

DATA SHEET

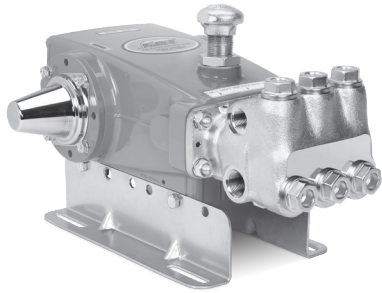
15 FRAME PLUNGER PUMPS



Brass
1050.44101

Stainless Steel
1051.44101

Stainless Steel Flushed
1051C.44101



Model 1050.44101 Shown
(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.
- TEG* pump configuration option consists of following modifications:
 - FPM elastomers and O-ring material throughout the pump.
 - Chrome-plated steel vented oil filler cap assembly with brass adapter.
 - Stainless steel sight gauge assembly and aluminum adapter.
 - 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.

COMMON SPECIFICATIONS

COMMON SPECIFICATIONS	U.S. Measure	Metric Measure
Bore	0.945"	24 mm
Stroke	1.181"	30 mm
Crankcase Capacity	42 oz	1.26 l
Inlet Ports (2)	¾" NPT(F)	¾" NPT(F)
Flushing Ports (2)	⅛" NPT(F)	⅛" NPT(F)
Discharge Ports (2)	½" NPT(F)	½" NPT(F)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	1.181"	30 mm
Weight	44 lbs	20 kg
Dimensions	16.40 x 12.99 x 8.25"	417 x 330 x 210 mm

SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	10 gpm	38 lpm
Pressure Range	100–2200 psi	6.9–152 bar
Pump RPM*	958 rpm	958 rpm
Inlet Pressure Range	Flooded to 60 psi	Flooded to 4.1 bar
Max. Liquid Temperature	240° F	115° C

ALTERNATE SPECIFICATIONS

	U.S. Measure	Metric Measure
Flow	12.3 gpm	46.6 lpm
Pressure Range	100–1800 psi	6.9–124 bar
Pump RPM*	1180 rpm	1180 rpm
Inlet Pressure Range	20–60 psi	1.4–4.1 bar
Max. Liquid Temperature	240° F	115° C

*Pump minimum is 100 RPM.

ELECTRIC HORSEPOWER REQUIREMENTS

FLOW		PRESSURE				PUMP RPM
GPM	LPM	PSI	BAR	PSI	BAR	
		1800	124	2000	138	
				2200	152	
Horsepower*						
12.3	46.6	15.2 hp		N/A		1180
10	38	12.4 hp		13.7 hp		958
9	34	11.1 hp		12.4 hp		862

$$\text{DETERMINING THE PUMP RPM} \quad \frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{Desired gpm}}{\text{Desired rpm}}$$

$$\text{DETERMINING THE REQUIRED HP} \quad \frac{\text{hp (Electric Brake)}}{1460} = \frac{\text{gpm} \times \text{psi}}{1460}$$

$$\text{DETERMINING MOTOR PULLEY SIZE} \quad \frac{\text{Motor Pulley OD}}{\text{Pump rpm}} = \frac{\text{Pump Pulley OD}}{\text{Motor rpm}}$$

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

PARTS LIST

ITEM	PART NUMBER	MATL	PART NUMBER	MATL	DESCRIPTION	QTY
	1050.44101		1051.44101			
			1051C.44101			
5	126540	STCP R	49651	S	Screw, HHC Sems (M8 x 20) (See Tech Bulletin 074, 128)	8
8	134805	ALE	134805	ALE	Cover, Bearing (See Tech Bulletin 118, 128)	2
9	855043	FBR	855043	FBR	Shim, Split, Bearing Cover 2-Piece (See Tech Bulletin 128)	0-2
10	76340	FPM	76340	FPM	O-Ring, Bearing Cover-75D	2
11	76491	FPM	76491	FPM	Seal, Oil, Crankshaft	2
12	855044	S	855044	S	Shim, Split, Bearing Cover 2-Piece (See Tech Bulletin 128)	0-2
15	39060	STL	39060	STL	Bearing, Roller	2
20	48600	TNM	48600	TNM	Rod, Connecting Assembly (See Tech Bulletin 074)	3
25	43494	FCM	43494	FCM	Crankshaft, Dual End (M30)	1
31	76411	BB	76411	BB	Adapter, [3/4" NPT(F)]	1
32	992623	BB	992623	BB	Nipple, Close [3/4" NPT(M)]	1
33	76331	STCP	76331	STCP	Cap, Vented	1
36	76792	SS	76792	SS	Gauge, Sight	1
37	76791	AL	76791	AL	Adapter, Sight (See Tech Bulletin 074)	1
38	44428	NBR	44428	NBR	Gasket, Flat, Adapter-80D	1
40	126541	STCP R	92542	S	Screw, HHC Sems (M6 x 20) (See Tech Bulletin 074)	4
48	25625	STCP	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	30322	FPM	30322	FPM	O-Ring, Drain Plug	1
50	133576	ALE	133576	ALE	Cover, Rear (See Tech Bulletin 118)	1
51	76834	FPM	76834	FPM	O-Ring, Rear Cover-75D	1
53	134836	ALE	134848	ALE	Crankcase (Includes: 54, 55) (See Tech Bulletin 118, 128)	1
54	27488	S	27488	S	Pin, Guide	2
55	126545	STCP R	44005	S	Stud, Manifold (M10 x 45)	4
64	43507	CM	43507	CM	Pin, Crosshead	3
65	43501	SZZ	45258	SSZZ	Rod, Plunger	3
69	126592	STCP R	126592	STCP R	Washer, Oil Seal	3
70	76500	FPM	76500	FPM	Seal, Oil, Crankcase	3
75	43506	S	43506	S	Slinger, Barrier	3
88	45675	S	45675	S	Washer, Keyhole	3
89	43553	BB	45879	SS	Collar, Spacer	3
90	43552	CC	43552	CC	Plunger (M24 x 77)	3
95	—	—	89651	SS	Stud, Plunger Retainer (M6 x 70)	3
96	43235	PTFE	43235	PTFE	Backup Ring, Plunger Retainer	3
97	14160	FPM	14160	FPM	O-Ring, Plunger Retainer-80D	3
98	44041	SS	44041	SS	Gasket, Plunger Retainer	3
99	—	—	44031	SS	Retainer, Plunger (M6) (See Tech Bulletin 074)	3
	104360	S	—	—	Retainer with Stud Plunger	3
100	765001	AL	765001	AL	Retainer, Seal	3
106	76035	ST	76035	ST	Seal, LPS with S-Spring	3
120	49290	BB	49286	SSNP	Case, Seal (See Tech Bulletin 098)	3
121	11737	FPM	11737	FPM	O-Ring, Seal Case-75D	3
126	43558	BB	45073	SS	Adapter, Female	3
127	76692	ST4	76692	ST4	V-Packing	6
128	43560	BB	45074	SS	Adapter, Male	3
139	20326	BBCP	44382	SS	Plug, Inlet [3/4" NPT(M)]	1
162	43248	PTFE	43248	PTFE	Backup Ring, Valve Seat	6
163	44383	FPM	44383	FPM	O-Ring, Seat-70D	6
164	44718	S	44037	SS	Seat	6
166	43721	S	48793	SS	Valve	6
167	43751	S	44039	SS	Spring, Valve	6
168	44564	PVDF	44564	PVDF	Retainer, Spring	6
172	11691	FPM	11691	FPM	O-Ring, Valve Plug-90D	6
174	43851	BBCP	49293	SS	Plug, Valve (See Tech Bulletin 074)	6
185	46704	BBCP	134823	SS	Head, Manifold	1
	—	—	49188	SS	Head, Manifold Flushed	1
192	126231	STCP R	15847	S	Lockwasher (M10)	4
194	126522	STCP R	81258	S	Nut, Hex (M10) (See Tech Bulletin 074)	4
250	26516.15FR	STCP	26516.15FR	STCP	Protector, Shaft	1

Bold print part numbers are unique to a particular pump model. R components comply with RoHS Directive.

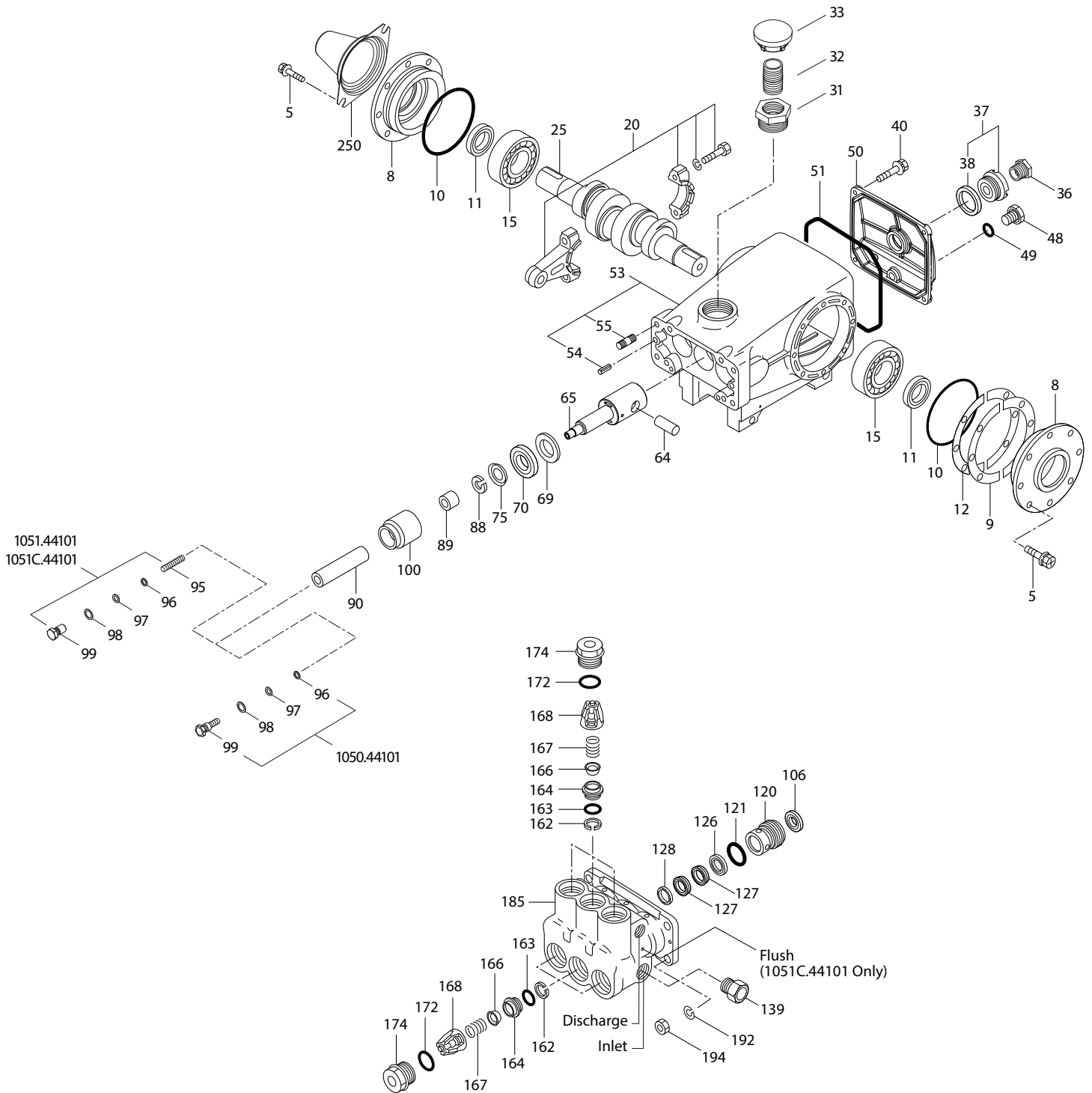
*Review individual parts in each kit for material code identification. For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-moly FBR=Fiber

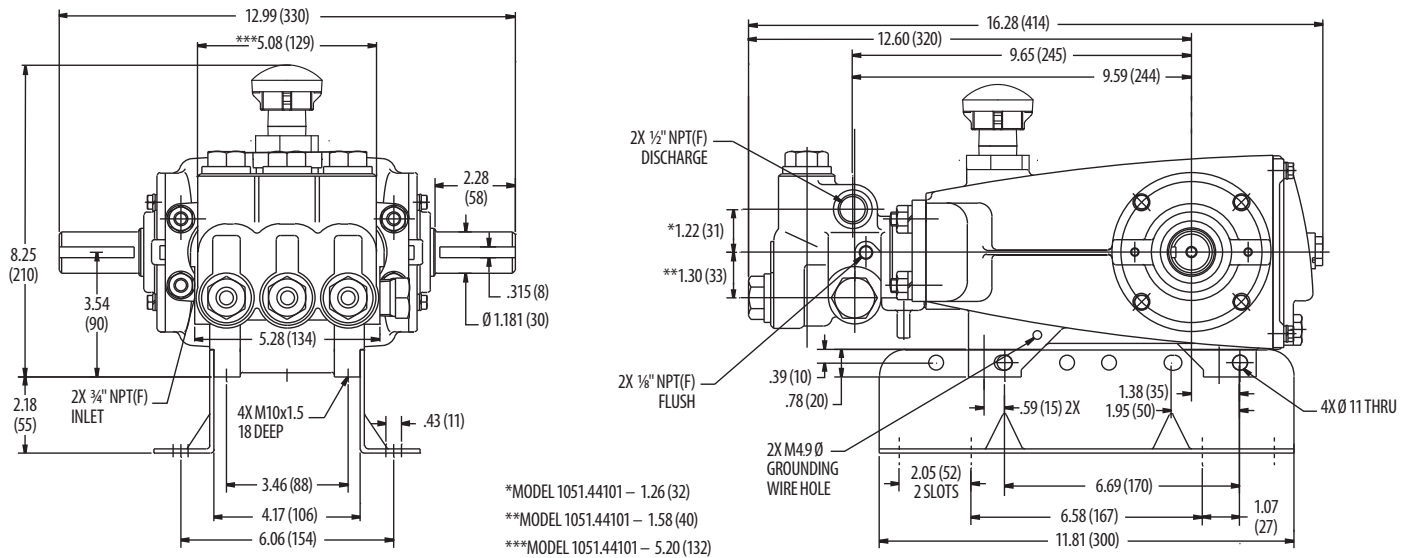
FCM=Forged Chrome-moly FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SS=316SS

ST4=Special PTFE 4 SSZZ=316SS/Zamak STCP=Steel/Chrome Plated SSNP=316SS/Nickel Plated ST=Polyetheretherketon STL=Steel SZZ=304SS/Zamak TNM=Special High Strength

EXPLODED VIEW

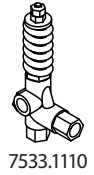
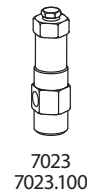


Models
 Brass – 1050.44101
 Stainless Steel – 1051.44101
 Stainless Steel Flushed – 1051C.44101
 June 2021



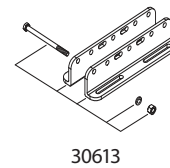
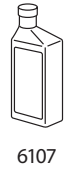
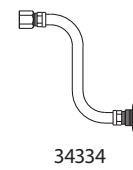
REPAIR KITS AND PARTS

PART NUMBER	DESCRIPTION	QTY
76094	Kit, Seal (Includes Items 97, 106, 121, 127)	1
31256 (1050)	Kit, Valve (Includes Items 162, 163, 164, 166,167, 168, 172)	2
30987 (1051)	Kit, Valve (Includes Items 162, 163, 164, 166,167, 168, 172)	2
6107	Oil, Bottle (21 oz) ISO 68 Hydraulic	2
30067	Key (M8 x 7.5 x 25)	1



OPTIONAL PARTS AND ACCESSORIES

PART NUMBER	DESCRIPTION	QTY
7023/ 7023.100	Regulator (Primary Pressure Control)	1
7533.1110	Relief Valve (Secondary Pressure Control)	1
6073	Pressure Gauge	1
6030	Accumulator	1
30613	Rail Assembly	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



⚠ 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

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