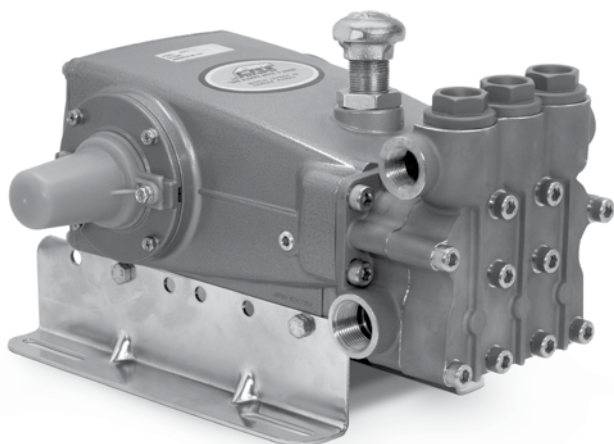


# DATA SHEET

## 15 FRAME PLUNGER PUMP



**Stainless Steel**      **1541M.44101**  
**Model:**



SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	18.0 gpm	68 lpm
Pressure Range	100 to 1200 psi	6.9 to 83 bar
Pump RPM*	1100 rpm	1100 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Max. Liquid Temperature	240° F	115° C
Above 130°F call Cat Pumps for inlet conditions and elastomer recommendations.		
Bore	1.181"	30 mm
Stroke	1.181"	30 mm
Crankcase Capacity	42 oz.	1.26 l
Inlet Ports (2)	1" NPT(F)	1" NPT(F)
Discharge Ports (2)	3/4" NPT(F)	3/4" NPT(F)
Shaft Diameter	1.181"	30 mm
Pulley Mounting	Either Side	Either Side
Weight	42.6 lbs.	21 kg
Dimensions	14.61 x 12.99 x 8.27"	371 x 330 x 210 mm

\*Pump minimum is 100 RPM.

### 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.

### ELECTRIC HORSEPOWER REQUIREMENTS

FLOW		PRESSURE			RPM
		psi 800	psi 1000	psi 1200	
U.S. gpm	lpm	bar 55	bar 69	bar 83	
18	68	9.9	12.3	14.8	1100

<b>DETERMINING THE PUMP R.P.M.</b>	Rated gpm	=	"Desired" gpm
	Rated rpm	=	"Desired" rpm
<b>DETERMINING THE REQUIRED H.P.</b>	Hp (Electric Brake)	=	$\frac{\text{gpm} \times \text{psi}}{1460}$
<b>DETERMINING MOTOR PULLEY SIZE</b>	$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}}$	=	$\frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$

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

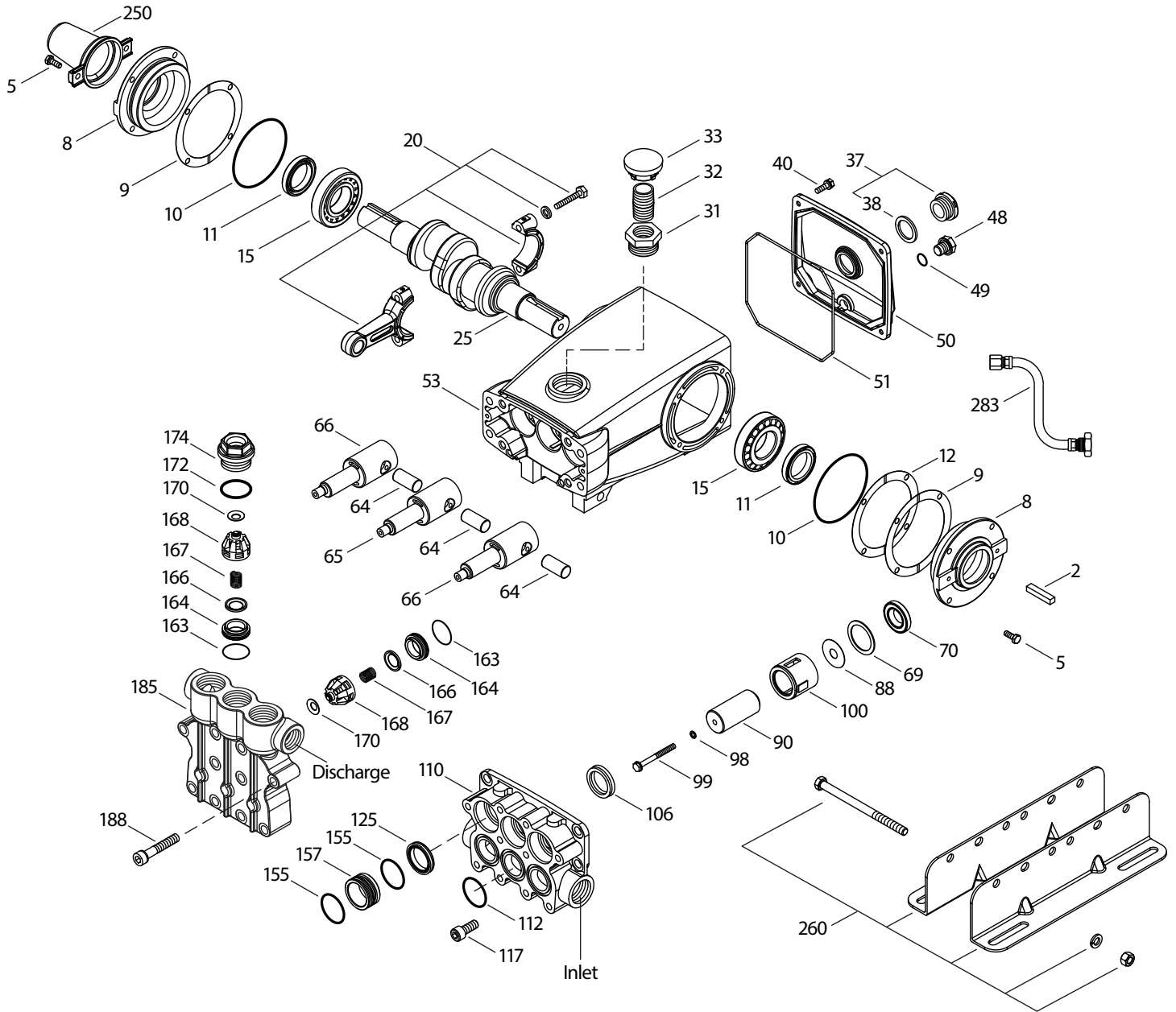
ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
5	92538	S	Screw, HHC Sems (M6x16)	8
8	43496	AL	Cover, Bearing (See Tech Bulletin 118)	2
9	815281	FBR	Shim, Split 2-Pc	3
10	76340	FPM	O-Ring, Bearing Cover - 75D	2
11	76491	FPM	Seal, Oil, Crankshaft - 70D	2
12	814800	S	Shim, Split, 2-Pc	2
15	39060	STL	Bearing, Roller	2
20	768600	TNM	Rod, Connecting Assembly	3
25	43494	FCM	Crankshaft, Dual-End (M30)	1
31	76411	BB	Adapter, 3/4" NPT	1
32	992623	BB	Nipple, Close 3/4" NPT	1
33	76331	STCP	Cap, Vented	1
36	76792	SS	Gauge, Sight	1
37	76791	AL	Adapter, Sight	1
38	44428	NBR	Gasket, Flat, Adapter - 80D	1
40	92542	S	Screw, HHC Sems (M6x20)	4
48	25625	STCP	Plug, Drain (1/4"x19BSP)	1
49	30322	FPM	O-Ring, Drain Plug	1
50	43491	AL	Cover, Rear (See Tech Bulletin 118)	1
51	76834	FPM	O-Ring, Rear Cover - 75D	1
53	48925	AL	Crankcase (Includes Guidepin) (See Tech Bulletin 118)	1
64	763507	CM	Pin, Crosshead	3
65	76614	SS	Rod, Plunger (Center)	1
66	76612	SS	Rod, Plunger (Outside)	2
69	126596	STCP R	Washer, Oil Seal	3
70	76500	FPM	Seal, Oil Crankcase	3
75	48937	S	Slinger, Barrier	3
90	48938	CC	Plunger, Ceramic (M30x65)	3
98	48394	FPM	Washer, Seal - 90D	3
99	† 48201	SS	Retainer, Plunger	3
100	76926	AL	Retainer, Seal	3
106	702939	ST4	Seal, LPS w/NIH-Spg	3
110	49614	SS	Manifold, Inlet	1
112	76903	FPM	O-Ring, Inlet Manifold - 80D	3
117	49044	S	Screw, HSH (M10x25)	4
125	702945	ST4	Seal, HPS	3
155	76903	FPM	O-Ring, Spacer - 80D	6
157	49621	SS	Spacer, HPS	3
163	14331	FPM	O-Ring, Seat - 70D	6
164	49626	SS	Seat	6
166	48686	SS	Valve	6
167	48687	SS	Spring, Valve	6
168	48994	PVDF	Retainer, Spring	6
170	49627	SS	Washer, Spring Retainer	6
172	14183	FPM	O-Ring, Valve Plug	3
174	49628	SS	Plug, Valve	3
185	49623	SS	Manifold, Discharge	1
188	87952	S	Screw, HSH (M10x55)	10

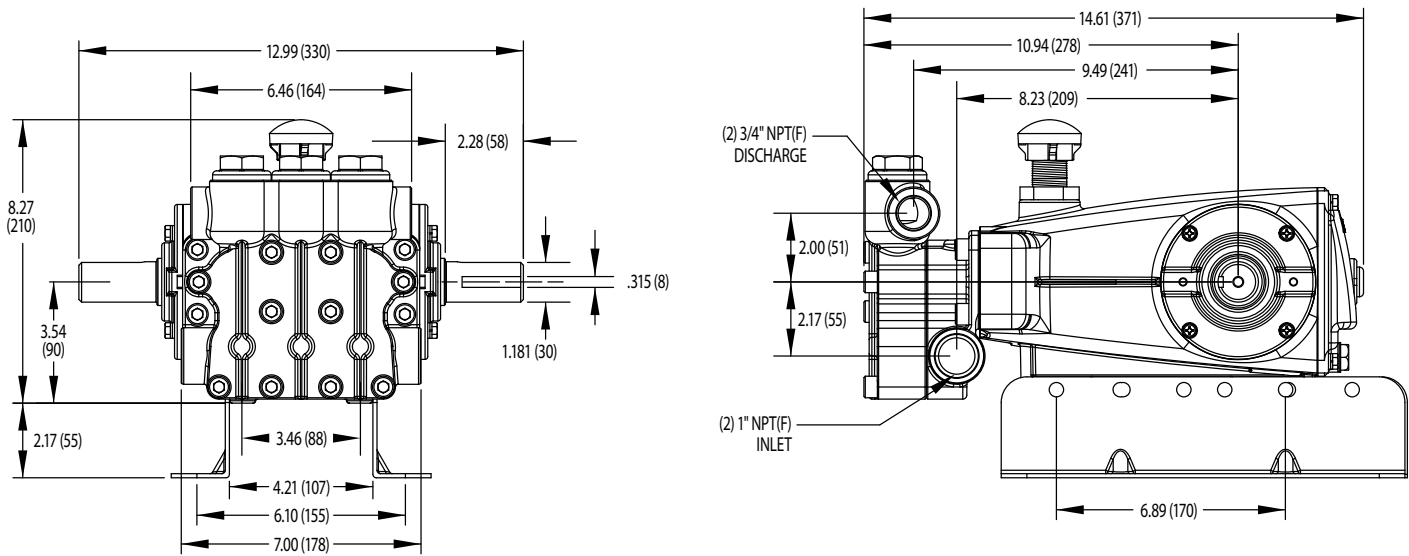
Optional Parts and Accessories on Page 4

† Production parts are different than replacement parts. R Components comply with RoHS Directive.  
View Tech Bulletins 002, 003, 024, 035, 036, 043, 053, 074, 083, 095 and 118 for additional information.

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

# EXPLODED VIEW

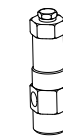




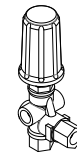
Model 1541M.44101

## OPTIONAL PARTS AND ACCESSORIES

PART NUMBER	DESCRIPTION	QTY
7022.100	Regulator (Primary Pressure Control)	1
7531.0110	Unloader (Primary Pressure Control)	1
7531.1110	Pop-Off Valve (Secondary Pressure Control)	1
6073	Pressure Gauge	1
6013	Accumulator	1
30613	Mounting Rails	1
30067/ 990036	Key (M8x7.5x25)/ (M8x7x40)	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
76093	Kit, Seal (Includes Items 98, 106, 112, 125, and 155)	1
76450	Kit, Valve (Includes Items 163, 164, 166,167, 168 170 and 172)	2
818443.44101	Complete Head	1
30696	Pliers (Reverse)	1
44050	Tool, Sight Gauge Removal	1
6107	Oil, Bottle (21 oz.) ISO 68 Hydraulic	2
6119	Lubricant, Antiseize (2 oz.)	1



7022.100



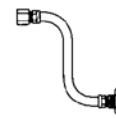
7531.1110



6073



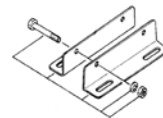
6013



34334



6107



30613

### ⚠ 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).



### CAT PUMPS

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