

Model 5CP2120W.44101 Shown  
(Rails and shaft protector sold separately)

## FEATURES

- Designed for continuous-duty performance for triethylene glycol (TEG) gas dehydration where low life cycle costs are a must.
- Field tested, high pressure triplex pump configured for TEG temperatures up to 240° F (116° C).
- Positive displacement technology for optimum energy efficiency.
- Compact footprint enhances direct-drive gearbox and bell housing drives.

## COMMON SPECIFICATIONS

	U.S.	Metric
Inlet Pressure Range (950 rpm) .....	- 5 to 60 psi	(- 0.35 to 4 bar)
Inlet Pressure Range (1725 rpm).....	Flooded to 60 psi	(Flooded to 4 bar)
Crankcase Capacity.....	17 oz.	(0.51 l)
Maximum Liquid Temperature .....	240°F	(116°C)
Above 130°F call Cat Pumps for inlet conditions and elastomer recommendations.		
Inlet Ports (2).....	1/2" NPTF	(1/2" NPTF)
Discharge Ports (2).....	3/8" NPTF	(3/8" NPTF)
Shaft Diameter .....	0.787"	(20 mm)
Dimensions.....	10.57 x 10.0 x 6.75"	(268 x 254 x 171)

### 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](http://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](http://www.catpumps.com/warranty).

# 5CP Plunger Pump

Triethylene Glycol  
(TEG) Dehydration

Models

**5CP2120W.44101**  
**5CP2140CS.44101**  
**5CP2150W.44101**

## SPECIFICATIONS

U.S. Measure    Metric Measure

### MODEL 5CP2120W.44101 Belt-Drive

Flow.....	4.0 gpm	(15 lpm)
Pressure Range.....	100-2500 psi	(7-175 bar)
RPM .....	950 rpm	(950 rpm)
Bore.....	0.787"	(20 mm)
Stroke.....	0.709"	(18 mm)
Weight.....	19.14 lbs.	(8.7 kg)

### MODEL 5CP2140CS.44101 Direct-Drive

Flow.....	4.0 gpm	(15 lpm)
Pressure Range.....	100-2500 psi	(7-175 bar)
RPM .....	1725 rpm	(1725 rpm)
Bore.....	0.787"	(20 mm)
Stroke.....	0.394"	(10 mm)
Weight.....	19.14 lbs.	(8.7 kg)

### MODEL 5CP2150W.44101 Direct-Drive

Flow.....	5.0 gpm	(19 lpm)
Pressure Range.....	100-2000 psi	(7-140 bar)
RPM .....	1725 rpm	(1725 rpm)
Bore.....	0.787"	(20 mm)
Stroke.....	0.472"	(12 mm)
Weight.....	19.14 lbs.	(8.7 kg)

## ELECTRIC HORSEPOWER REQUIREMENTS

MODELS	FLOW		PRESSURE				MOTOR PULLEY SIZE	
			psi 1200	psi 1500	psi 2000	psi 2500		
	U.S. gpm	lpm	bar 85	bar 105	bar 140	bar 175	rpm	Pulley O.D.
5CP2120W.44101	4.0	15	3.3	4.1	5.5	6.9	950	4.3
Alternate	5.0	19	4.1	5.1	6.9	N/A	1188	5.5
5CP2140CS.44101	4.0	15	3.3	4.1	5.5	6.9	1725	Direct Drive
5CP2150W.44101	5.0	19	4.1	5.1	6.9	N/A	1725	Direct Drive

<b>DETERMINING THE PUMP R.P.M.</b>	Rated gpm	=	"Desired" gpm
	Rated rpm	=	"Desired" rpm
<b>DETERMINING THE REQUIRED H.P.</b>	gpm x psi	=	Electric Brake H. P. Required
	1460	=	
<b>DETERMINING MOTOR PULLEY SIZE</b>	Motor Pulley O.D. Pump rpm	=	Pump Pulley O.D. Motor rpm

See complete Drive Packages [Incls: Pulleys, Belts, Hubs, Key] Tech Bulletin 003. Refer to pump **Service Manual** for repair procedure and additional technical information.

## PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
5	126542	STCP R	Screw, Sems HHC (M8x16)	8
8	46910	AL	Cover, Bearing	2/1
10	76028	FPM	O-Ring, Bearing Cover - 70D	2
11	76236	FPM	Seal, Oil, Crankshaft - 70D	2
15	14480	STL	Bearing, Ball	2
20	48742	TNM	Rod, Connecting Assy	3
25	<b>46928</b>	<b>FCM</b>	Crankshaft, Dual End - 5CP2120W.44101 (18mm)	1
	<b>46982</b>	<b>FCM</b>	Crankshaft, Dual End - 5CP2150W.44101 (12mm)	1
	<b>48203</b>	<b>FCM</b>	Crankshaft, Single End - 5CP2140CSW.44101 (10mm)	1
30	<b>48224</b>	<b>AL</b>	Cover, Bearing Blind - 5CP2140CSW.44101	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, Oil Gauge - 80D	1
40	125824	STCP R	Screw, Sems HHC (M6x16)	4
48	25625	STCP	Plug, Drain (1/4"x19BSP)	1
49	30322	FPM	O-Ring, Drain Plug	1
50	46940	AL	Cover, Rear	1
51	76234	FPM	O-Ring, Rear Cover - 70D	1
53	48617	AL	Crankcase	1
64	46746	CM	Pin, Crosshead	3
65	48458	BBNP	Rod, Plunger	3
70	76838	FPM	Seal, Oil, Crankcase - 70D	3
75	43328	S	Slinger, Barrier	3
88	45697	S	Washer, Keyhole (M18 x 10)	3
90	46841	CC	Plunger (M20x50)	3
98	48394	FPM	Washer, Seal - 90D	3
99	† 48201	SS	Retainer, Plunger w/Stud (M6)	3
100	76749	AL	Retainer, Seal	3
106	76149	ST4	Seal, LPS w/S-Spg	3
120	49436	BB	Case, Seal	3
121	14329	FPM	O-Ring, Seal Case	3
125	76395	ST4	Seal, HPS w/S	3
139	22179	BBCP	Plug, Inlet (1/2"NPT)	1
162	48361	D	Back-up-Ring, Seat	6
163	44938	FPM	O-Ring, Seat - 70D	6
164	43725	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	43849	BBCP	Plug, Valve	6
185	48245	W770	Manifold, Head - W770	1
188	126513	STCP R	Screw, HSH (M8x70)	8
196	22187	BBCP	Plug, Discharge (3/8"NPT)	1

Optional Parts And accessories On Page 4

**Bold print part numbers are unique to a particular pump model.** † Production parts are different than repair parts.

R Components comply with RoHS Directive. [ ] Date of latest production change. W770 effective with 97 production.

View Tech Bulletins 002, 003, 024, 036, 043, 053, 060, 061, 064, 073, 074, 077, 078, and 083 for additional information.

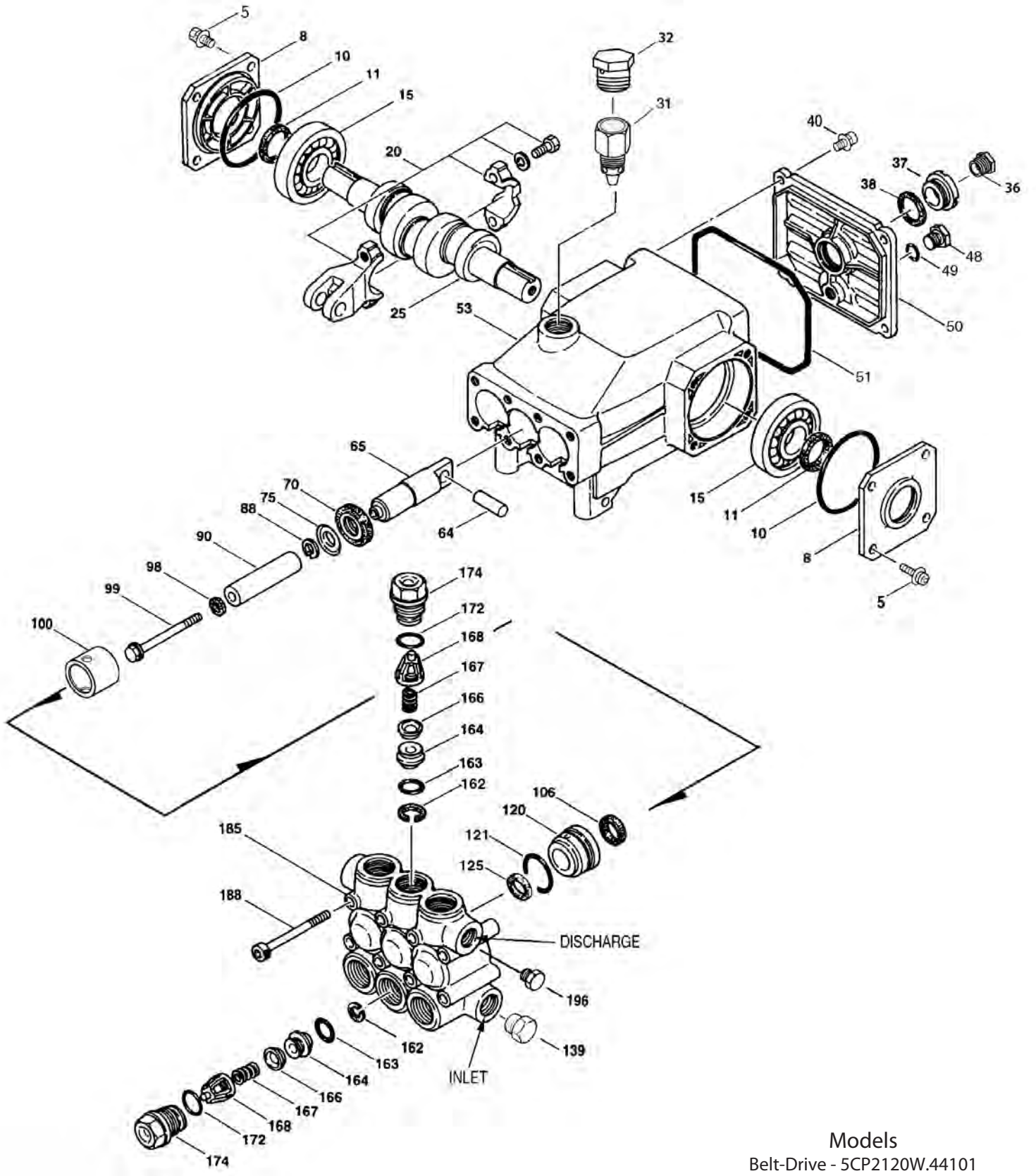
MATERIAL CODES (Not Part of Part Number): AL=Aluminum BB=Brass BBCP=Brass/Chrome Plated BBNP=Brass/Nickel Plated CC=Ceramic

CM=Chrome-molyD=Acetal FCM=Forged Chrome-moly FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) PVDF=Polyvinylidene Fluoride

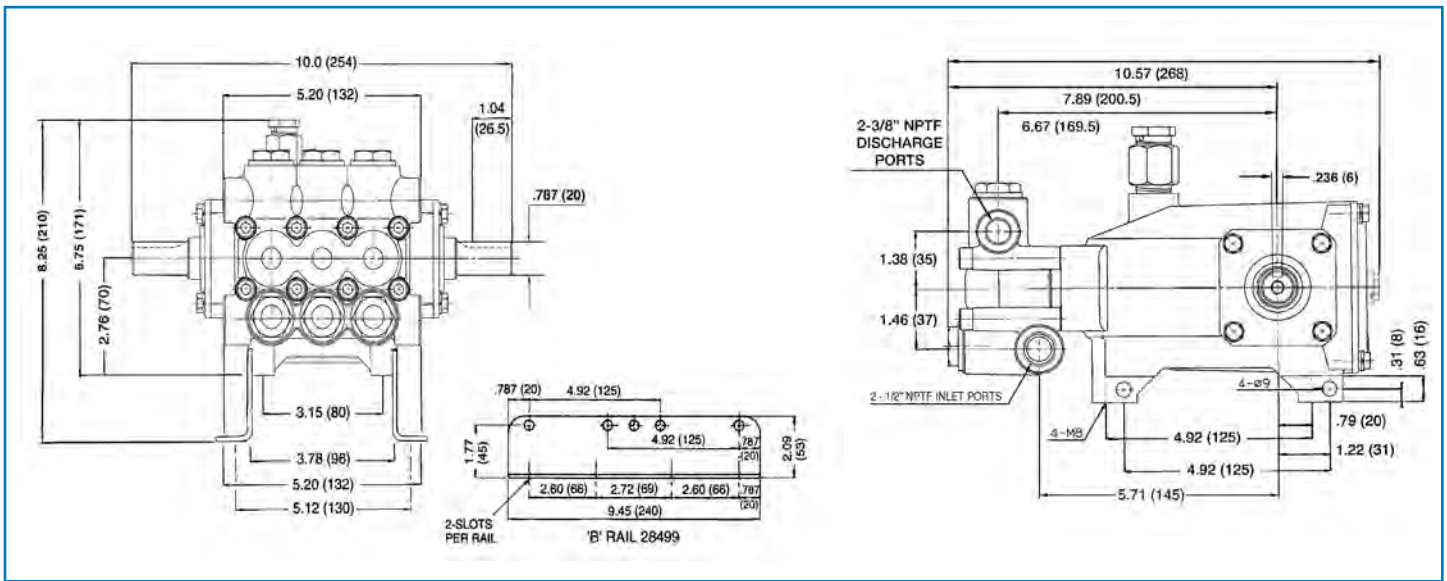
S=304SS SS=316SS ST4=Special PTFE 4 STL=Steel STCP=Steel/Chrome Plated

TNM=Special High Strength W770=Special Alloy

# EXPLODED VIEW

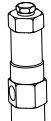
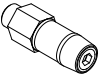

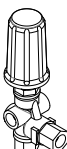



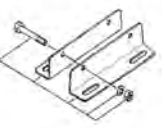



Models  
Belt-Drive - 5CP2120W.44101  
Direct-Drive -  
5CP2140CS.44101, 5CP2150W.44101  
November 2011



Models 5CP2120W.44101, 5CP2140CS.44101, 5CP2150W.44101,

## OPTIONAL PARTS AND ACCESSORIES

Part Number	Description	QTY		
7013	Regulator (Primary Pressure Control)	1		
7672.0110	Unloader (Primary Pressure Control)	1		33961S
7672.1110	Relief Valve (Secondary Pressure Control)	1		
33961S	Pop-Off Valve (Secondary Pressure Control)	1	7013	
6073	Pressure Gauge	1		6030
6030	Accumulator	1		
30611	Mounting Rails	1		
118672	Shaft Protector	1		
30057	Key (M6x6x25)	1	7672.0110	6073
76334	Kit, Oil Indicator (3/8" x 24") See Individual Data Sheet	1	7672.1110	
34334	Kit, Oil Drain (3/8" x 24") See Individual Data Sheet	1		
76237	Kit, Seal (Includes Items 98, 106, 121, and 125)	1	118672	
31821	Kit, Valve (Includes Items 162, 163, 164, 166, 167, 168 and 172)	2		
816650.44101	Complete Head	1		34334
30696	Pliers (Reverse)	1		
44050	Tool, Sight Gauge Removal	1		
6107	Oil, Bottle (21 oz.) ISO 68 Hydraulic	1		30611

**Demand Genuine Cat Pump Parts And Accessories.**



**CAT PUMPS**  
 1681 - 94TH LANE N.E. MINNEAPOLIS, MN 55449-4324  
 PHONE (763) 780-5440 — FAX (763) 780-2958  
 e-mail: techsupport@catpumps.com  
 www.catpumps.com