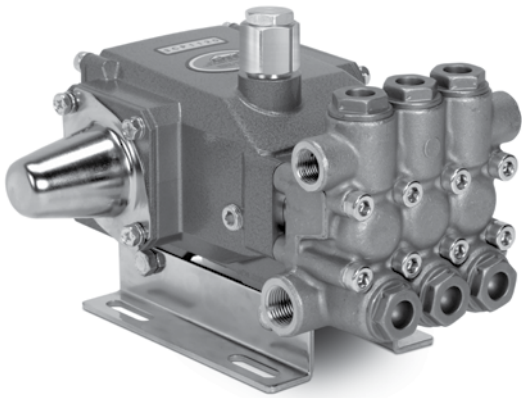


DATA SHEET

3CP PLUNGER PUMP



Brass Models: 3CP1120.44101, 3CP1130.44101, 3CP1140.44101



Model 3CP1120.44101 Shown
(Rails and shaft protector sold separately)

FEATURES

- Field- tested, high pressure triplex pump configured for high temperature TEG (triethylene glycol) applications up to 240°F/115°C. May be used in other high temperature applications with fluids possessing adequate lubrication properties. Contact Cat Pumps for more information.
- Positive displacement technology for optimum energy efficiency.
- Re-configured pump .44101 option consists of following materials:
 - O-Ring material throughout the pump: Fluoropolymer elastomers.
 - Oil filler cap assembly: Brass adapters, chrome-plated steel vented cap.
 - Rear sight gauge assembly: Aluminum sight adapter and stainless steel sight gauge.
 - Seal retainers: Aluminum.
 - Low-pressure seals and V-Packings: Special PTFE blends.

COMMON

SPECIFICATIONS	U.S.	Metric
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Bore	0.709"	18 mm
Crankcase Capacity	11.8 oz.	0.35 l
Maximum Liquid Temperature	240°F	115°C
Inlet Ports (2)	1/2" NPT(F)	1/2" NPT(F)
Discharge Ports (2)	3/8" NPT(F)	3/8" NPT(F)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	0.650"	16.5 mm
Weight	14.84 lbs.	6.7 kg
Dimensions	9.21 x 8.78 x 6.34"	234 x 223 x 176 mm

SPECIFICATIONS	U.S. Measure	Metric Measure
3CP1120.44101		
Flow	4.2 gpm	15.9 lpm
Pressure Range	100 to 2200 psi	6.9 to 152 bar
Pump RPM*	1725 rpm	1725 rpm
Stroke	0.500"	12.7 mm
3CP1130.44101		
Flow	2.4 gpm	9 lpm
Pressure Range	100 to 2200 psi	6.9 to 152 bar
Pump RPM*	1725 rpm	1725 rpm
Stroke	0.278"	7.3 mm
3CP1140.44101		
Flow	3.6 gpm	13.6 lpm
Pressure Range	100 to 2200 psi	6.9 to 152 bar
Pump RPM*	1725 rpm	1725 rpm
Stroke	0.433"	11 mm

*Pump minimum is 100 RPM.

ELECTRIC HORSEPOWER REQUIREMENTS

MODELS	FLOW		PRESSURE				RPM
			psi 1200	psi 1500	psi 2000	psi 2200	
	U.S. gpm	lpm	bar 83	bar 103	bar 138	bar 152	
3CP1120.44101	4.2	15.9	3.5	4.3	5.8	6.3	1725
	3.5	13.2	2.9	3.6	4.8	5.3	1531
	3.0	11.4	2.5	3.1	4.2	4.5	1313
3CP1130.44101	2.4	9.0	1.9	2.4	3.2	3.6	1725
3CP1140.44101	3.6	13.6	3.0	3.7	5.0	5.4	1725

DETERMINING THE PUMP R.P.M. $\frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$

DETERMINING THE REQUIRED H.P. $\frac{\text{Hp (Electric Brake)}}{1460} = \frac{\text{gpm x psi}}{1460}$

DETERMINING MOTOR PULLEY SIZE $\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$

See complete Drive Packages [Includes: pulleys, belts, hubs, key] Tech Bulletin 003.
Refer to pump **Service Manual** for repair procedure and additional technical information.

PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
5	125824	STCP R	Screw, HHC Sems (M6x16)	8
8	46901	AL	Cover, Bearing	2
10	76028	FPM	O-Ring, Bearing Cover - 70D	2
11	76236	FPM	Seal, Oil, Crankshaft - 70D	2
15	14480	STL	Bearing, Ball	2
20	48730	TNM	Rod, Connecting, Assembly	3
25	46927	FCM	Crankshaft, Dual End - 3CP1120.44101 (M12.7)	1
	46994	FCM	Crankshaft, Dual End - 3CP1130.44101 (M7.3)	1
	46991	FCM	Crankshaft, Dual End - 3CP1140.44101 (M11)	1
31	76142	AL	Adapter, Breather	1
32	76797	BB	Cap, Vented	1
36	76792	SS	Gauge, Sight	1
37	76791	AL	Adapter, Sight	1
38	44428	NBR	Gasket, Flat, Adapter - 80D	1
40	125824	STCP R	Screw, HHC Sems (M6x16)	4
48	25625	STCP	Plug, Drain (1/4"x19 BSP)	1
49	30322	FPM	O-Ring, Drain Plug	1
50	46939	AL	Cover, Rear	1
51	76241	FPM	O-Ring, Rear Cover	1
53	48644	AL	Crankcase	1
64	46615	CM	Pin, Crosshead	3
65	48459	BBNP	Rod, Plunger	3
70	76739	FPM	Seal, Oil, Crankcase	3
75	43900	S	Slinger, Barrier	3
88	45697	S	Washer, Keyhole	3
90	46976	CC	Plunger (M18x43)	3
98	48394	FPM	Washer, Seal - 90D	3
99	† 48201	SS	Retainer, Plunger w/Stud (M6)	3
100	76541	AL	Retainer, Seal	3
106	76243	ST2	Seal, LPS w/S-Spg	3
120	46625	BB	Case, Seal	3
121	48522	FPM	O-Ring, Seal Case	3
125	76052	ST4	Seal, HPS w/S	3
139	43448	BB	Plug, Inlet [1/2" NPT(M)]	1
163	11685	FPM	O-Ring, Seat - 85D	6
164	45790	S	Seat	6
166	43723	S	Valve	6
167	43750	S	Spring	6
168	44565	PVDF	Retainer, Spring	6
172	15855	FPM	O-Ring, Valve Plug - 70D	6
174	46756	BB	Plug, Valve	6
185	46616	FBB	Manifold, Head	1
188	126512	STCP R	Screw, HSH (M8x65)	8
196	22187	BBCP	Plug, Discharge [3/8" NPT(M)]	1

Repair Kits and Parts, Optional Parts and Accessories on Page 4

Bold print part numbers are unique to a particular pump model. [] Date of latest production change.

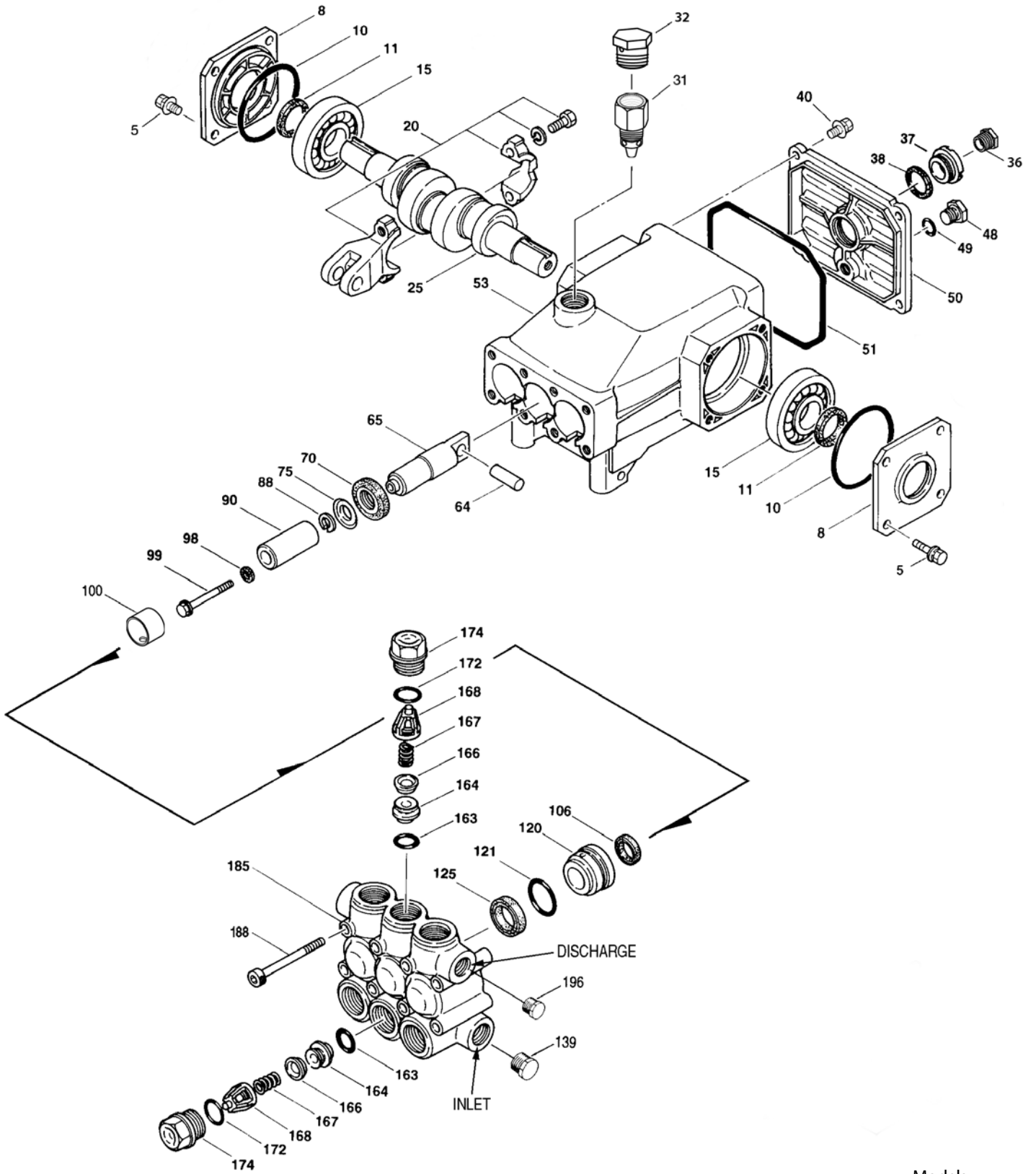
† Production parts are different than repair parts. R Components comply with RoHS Directive.

View Tech Bulletins 002, 003, 024, 036, 064, 073, 074, 083 for additional information.

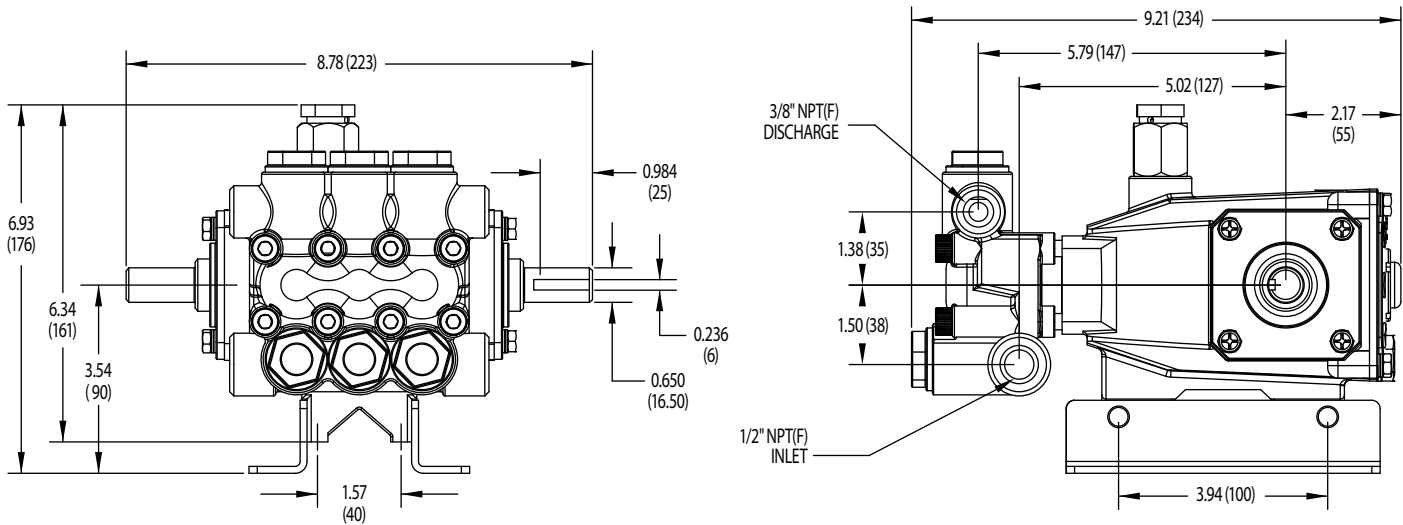
For motorized versions see BD motor data sheet. For Gearbox version see 8075 data sheet.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum BB=Brass BBCP=Brass/Chrome Plated BBNP=Brass Nickel Plated CC=Ceramic CM=Chrome-moly FBB=Forged Brass
FCM=Forged Chrome-Moly FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) PVDF=Polyvinylidene Fluoride S=304SS SS=316SS ST2=Special PTFE 2 ST4= Special PTFE 4 STL=Steel
STCP=Steel/Chrome Plated TNM=Special High Strength

EXPLODED VIEW



Models
3CP1120.44101
3CP1130.44101
3CP1140.44101
May 2017



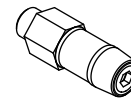
Models 3CP1120.44101, 3CP1130.44101, 3CP1140.44101

REPAIR KITS AND PARTS

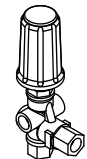
Part No.	Description	QTY
76097	Kit, Seal (Includes Items 98, 106, 121, and 125)	1
33258	Kit, Valve (Includes Items 163, 164, 166,167, 168 and 172)	2
6107	Oil, Bottle (21 oz.) ISO 68 Hydraulic	1
30047	Key (M5x5x24)	1
814841.44101	Complete Head	1



7003



339615



7694.0110
7694.1110

OPTIONAL PARTS AND ACCESSORIES

Part No.	Description	QTY
7003	Regulator (Primary Pressure Control)	1
7694.0110	Unloader (Primary Pressure Control)	1
7694.1110	Relief Valve (Secondary Pressure Control)	1
339615	Pop-Off Valve (Secondary Pressure Control)	1
6073	Pressure Gauge	1
6030	Accumulator	1
30612	Mounting Rails	1
118672	Shaft Protector	1
76334	Kit, Oil Indicator (3/8" x 24") See Individual Data Sheet	1
34334	Kit, Oil Drain (3/8" x 24") See Individual Data Sheet	1
30696	Pliers (Reverse)	1
44050	Tool, Sight Gauge Removal	1



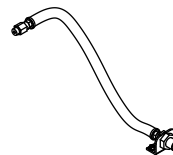
6030



6073



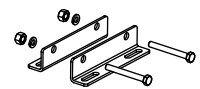
118672



34334



6107



30612

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/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



CAT PUMPS

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