

MODEL 310.CO₂



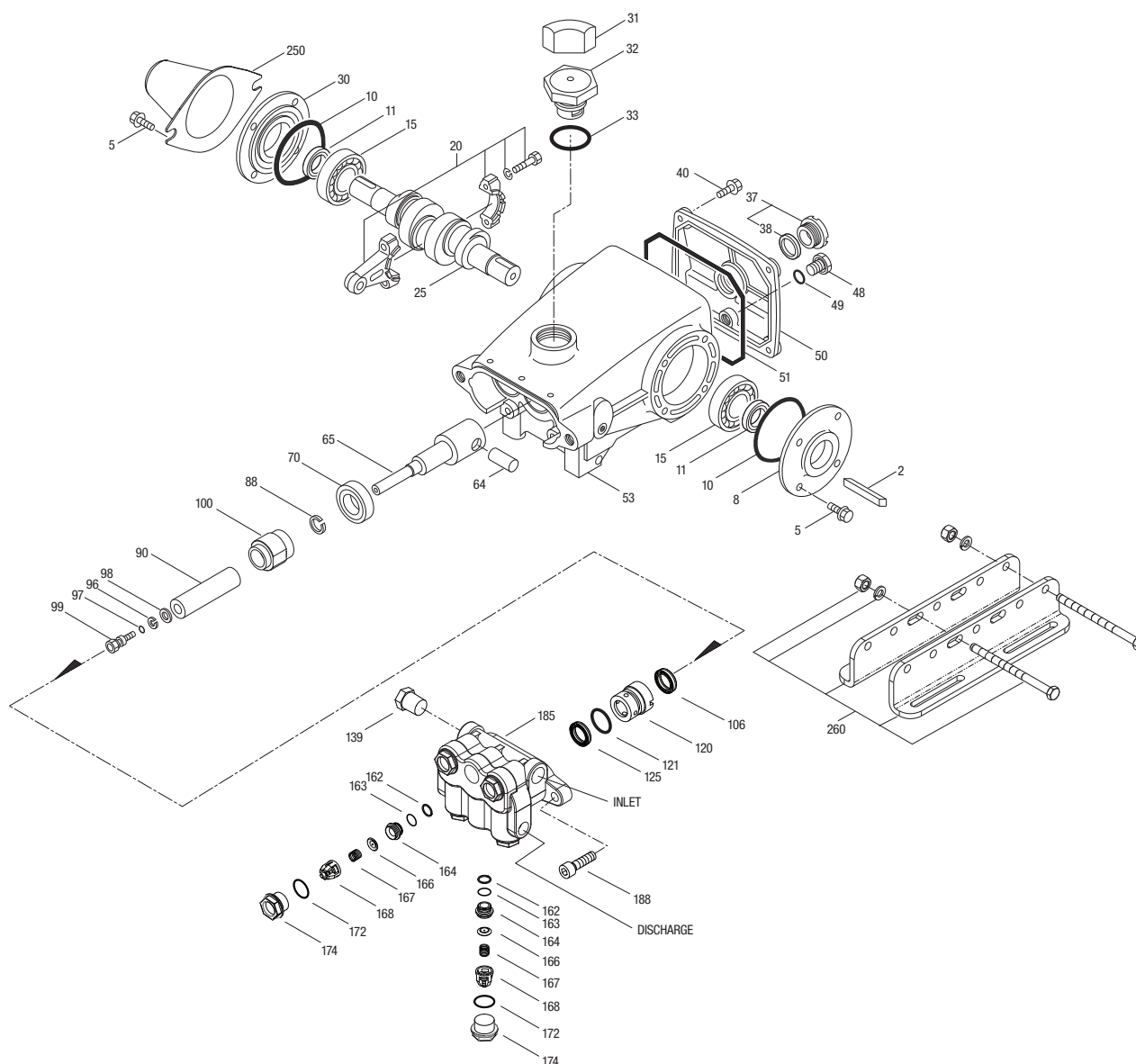
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	1.75 gpm	6.62 lpm
Pressure Range	400 – 2200 psi	28 – 152 bar
Pump RPM*	450	450
Inlet Pressure Range**	300 – 400 psi	21 – 27.5 bar
Min. Liquid Temperature	–20° F	–29° C
Bore	0.787"	20 mm
Stroke	0.709"	18 mm
Crankcase Capacity	18 oz.	.055 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1/2" NPT(F)	1/2" NPT(F)
Discharge Ports (2)	3/8" NPT(F)	3/8" NPT(F)
Shaft Diameter	0.787"	20 mm
Pulley Mounting	Either Side	Either Side
Weight	19.8 lbs.	9 kg
Dimensions	11.73 x 10.0 x 5.24"	298 x 254 x 133 mm

* Pump minimum is 100 RPM

** Temperature and pressure must be maintained to keep incoming CO₂ in a liquid state.

EXPLODED VIEW



PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY	ITEM	PN	MATL	DESCRIPTION	QTY
2	30057	STL	Key (M6 x 6 x 25) (See Tech Bulletin 074)	1	98	45891	CU	Gasket, Plunger Retainer	3
5	125824	STCP R	Screw, HHC Sems (M6 x 16)	8	99	104360	S	Retainer, Plunger w/stud (See Tech Bulletin 074)	3
8	43344	AL	Covering, Bearing	2	100	701765	SS	Retainer, Seal	3
10	43343	NBR	O-Ring, Bearing Cover – 70D	2	106	701763	SFTA	Seal, LPS w/NIH-Spring	3
11	43222	NBR	Seal, Oil, Crankshaft	2	120	45679	BB	Case, Seal	3
15	14480	STL	Bearing, Ball	2	121	14200	NBR	O-Ring, Seal Case – 70D	3
20	45883	HS	Rod, Connecting Assembly (See Tech Bulletin 074)	3	125	701764	SFTA	Seal, HPS w/NIH-Spring	3
25	43342	FCM	Crankshaft, Dual End (M18)	1	139	22179	BBCP	Plug, Inlet (1/2" NPT(M))	1
31	828710	PE	Protector, Oil Cap w/Polyurethane Gasket	1	162	48361	D	Back-up Ring, Seat	6
32	43211	ABS	Cap, Oil Filler	1	163	43358	NBR	O-Ring, Seat – 70D	6
33	14177	NBR	O-Ring, Oil Filler Cap – 70D	1	164	43725	S	Seat	6
37	92241	PC	Gauge, Oil, Bubble w/Gasket (See Tech Bulletin 074)	1	166	43723	S	Valve	6
38	44428	NBR	Gasket, Flat, Oil Gauge	1	167	43750	S	Spring	6
40	126541	STCP R	Screw, HHC Sems (M6 x 20) (See Tech Bulletin 074)	4	168	44565	PVDF	Retainer, Spring	6
48	25625	STCP	Plug, Drain (1/4" x 19BSP)	1	172	17615	NBR	O-Ring, Valve Plug – 75D	6
49	23170	NBR	O-Ring, Drain Plug – 70D	1	174	43849	BBCP	Plug, Valve (See Tech Bulletin 074)	6
50	48772	AL	Cover, Rear (See Tech Bulletin 090)	1	185	44837	BBCP	Head, Manifold	1
51	48773	NBR	O-Ring, Rear Cover – 70D (See Tech Bulletin 090)	1	188	126520	STCP R	Screw, HSH Sems (M10 x 35) (See Tech Bulletin 074)	2
53	48769	AL	Crankcase (See Tech Bulletin 090)	1	250	118672	STCP	Protector, Shaft	1
64	43351	CM	Pin, Crosshead	3	255	30243	STZP	Mount, Direct (See Tech Bulletin 074)	1
65	43365	ZZCP	Rod, Plunger	3	260	30611	STZP R	Mount, Rail Assembly	1
70	43228	NBR	Seal, Oil, Crankcase	3	275	30944	STL	Hub, "B" (35mm w/keyway)	1
88	45697	S	Washer, Keyhole (M18 x 10)	3	299	810027.C02	BBCP	Head, Complete w/Seals and O-Rings	1
90	43367	CC	Plunger (M20 x 72)	3	300	76152	NBR *	Kit, Seal (Includes: 97, 106, 121, 125)	1
96	43235	PTFE	Back-up-Ring, Plunger Retainer	3	310	30821	NBR	Kit, Valve Preassembled (Includes: 162-164, 166-168, 172)	2
97	17399	NBR	O-Ring, Plunger Retainer – 80D	3	—	6107	—	Oil, Bottle (21 oz.) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	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 BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=ChromeMoly CU=Copper D=Acetal
FCM=Forged Chrome-Moly HS=High Strength NBR=Medium Nitrile (Buna-N) NIH=High Nickel Alloy PC=Poly Carbonate PE=Polyethylene PTFE=Pure Polytetrafluoroethylene
PVDF=Polyvinylidene Fluoride S=304SS SS=316SS SFTA=Special Blend PTFE TAN STCP=Steel/Chrome Plated STL=Steel
STZP=Steel/Zinc Plated ZZCP=Chrome Plated/Steel-Zamak

⚠ 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/warranty.