

MODEL 2831KM.CO₂



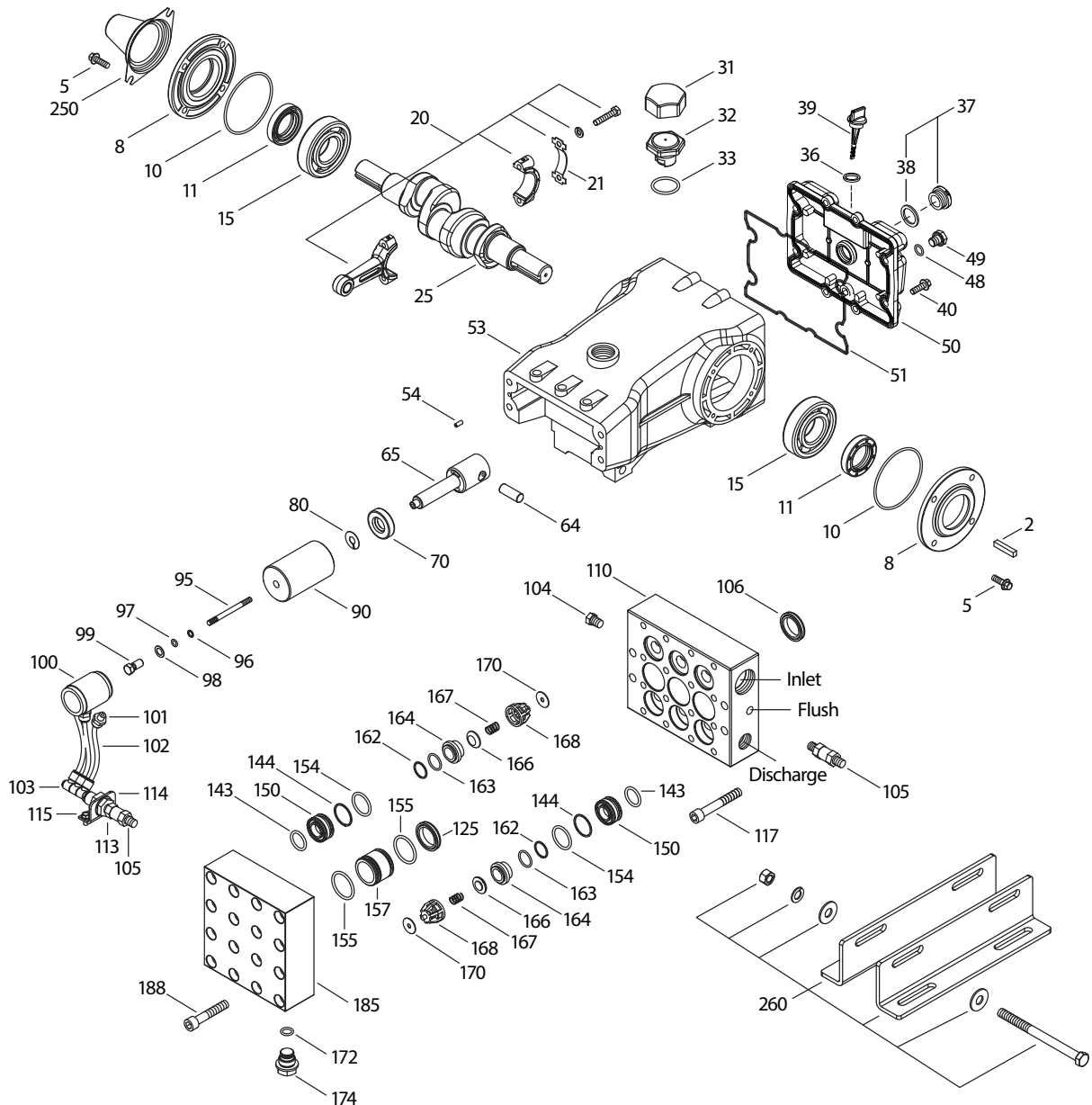
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	10.0 gpm	38 lpm
Pressure Range	400 to 1200 psi	27.5 to 83 bar
Pump RPM*	450 rpm	450 rpm
Inlet Pressure Range**	300 to 800 psi	21 to 55 bar
Min. Liquid Temperature**	-20°F	-29°C
Bore	1.260"	32 mm
Stroke	1.516"	38.5 mm
Crankcase Capacity	84 oz.	2.5 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1-1/4" NPT(F)	1-1/4" NPT(F)
Flushing Ports (2)	1/4" NPT(F)	1/4" NPT(F)
Discharge Ports (2)	3/4" NPT(F)	3/4" NPT(F)
Shaft Diameter	1.181"	30 mm
Pulley Mounting	Either side	Either side
Weight	104 lbs.	42.7 kg
Dimensions	18.98 x 15.04 x 8.03"	482 x 382 x 204 mm

*Pump minimum is 100 RPM.

**Temperature and pressure must be maintained to keep incoming CO₂ in a liquid state.

EXPLODED VIEW



(Parts List on Reverse Side)

January 2019

PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY
2	990036	STL	Key (M8x7x40)	1
5	125753	S	Screw, HHC Sems (M8x25)	8
8	49533	ALE	Covering, Bearing (See Tech Bulletin 118)	2
10	27772	NBR	O-Ring, Bearing Cover - 70D	2
11	27771	NBR	Seal, Oil, Crankshaft	2
15	26512	STL R	Bearing, Ball	2
20	76755	TNM	Assembly, Connecting Rod	3
21	126562	STCP R	Washer, Locking (M10)	3
25	49795	FCM	Crankshaft, Dual End (M38.5)	1
31	828710	PE	Protector, Oil Cap w/Polyurethane Gasket	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Oil Filler Cap - 70D	1
36	129343	RBR	Gasket, Dipstick	1
37	92241	—	Gauge, Oil, Bubble w/Gasket - 80D	1
38	44428	NBR	Gasket, Flat, Oil Gauge - 80D	1
39	27769	ABS	Dipstick	1
40	125753	S	Screw, HHC Sems (M8x25)	8
48	25625	STCP	Plug, Drain (1/4"x19BSP)	1
49	23170	NBR	O-Ring, Drain Plug - 70D	1
50	133582	ALE	Cover, Rear (See Tech Bulletin 118, 126)	1
51	27767	NBR	O-Ring, Rear Cover - 70D	1
53	49520	ALE	Crankcase Assy (Incls: 54) (See Tech Bulletin 118)	1
54	27488	S	Pin, Guide	2
64	76758	CM	Pin, Crosshead	3
65	76756	SSHS	Rod, Plunger	3
70	27785	NBR	Seal, Oil, Crankcase	3
88	110670	S	Washer, Keyhole	3
90	45749	CC	Plunger (M32x93)	3
95	89835	SS	Stud, Plunger Retainer (M7 x 87)	3
96	20184	PTFE	Back-up-Ring, Plunger Retainer	3
97	14190	NBR	O-Ring, Plunger Retainer - 70D	3
98	44069	SS	Gasket, Plunger Retainer	3
99	44068	SS	Retainer, Plunger (M7)	3
100	997701	AL	Retainer, Seal	3
101	999490	D	Adapter, 1/4"	3
102	999492	NY	Tubing, 1/4"	3
103	999491	PLM	Manifold (3"x1/4"NPT)	1

ITEM	PN	MATL	DESCRIPTION	QTY
104	701077	SS	Plug, Inlet Manifold (1/4"NPT)	1
105	33937	SS	Valve, Check (1/4"NPT)	2
106	76298	ST2	Seal, LPS, w/S-Spg	3
110	701719	SS	Manifold, Inlet, Flushed	1
113	34338	BB	Union (1/4"NPT)	1
114	34347	STZP	Bracket	1
115	990776	STZP R	Screw, HHC (1/4"-20 x 1/2")	2
117	701693	S	Screw, HSH (M12x80)	4
125	76832	ST4	Seal, HPS w/S	3
143	14200	NBR	O-Ring, Valve Adapter, Rear - 70D	6
144	28243	PTFE	Back-up-Ring, Valve Adapter	6
150	701675	SS	Adapter, valve	6
154	11379	NBR	O-Ring, Valve Adapter, Front - 70D	6
155	14520	NBR	O-Ring, High Pressure Seal Spacer	6
157	701692	SS	Spacer, High Pressure Seal	3
162	21985	PTFE	Back-up-Ring, Seat	6
163	26089	NBR	O-Ring, Seat - 80D	6
164	44080	SS	Seat	6
166	44081	SS	Valve	6
167	44082	SS	Spring	6
168	44735	PVDF	Retainer, Spring	6
170	44794	SS	Washer, Spring Retainer	6
172	700008	NBR	O-Ring, Valve Plug	3
174	701694	SS	Plug, Valve	3
185	701662	SS	Manifold, Valve, Block-Style	1
188	89628	S	Screw, HSH (M12x65)	8
250	26516	STC P	Protector, Shaft	1
260	30614	STZP R	Mount, Rail Assembly	1
290	6124	—	Gasket, Liquid (3 oz.)	1
299	—	SS	Head, Complete	1
300	76604	NBR*	Kit, Seal (Incls: 96,97,106,125,143,144,154,155)	1
310	701732	NBR	Kit, Valve Preassembled (Incls: 143,144, 154,155,162-164,166-168,170,172)	2
	6100	—	Oil, Bottle (21 oz.) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	4
	6119	—	Lubricant, Antiseize (2 oz.)	1

*Review individual parts in each kit for material code identification. Italics are optional items. R Components comply with RoHS Directive.

See Tech Bulletins 002, 003, 024, 036, 074, 083, 095, 118 and 126

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BB=Brass CC=Ceramic CM=ChromeMoly D=Acetal

FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N) NY=Nylon PLM=Unspecified Poly PTFE=Pure Polytetrafluoroethylene

PVDF=Polyvinylidene Fluoride PE=Polyethylene RBR=Rubber S=304SS SS=316SS SSHS=316SS/High Strength STCP=Steel/Chrome Plated

ST2=Special PTFE 2 ST4=Special PTFE 4 STL=Steel STZP=Steel/Zinc Plated TNM=Special High Strength

CAUTIONS AND WARNINGS

All High-Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



CAT PUMPS

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