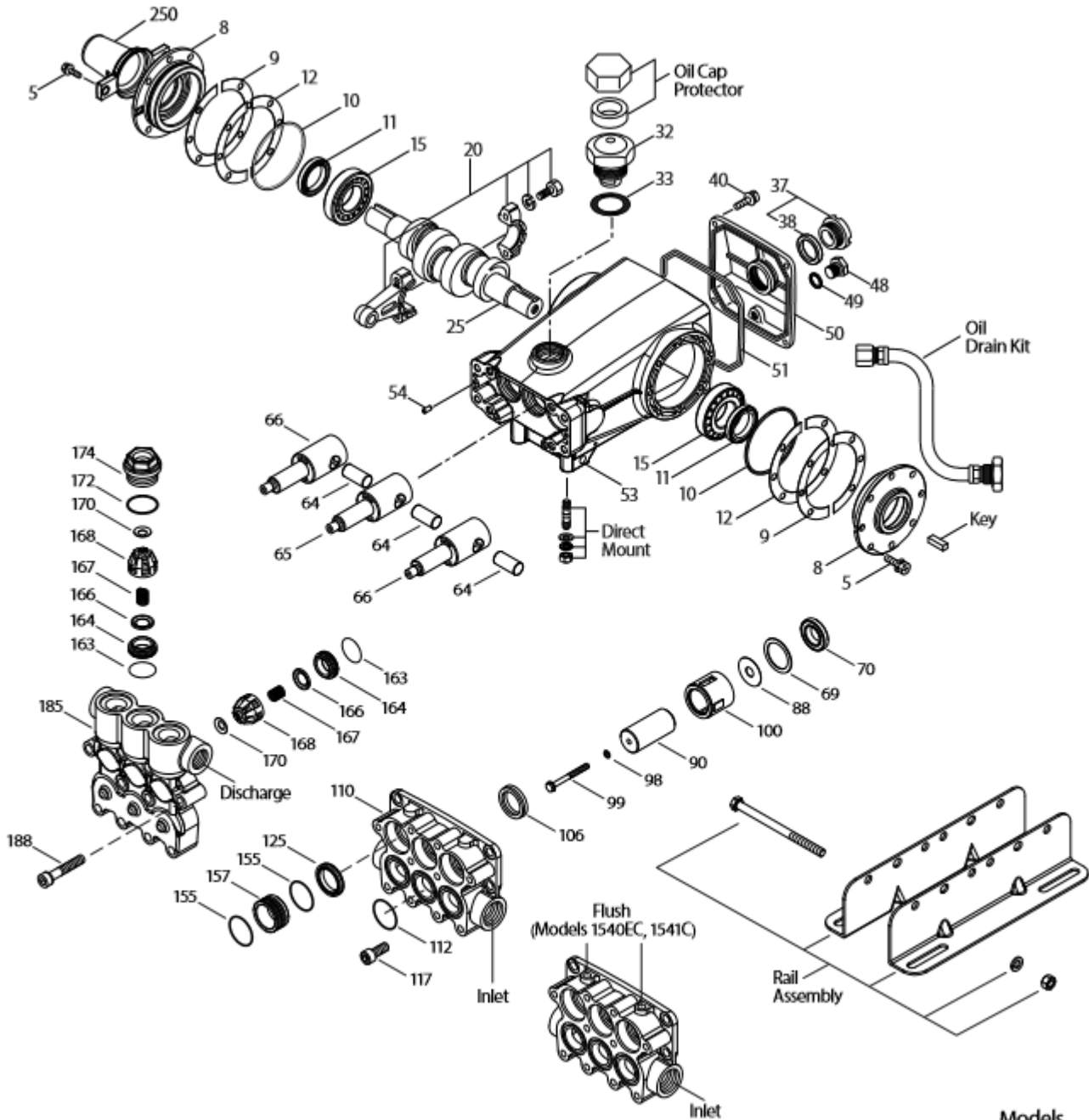
Flow	73 L/min
Pressure range	6,9 to 83 bar
RPM	1180 RPM
Inlet pressure range	Flooded to 4,8 bar
Stroke	30 mm

Common specifications

Bore	30 mm
Crankcase capacity	1,26 L
Maximum liquid temperature	60° C
Inlet ports (2)	1" NPTF
Flushed ports (2)	1/8" NPTF
Discharge ports (2)	3/4" NPTF
Shaft diameter	30 mm
Weight	21 kg
Dimensions	370 x 330 x 163 mm

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

Exploded View



Models
 Brass – 1540E
 Flushed – 1540EC
 Stainless Steel – 1541
 Stainless Steel Flushed – 1541C
 October 2020

Parts list

Item	Num. 1540E 1540EC	Mat.	Num. 1541 1541C	Mat.	Description	Qty
5	49651	S	49651	S	Screw, sems HHC (M8x20) (see TB074,128)	8
8	134805	ALE	134805	ALE	Cover, bearing (see TB 118,128)	2
9	855043	FBR	855043	FBR	Shim, split, 2 pc (see TB 128)	0-2
10	11340	NBR	11340	NBR	O-ring, bearing cover – 70D	2
11	43495	NBR	43495	NBR	Seal, oil, crankshaft – 70D	2
12	855044	S	855044	S	Shim, split, 2 pc (see TB128)	0-2
15	39060	STL	39060	STL	Bearing, roller	2
20	48600	TNM	48600	TNM	Rod, Connecting assembly (see TB 074)	3
25	43494	FCM	43494	FCM	Crankshaft, dual end (M30)	1
32	43211	ABS	43211	ABS	Cap, oil filler	1
33	14177	NBR	14177	NBR	O-ring, filler cap – 70D	1
37	92241	PC	92241	PC	Gauge, oil, bubble w/gasket – 80D (see TB 074)	1
38	44428	NBR	44428	NBR	Gasket, flat, oil gauge – 80D	1
40	92542	S	92542	S	Screw, sems HHC (M6x20) (see TB 074)	4
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	133576	ALE	133576	AL	Cover, rear (see TB 118)	1
51	44834	NBR	44834	NBR	O-ring, rear cover – 70D	1
53	134858	ALE	134858	ALE	Crankcase with guide pins (see TB 118,128)	1
54	27488	S	27488	S	Pin, guide	2
64	43507	CM	43507	CM	Pin, crosshead	3
65	48933	SHS	49611	SS	Rod, plunger (center)	1
66	48931	SHS	49609	SS	Rod, plunger (outside)	2
69	126596	STCP R	126596	STCP R	Washer, oil seal	3
70	43500	NBR	43500	NBR	Seal, oil, crankcase – 80D	3
88	48937	S	48937	S	Washer, flat	3
90	48938	CC	48938	CC	Plunger, ceramic (M30x65)	3
98	46730	NBR	46730	NBR	Washer, seal – 90D	3
99	+ 48201	SS	+ 48201	SS	Retainer, plunger (see TB 074)	3
100	48936	PVDF	48936	PVDF	Retainer, seal	3
106	49067	NBR	-	-	Seal, LPS w/S-Spg	3
	-	-	49616	NBR	Seal, LPS w/SS-Spg	3
	702939	ST4	-	-	Seal, w/NiH-Spg	3
110	48940	FBB	49614	SS	Manifold, inlet	1
	49853	FBB	134147	SS	<i>Manifold, inlet flushed (1/8" NPTF)</i>	1
112	123903	NBR	123903	NBR	O-ring, inlet manifold – 90D	3
117	49044	S	49044	S	Screw, HSH (M10x25) (see TB 074)	4
125	48944	SNG	-	-	Seal, HPS w/stainless steel	3
	49619	STG	49619	STG	<i>Seal, assy 2 piece w/SS-support</i>	3
155	123903	NBR	123903	NBR	O-ring, spacer – 90D	6
157	48946	BB	49621	SS	Spacer, HPS	3
163	26143	NBR	26143	NBR	O-ring, seat – 80D	6
164	48951	S	49626	SS	Seat	6
166	48686	SS	48686	SS	Valve	6
167	48687	SS	48687	SS	Spring	6
168	48994	PVDF	48994	PVDF	Retainer, spring	6
170	123764	S	49627	SS	Washer, spring retainer	6
172	17629	NBR	17629	NBR	O-ring, valve plug – 80D	3
174	48952	FBB	49628	SSZZ	Plug, valve (see TB 074)	3
185	48948	FBB	49623	SS	Manifold, discharge	1
188	87952	S	87952	S	Screw, HSH (M10x55) (see TB 074)	10
250	855046	NY	-	-	<i>Protector, shaft w/2 screws PN 126544 (see TB 128)</i>	1
	-	-	855047	NY	<i>Protector, shaft w/2 screws PN 125753 (see TB 128)</i>	1

Bold print part numbers are unique to a particular pump model. Italics are optional items.

+ Production parts are different than replacement parts. R Components comply with RoHS directive.

For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (not part or part number)

ABS	ABS plastic	FPM	Fluorocarbon	SS	316 SS
ALE	Aluminium epoxy	NBR	Medium nitrile (Buna-N)	SSZZ	316 SS / zamak
BB	Brass	NY	Nylon	STCP	Steel / chrome plated
CC	Ceramic	PC	Poly Carbonate	STG	Special blend PTFE white
CM	Chrome-moly	PE	Polyethylene	STL	Steel
F	Cast iron	PVDF	Polyvinylidene fluoride	STZP	Steel / zinc plated
FBB	Forged brass	S	304SS	ST4	Special PTFE 4
FBR	Fiber	SHS	304 ss / high strength	TNM	Special high strength
FCM	Forged chrome-moly	SNG	Special blend (Buna)		

OPTIONAL PARTS AND ACCESSORIES

Part	Description	Qty
30067	Key, M8 x 7.5 x 25	1
990036	Key, M8 x 7 x 40	1
30613	Assembly, rail (5.72" see dim. drawing)	1
76513	Assembly, rail (6.22" see dim. drawing)	1
990550	Assembly, rail, diesel (5.72" see dim.draw.)	1
30264	Mount, direct	1
828710	Protector, oil cap	1
34334	Kit, oil drain	1
30206	Pulley, 10", 2 groove H	1
30059	Hub, H, 30 mm	1
990012	Hub, B, 30 mm	1

SERVICE PARTS

Part	Description	Qty
31770	Kit, seal (models 1540E, 1540EC)	1
31430	Kit, seal (models 1541, 1541C)	1
31775	Kit, valve (models 1540E, 1540EC)	2
31450	Kit, valve (models 1541, 1541C)	2
6107	Oil, bottle (21 oz.)	1-2
6124	Gasket, liquid (3 oz.)	1
6119	Lubricant, anti-seize (2 oz.) (1541, 1542C)	1
701931	Sealant, silicone (see TB 100) (1540E)	1
816863	Head, compl. w/NBR seals & O-rings (1540E)	1
818443	Head, complete w/NBR seals & O-rings (1541)	1

SEAL KITS (1 seal kit required per pump)

Pump models	NBR	FPM
1540E, 1540EC	31770	76430
1541,1541C	31430*	76430

Items included			Description	Qty
98	46730	48394	O-ring, plunger retainer	3
106	49067		Seal, LPS with S/spring (models 1540E, 1540EC)	3
	702939	702939	Seal, LPS with NIH-spring (models 1540E, 1540EC)	3
	49616		Seal, LPS with SS-spring (models 1541, 1541C)	3
112	123903	76903	O-ring, inlet manifold	3
125	48944		Seal, HPS (models 1540E, 1540EC)	3
	49619	49619	Assembly, seal 2-piece with SS support (models 1541, 1541C)	3
155	123903	76903	O-ring, Spacer	6

*Review material codes for individual items (STG may be used as alternative)

VALVE KITS (2 valve kits required per pump)

Pump models	NBR	FPM
1540E, 1540EC	31775	76775
1541,1541C	31450	76450

Items included			Description	Qty
163	26143	14331	O-ring, valve seat	3
164	48951	48951	Seat (models 1540E, 1540EC)	3
	49626	49626	Seat (models 1541, 1541C)	3
166	48686	48686	Valve	3
167	48687	48687	Spring	3
168	48994	48994	Retainer, spring	3
170	123764	123764	Washer, spring retainer (models 1540E, 1540EC)	3
	49627	49627	Washer, spring retainer (models 1541, 1541C)	3
172	17629	14183	O-ring, valve plug	3