

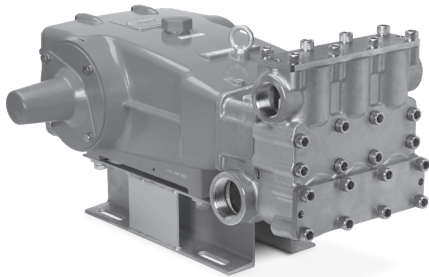
DATA SHEET

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

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

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 | 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.

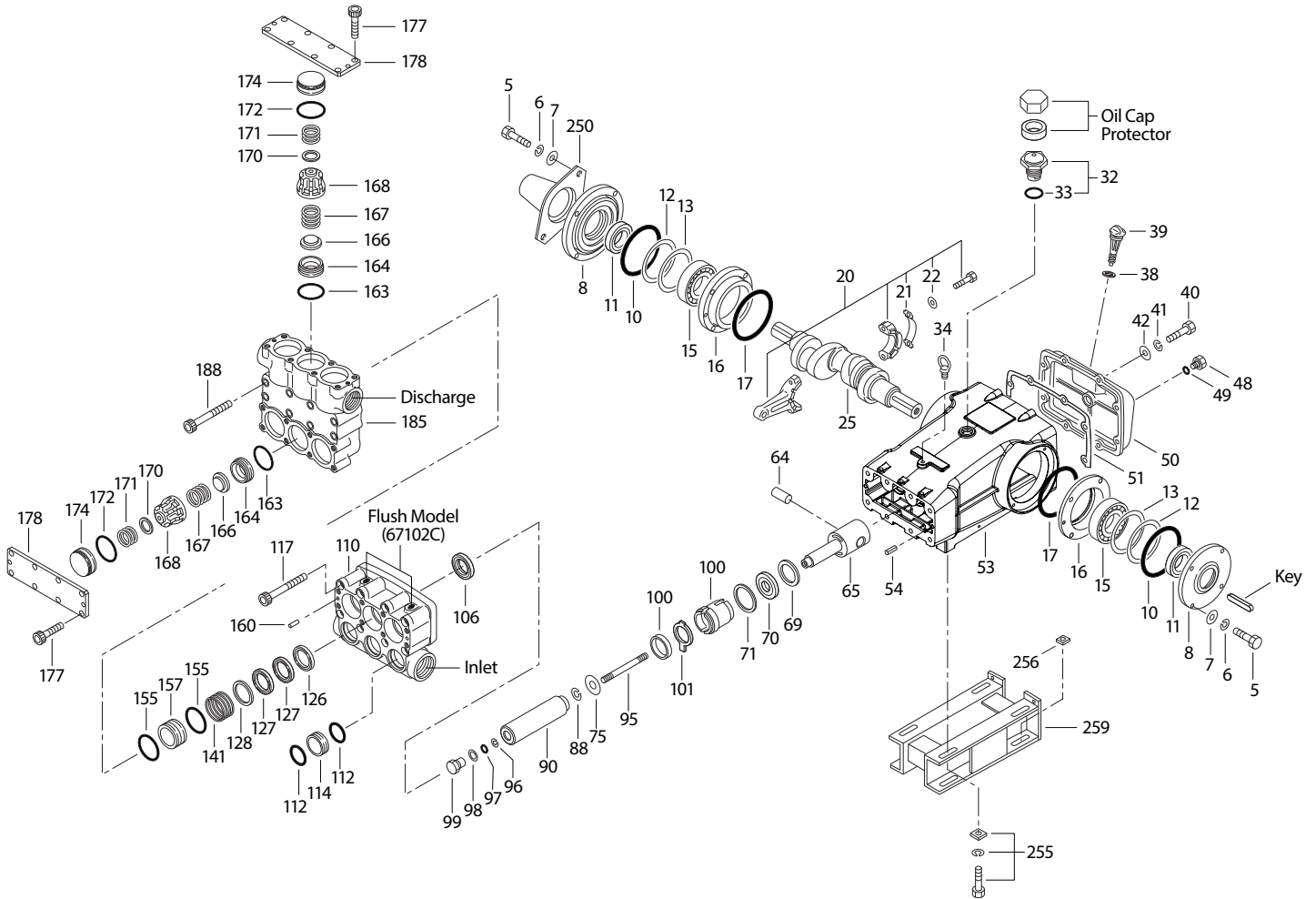
MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BBHS=Brass/High Strength BBSS=Brass/Stainless Steel CC=Ceramic CM=Chrome-Moly DSS=Duplex SS

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



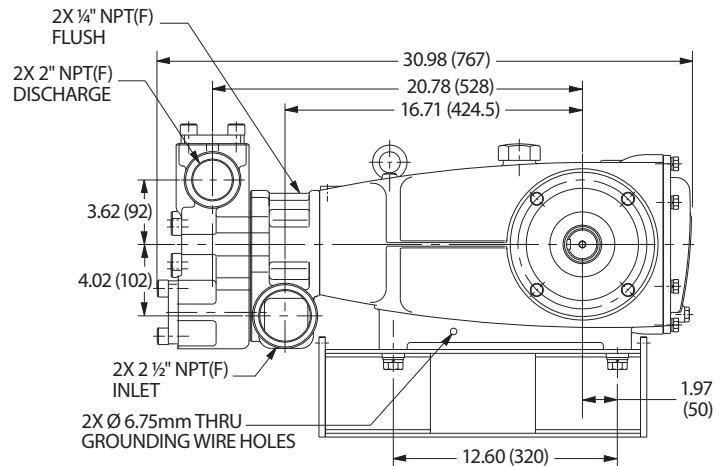
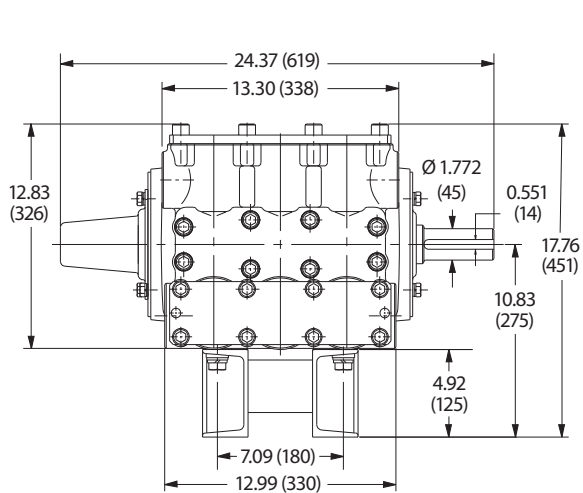
Models
 Duplex Stainless Steel 67102
 Duplex Stainless Steel Flushed 67102C
 May 2024

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 | O-Ring, Plunger Retainer | 3 |
| 106 | Seal, Low-Pressure with SS-Spring | 3 |
| 112 | O-Ring, Inlet Spacer | 6 |
| 127 | V-Packing | 6 |
| 155 | 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 | O-Ring, Valve Seat | 3 |
| 164 | Seat | 3 |
| 166 | Valve | 3 |
| 167 | Spring | 3 |
| 168 | Retainer, Spring | 3 |
| 170 | Washer, Spring Retainer | 3 |
| 172 | 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