



## Technical specifications and instructions



**Direct-Drive  
Plunger pumps**

**Electric models**

**2SF09ES**

**2SF11ES**

**2SF13ES**

(Unloader included with pump)

### Specifications (\*)

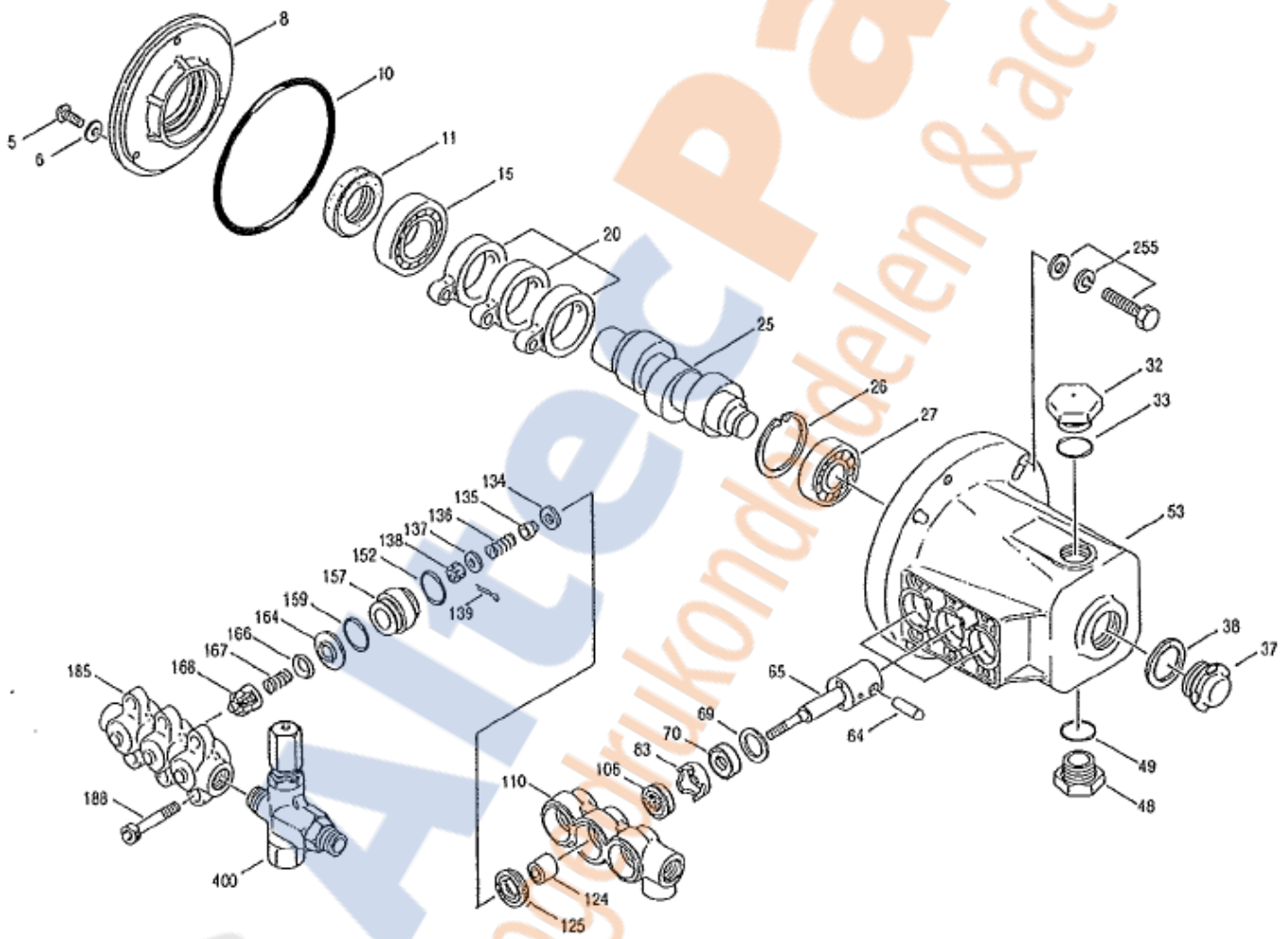
	<b>2SF09ES</b>	<b>2SF11ES</b>	<b>2SF13ES</b>
<b>Flow</b>	9 l/min	11 l/min	13 l/min
<b>Max. discharge pressure</b>	130 bar	110 bar	90 bar
<b>Max. RPM</b>	2800 RPM	2800 RPM	2800 RPM
<b>Stroke</b>	4,6 mm	5,8 mm	6,8 mm

### Common Specifications

<b>Inlet pressure range</b>	0,1 bar to 5,2 bar
<b>Bore</b>	18 mm
<b>Max. liquid temperature (standard)</b>	71° C
<b>Crankcase capacity</b>	0,35 L
<b>Inlet ports (1)</b>	3/8" NPT
<b>Discharge ports (2)</b>	3/8" NPT
<b>Weight (pump only)</b>	4,8 kg
<b>Dimensions (pump only)</b>	232 x 169 x 165 mm
<b>Hollow shaft diameter</b>	24 mm
<b>Flange PCD</b>	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	<b>548584</b>	Crankshaft, 2SF09ES	1
	<b>548583</b>	Crankshaft, 2SF11ES	1
	<b>548582</b>	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