



Technical specifications and instructions



3 Frame Plunger pump

Stainless Steel Models

231, 241, 271

Nickel Aluminum Bronze Models

237, 247, 277

Specifications (*)

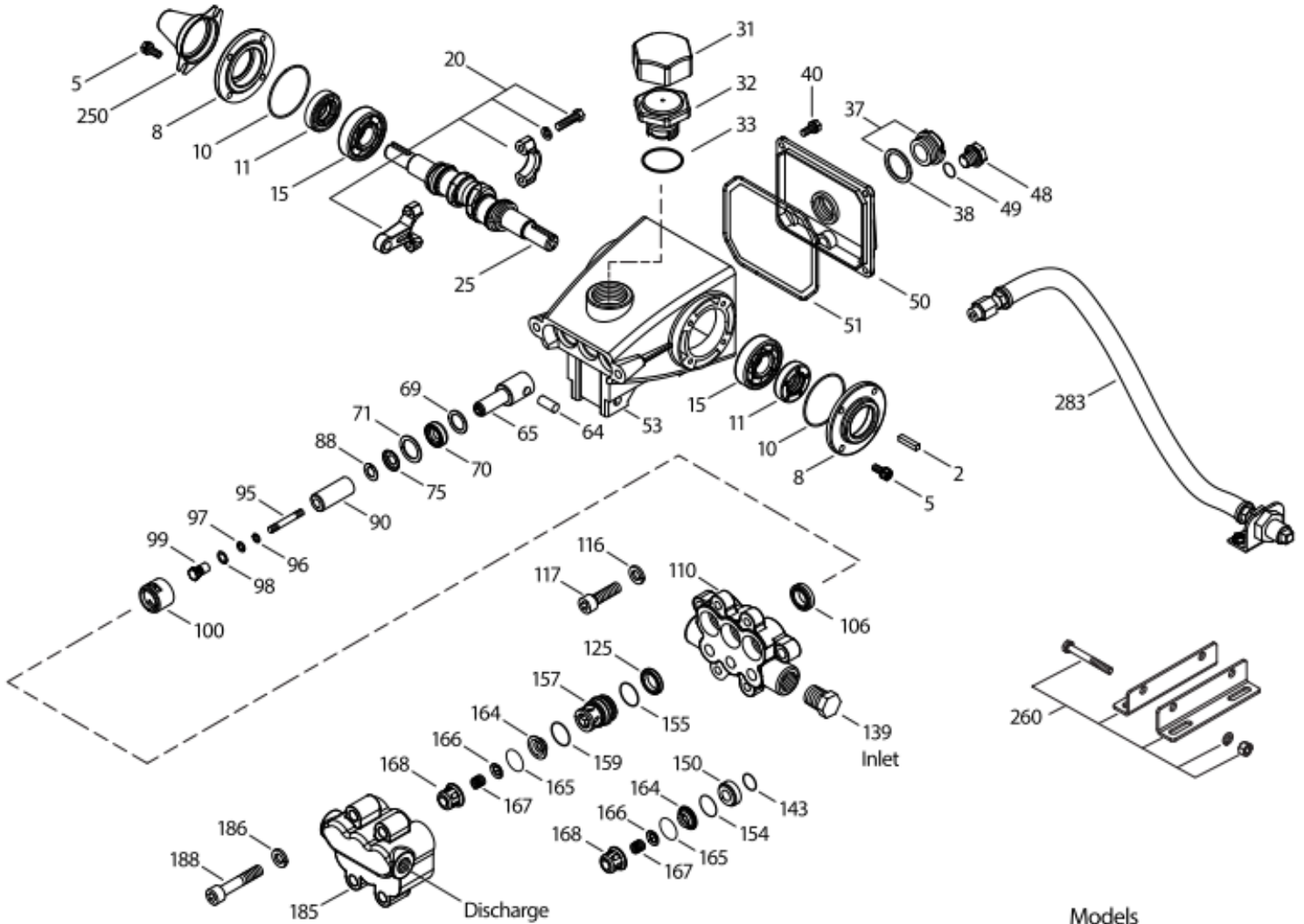
	<i>Model 231, 237</i>	<i>Model 241, 247</i>	<i>Model 271, 277</i>
Flow	7,2 l/min	11,2 l/min	13,2 l/min
Pressure range	7 to 105 bar	7 to 85 bar	7 to 105 bar
RPM	1420 RPM	1420 RPM	1420 RPM
Inlet pressure range	Flooded to 4,1 bar	Flooded to 4,1 bar	Flooded to 4,1 bar
Stroke	7,3 mm	11 mm	12,7 mm

Common specifications

Bore	18 mm
Crankcase capacity	0,45 l
Maximum liquid temperature	71° C
Inlet ports (2)	1/2" NPTF
Discharge ports (2)	3/8" NPTF
Shaft diameter	16,5 mm
Weight	6,1 kg
Dimensions	261 x 223 x 136 mm

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

Exploded View



Models
Stainless Steel - 231, 241, 271
Nickel Aluminum Bronze - 237, 247, 277
December 2016

Parts list

Item	Num.	Mat.	Num.	Mat.	Description	Qty
	231		237			
	241		247			
	271		277			
2	30047	STL	30047	STL	Key (M5x5x24)	1
5	92538	S	92538	S	Screw, sems HHC (M6x16)	8
8	27950	AL	27950	AL	Cover, bearing	2
10	26536	NBR	26536	NBR	O-ring, bearing cover – 70D	2
11	24159	NBR	24159	NBR	Seal, oil	2
15	14487	STL R	14487	STL R	Bearing, ball	2
20	48867	TNM	48867	TNM	Rod, connecting assy	3
25	46946	FCM	46946	FCM	Crankshaft, dual end – 231, 237 (M7,3)	1
	46951	FCM	46951	FCM	Crankshaft, dual end – 241, 247 (M11)	1
	108062	FCM	108062	FCM	Crankshaft, dual end – 271, 277 (M12,7)	1
31	828710	PE	828710	PE	Protector, oil 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
37	92241	-	92241	-	Gauge, oil, bubble w/gasket – 80D	1
38	44428	NBR	44428	NBR	Gasket, flat, oil gauge – 80D	1
40	92542	S	92542	S	Screw, sems HHC (M6x20)	6
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	48772	AL	48772	AL	Cover, rear (see TB 104)	1
51	48773	NBR	48773	NBR	O-ring, rear cover (see TB 104)	1
53	128354	AL	128354	AL	Crankcase {07/08} (see TB 104)	1
64	16948	CM	16948	CM	Pin, crosshead	3
65	45114	SSZZ	45114	SSZZ	Rod, plunger	3
69	126259	STCP R	126259	STCP R	Washer, oil (M24)	3
70	25301	NBR	25301	NBR	Seal, oil – 80D	3
71	126189	STCP R	126189	STCP R	Washer, oil seal	3
75	43900	S	43900	S	Slinger, barrier	3
88	45697	S	45697	S	Washer, keyhole (M18x10)	3
90	43901	CC	43901	CC	Plunger (M18x43)	3
95	126550	STCP R	126550	STCP R	Stud, plunger retainer (M6x43)	3
96	43235	PTFE	43235	PTFE	Back-up-ring, plunger retainer	3
97	17399	NBR	17399	NBR	O-ring, plunger retainer – 80D	3
	14160	FPM	14160	FPM	O-ring, plunger retainer – 80D	3
	# 46204	EPDM	# 46204	EPDM	O-ring, plunger retainer – 70D	3
	701715	IPFE	701715	IPFE	O-ring, plunger retainer	3
98	44041	SS	44041	SS	Gasket, plunger retainer (M12,5)	3
99	44031	SS	44031	SS	Retainer, plunger (M6)	3
100	28597	PVDF	28597	PVDF	Retainer, seal	3
106	44053	NBR	44053	NBR	Seal, LPS w/SS-Spg	3
	44926	FPM	44926	FPM	Seal, LPS w/SS-Spg	3
	# 46651	EPDM	# 46651	EPDM	Seal, LPS w/SS-Spg	3
	702390	SFTA	702390	SFTA	Seal, LPS w/SS-Spg	3
	76243	ST2	76243	ST2	Seal, LPS w/S-Spg	3
110	46425	SS	44052	NAB	Manifold, inlet	1
116	15847	S	15847	S	Lockwasher (M10)	2
117	87950	S	87950	S	Screw, HSH (M10x35)	2
125	44652	SNG	44652	SNG	Seal, HPS w/SS	3
	44925	FPM	44925	FPM	Seal, HPS w/SS	3
	46652	HT	46652	HT	Seal, HPS w/SS, 2pcs w/S – support	3
	701382	SFTA	701382	SFTA	Seal, HPS w/SS	3
	76052	ST4	76052	ST4	Seal, HPS w/S	3
139	45156	SS	44563	NAB	Plug, inlet (1/2" NPTM)	1
143	17547	NBR	17547	NBR	O-ring, inlet valve adapter, rear – 85D	3
	11685	FPM	11685	FPM	O-ring, inlet valve adapter, rear – 85D	3
	# 46648	EPDM	# 46648	EPDM	O-ring, inlet valve adapter, rear – 70D	3
	703308	IPFE	703308	IPFE	O-ring, inlet valve adapter, rear – 85D	3
150	44060	SS	44060	SS	Adapter, inlet valve	3
154	43893	NBR	43893	NBR	O-ring, inlet valve adapter, front – 80D	3

	44927	FPM	44927	FPM	O-ring, inlet valve adapter, front	3
	# 46649	EPDM	# 46649	EPDM	O-ring, inlet valve adapter, front – 80D	3
	703307	IPFE	703307	IPFE	O-ring, inlet valve adapter, front – 80D	3
155	26089	NBR	26089	NBR	O-ring, discharge valve adapter, rear – 80D	3
	11377	FPM	11377	FPM	O-ring, discharge valve adapter, rear – 80D	3
	# 46647	EPDM	# 46647	EPDM	O-ring, discharge valve adapter, rear – 80D	3
	703244	IPFE	703244	IPFE	O-ring, discharge valve adapter, rear – 75D	3
157	44059	SS	44059	SS	Adapter, discharge valve	3
159	26089	NBR	26089	NBR	O-ring, discharge valve adapter, front – 80D	3
	11377	FPM	11377	FPM	O-ring, discharge valve adapter, front – 80D	3
	# 46647	EPDM	# 46647	EPDM	O-ring, discharge valve adapter, front – 80D	3
	703244	IPFE	703244	IPFE	O-ring, discharge valve adapter, front – 75D	3
164	44058	SS	44058	SS	Seat	6
165	44001	NBR	44001	NBR	O-ring, seat – 80D	6
	44928	FPM	44928	FPM	O-ring, seat – 80D	6
	# 46650	EPDM	# 46650	EPDM	O-ring, seat – 80D	6
	703309	IPFE	703309	IPFE	O-ring, seat – 80D	6
166	44057	SS	44057	SS	Valve	6
167	44056	SS	44056	SS	Spring	6
168	44055	SS	44055	SS	Retainer, spring	6
185	46427	SS	44054	NAB	Manifold, discharge	1
186	15847	S	15847	S	Lockwasher (M10)	4
188	87952	S	87952	S	Screw, HSH (M10x55)	4
250	25130	STCP	25130	STCP	Protector, shaft	1
260	30612	STZP R	30612	STZP R	Rail, angle assy	1
265	30651	-	30651	-	Kit, complete mounting (incl.30612, 30246, 25130)	1
270	30246	STL	30246	STL	Pulley & key assy (incl 30032, 30047) {TB 003}	1
283	34334	-	34334	-	Kit, oil drain (3/8"x24")	1
299	814823	SS	815262	NAB	Head, complete w/NBR seals & O-rings	1
300	30983	NBR	30983	NBR	Kit, seal (incl. 97,106,125,143,154,155,159,165) standard	1
	33609	FPM	33609	FPM	Kit, seal (incl. 97,106,125,143,154,155,159,165)	1
	# 33914	EPDM*	# 33914	EPDM*	Kit, seal (incl. 97,106,125,143,154,155,159,165)	1
	33915	HT	33915	HT	Kit, seal HiTemp (incl.97,106,125,143,154,155,159,165)	1
	30735	STHT	30735	STHT	Kit, seal (incl. 97,106,125,143,154,155,159,165)	1
	76660	IPFE	76660	IPFE	Kit, seal (incl. 97,106,125,143,154,155,159,165)	1
310	30982	NBR	30982	NBR	Kit, valve (incl 143,154,155,164,165,166,167,168) standard	1
	31216	FPM	31216	FPM	Kit, valve (incl 143,154,155,164,165,166,167,168)	1
	# 31217	EPDM	# 31217	EPDM	Kit, valve (incl 143,154,155,164,165,166,167,168)	1
	76690	IPFE	76690	IPFE	Kit, valve (incl 143,154,155,164,165,166,167,168)	1

Bold print 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, 033, 034, 036, 043, 049, 052, 053, 067, 073, 074, 083 and 104 for additional information.

Material codes: (not part or part number)

ABS	ABS plastic	NAB	Nickel aluminium bronze	SSZZ	316SS/zamac
AL	Aluminium	NBR	Medium nitrile (Buna-N)	ST2	Special PTFE 2
CC	Ceramic	PE	Polyethylene	ST4	Special PTFE 4
CM	Chrome-moly	PTFE	Pure polytetrafluorethylene	STCP	Steel/chrome plated
EPDM	Ethylene propylene diene mona.	PVDF	Polyvinylidene fluoride	STL	Steel
FCM	Forged chrome-moly	S	304SS	STZP	Steel/zinc plated
FPM	Fluorocarbon	SFTA	Special blend PTFE	TNM	Special high-strength
HT	High Temp (EPDM alternative)	SS	316SS		
IPFE	I-Perfluoroelastomer PTFE (EPDM alt.)	SNG	Special blend (Buna)		