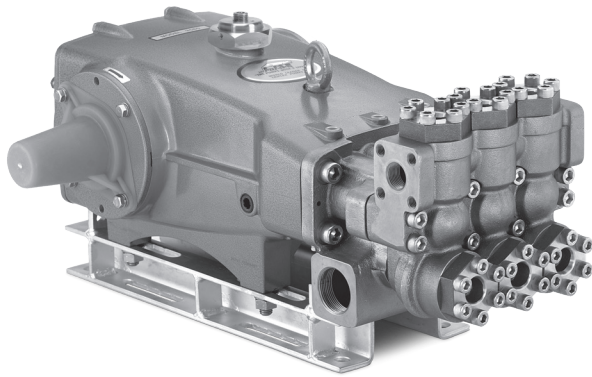


DATA SHEET

35 FRAME PLUNGER PUMP



**Nickel Aluminum
Bronze Model: 3517.44101**



Model 3517.44101 Shown
(Shaft protector included, mounting rails 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 liquids possessing adequate lubrication properties. Contact Cat Pumps for more information.
- Positive displacement technology delivers optimum energy efficiency.
- Option consists of following materials:
 - FPM O-ring material throughout the pump and elastomers.
 - Stainless steel vented oil filler cap assembly.
 - Stainless steel aluminum adapter. Stainless steel sight gauge assembly and aluminum seal retainers.
 - Special PTFE blended low-pressure seals and V-packings.

* TEG pump configuration is denoted by adding ".44101" to the end of the pump model.

SPECIFICATIONS

	U.S.	Metric
Flow	14 gpm	53 lpm
Pressure Range	100–3000 psi	6.9–207 bar
Pump RPM*	800 rpm	800 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Maximum Liquid Temperature	240° F	115° C
Bore	0.984"	25 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts	4 l
Inlet Ports (2)	1½" NPT(F)	1½" NPT(F)
Discharge Ports (2)	1" NPT(F)	1" NPT(F)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	1.378"	35 mm
Weight	139 lbs	63 kg
Dimensions	24.51 x 18.11 x 10.17"	623 x 460 x 258 mm

*Pump minimum is 100 RPM.

ELECTRIC HORSEPOWER REQUIREMENTS

FLOW		PRESSURE				PUMP RPM	
GPM	LPM	PSI	BAR	PSI	BAR		
		2000	138	2500	172		3000
Horsepower							
14	53	19.2 hp		24.0 hp		28.8 hp	800
12	45	16.4 hp		20.5 hp		24.7 hp	685
10	38	13.7 hp		17.1 hp		20.5 hp	571

**DETERMINING
THE PUMP RPM**

$$\frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{Desired gpm}}{\text{Desired rpm}}$$

**DETERMINING
THE REQUIRED HP**

$$\text{hp (Electric Brake)} = \frac{\text{gpm} \times \text{psi}}{1460}$$

**DETERMINING
MOTOR PULLEY SIZE**

$$\frac{\text{Motor Pulley OD}}{\text{Pump rpm}} = \frac{\text{Pump Pulley OD}}{\text{Motor rpm}}$$

Refer to pump **Service Manual** for repair procedure and additional technical information.

PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
5	96049	S	Screw, HHC Sems (M10 x 25) (See Tech Bulletin 074, 125)	8
8	134604	ALE	Cover, Bearing (See Tech Bulletin 118, 125)	2
9	815279	FBR	Shim, Split 2-Piece (See Tech Bulletin 125)	2
10	76173	FPM	O-Ring, Bearing Cover	2
11	76172	FPM	Seal, Oil, Crankshaft	2
12	855049	S	Shim, Split 2-Piece	0-2
15	29326	STL	Bearing, Roller	2
20	121467	TNM	Rod, Connecting Assembly (Includes: 21, 22, 23)	3
21	126749	STCP R	Washer, Locking	3
22	126593	STCP R	Shim, Washer (M10.5)	6
23	122045	STZP	Screw, HH (M10 x 55) (See Tech Bulletin 074)	6
25	29325	FCM	Crankshaft, Dual End (M48)	1
32	997574	SS	Cap, Filler with O-Ring	1
34	126743	STCP R	Bolt, Eye (M12 x 1.75) (For Lifting Pump Only)	1
36	76792	SS	Gauge, Sight	1
37	76791	AL	Adapter, Sight	1
38	44428	NBR	Gasket, Flat, Adapter-80D	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	30322	FPM	O-Ring, Drain Plug	1
50	45936	ALE	Cover, Rear (See Tech Bulletin 118)	1
51	76174	FPM	O-Ring, Rear Cover-75D	1
53	134784	ALE	Crankcase Assembly (Includes: 34, 54) (See Tech Bulletin 118, 125)	1
54	27488	S	Pin, Guide	2
64	43864	CM	Pin, Crosshead	3
65	45116	SSZZ	Rod, Plunger	3
69	126587	STCP R	Washer, Oil Seal	3
70	44739	FPM	Seal, Oil, Crankcase	3
75	43865	S	Slinger, Barrier	3
88	45676	S	Washer, Keyhole	3
90	43866	CC	Plunger (M25 x 145)	3
95	89778	SS	Stud, Plunger Retainer (M10 x 135)	3
96	20189	PTFE	Backup Ring, Plunger Retainer	3
97	11375	FPM	O-Ring, Plunger Retainer	3
98	44085	SS	Gasket, Plunger Retainer	3
99	44084	SS	Retainer, Plunger (M10)	3
100	999324	AL	Retainer, Seal	3
104	44826	FPM	O-Ring, Adapter-70D	3
105	44088	NAB	Adapter, LPS	3
106	76086	ST2	Seal, LPS with S-Spring	3
107	44089	SS	Washer, LPS	3
110	44206	NAB	Manifold, Inlet	1
112	14183	FPM	O-Ring, Inlet Manifold	3
117	44585	S	Screw, HSH (M14 x 40) (See Tech Bulletin 074)	4
123	13266	FPM	O-Ring, Inlet Manifold	3
124	44090	NAB	Cylinder, V-Packing	3
126	44091	NAB	Adapter, Female	3
127	76611	ST4	V-Packing	6
128	44092	NAB	Adapter, Male	3
155	14183	FPM	O-Ring, V-Packing Spacer-70D	6
156	28243	PTFE	Backup Ring, V-Packing Spacer	6
157	44093	NAB	Spacer, V-Packing	3
162	21985	PTFE	Backup Ring, Valve Seat	6
163	11377	FPM	O-Ring, Valve Seat-80D	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
171	44793	SS	Spring, Coil	6
172	11720	FPM	O-Ring, Valve Plug-70D	6
173	20224	PTFE	Backup Ring, Valve Plug	6
174	44795	NAB	Plug, Valve	6
175	87951	S	Screw, HHC Sems (M10 x 30) (See Tech Bulletin 074)	36
185	46565	NAB	Manifold, Discharge	1
188	89981	S	Screw, HSH (M12 x 70) (See Tech Bulletin 074)	8
250	855042	NY	Protector, Shaft (See Tech Bulletin 125)	1

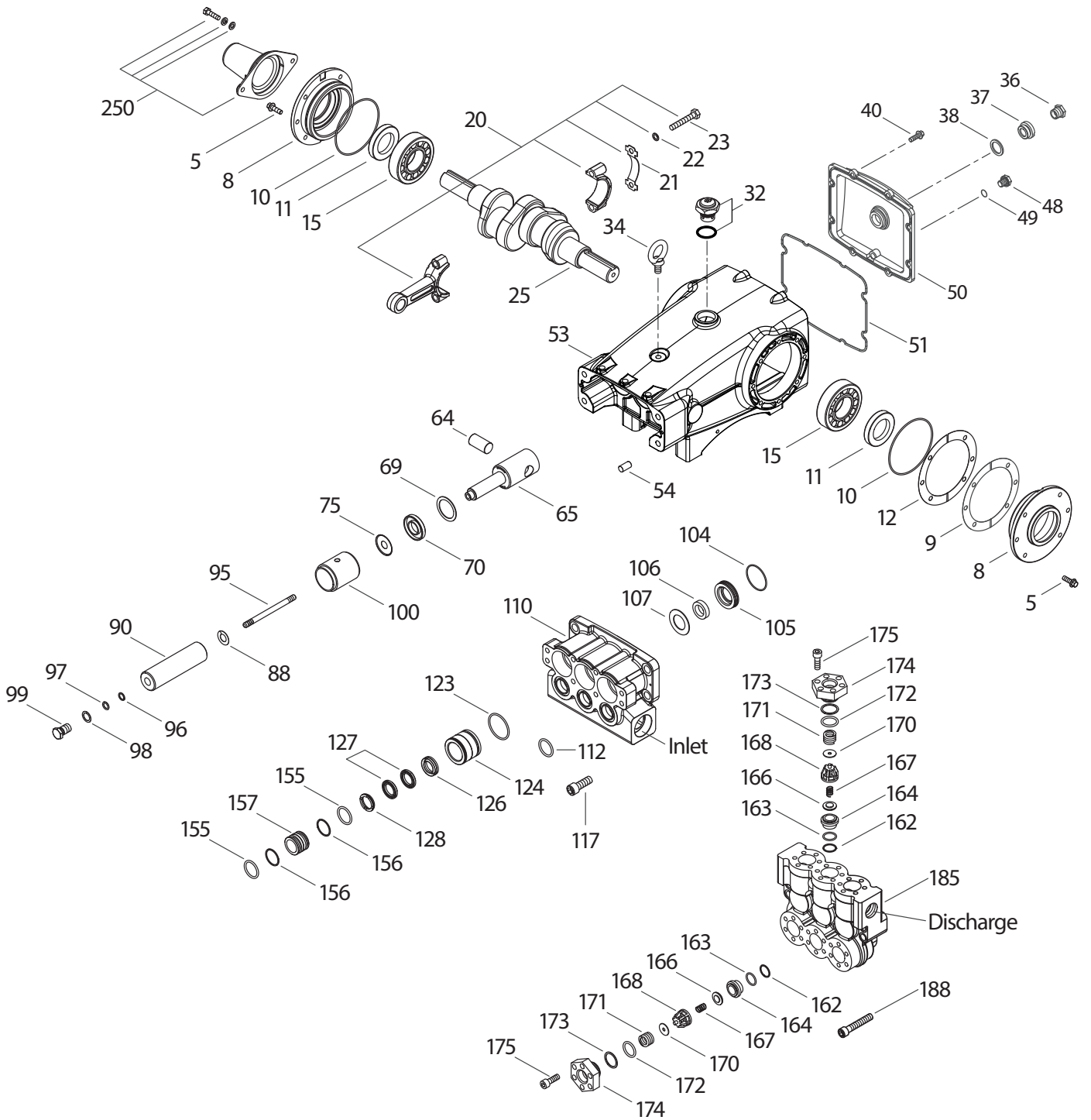
R Components comply with RoHS Directive.

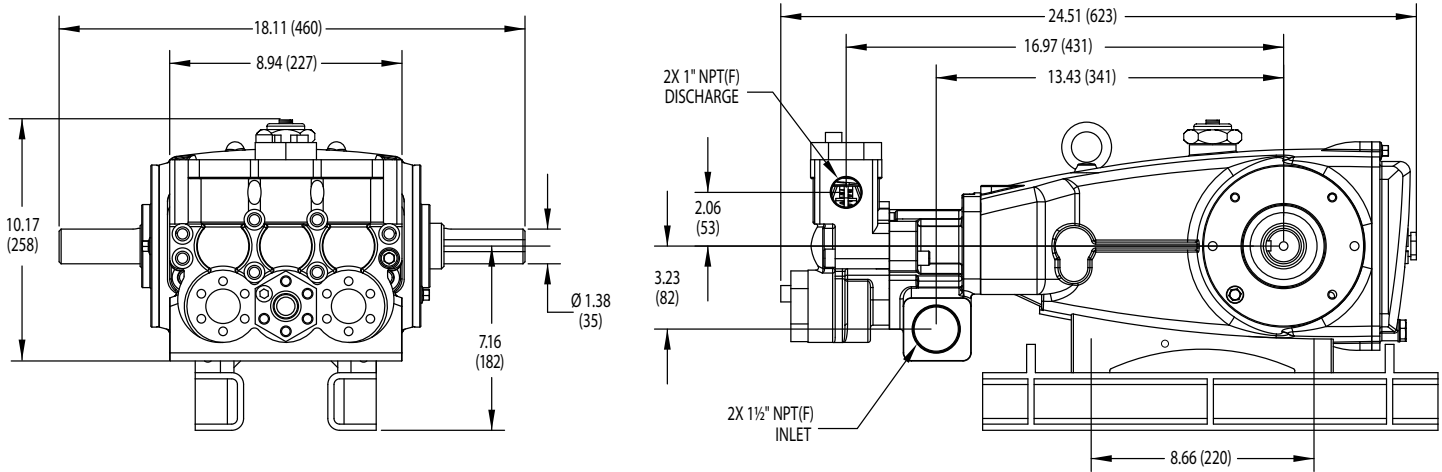
For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-Moly
 FBB=Forged/Brass FBR=Fiber FCM=Forged Chrome-moly FPM=Fluorocarbon NAB=Nickel Aluminum Bronze NBR=Medium Nitrile (Buna-N) NY=Nylon
 PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SS=316SS STL=Steel ST2= Special PTFE2 ST4=Special PTFE4
 STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated SSZZ=316SS/Zamak TNM=Special High Strength

Repair kits and Parts, Optional Parts and Accessories listed on Page 4.

EXPLODED VIEW



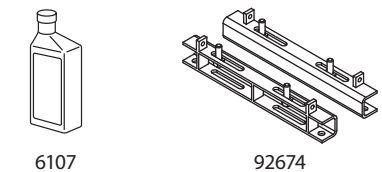
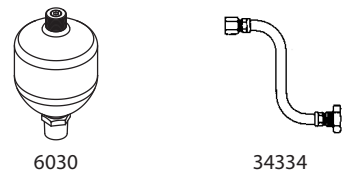
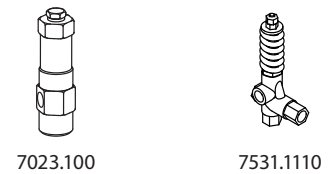


REPAIR KITS AND PARTS

PART NUMBER	DESCRIPTION	QTY
76447	Kit, Seal (Includes Items 97, 104, 106, 112, 123, 127, 155, 156)	1
701798	Kit, Valve (Includes Items 162, 163, 164, 166,167, 168, 170, 172, 173)	2
6107	Oil, Bottle (21 oz) ISO 68 Hydraulic	6-7
34021	Key (M10 x 8 x 70)	1

OPTIONAL PARTS AND ACCESSORIES

PART NUMBER	DESCRIPTION	QTY
7023.100	Regulator (Primary Pressure Control)	1
7531.1110	Valve, Relief (Secondary Pressure Control)	1
9941	Valve, Pop-Off (Secondary Pressure Control)	1
6076	Gauge, Pressure	1
6030	Dampener, Pulsation	1
92674	Assembly, Rail	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	Reverse Pliers	1
44050	Tool, Sight Gauge Removal	1



⚠ 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 online at www.catpumps.com/literature/cat-pumps-limited-warranty