

MODEL 3801KMHS.CO2



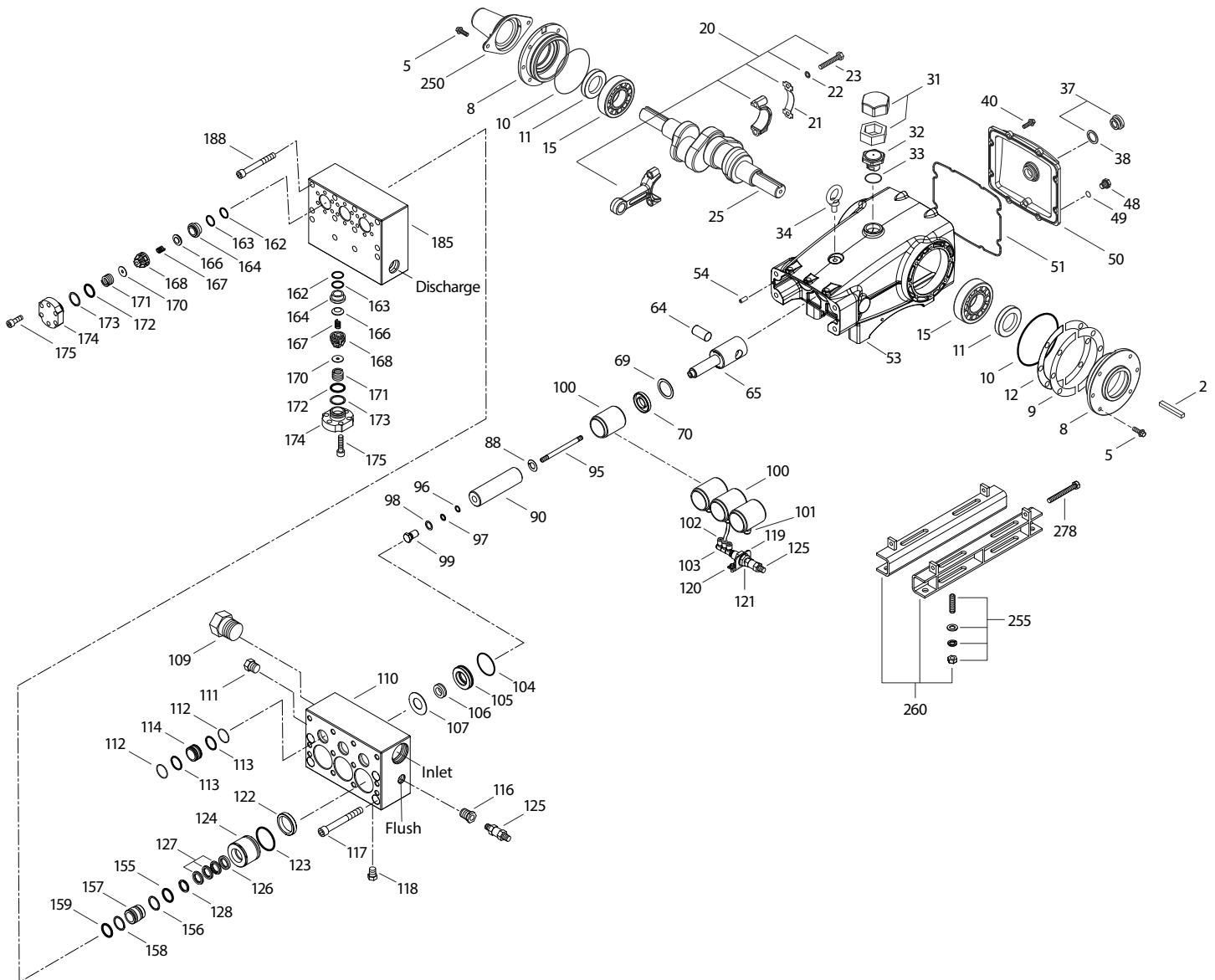
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	3.5 gpm	13.2 lpm
Pressure Range	100–5000 psi	7–345 bar
Pump RPM*	450	450
Inlet Pressure Range**	300–800 psi	21–55 bar
Min. Liquid Temperature**	-20° F	-29° C
Bore	0.787"	20 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts	4 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1½" NPT(F)	1½" NPT(F)
Flush Ports (2)	½" NPT(F)	½" NPT(F)
Discharge Ports (2)	1" NPT(F)	1" NPT(F)
Shaft Diameter	1.378"	35 mm
Pulley Mounting	Either Side	Either Side
Weight	170 lbs	77 kg
Dimensions	24.72 x 18.11 x 9.37"	628 x 460 x 238 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)

November 2024

PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY
2	34021	STL	Key (M10 x 8 x 70)	1
5	96049	S	Screw, HH Sems (M10 x 25) (See Tech Bulletin 074)	8
8	134604	ALE	Covering, Bearing	2
9	815279	FBR	Shim, Split 2-Piece	0-2
10	12398	NBR	O-Ring, Bearing Cover-70D	2
11	13296	NBR	Seal, Oil, Crankshaft	2
12	855049	S	Shim, Split 2-Piece	0-2
15	29326	STL	Bearing, Roller	2
20	76164	BZ	Assembly, Connecting Rod (Includes: 21, 22, 23) (See Tech Bulletin 074)	3
21	126749	STCP R	Washer, Locking (M10)	3
22	126593	STCP R	Shim, Washer (M10.5 x 1.5)	6
23	122045	STZP	Screw, HH (M10 x 55)	6
25	29325	FCM	Crankshaft, Dual-End (M48)	1
31	828710	PE	Protector, Oil Cap with Polyurethane Gasket	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Oil Filler Cap-70D	1
34	126743	STCP R	Bolt, Eye (M12 x 1.75) (For Lifting Pump Only)	1
37	92241	PC	Gauge, Oil, Bubble with Gasket (See Tech Bulletin 074)	1
38	44428	NBR	Gasket, Flat, Oil Gauge	1
40	125753	S	Screw, HH Sems (M8 x 25) (See Tech Bulletin 074)	8
48	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR	O-Ring, Drain Plug-70D	1
50	45936	ALE	Cover, Rear	1
51	16612	NBR	O-Ring, Rear Cover-70D	1
53	134784	ALE	Crankcase Assembly (Includes: 54)	1
54	27488	S	Pin, Guide	2
64	763864	CM	Pin, Crosshead	3
65	76725	SSHB	Rod, Plunger	3
69	126587	STCP R	Washer, Oil Seal	3
70	100488	NBR S	Seal, Oil, Crankcase	3
88	45675	S	Washer, Keyhole	3
90	43945	CC	Plunger (M20 x 145)	3
95	89779	S	Stud, Plunger Retainer (M7 x 123)	3
96	20184	PTFE	Backup 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) (See Tech Bulletin 074)	3
100	999324	AL	Retainer, Seal	3
101	999490	D	Adapter, 1/4"	3
102	999492	NY	Tubing, 1/4"	3
103	999491	PLM	Manifold (3" x 1/4" NPT[M])	1
104	43875	NBR	O-Ring, Inlet Adapter-70D	3
105	701344	SS	Adapter, Inlet	3
106	701974	SFTB	Seal, Low-Pressure, NIH-Spring	3
107	44074	SS	Washer, Low-Pressure Seal	3
109	701116	SS	Plug (1 1/2" NPT[M])	1
110	701408	SS	Manifold, Inlet, Block-Style Flushed	1
111	45156	SS	Plug (1/2" NPT[M])	1

ITEM	PN	MATL	DESCRIPTION	QTY
112	701794	NBR	O-Ring, Inlet Spacer-70D	6
113	701319	PTFE	Backup Ring, Inlet Spacer	6
114	701317	SS	Spacer, Inlet	3
116	998032	SS	Bushing (1/2" NPT[M] x 1/4" NPT[F])	1
117	701252	SS	Screw, HSH (M14 x 100)	4
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	701367	SS	Spacer, Cylinder	3
123	12391	NBR	O-Ring, V-Packing Cylinder-70D	3
124	701336	SS	Cylinder, V-Packing	3
125	33937	SS	Valve, Check (1/4" NPT[M])	2
126	44164	SS	Adapter, Female	3
127	44607	STG	V-Packing	9
128	44165	SS	Adapter, Male	3
155	17622	NBR	O-Ring, V-Packing Spacer-85D	3
156	28675	PTFE	Backup Ring, V-Packing Spacer	3
157	701352	SS	Spacer, V-Packing	3
158	28675	PTFE	Backup Ring, V-Packing Spacer	3
159	17622	NBR	O-Ring, V-Packing Spacer-85D	3
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, Spring	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 (See Tech Bulletin 074)	6
175	87951	S	Screw, HSH, Valve Plug (M10 x 30) (See Tech Bulletin 074)	36
185	701314	SS	Manifold, Discharge, Block-Style	1
188	701279	S	Screw, HSH (M12 x 100) (See Tech Bulletin 074)	12
250	855042	POP	Protector, Shaft	1
255	34039	S	Mount, Direct	1
260	76514	S	Mount, Rail Assembly	1
278	80540	STZP	Screw, HH (M12 x 100) (Rail Adjusting Screw)	2
290	6124	—	Gasket, Liquid (3 oz)	1
299	901389	SS	Head, Complete	1
300	76786	NBR*	Kit, Seal (Includes: 97, 104, 106, 112, 113, 123, 127, 155, 156, 158, 159)	1
310	34151	NBR	Kit, Valve Preassembled (Includes: 162-164, 166-168, 170-173)	2
—	6100	—	Oil, Case (12 - 21 oz Bottles) (Fill to Specified Crankcase Capacity Prior to Start-up)	1
—	6139	—	Lubricant, Anti-Sieze (8 oz)	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 ALE=Aluminum Epoxy BB=Brass BZ=Bronze CC=Ceramic CM=ChromeMoly

D=Acetal FBR=Fiber FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N) NBR S=Buna Silicone Free NY=Nylon PC=Poly Carbonate

PE=Polyethylene PLM=Unspecified Poly POP=Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride

S=304SS SFTB=Special Blend PTFE Black SS=316SS SSHB= 316SS/High Strength Brass STG=Special Blend PTFE White

STCP=Steel/Chrome Plated STL=Steel STZP=Steel/Zinc Plated

⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (e.g. regulator, unloader) and a secondary pressure relief device (e.g. 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