

MODEL 6821KM.CO₂



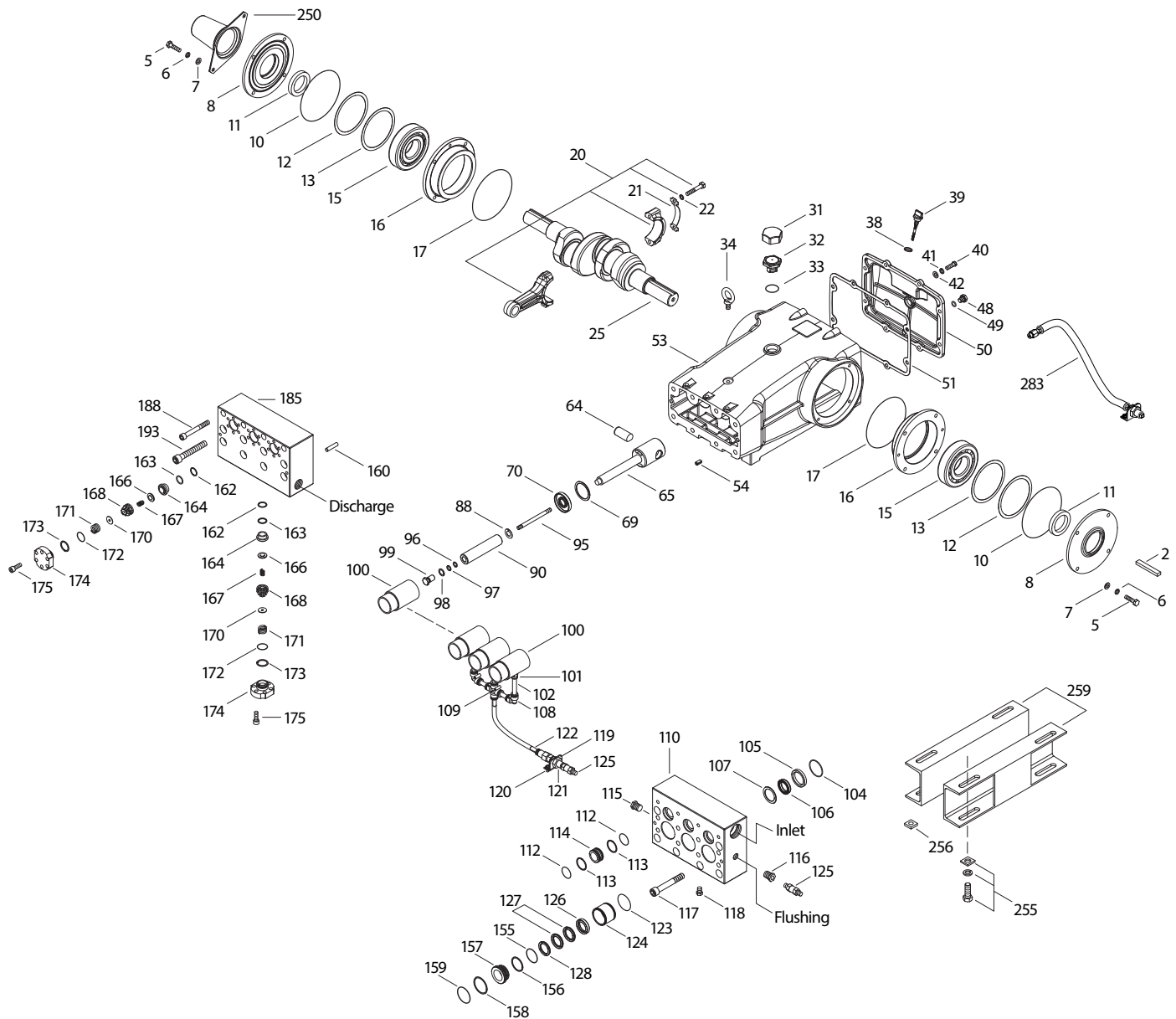
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	16.0 gpm	60.6 lpm
Pressure Range	400–3000 psi	27.60–207 bar
Maximum Pump RPM*	450	450
Inlet Pressure Range**	300–800 psi	21–55 bar
Min. Liquid Temperature	-20° F	-29° C
Bore	1.260"	32 mm
Stroke	2.579"	65.5 mm
Crankcase Capacity	10 qts	9.46 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1 ½" NPT(F)	1 ½" NPT(F)
Flush Ports (2)	½" NPT(F)	½" NPT(F)
Discharge Ports (2)	1" NPT(F)	1" NPT(F)
Shaft Diameter	1.772"	45 mm
Weight	355 lbs	161 kg
Dimensions	29.5 x 24.3 x 12.0"	750 x 618 x 305 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)

February 2021

PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY
2	43048	STL	Key (M14 x 9 x 90)	1
5	89728	S	Screw, HH (M10 x 40) (See Tech Bulletin 074)	8
6	15847	S	Lockwasher (M10)	8
7	19934	S	Washer, Flat (M10)	8
8	29443	AL	Cover, Bearing, Outer (See Tech Bulletin 118)	2
10	29444	NBR	O-Ring, Bearing Cover-70D	2
11	11443	NBR	Seal, Oil, Crankshaft-70D	2
12	126594	STCP R	Washer, Shim (M120 x 0.3)	0-2
13	126595	STCP R	Washer, Shim (M120 x 0.5)	0-2
15	29441	STL	Bearing, Roller	2
16	29442	STL	Cover, Bearing, Inner	2
17	29444	NBR	O-Ring, Bearing Cover-70D	2
20	766612	BBHS	Assembly, Connecting Rod (Includes: 21, 22) (See Tech Bulletin 074)	3
21	126560	STCP R	Washer, Locking	3
22	126593	STCP R	Washer, Shim (M10.5 x 1.5)	6
25	29440	FCM	Crankshaft, Dual Shaft	1
31	828710	PE	Protector, Oil Cap with Foam Gasket	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Filler Cap-70D	1
34	126743	STCP R	Bolt, Eye (M12) (For Lifting Pump Only)	1
38	129343	RBR	Gasket, Flat Flex	1
39	27769	ABS	Stick, Dip	1
40	89627	S	Screw, HH (M10 x 30) (See Tech Bulletin 074)	8
41	15847	S	Lockwasher (M10)	8
42	19934	S	Washer, Flat (M10)	8
48	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR	O-Ring, Drain Plug-70D	1
50	29438	AL	Cover, Rear Outer (See Tech Bulletin 118)	1
51	129386	NBR	Gasket, Rear Cover	1
53	45303	AL	Crankcase (Includes: 34, 54) Outer (See Tech Bulletin 118)	1
54	43282	S	Pin, Guide	2
64	769481	CM	Pin, Crosshead	3
65	768735	SSZZ	Rod, Plunger	3
69	126588	STCP R	Washer, Oil Seal	3
70	29454	NBR	Seal, Oil Crankcase-80D	3
88	45676	S	Washer, Keyhole (M16)	3
90	43957	CC	Plunger (M32 x 145)	3
95	89778	SS	Stud, Plunger Retainer (M10 x 135)	3
96	20189	PTFE	Backup Ring, Plunger Retainer	3
97	11345	NBR	O-Ring, Plunger Retainer-70D	3
98	44085	SS	Gasket, Plunger Retainer	3
99	44084	SS	Retainer, Plunger (M10) (See Tech Bulletin 074)	3
100	703222	D	Retainer, Seal	3
101	703146	BBNP	Adapter, Tubing [3/8" NPT(M) x 12MM]	3
102	703142	NY	Tubing (12MM)	6
103	998550	NY	Nipple [1/2" NPT(M) x 1/4" NPT(M)]	1
104	43875	NBR	O-Ring, Adapter, Inlet-70D	3
105	45562	SS	Adapter, Inlet, LPS	3
106	76298	ST2	Seal, LPS, with SS-Spring	3
107	44101	SS	Washer, LPS	3
108	703145	D	Elbow (12MM)	2
109	703144	D	Cross, Barb (12MM)	1

ITEM	PN	MATL	DESCRIPTION	QTY
110	701322	SS	Manifold Inlet, Block-Style, Flushed	1
111	701116	SS	Plug, Inlet Manifold [1 1/2" NPT(M)]	1
112	701632	NBR	O-Ring, Spacer	6
113	701329	PTFE	Backup Ring, Spacer	6
114	701327	SS	Spacer, Inlet	3
115	45156	SS	Plug, Hex Head [1/2" NPT(M)]	1
116	998032	SS	Bushing [1/2" NPT(M) x 1/4" NPT(M)]	1
117	89694	S	Screw, HSH (M16 x 110) (See Tech Bulletin 074)	6
118	701077	SS	Plug [1/4" NPT(M)]	3
119	34347	STZP	Bracket	1
120	990776	STZP R	Screw, HHC (1/4" - 20 x 1/2")	2
121	34338	BB	Union, [1/4" NPT(M)]	1
122	703147	BBNP	Adapter, Tubing [1/2" NPT(F) x 12MM]	1
123	12391	NBR	O-Ring, V-Packing Cylinder-70D	3
124	701330	SS	Cylinder, V-Packing	3
125	33937	SS	Valve, Check [1/4" NPT(M)]	2
126	48390	D	Adapter, Female	3
127	76608	ST4	V-Packing	6
128	704477	SS	Adapter, Male	3
155	48861	NBR	O-Ring, V-Packing Spacer, Inner-90D	3
156	48371	D	Backup Ring, Spacer, Inner	3
157	45674	SS	Spacer, V-Packing	3
158	48362	D	Backup Ring, Spacer, Outer	3
159	48860	NBR	O-Ring, V-Packing Spacer, Outer-90D	3
160	44756	S	Pin, Guide	2
162	21985	PTFE	Backup 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, Retainer	6
171	44793	SS	Spring, Coil	6
172	15853	NBR	O-Ring, Valve Plug-70D	6
173	20224	PTFE	Backup Ring, Valve Plug	6
174	701260	SS	Plug, Valve	6
175	87951	S	Screw, HSH (M10 x 30) (See Tech Bulletin 074)	36
185	701320	SS	Manifold, Discharge, Block-Style	1
188	701279	S	Screw, HSH (M12 x 100), Lower (See Tech Bulletin 074)	4
193	89694	S	Screw, HSH (M16 x 110), Upper (See Tech Bulletin 074)	8
250	29445	AL	Protector, Shaft Outer (See Tech Bulletin 118)	1
255	33243	STZP	Kit, Mount (Included with Pump)	1
256	29649	STCP	Washer, Slant (M16) Use for Adjustment Between Rail and Mounting Base (Included with Pump)	4
259	126604	STCP R	Rail, Box (Included with Pump)	2
283	34314	—	Kit, Oil Drain (3/8" x 48")	1
290	6124	—	Gasket, Liquid (3 oz)	1
300	76330	NBR*	Kit, Seal (Includes: 97, 104, 106, 112, 113, 123, 127, 155, 156, 158, 159)	1
310	34151	NBR	Kit, Valve (Includes: 162, 163, 164, 166, 167, 168, 170, 172, 173)	2
—	6105	—	Oil, Twin Pack (Two 2.5 Gal) ISO-68 Hydraulic (Fill to Specified Crankcase Capacity Prior to Start-up)	1
—	6119	—	Lubricant, Antiseize (2 oz) Outer (See Tech Bulletin 118)	1

*Review individual parts in each kit for material code identification. *Italics are optional items.*

R Components comply with RoHS Directive. For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum BBHS=Brass/High Strength BBNP=Brass/Nickel Plated BB=Brass

CC=Ceramic CM=ChromeMoly D=Acetal FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N) NY=Nylon PE=Polyethylene

PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride RBR=Rubber S=304SS SS=316SS ST2=Special PTFE2

ST4=Special PTFE4 SSZZ=316SSZamak STCP=Steel/Chrome Plated STL=Steel STZP=Steel/Zinc Plated

⚠ 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/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/literature/cat-pumps-limited-warranty

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