

MODEL 2831KM.CO2



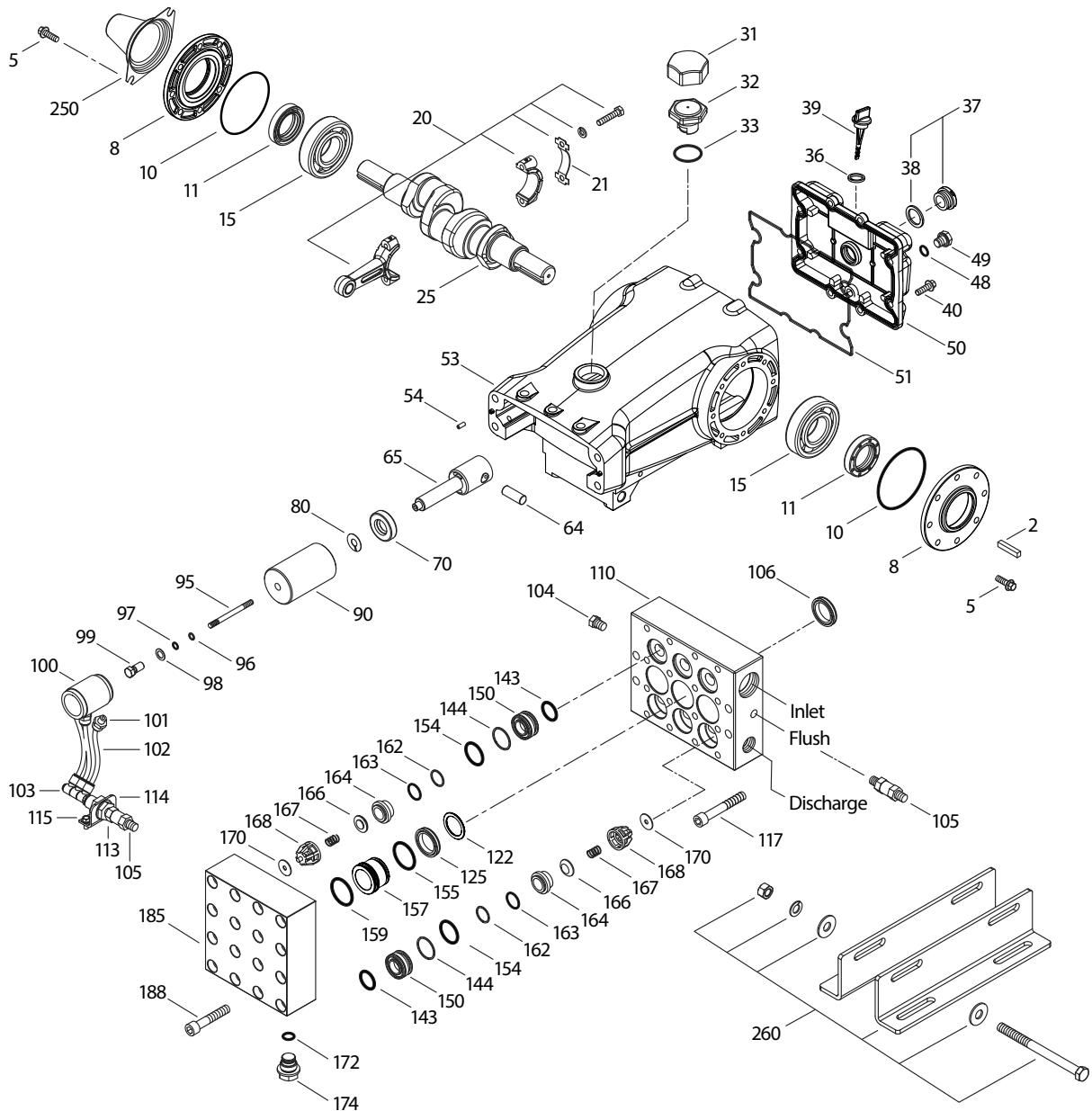
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	10.0 gpm	38 lpm
Pressure Range	218–1200 psi	15.0–83 bar
Pump RPM*	450 rpm	450 rpm
Inlet Pressure Range**	300–800 psi	21–55 bar
Min. Liquid Temperature**	-20° F	-29° C
Bore	1.260"	32 mm
Stroke	1.516"	38.5 mm
Crankcase Capacity	84 oz	2.5 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1¼" NPT(F)	1¼" NPT(F)
Flushing Ports (2)	¼" NPT(F)	¼" NPT(F)
Discharge Ports (2)	¾" NPT(F)	¾" NPT(F)
Shaft Diameter	1.181"	30 mm
Pulley Mounting	Either Side	Either Side
Weight	104 lbs	42.7 kg
Dimensions	18.98 x 15.04 x 8.03"	482 x 382 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)

April 2026

PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY
2	990036	STL	Key (M8 x 7 x 40)	1
5	125753	S	Screw, HHC Sems (M8 x 25) (See Tech Bulletin 074)	8
8	134966	ALE	Covering, Bearing	2
10	27772	NBR	O-Ring, Cover, Bearing	2
11	27771	NBR	Seal, Oil, Crankshaft	2
15	26512	STL R	Bearing, Ball	2
20	76755	TNM	Assembly, Connecting Rod (Includes: Locking Washer, Washer, Screws) (See Tech Bulletin 074)	3
21	126562	STCP R	Washer, Locking (M10)	3
25	49795	FCM	Crankshaft, Dual-End (M38.5)	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	1
36	129343	RBR	Gasket, Flat, Flexible	1
37	92241	PC	Gauge, Oil, Bubble with Gasket (See Tech Bulletin 074)	1
38	44428	NBR	Gasket, Flat, Flexible	1
39	27769	ABS	Dipstick (Blue)	1
40	125753	S	Screw, HHC 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	1
50	133582	ALE	Cover, Rear	1
51	27767	NBR	O-Ring, Rear Cover	1
53	133609	ALE	Assembly, Crankcase (Includes: 54)	1
54	27488	S	Pin, Guide	2
64	76758	CM	Pin, Crosshead	3
65	76756	SSHS	Rod, Plunger	3
70	27785	NBR	Seal, Oil, Crankcase	3
88	110670	S	Washer, Keyhole	3
90	45749	CC	Plunger (M32 x 93)	3
95	89835	SS	Stud, Plunger Retainer (M7 x 87)	3
96	20184	PTFE	Backup Ring, Plunger Retainer	3
97	14190	NBR	O-Ring, Plunger Retainer	3
98	44069	SS	Gasket, Plunger Retainer	3
99	44068	SS	Retainer, Plunger (M7) (See Tech Bulletin 074)	3
100	997701	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

ITEM	PN	MATL	DESCRIPTION	QTY
104	701077	SS	Plug, Inlet Manifold (1/4" NPT[M])	1
105	33937	SS	Valve, Check (1/4" NPT[M])	2
106	76298	ST2	Seal, Low-Pressure with S-Spring	3
110	701719	SS	Manifold, Inlet/Discharge with Flush Ports	1
113	34338	BB	Union (1/4"NPT)	1
114	34347	STZP	Bracket	1
115	990776	STZP R	Screw, HHC (1/4"-20 x 1/2")	2
117	701693	S	Screw, HSH (M12 x 80) (See Tech Bulletin 074)	4
122	702080	SS	Washer, Support	3
125	76832	ST4	Seal, High-Pressure with S	3
143	14200	NBR	O-Ring, Adapter, Valve, Rear	6
144	28243	PTFE	Backup Ring, Adapter, Valve	6
150	701675	SS	Adapter, valve	6
154	11379	NBR	O-Ring, Adapter, Valve, Front	6
155	14520	NBR	O-Ring, Seal Spacer	3
157	704608	SS	Spacer, High-Pressure	3
159	704749	NBR	O-Ring, Spacer	3
162	21985	PTFE	Backup Ring, Seat	6
163	26089	NBR	O-Ring, Seat	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 Retainer	6
172	700008	NBR	O-Ring, Valve Plug	3
174	701694	SS	Plug, Valve (See Tech Bulletin 074)	3
185	704607	SS	Manifold, Valve, Block-Style	1
188	89628	S	Screw, HSH (M12 x 65) (See Tech Bulletin 074)	8
250	26516	STCP	Protector, Shaft	1
260	30614	STZP R	Mount, Rail Assembly	1
290	6124	—	Gasket, Liquid (3 oz)	1
300	32554	NBR*	Kit, Seal (Includes: 96, 97, 106, 125, 143, 144, 154, 155, 159)	1
310	703162	NBR	Kit, Valve Preamsembled (Includes: 143, 144, 154, 155, 159, 162-164, 166-168, 170, 172)	1
	6100	—	Oil, Bottle (21 oz) (Fill to Specified Crankcase Capacity Prior to Start-up)	4
	6139	—	Lubricant, Antiseize (8 oz) (See Tech Bulletin 095)	1

Note: Prior to 10/2025 use 76604 Seal Kit and 701732 Valve Kit

*Review material code for individual items (ST2, ST4 may be used as an alternative) *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 CC=Ceramic CM=ChromeMoly
 D=Acetal FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N) NY=Nylon PC=Poly Carbonate PE=Polyethylene PLM=Unspecified Poly
 PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride RBR=Rubber S=304SS SS=316SS SSHS=316SS/High Strength
 STCP=Steel/Chrome Plated ST2=Special PTFE 2 ST4=Special PTFE 4 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