

MODEL 3521CM.CO₂



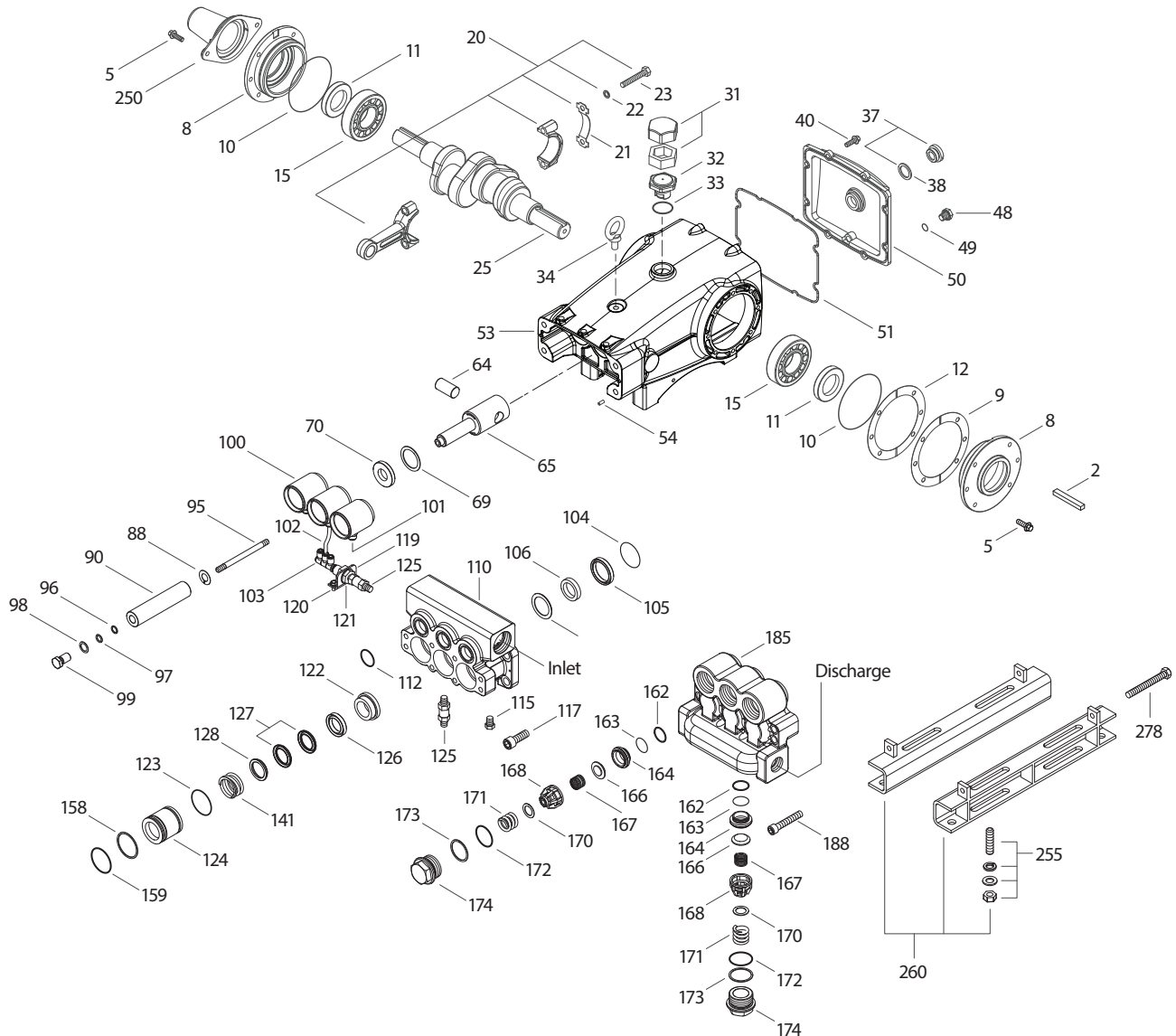
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	11.4 gpm	43.1 lpm
Pressure Range	400 – 2000 psi	27.5 – 138 bar
Pump RPM*	450	450
Inlet Pressure Range**	300 – 400 psi	21 – 27.5 bar
Min. Liquid Temperature	-20° F	-29° C
Bore	1.260"	32 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts.	4 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1 1/2" NPT(F)	1 1/2" NPT(F)
Flush Ports (2)	1/4" NPT(F)	1/4" NPT(F)
Discharge Ports (2)	1" NPT(F)	1" NPT(F)
Shaft Diameter	1.378"	35 mm
Pulley Mounting	Either Side	Either Side
Weight	139 lbs.	63 kg
Dimensions	24.33 x 18.11 x 9.72"	618 x 460 x 247 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)

July 2020

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, 125)	8
8	134604	ALE	Covering, Bearing (See Tech Bulletin 118, 125)	2
9	815279	FBR	Shim, Split 2-Piece (See Tech Bulletin 125)	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	761467	TNM	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 (¼" x 19BSP)	1
49	23170	NBR	O-Ring, Drain Plug – 70D	1
50	45936	ALE	Cover, Rear (See Tech Bulletin 118)	1
51	16612	NBR	O-Ring, Rear Cover – 70D	1
53	134784	ALE	Crankcase Assembly (Includes: 34, 54) (See Tech Bulletin 118, 125)	1
54	27488	S	Pin, Guide	2
64	763864	CM	Pin, Crosshead (with flats)	3
65	765116	SSZZ	Rod, Plunger	3
69	126587	STCP R	Washer, Oil Seal	3
70	100488	NBR S	Seal, Oil, Crankcase	3
88	45676	S	Washer, Keyhole	3
90	43957	CC	Plunger (M32 x 145)	3
95	89778	SS	Stud, Plunger Retainer (M10 x 135)	3
96	20189	PTFE	Back-up Ring, Plunger Retainer	3
97	11345	NBR	O-Ring, Plunger Retainer	3
98	44085	SS	Gasket, Plunger Retainer	3
99	44084	SS	Retainer, Plunger (M10) (See Tech Bulletin 074)	3
100	999324	AL	Retainer, Seal	3
101	999490	D	Adapter ¼"	3
102	999492	NY	Tubing ¼"	3
103	999491	PLM	Manifold [3" x ¼" NPT(M)]	1

ITEM	PN	MATL	DESCRIPTION	QTY
104	43875	NBR	O-Ring, Inlet Adapter – 70D	3
105	45562	SS	Adapter, Inlet	3
106	702285	TFDA	Seal, LPS, with SS–Spring	3
107	44101	SS	Washer	3
110	125397	SS	Manifold, Inlet, Flushed	1
112	11379	NBR	O-Ring, Inlet Manifold	3
115	22177	BBCP	Plug, HH [¼" NPT(M)]	1
117	44585	S	Screw, HSH (M14 x 40) (See Tech Bulletin 074)	4
119	34347	STZP	Bracket	1
120	990776	STZP R	Screw, HHC (¼" - 20 x ½")	2
122	49782	SS	Spacer (See Tech Bulletin 114)	3
123	12391	NBR	O-Ring, V-Packing Cylinder	3
124	49783	SS	Cylinder, V-Packing (See Tech Bulletin 114)	3
125	33937	SS	Valve, Check [¼" NPT(M)]	2
126	48390	D	Adapter, Female	3
127	44608	STG	V-Packing	6
128	45565	SS	Adapter, Male	3
141	49743	SS	Spring, Large Coil (See Tech Bulletin 114)	3
158	48362	D	Back-up Ring, V-Packing Spacer	3
159	48860	NBR	O-Ring, V-Packing Spacer	3
162	48363	D	Back-up Ring, Seat	6
163	26142	NBR	O-Ring, Seat	6
164	44612	SS	Seat	6
166	44108	SS	Valve	6
167	44109	SS	Spring	6
168	44728	PVDF	Retainer, Spring	6
170	44729	SS	Washer, Spring	6
171	44644	SS	Spring, Coil	6
172	89827	NBR	O-Ring, Valve Plug	6
173	48364	D	Back-up Ring, Valve Plug	6
174	49300	SSD	Plug, Valve (See Tech Bulletin 074)	6
185	49299	SSD	Manifold, Discharge	1
188	89981	S	Screw, HSH (M12 x 70) (See Tech Bulletin 074)	8
250	855042	NY	Protector, Shaft (See Tech Bulletin 125)	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
300	76114	NBR*	Kit, Seal (Includes: 97, 104, 106, 112, 123, 127, 158, 159)	1
310	34017	NBR	Kit, Valve Preassembled (Includes: 162–164, 166–168, 170, 172, 173)	2
—	6100	—	Oil, Case [(12) 21 oz. Bottles] ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	1

Italics are optional items. R Components comply with RoHS Directive.

For additional technical information see www.catpumps.com/literature/tech-bulletins. *Review individual parts in each kit for material identification

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum ALE=Aluminum Epoxy BBCP=Brass/Chrome-Plated

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 PLM=Unspecified Poly PTFE=Pure Polytetrafluoroethylene

PVDF=Polyvinylidene Fluoride PE=Polyethylene S=304SS SS=316SS SSD=Duplex Stainless Steel SSZZ=316SS/Zamak

STCP=Steel/Chrome Plated STG= Special Blend PTFE White STL=Steel STZP=Steel/Zinc Plated

TFDA=PTFE FDA 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/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