



Technical specifications and instructions



Motorized pump unit 2SF42SEEL251 Shown

Stainless Steel Direct drive plunger pump

Models

**2SF05SEEL, 2SF10SEEL,
2SF15SEEL, 2SF22SEEL,
2SF25SEEL, 2SF29SEEL,
2SF35SEEL, 2SF42SEEL**

Specifications (*)

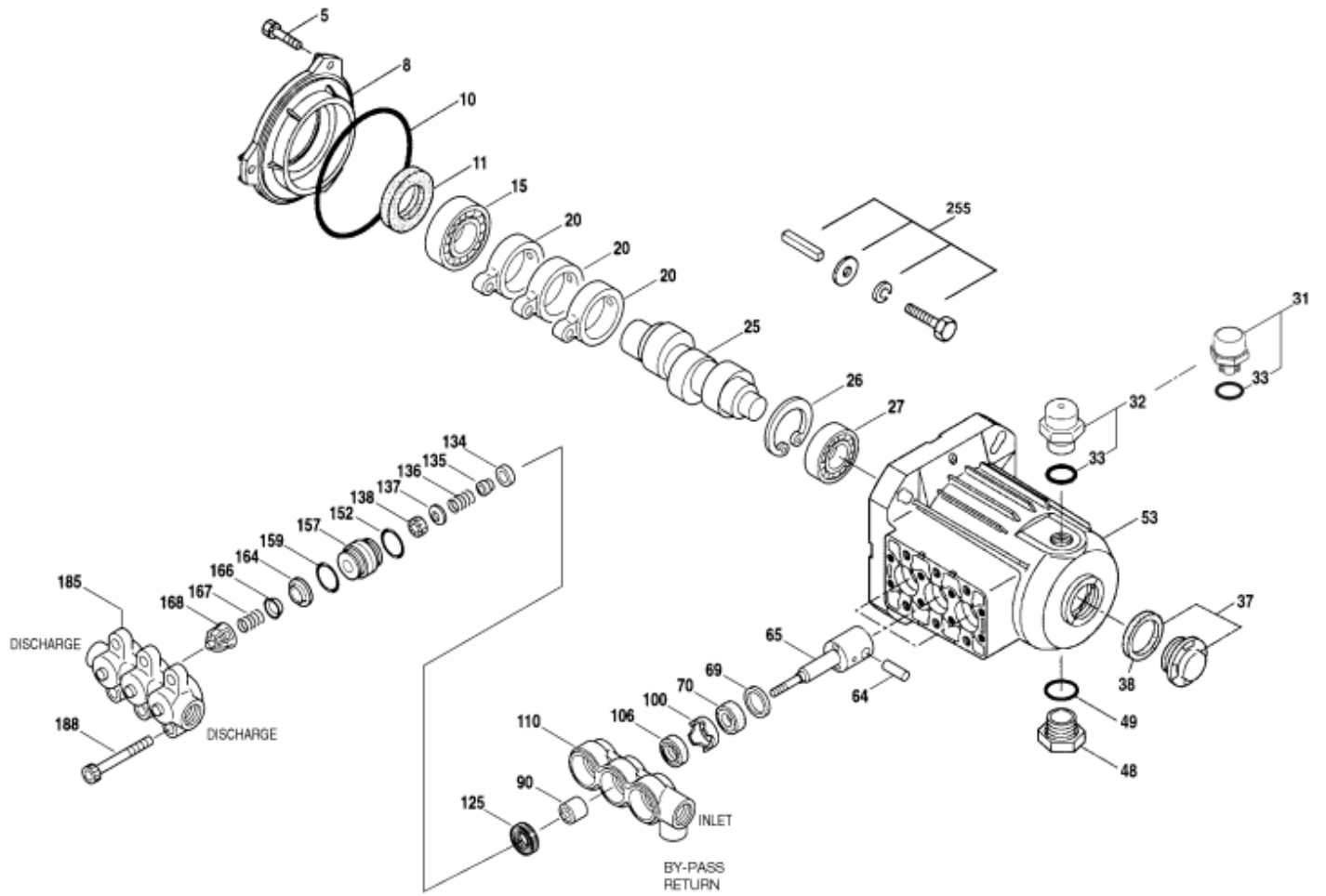
	2SF05SEEL	2SF10SEEL	2SF15SEEL	2SF22SEEL
Flow	1,6 l/min	3,1 l/min	4,8 l/min	7,0 l/min
Discharge pressure range	7 - 85 bar	7 - 85 bar	7 - 85 bar	7 - 85 bar
Stroke	1,8 mm	3,1 mm	4,5 mm	6,3 mm
	2SF25SEEL	2SF29SEEL	2SF35SEEL	2SF42SEEL
Flow	7,9 l/min	9,1 l/min	11,0 l/min	13,2 l/min
Discharge pressure range	7 - 85 bar	7 - 85 bar	7 - 85 bar	7 - 70 bar
Stroke	7,3 mm	8,5 mm	10,2 mm	10,2 mm

Common Specifications

RPM	1450
Inlet pressure range	flooded to 4 bar
Shaft diameter	15,9 mm
Bore	18 mm
Bore (2SF42SEEL only)	20 mm
Maximum liquid temperature	70° C
Crankcase capacity	0,33 L
Inlet port (1)	3/8" NPT(F)
Discharge ports (2)	3/8" NPT(F)
By-pass return port (1)	1/4" NPT(F)
Weight (pump only)	4 kg
Dimensions (pump only)	173 x 221 x 133 mm

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

Exploded View



Parts list

Item	Num.	Mat.	Description	Models	Qty
5	547445	S	Screw, HHS sems (M6x14) {3/03}	All Models	3
8	547153	AL	Cover, bearing {3/03}	All Models	1
10	14041	NBR	O-ring, bearing cover – 70D {3/03}	All Models	1
11	55337	NBR	Seal, oil, cfrankshaft – 70D {3/03}	All Models	1
15	14488	STL	Bearing, ball, inner	All Models	1
20	547046	TNM	Rod, Connecting	All Models	3
25	831987	CM	Crankshaft, 1.8 mm	05SEEL	1
	46109	CM	Crankshaft, 3.1 mm	10SEEL	1
	44931	CM	Crankshaft, 4.5 mm	15SEEL	1
	45160	CM	Crankshaft, 6.3 mm	22SEEL	1
	544693	CM	Crankshaft, 7.3 mm	25SEEL	1
	45914	CM	Crankshaft, 8.5 mm	29SEEL	1
	544694	CM	Crankshaft, 10.2 mm	35SEEL, 42SEEL	1
26	12385	STL	Ring, retaining, bearing	All Models	1
27	15710	STL	Bearing, ball, outer	All Models	1
31	549726	-	Cap, vented w/O-ring (rain cap)	All Models	1
32	547961	RTP	Cap, oil filler w/O-ring	All Models	1
33	14179	NBR	O-ring, oil filler cap – 70D	All Models	1
37	92241	-	Gauge, oil w/gasket – 80D	All Models	1
38	44428	NBR	Gasket, flat, oil gauge – 80D	All Models	1
48	44842	NY	Plug, drain	All Models	1
49	14179	NBR	O-ring, drain plug – 70D	All Models	1
53	547285	AL	Crankcase (see TB 92)	All Models	1
64	16948	CM	Pin, crosshead	All Models	3
65	544695	SSZZ	Rod, plunger	All Models	3
69	126259	STCP R	Washer, oil seal	All Models	3
70	25461	NBR	Seal, oil crankcase	All Models	3
90	544697	CC	Plunger, ceramic (M18x18)	05-35SEEL	3
	831290	CC	Plunger, ceramic (M20x18)	42SEEL	3
100	44869	PVDF	Retainer, seal	All Models	3
106	547683	NBR	Seal, LPS w/SS-Spg	All Models	3
	545192	FPM	Seal, LPS w/SS-Spg	All Models	3
	546507	EPDM	Seal, LPS w/SS-Spg	All Models	3
110	547704	SS	Manifold, inlet	05-35SEEL	1
	831288	SS	Manifold, inlet	42SEEL	1
125	44652	SNG	Seal, HPS w/SS	05-35SEEL	3
	46652	HT*	Seal, HPS 'Hi-Temp' 2-pc w/S-support	05-35SEEL	3
	44649	SNG	Seal, HPS w/SS	42SEEL	3
	44936	FPM	Seal, HPS w/SS	42SEEL	3
	46667	HT*	Seal, HPS 'Hi-Temp' 2-pc w/S-support	42SEEL	3
134	543691	SS	Valve, inlet (see TB 91)	05-35SEEL	3
	33873	NY	Valve, inlet (see TB 91)	05-35SEEL	3
	831400	SS	Valve, inlet	42SEEL	3
135	543689	SS	Spacer	All Models	3
136	543690	SS	Spring, inlet valve	All Models	3
137	88575	S	Washer, conical (M6)	All Models	3
138	543692	SS	Nut (M6)	All Models	3
152	+ 26089	NBR	O-ring, adapter spacer, inner – 80D	05-35SEEL	3
	11377	FPM	O-ring, adapter spacer, inner – 80D	05-35SEEL	3
	46647	EPDM	O-ring, adapter spacer, inner – 80D	05-35SEEL	3
	549539	NBR	O-ring, adapter spacer, inner	42SEEL	3
	129977	FPM	O-ring, adapter spacer, inner	42SEEL	3
	129978	EPDM	O-ring, adapter spacer, inner	42SEEL	3
157	544700	SS	Adapter, valve	05-35SEEL	3
	831289	SS	Adapter, valve	42SEEL	3

159	+ 26089	NBR	O-ring, adapter spacer, outer – 80D	All Models	3
	11377	<i>FPM</i>	<i>O-ring, adapter spacer, outer – 80D</i>	<i>All models</i>	3
	46647	<i>EPDM</i>	<i>O-ring, adapter spacer, outer – 80D</i>	<i>All models</i>	3
164	544293	SS	Seat	All Models	3
166	543669	SS	Valve	All Models	3
167	543700	SS	Spring	All Models	3
168	44565	PVDF	Retainer, spring	All Models	3
185	547705	SS	Manifold, discharge	All Models	1
188	544701	S	Screw, HSH (M8x80)	All Models	6
255	30517	STZP R	Assy, bolt mount	All Models	1
283	990394	-	<i>Kit, oil drain</i>	<i>All models</i>	1
285	80228	STL	<i>Screw (M8-1.25x80)</i>	<i>All models</i>	2
300	34973	NBR	<i>Kit, seal (incl. 106, 125, 152, 159)</i>	<i>05-35SEEL</i>	1
	33453	FPM	<i>Kit, seal (incl. 106, 125, 152, 159)</i>	<i>05-35SEEL</i>	1
	30536	EPDM*	<i>Kit, seal (incl. 106, 125, 152, 159)</i>	<i>05-35SEEL</i>	1
	76973	NBR	<i>Kit, seal (incl. 106, 125, 152, 159)</i>	<i>42SEEL</i>	1
	76955	FPM	<i>Kit, seal (incl. 106, 125, 152, 159)</i>	<i>42SEEL</i>	1
	76996	EPDM	<i>Kit, seal (incl. 106, 125, 152, 159)</i>	<i>42SEEL</i>	1
310	34972	NBR	<i>Kit, valve (incl. 152, 159, 164, 166, 167, 168)</i>	<i>05-35SEEL</i>	1
	33454	FPM	<i>Kit, valve (incl. 152, 159, 164, 166, 167, 168)</i>	<i>05-35SEEL</i>	1
	30546	EPDM	<i>Kit, valve (incl. 152, 159, 164, 166, 167, 168)</i>	<i>05-35SEEL</i>	1
	76972	NBR	<i>Kit, valve (incl. 152, 159, 164, 166, 167, 168)</i>	<i>42SEEL</i>	1
	76445	FPM	<i>Kit, valve (incl. 152, 159, 164, 166, 167, 168)</i>	<i>42SEEL</i>	1
	76446	EPDM	<i>Kit, valve (incl. 152, 159, 164, 166, 167, 168)</i>	<i>42SEEL</i>	1
311	39668	NBR	<i>Kit, inlet valve w/SS IV (incl. 134-138, 152, 159)</i>	<i>05-35SEEL</i>	1
	34974	NBR	<i>Kit, inlet valve w/NY IV (incl. 134-138, 152, 159)</i>	<i>05-35SEEL</i>	1
	33460	FPM	<i>Kit, inlet valve w/NY IV (incl. 134-138, 152, 159)</i>	<i>05-35SEEL</i>	1
	30556	EPDM	<i>Kit, inlet valve w/NY IV (incl. 134-138, 152, 159)</i>	<i>05-35SEEL</i>	1
	76668	NBR	<i>Kit, inlet valve w/SS IV (incl. 134-138, 152, 159)</i>	<i>42SEEL</i>	1
	76465	FPM	<i>Kit, inlet valve w/SS IV (incl. 134-138, 152, 159)</i>	<i>42SEEL</i>	1
	76466	EPDM	<i>Kit, inlet valve w/SS IV (incl. 134-138, 152, 159)</i>	<i>42SEEL</i>	1
352	44050	STZP	<i>Tool, oil gauge removal</i>	<i>All models</i>	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 than repair parts. R Components comply with RoHS directive. * Review individual parts in each kit for material code identification.

View 'Tech Bulletins' 002, 036, 043, 055, 064, 070, 073, 074, 091, 092 and 095 for additional information.

Note: Discard key which may come standard with most motors and engines and use only the key included in bolt kit.

Material codes: (not part or part number)

AL	Aluminum	NBR	Medium nitrile (Buna-N)	SS	316 stainless steel
CC	Ceramic	NY	Nylon	SSZZ	316SS/zamak
CM	Chrome-moly	PVDF	Polyvinylidene fluoride	STCP	Steel / chrome plated
EPDM	Ethylene propylene diene mon.	RTP	Reinforced composite	STL	Steel
FPM	Fluorocarbon	S	304 stainless steel	STZP	Steel / zinc plated
HT	Hi-Temp (EPDM alternative)	SNG	Special blend (buna)	TNM	Special high strength