



Technical specifications and instructions



(Unloader included with pump)

**Direct-Drive
Plunger pumps**

Electric models

2SF09ES

2SF11ES

2SF13ES

Specifications (*)

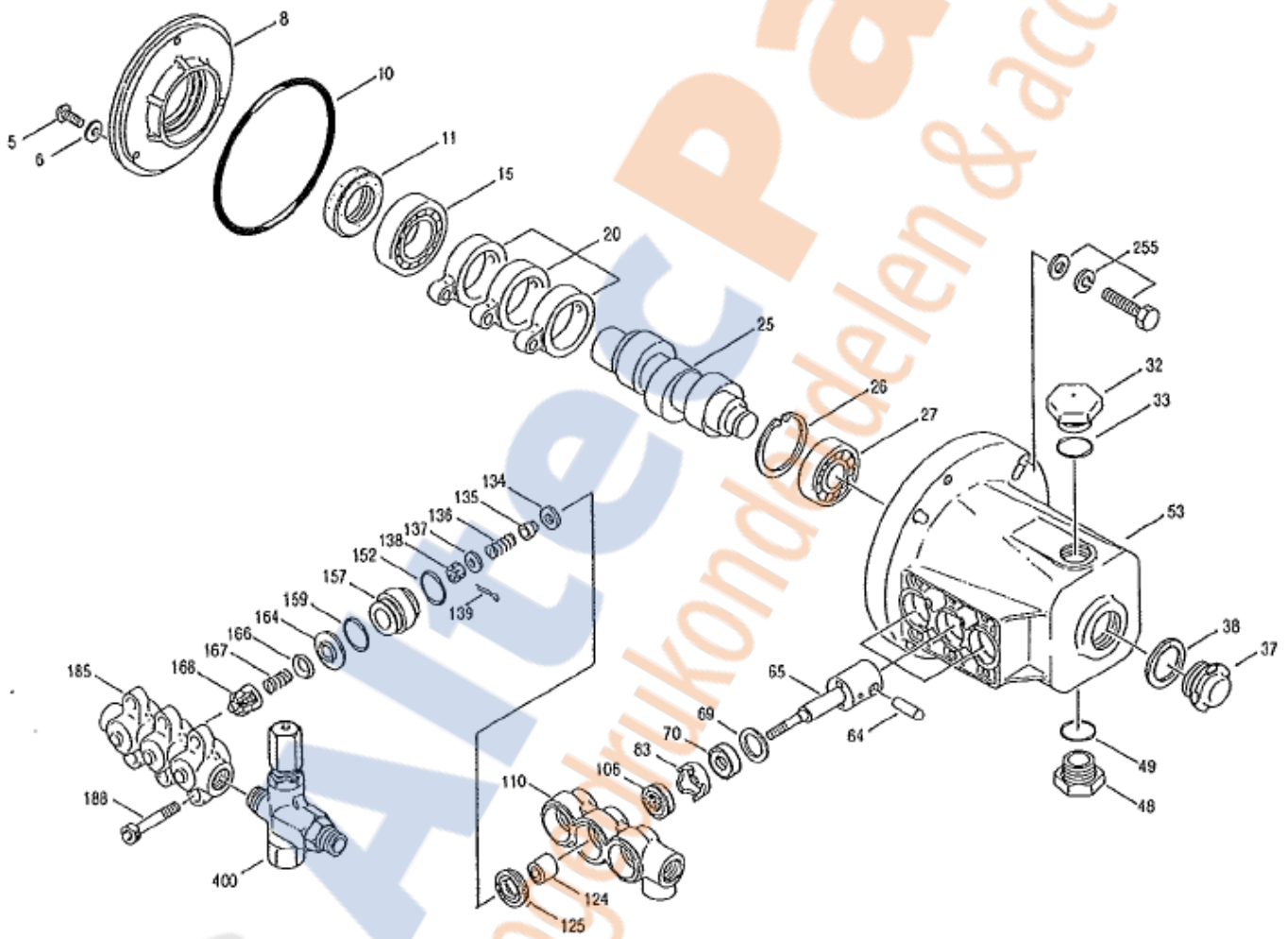
	2SF09ES	2SF11ES	2SF13ES
Flow	9 l/min	11 l/min	13 l/min
Max. discharge pressure	130 bar	110 bar	90 bar
Max. RPM	2800 RPM	2800 RPM	2800 RPM
Stroke	4,6 mm	5,8 mm	6,8 mm

Common Specifications

Inlet pressure range	0,1 bar to 5,2 bar
Bore	18 mm
Max. liquid temperature (standard)	71° C
Crankcase capacity	0,35 L
Inlet ports (1)	3/8" NPT
Discharge ports (2)	3/8" NPT
Weight (pump only)	4,8 kg
Dimensions (pump only)	232 x 169 x 165 mm
Hollow shaft diameter	24 mm
Flange PCD	130 mm

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

Exploded View



Parts list

Item	Num.	Description	Qty
5	549360	Screw	3
6	150810	Washer, seal	3
8	547084	Cover, bearing	1
10	14041	O-ring, bearing case	1
11	46419	Seal, oil	1
15	56110	Bearing, ball, inner	1
20	547046	Rod, Connecting	3
25	548584	Crankshaft, 2SF09ES	1
	548583	Crankshaft, 2SF11ES	1
	548582	Crankshaft, 2SF13ES	1
26	12385	Ring, retaining	1
27	15710	Bearing, ball, outer	1
32	547961	Cap, oil filler	1
33	14179	O-ring, oil filler cap	1
37	92241	Gauge, bubble oil w/gasket	1
38	44428	Gasket, flat, oil gauge	1
48	44842	Plug, drain	1
49	14179	O-ring, drain plug	1
53	547285	Crankcase	1
64	16948	Pin, crosshead	3
65	44865	Rod, plunger	3
69	126259	Washer	3
70	25461	Seal, oil (Buna-N)	3
83	44869	Retainer, seal	3
106	44876	Seal, LPS (Buna-N)	3
110	44978	Manifold, inlet	1
124	45847	Plunger, ceramic	3
125	43245	Seal, HPS, (Buna-N)	3
134	45854	Valve, inlet	3
135	549520	Spacer, inlet	3
136	44872	Spring, inlet valve	3
137	88575	Washer, conical	3
138	27000	Nut, slotted	3
139	12725	Cotterpin	3
152	23172	O-ring	3
157	44878	Discharge valve adapter	3
159	23172	O-ring, adapter	3
164	44881	Seat, discharge valve	3
166	548608	Valve	3
167	541062	Spring	3
168	46583	Retainer, spring	3
185	44879	Manifold, discharge	1
188	126762	Screw	6
255	540638	Assy, bolt mount	1
300	34053	Kit, seal (incl.106,125,139,152)	1
310	34052	Kit, valve (incl.164,166,167,168)	1
311	34668	Kit, inlet valve (incl.134-137,139,152)	1