

MODEL 6821KM.CO₂



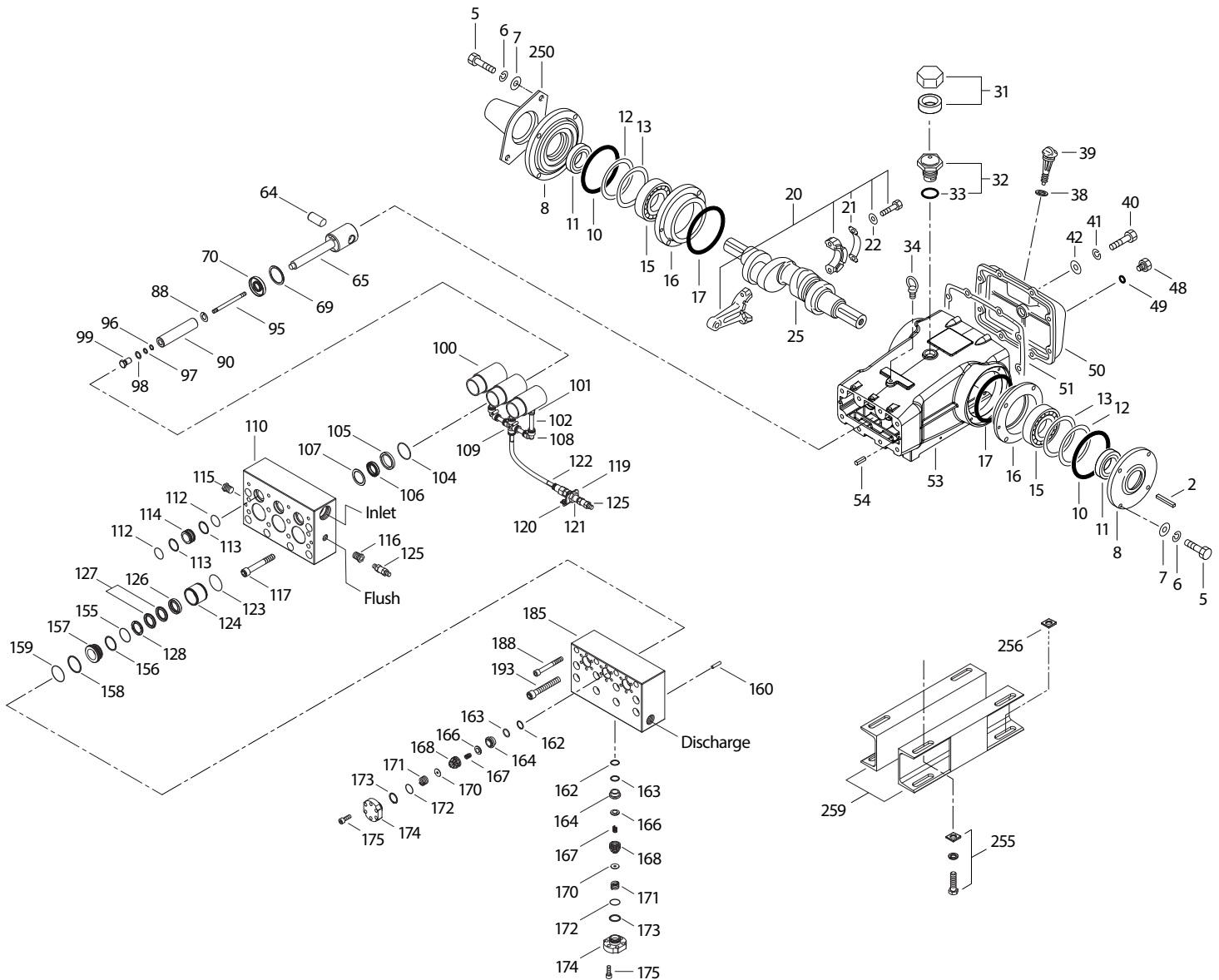
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	16.0 gpm	60.6 lpm
Pressure Range	400–3000 psi	27.6–207 bar
Pump RPM*	450	450
Inlet Pressure Range**	300–800 psi	21–55 bar
Min. Liquid Temperature	-20° F	-29° C
Bore	1.260"	32 mm
Stroke	2.579"	65.5 mm
Crankcase Capacity	10 qts	9.46 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1 1/2" NPT(F)	1 1/2" NPT(F)
Flush Ports (2)	1/2" NPT(F)	1/2" NPT(F)
Discharge Ports (2)	1" NPT(F)	1" NPT(F)
Shaft Diameter	1.772"	45 mm
Pulley Mounting	Either Side	Either Side
Weight	355 lbs	161 kg
Dimensions	29.68 x 23.98 x 11.97"	754 x 609 x 304 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)

April 2022

PARTS LIST

ITEM	PN	MATL DESCRIPTION	QTY	ITEM	PN	MATL DESCRIPTION	QTY
2	43048	STL Key (M14 x 9 x 90)	1	110	701322	SS Manifold Inlet, Block-Style, Flushed	1
5	89728	S Screw, HH (M10 x 40) (See Tech Bulletin 074)	8	111	701116	SS Plug, Inlet Manifold [1½" NPT(M)]	1
6	15847	S Lockwasher (M10)	8	112	701632	NBR O-Ring, Spacer	6
7	19934	S Washer, Flat (M10)	8	113	701329	PTFE Backup Ring, Spacer	6
8	29443	ALE Cover, Bearing, Outer (See Tech Bulletin 118)	2	114	701327	SS Spacer, Inlet	3
10	29444	NBR O-Ring, Bearing Cover-70D	2	115	45156	SS Plug, Hex Head [½" NPT(M)]	1
11	11443	NBR Seal, Oil, Crankshaft	2	116	998032	SS Bushing [½" NPT(M) x ¼" NPT(M)]	1
12	126594	STCP R Washer, Shim (M120 x 0.3)	0-2	117	89694	S Screw, HSH (M16 x 110) (See Tech Bulletin 074)	6
13	126595	STCP R Washer, Shim (M120 x 0.5)	0-2	119	34347	STZP Bracket	1
15	29441	STL Bearing, Roller	2	120	990776	STZP R Screw, HHC (¼" - 20 x ½")	2
16	29442	STL Cover, Bearing, Inner	2	121	34338	BB Union, [¼" NPT(M)]	1
17	29444	NBR O-Ring, Bearing Cover-70D	2	122	703147	BBNP Adapter, Tubing [½" NPT(F) x 12MM]	1
20	766612	BBHS Assembly, Connecting Rod (Includes: 21, 22) (See Tech Bulletin 074)	3	123	12391	NBR O-Ring, V-Packing Cylinder-70D	3
21	126560	STCP R Washer, Locking	3	124	701330	SS Cylinder, V-Packing	3
22	126593	STCP R Washer, Shim (M10.5 x 1.5)	6	125	33937	SS Valve, Check [¼" NPT(M)]	2
25	29440	FCM Crankshaft, Dual Shaft (M65.5)	1	126	48390	D Adapter, Female	3
31	828710	PE Protector, Oil Cap with Foam Gasket	1	127	76608	ST4 V-Packing	6
32	43211	ABS Cap, Oil Filler	1	128	704477	SS Adapter, Male	3
33	14177	NBR O-Ring, Filler Cap-70D	1	155	48861	NBR O-Ring, V-Packing Spacer, Inner-90D	3
34	126743	STCP R Bolt, Eye (M12) (For Lifting Pump Only)	1	156	48371	D Backup Ring, Spacer, Inner	3
38	129343	RBR Gasket, Flat Flex	1	157	45674	SS Spacer, V-Packing	3
39	27769	ABS Stick, Dip	1	158	48362	D Backup Ring, Spacer, Outer	3
40	89627	S Screw, HH (M10 x 30) (See Tech Bulletin 074)	8	159	48860	NBR O-Ring, V-Packing Spacer, Outer-90D	3
41	15847	S Lockwasher (M10)	8	160	44756	S Pin, Guide	2
42	19934	S Washer, Flat (M10)	8	162	21985	PTFE Backup Ring, Seat	6
48	25625	STCP Plug, Drain (¼" x 19 BSP)	1	163	26089	NBR O-Ring, Seat-80D	6
49	23170	NBR O-Ring, Drain Plug-70D	1	164	44080	SS Seat	6
50	29438	ALE Cover, Rear Outer (See Tech Bulletin 118)	1	166	44081	SS Valve	6
51	129386	NBR Gasket, Rear Cover	1	167	44082	SS Spring	6
53	133667	ALE Crankcase (Includes: 34, 54) Outer (See Tech Bulletin 118)	1	168	44735	PVDF Retainer, Spring	6
54	43282	S Pin, Guide	2	170	44794	SS Washer, Retainer	6
64	769481	CM Pin, Crosshead	3	171	44793	SS Spring, Coil	6
65	768735	SSZZ Rod, Plunger	3	172	15853	NBR O-Ring, Valve Plug-70D	6
69	126588	STCP R Washer, Oil Seal	3	173	20224	PTFE Backup Ring, Valve Plug	6
70	29454	NBR Seal, Oil Crankcase	3	174	701260	SS Plug, Valve	6
88	45676	S Washer, Keyhole (M16)	3	175	87951	S Screw, HSH (M10 x 30) (See Tech Bulletin 074)	36
90	43957	CC Plunger (M32 x 145)	3	185	701320	SS Manifold, Discharge, Block-Style	1
95	89778	SS Stud, Plunger Retainer (M10 x 135)	3	188	701279	S Screw, HSH (M12 x 100), Lower (See Tech Bulletin 074)	4
96	20189	PTFE Backup Ring, Plunger Retainer	3	193	89694	S Screw, HSH (M16 x 110), Upper (See Tech Bulletin 074)	8
97	11345	NBR O-Ring, Plunger Retainer-70D	3	250	29445	AL Protector, Shaft Outer (See Tech Bulletin 118)	1
98	44085	SS Gasket, Plunger Retainer	3	255	33243	STZP Direct, Mount (Included with Pump)	1
99	44084	SS Retainer, Plunger (M10) (See Tech Bulletin 074)	3	256	29649	STCP Washer, Slant (M16) (To Shim and Align Mounting Bolt [Not Included] Through the Box Rail and Mounting Base)	4
100	703222	D Retainer, Seal	3	259	126604	STCP R Rail, Box (Included with Pump)	2
101	703146	BBNP Adapter, Tubing [¾" NPT(M) x 12MM]	3	283	34314	— Kit, Oil Drain (¾" x 48") (Not Shown)	1
102	703142	NY Tubing (12MM)	6	290	6124	— Gasket, Liquid (3 oz)	1
103	998550	NY Nipple [½" NPT(M) x ¼" NPT(M)]	1	300	76330	NBR* Kit, Seal (Includes: 97, 104, 106, 112, 113, 123, 127, 155, 156, 158, 159)	1
104	43875	NBR O-Ring, Adapter, Inlet-70D	3	310	34151	NBR Kit, Valve (Includes: 162, 163, 164, 166, 167, 168, 170, 172, 173)	2
105	45562	SS Adapter, Inlet, Low-Pressure	3	—	6102	— Oil, (2.5 gal) ISO-68 Hydraulic (Fill to Specified Crankcase Capacity Prior to Start-up)	1
106	76298	ST2 Seal, Low-Pressure, with SS-Spring	3	—	6139	— Lubricant, Antiseize (8 oz) Outer (See Tech Bulletin 118)	1
107	44101	SS Washer, Low-Pressure	3				
108	703145	D Elbow (12MM)	2				
109	703144	D Cross, Barb (12MM)	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 ALE=Aluminum Epoxy 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 online at www.catpumps.com/literature/cat-pumps-limited-warranty