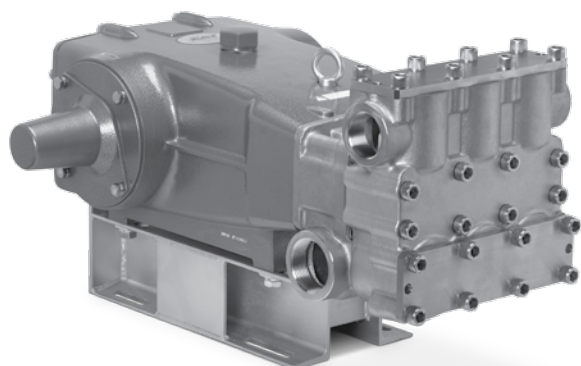


DATA SHEET

60 FRAME PLUNGER PUMPS



Duplex Stainless Steel Model: **67102**



Model 67102 Shown
(Shaft protector and mounting rails included)

SPECIFICATIONS	U.S.	Metric
Flow	100 gpm	378.5 lpm
Pressure Range	100 to 1000 psi	6.9 to 69 bar
Pump RPM*	680 rpm	680 rpm
Inlet Pressure Range	Flooded to 60 psi	Flooded to 4 bar
Bore	2.441"	62 mm
Stroke	2.579"	65.5 mm
Max. Liquid Temperature	140° F	60° C
Above 130°F call Cat Pumps for inlet conditions and elastomer recommendations.		
Crankcase Capacity	10 qts	9.46 l
Inlet Ports (2)	2 1/2" NPT(F)	2 1/2" NPT(F)
Discharge Ports (2)	2 " NPT(F)	2 " NPT(F)
Weight	363.75 lbs	165 kg
Dimensions	30.03 x 24.37 x 12.67"	763 x 619 x 322 mm

ALTERNATE SPECIFICATIONS

Flow	80 gpm	302.8 lpm
Pressure Range	100 to 1200 psi	6.9 to 83 bar
Pump RPM*	540 rpm	540 rpm
Inlet Pressure Range	Flooded to 30 psi	Flooded to 2 bar

*Pump minimum is 100 RPM.

FEATURES

- Triplex plunger design delivers high efficiency and low pulsation.
- Special high-density, polished, concentric plungers provide a true wear surface and extended seal life.
- Cast duplex Stainless Steel inlet and discharge manifolds provide excellent corrosion resistance.
- V-Packings and low pressure seals are completely lubricated and cooled, greatly increasing service life.
- Oversized crankshaft bearings with greater loading capacity provide longer bearing life.
- Low unswept volume maximizes volumetric efficiency, reducing energy costs and providing consistent flow.

ELECTRIC HORSEPOWER REQUIREMENTS

FLOW		PRESSURE				PUMP RPM	DRIVE
		psi 800 bar 55	psi 900 bar 62	psi 1000 bar 69	psi 1200 bar 83		
gpm	lpm						Consult Cat Pumps for Pump and Motor Pulley Sizes
100	378.5	54.8	61.6	68.5	N/A	680	
90	340.7	49.3	55.5	61.6	N/A	610	
80	302.8	43.8	49.3	54.8	65.8	540	

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.

$$\frac{\text{gpm} \times \text{psi}}{1460} = \frac{\text{Electric Brake}}{\text{H. P. Required}}$$

DETERMINING MOTOR PULLEY SIZE

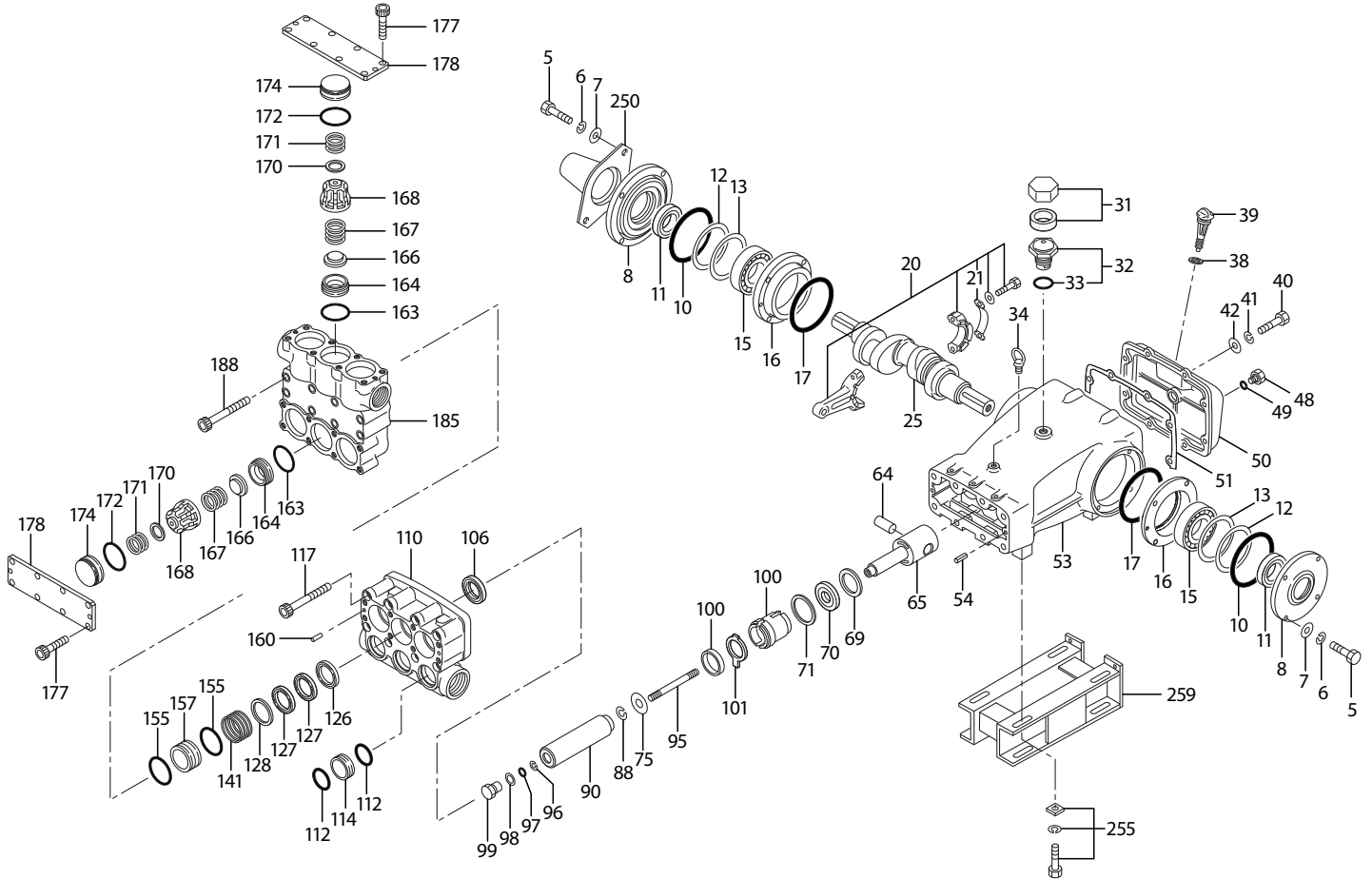
$$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$$

See complete Drive Packages [Incls: 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
2	43048	STL	Key (M14x9x90)	1
5	89728	S	Screw, HH (M8x40)	8
6	15847	S	Lockwasher (M10)	8
7	19934	S	Washer, Flat (M10)	8
8	29443	AL	Covering, Bearing - Outer	2
10	29444	NBR	O-Ring, Bearing Cover - 70D	2
11	11443	NBR	Seal, Oil, Crankshaft	2
12	126595	STCP R	Shim, Washer (M120 x .5)	0-2
13	126594	STCP R	Shim, Washer (M120 x .3)	0-2
15	29441	STL	Bearing, Roller	2
16	29442	STL	Covering, Bearing - Inner	2
17	29444	NBR	O-Ring, Bearing Cover - 70D	2
20	126612	BBHS	Assembly, Connecting Rod (Incls: 21)	3
21	126560	STCP R	Washer, Locking	3
25	29440	FCM	Crankshaft, Dual End (M65.5)	1
31	828710	PE	Protector, Oil Cap w/Polyurethane Gasket	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Oil Filler Cap - 70D	1
34	126743	STCP R	Bolt, Eye (M12x1.75) (For Lifting Pump Only)	1
38	129343	RBR	Gasket, Flat, Oil Gauge	1
39	27769	ABS	Stick, Dip	1
40	89627	S	Screw, HH (M10x30)	8
41	15847	S	Lockwasher (M10)	8
42	19934	S	Washer, Flat (M10)	8
48	25625	STCP	Plug, Drain (1/4"x19BSP)	1
49	23170	NBR	O-Ring, Drain Plug - 70D	1
50	29438	AL	Cover, Rear	1
51	129386	NBR	Gasket, Rear Cover	1
53	855040	AL	Crankcase Assy (Incls: 34, 54)	1
54	43282	S	Pin, Guide	2
64	29481	CM	Pin, Crosshead	3
65	133712	BBSS	Rod, Plunger	3
69	126588	STCP R	Washer, Oil Seal	3
70	133716	NBR	Seal, Oil, Crankcase	3
71	133717	SS	Washer	3
75	133718	SS	Slinger, Barrier	3
88	133719	SS	Washer, Keyhole	3
90	133721	CC	Plunger (M62x174)	3
95	44748	SS	Stud, Plunger Retainer (M14 x 147)	3
96	20214	PTFE	Back-up-Ring, Plunger Retainer	3
97	17616	NBR	O-Ring, Plunger Retainer - 80D	3
98	44751	SS	Gasket, Plunger Retainer	3
99	44750	SS	Retainer, Plunger (M14)	3
100	855039	PVDF	Retainer, Seal, 2-piece	3
101	133723	—	Wick (long tab)	3
106	133725	NBR	Seal, LPS, w/SS-Spg	3
110	133318	SSD	Manifold, Inlet	1
112	12392	NBR	O-Ring, Inlet Spacer - 70D	6
114	133734	SS	Spacer, Inlet	3
117	89694	S	Screw, HSH (M16x110)	8
126	133728	PTFE	Adapter, Female	3
127	133729	STG	V-Packing	6
128	133730	SS	Adapter, Male	3
141	133731	SS	Spring, Large Coil	3
155	133733	NBR	O-Ring, V-Packing Spacer - 80D	6
157	133732	SS	Spacer, V-Packing	3
160	44756	S	Pin, Guide	2
163	133733	NBR	O-Ring, Seat - 80D	6
164	133736	SS	Seat	6
166	133738	SS	Valve	6
167	133737	SS	Spring	6
168	133739	PVDF	Retainer, Spring	6
170	133740	SS	Washer, Spring	6
171	133741	SS	Spring, Coil	6
172	15858	NBR	O-Ring, Valve Plug - 70D	6
174	133742	SS	Plug, Valve	6
177	133744	S	Screw, HSH (M16x30) - Valve Plate	16
178	133743	S	Plate, Valve	2
185	133321	SSD	Manifold, Discharge	1

EXPLODED VIEW



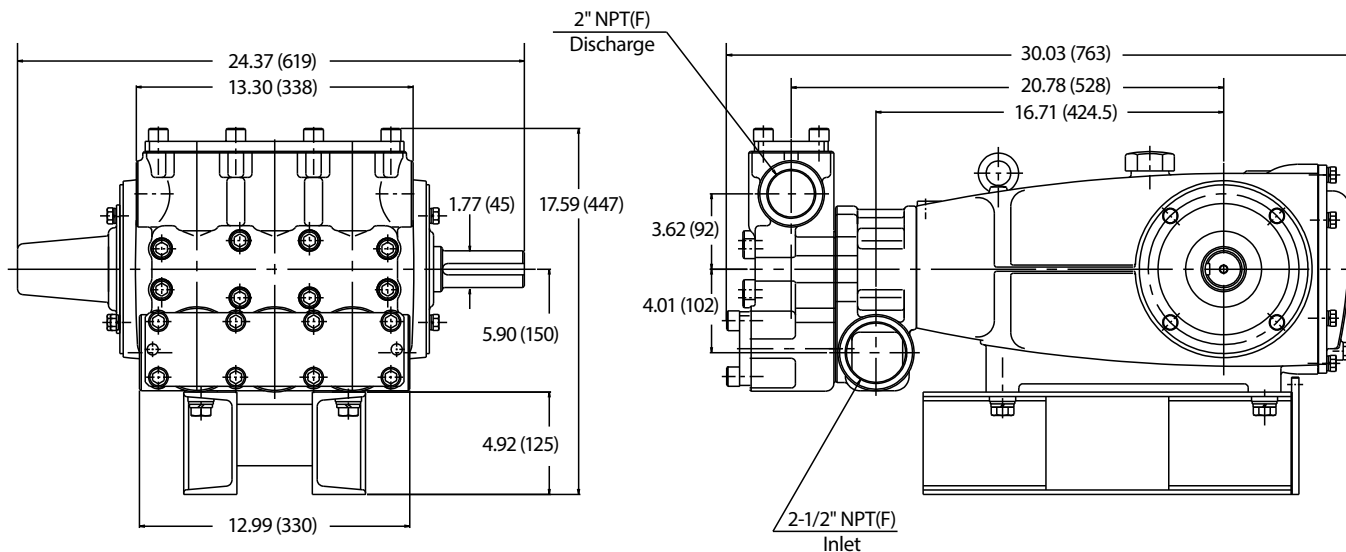
Model
Duplex Stainless Steel 67102
April 2016

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
188	89959	S	Screw, HSH (M16x120)	8
250	29445	AL	Protector, Shaft	1
255	33243	STZP	Mount, Bolt Assy (included with pump)	1
259	126787	STZP	Mount, Rail Assembly (included with pump)	1
290	6124	—	Gasket, Liquid (3 oz.)	1
299	818631	DSS	Head, Complete w/NBR O-Rings	1
300	76294	NBR *	Kit, Seal (Incls: 97,101,106,112,127,155)	1
310	76296	NBR	Kit, Valve Preassembled (Includes:163,164,166,167,168,170,172)	2
—	6100	—	Oil, Case (12-21 oz. Bottles) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	1
—	6119	—	Lubricant, Anti-Seize (2 oz.)	1

Italics are optional items. R Components comply with RoHS Directive. *Review material codes for individual items (STG generally may be used as alternate).

See Tech Bulletins 003, 024, 036, 043, 053, 074, 083 and 095 for additional information.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum BBHS=Brass/High Strength BBSS=Brass/Stainless Steel CC=Ceramic CM=Chrome-Moly DSS=Duplex SS
FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) PE=Polyethylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride RBR=Rubber S=304SS SS=316SS
SSD=Duplex Stainless Steel STCP=Steel/Chrome Plated STG=Special Blend PTFE White STL=Steel STZP=Steel/Zinc Plated



⚠ 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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