

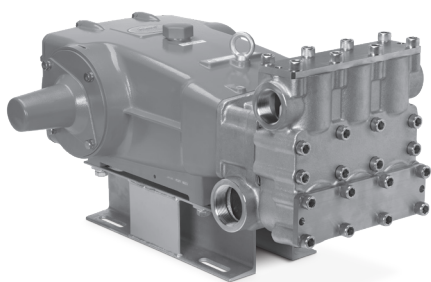
DATA SHEET

60 FRAME PLUNGER PUMPS



Duplex Stainless Steel Model: **67102**

Duplex Stainless Steel Flushed Model: **67102C**



Model 67102 Shown
(Box rails and shaft protector included)

FEATURES

- Triplex plunger design ensures high efficiency and low pulsation.
- V-packings and low-pressure seals are completely lubricated and cooled, greatly increasing service life.
- Cast duplex stainless steel inlet and discharge manifolds provide excellent corrosion resistance.
- Model 67102C offers an external flush for high-temperature or low-lubricity liquids.
- Low unswept volume maximizes volumetric efficiency, reducing energy costs and providing consistent flow.

SPECIFICATIONS

	U.S.	Metric
Flow	100 gpm	378.5 lpm
Pressure Range	100–1000 psi	6.9–69 bar
Pump RPM*	680 rpm	680 rpm
Inlet Pressure Range	Flooded to 30 psi	Flooded to 2 bar
Max. Liquid Temp. (67102)	140° F	60° C
Max. Liquid Temp. (67102C)	180° F	82° C
Bore	2.441"	62 mm
Stroke	2.579"	65.5 mm
Crankcase Capacity	10 qts	9.46 l
Inlet Ports (2)	2 ½" NPT(F)	2 ½" NPT(F)
Flush Ports (2) (67102C)	¼" NPT(F)	¼" NPT(F)
Discharge Ports (2)	2" NPT(F)	2" NPT(F)
Shaft Diameter	1.772"	45 mm
Pulley Mounting	Either side	Either side
Weight	363.75 lbs	165 kg
Dimensions	30.98 x 24.37 x 12.83"	767 x 619 x 326 mm

ALTERNATE SPECIFICATIONS

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

*Pump minimum is 100 RPM.

DETERMINING THE PUMP RPM

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

DETERMINING THE REQUIRED HP

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

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	P/N	MATL	DESCRIPTION	QTY
5	89728	S	Screw, HH (M10 x 40) (See Tech Bulletin 074)	8
6	15847	S	Lockwasher (M10)	8
7	19934	S	Washer, Flat (M10)	8
8	29443	ALE	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 (Includes: 21, 22) (See Tech Bulletin 074)	3
21	126560	STCP R	Washer, Locking	3
22	126593	STCP R	Washer, Shim (M10.5 x 1.5)	6
25	29440	FCM	Crankshaft, Dual-End (M65.5)	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Oil Filler Cap-70D	1
34	126743	STCP R	Bolt, Eye (M12 x 1.75) (For Lifting Pump Only)	1
38	129343	RBR	Gasket, Flat, Oil Gauge	1
39	27769	ABS	Stick, Dip	1
40	89627	S	Screw, HH (M10 x 30) (See Tech Bulletin 074)	8
41	15847	S	Lockwasher (M10)	8
42	19934	S	Washer, Flat (M10)	8
48	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR	O-Ring, Drain Plug-70D	1
50	29438	ALE	Cover, Rear	1
51	129386	NBR	Gasket, Rear Cover	1
53	855040	ALE	Crankcase Assembly (Includes: 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 (M62 x 174)	3
95	44748	SS	Stud, Plunger Retainer (M14 x 147)	3
96	20214	PTFE	Backup 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) (See Tech Bulletin 074)	3
100	855039	PVDF	Retainer, Seal, 2-Piece	3
101	133723	—	Wick (Long Tab)	3
106	133725	NBR	Seal, Low-Pressure, with SS-Spring	3
110	*133318	SSD	Manifold, Inlet	1
	*134436	SSD	Manifold, Inlet, Flushed (1/4" NPT[F] Ports)	1
112	12392	NBR	O-Ring, Inlet Spacer-70D	6
114	133734	SS	Spacer, Inlet	3
117	89694	S	Screw, HSH (M16 x 110) (See Tech Bulletin 074)	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	31377	STTC	Screw, HSH (M16 x 35) – Valve Plate (See Tech Bulletin 074)	16
178	670035	S	Plate, Valve	2
185	133321	SSD	Manifold, Discharge	1
188	89959	S	Screw, HSH (M16 x 120) (See Tech Bulletin 074)	8
250	29445	ALE	Protector, Shaft	1
255	33243	STZP	Mount, Direct	1
256	29649	STCP	Washer, Slant (M16) (To Shim and Align Mounting Bolt (Not Included) Through the Box Rail and Mounting Base)	4
259	126787	STZP	Rail, Box	1

* When ordering a new inlet manifold PN 133318 or 134436, order two (2) PN 44756 guide pins (Item #160)

Bold print part numbers are unique to a particular pump model.

R Components comply with RoHS Directive. For additional technical information see www.catpumps.com/literature/tech-bulletins.

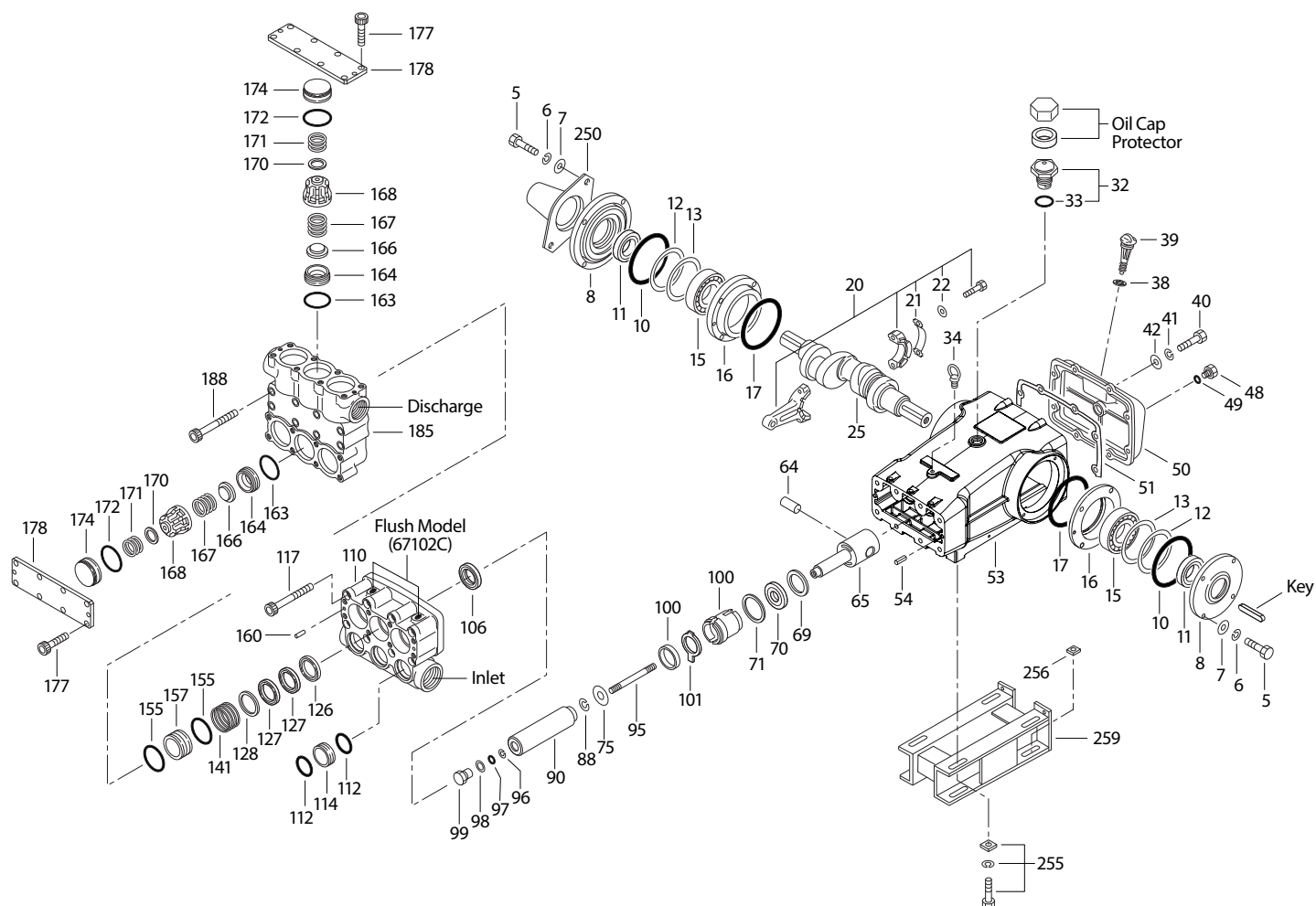
MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BBHS=Brass/High Strength BBSS=Brass/Stainless Steel CC=Ceramic CM=Chrome-Moly DSS=Duplex SS

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 STTC=Steel PTFE Coated STZP=Steel/Zinc Plated

Optional Parts and Accessories and Service parts listed on page 3. Standard Seal and Valve Kits listed on page 4.

EXPLODED VIEW



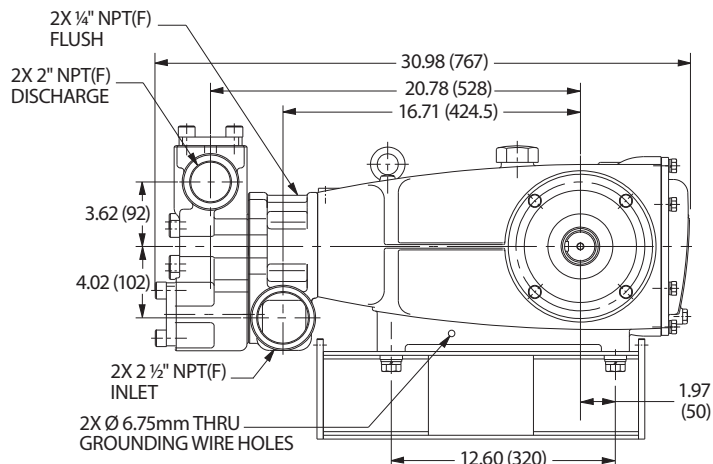
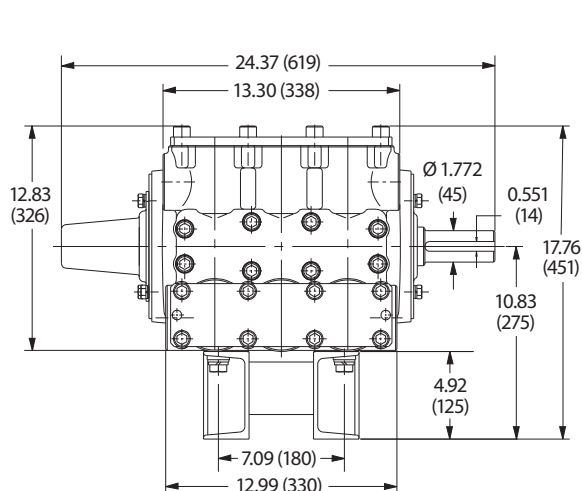
Models
 Duplex Stainless Steel 67102
 Duplex Stainless Steel Flushed 67102C
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OPTIONAL PARTS AND ACCESSORIES

PART	DESCRIPTION	QTY
43048	Key (M14 x 9 x 90)	1
828710	Protector, Oil Cap with Foam Gasket	1
990014	Hub, "B", 45 mm (Not Shown)	1
34314	Kit, Oil Drain (3/8" x 48") (Not Shown)	1
88902	Stud (M16 x 277) (For removal of DM & IM) (Not Shown)	2

SERVICE PARTS

PART	DESCRIPTION	QTY
76294	Kit, Seal – Standard NBR	1
76296	Kit, Valve – Standard NBR	2
6102	Oil, Jug (2.5 gal) (Fill to Specified Crankcase Capacity Prior to Start-up)	1
6124	Gasket, Liquid (3 oz)	1
6139	Lubricant, Anti-Seize (8 oz) (See Tech Bulletin 095)	1
32357	Crankcase Oil Seal Removal and Installation Kit (Not Shown) (Includes: Oil Seals, Guide Tool, Screws, Washers)	1
30696	Reverse Pliers (Not Shown)	1
818631	Head, Complete with NBR Seals and O-Rings (Model 67102)	1
818646	Head, Complete with NBR Seals and O-Rings (Model 67102C)	1



Models 67102, 67102C

SEAL KITS

One (1) seal kit required per pump

PUMP MODELS	NBR (STD)
67102, 67102C	76294*

ITEM (Included in Seal Kits)	DESCRIPTION	QTY
97	17616 O-Ring, Plunger Retainer	3
106	133725 Seal, Low-Pressure with SS-Spring	3
112	12392 O-Ring, Inlet Spacer	6
127	133729 V-Packing	6
155	133733 O-Ring, V-Packing Spacer	6

*Review material codes for individual items (STG may be used as alternative)

VALVE KITS

Two (2) valve kits required per pump

PUMP MODELS	NBR (STD)
67102, 67102C	76296

ITEM (Included in Valve Kits)	DESCRIPTION	QTY
163	133733 O-Ring, Valve Seat	3
164	133736 Seat	3
166	133738 Valve	3
167	133737 Spring	3
168	133739 Retainer, Spring	3
170	133740 Washer, Spring Retainer	3
172	15858 O-Ring, Valve Plug	3

⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (e.g. regulator, unloader) and a secondary pressure relief device (e.g. 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