

MODEL 781KMCO2.0770



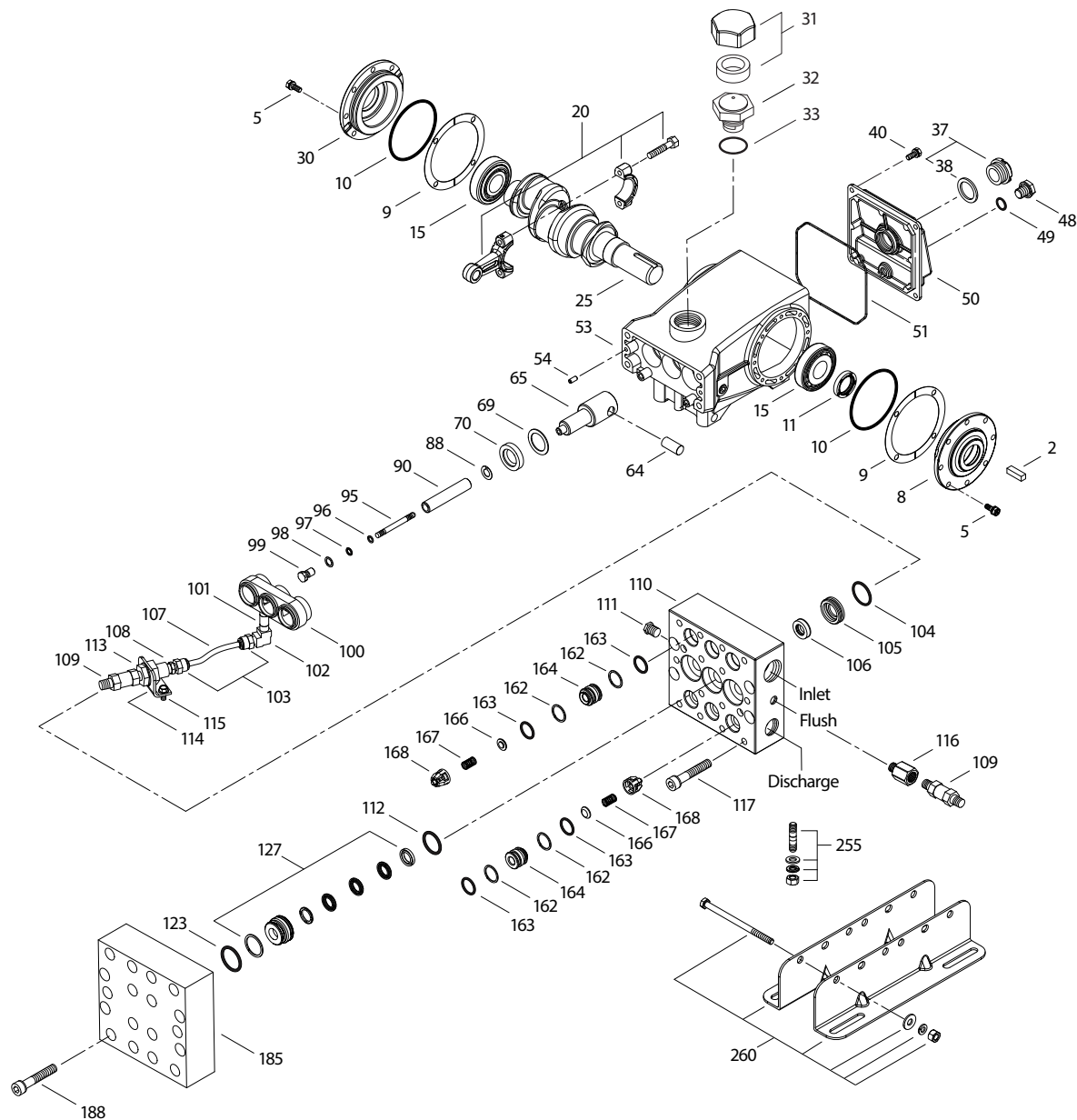
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	0.82 gpm	3.1 lpm
Pressure Range	100–5000 psi	6.9–345 bar
Pump RPM*	450 rpm	450 rpm
Inlet Pressure Range**	300–800 psi	21–55 bar
Minimum Liquid Temperature**	-20° F	-29° C
Bore	0.551"	14 mm
Stroke	0.945"	24 mm

SPECIFICATIONS	U.S. Measure	Metric Measure
Crankcase Capacity	25 oz	0.75 l
Inlet Ports (2)	½" NPT(F)	½" NPT(F)
Flush Ports (2)	⅛" NPT(F)	⅛" NPT(F)
Discharge Ports (2)	⅜" NPT(F)	⅜" NPT(F)
Shaft Diameter	0.945"	24 mm
Weight	48.1 lbs	21.8 kg
Dimensions	13.15 x 9.25 x 6.06"	334 x 235 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)

September 2024

PARTS LIST

ITEM	PN	MATL DESCRIPTION	QTY
2	30067	STL Key (M8 x 7.5 x 25)	1
5	92538	S Screw, HHC, Sems (M6 x 16) (See Tech Bulletin 074)	8
8	133571	ALE Cover, Bearing	1
9	815280	FBR Split Shim, 2-Piece	1-2
10	12393	NBR O-Ring, Bearing Cover	2
11	43222	NBR Seal, Oil, Crankshaft	1
15	43221	STL Bearing, Roller	2
20	768863	TNM Rod Assembly, Connecting (with POM Bushing)	3
25	119234	FCM Crankshaft, Single-End (M24 with 60 mm Extension)	1
30	133572	ALE Cover, Blind Bearing	1
31	828710	PE Protector, Oil Cap With Foam Gasket	1
32	44666	RTP Cap, Oil Filler, Domed	1
33	14177	NBR O-Ring, Filler Cap-70D	1
37	92241	PC Gauge, Oil, Bubble with Gasket-80D (See Tech Bulletin 074)	1
38	44428	NBR Gasket, Flat Flexible, Oil Gauge-80D	1
40	92538	S Screw, HHC, Sems (M6 x 16) (See Tech Bulletin 074)	4
48	25625	STCP Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR O-Ring, Drain Plug-70D	1
50	133569	ALE Cover, Rear	1
51	14047	NBR O-Ring, Rear Cover-70D	1
53	133593	ALE Crankcase with Guide Pins	1
54	27488	S Pin, Guide	2
64	763237	SS Pin, Crosshead	3
65	768913	AL Rod, Plunger, Short (with Set Screws)	3
69	126589	STCP R Washer, Oil Seal	3
70	43228	NBR Seal, Oil, Crankcase	3
88	45697	S Washer, Keyhole (M18 x M10)	3
90	45890	CC Plunger (M14 x 72)	3
95	89653	SS Stud, Plunger Retainer (M6 x 58)	3
96	43235	PTFE Backup Ring, Plunger Retainer	3
97	701715	FFKM O-Ring, Plunger Retainer-75D	3
98	44041	SS Gasket, Plunger Retainer	3
99	49665	SS Retainer, Plunger (M6) (See Tech Bulletin 074)	3
100	999703	AL Retainer, Seal, Vented	1
101	999701	BB Nipple (1/8" NPT[M] x 2")	1

ITEM	PN	MATL DESCRIPTION	QTY
102	999702	BB Elbow (1/8" NPT[M])	1
103	999490	D Adapter (1/4")	2
104	702774	FFKM O-Ring, Inlet Adapter-75D	3
105	701587	SS Adapter, Inlet	3
106	704649	ST4 Seal, Low-Pressure with NIH-Spring	3
107	999492	NY Tubing	1
108	34633	BB Bushing (1/4" NPT[M] x 1/8" NPT[F])	1
109	33937	SS Valve, Check (1/4" NPT[M])	2
110	49241	SS Manifold, Inlet/Discharge Block-Style (1/8" Flushed Port)	1
111	34507	BB Plug (1/8" NPT[F])	1
112	702496	FFKM O-Ring, V-Packing Cylinder-75D	3
113	34338	BB Union (1/4" NPT[M])	1
114	34347	STZP Bracket	1
115	990776	STZP R Screw, HHC (1/4"-20 x 1/2")	2
116	34148	BB Adapter (1/4" NPT[F] x 1/8" NPT[M])	1
117	87952	S Screw, HSH (M10 x 55) (See Tech Bulletin 074)	4
122	701598	PTFE Backup Ring, V-Packing Cylinder	3
123	702769	FFKM O-Ring, V-Packing Cylinder-75D	3
124	701589	SS Cylinder, V-Packing	3
127	701791	SFTA V-Packing Assembly	3
162	701599	PTFE Backup Ring, Seat	12
163	702495	FFKM O-Ring, Seat-75D	12
164	701591	SS Seat	6
166	701751	SS Valve	6
167	44056	SS Spring	6
168	44565	PVDF Retainer, Spring	6
185	49213	SS Manifold, Valve, Block-Style	1
188	87952	S Scw, HSH, (M10 x 55) (See Tech Bulletin 074)	14
255	30243	STZP Mount, Direct	1
260	30645	STZPR Rail, Assembly	1
	30611	STZPR Rail, Assembly	1
300	702843	FFKM* Kit, Seal (Includes: 96, 97, 104, 106, 112, 122, 123, 127)	1
310	702844	FFKM Kit, Valve (Includes: 162, 163, 164, 166, 167, 168)	2
	6107	Oil, Bottle (21 oz) (Fill to Specified Crankcase Capacity Prior to Start-up)	1-2
	6139	Lubricant, Antiseize (8 oz)	1

Italics are optional items. [] Date of latest production change.

R Components comply with RoHS Directive. *Review material codes for individual items (SFTA, ST4 may be used as alternate).

For additional technical information see www.catpumps.com/literature/tech-bulletins. MATERIAL CODES (Not Part of Part Number):

AL=Aluminum ALE=Aluminum Epoxy BB=Brass CC=Ceramic D=Acetal FBR=Fiber FCM=Forged Chrome-Moly

FFKM=Perfluoroelastomer NBR=Medium Nitrile (Buna-N) NY=Nylon PC=Poly Carbonate PE=Polyethylene

PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride RTP=Reinforced Composite S=304SS

SS=316SS ST4=Special PTFE4 SFTA=Special Blend PTFE-Tan STCP=Steel/Chrome Plated

STL=Steel STZP=Steel/Zinc Plated TNM=Special High Strength

⚠ 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