CAT PUMPS®

*The Pumps with Nine Lives*

# Pumps & Accessories Catalog

Product Quality, Reliability and Support You Expect

**www.catpumps.com**

# When It Needs to Run, Choose Cat Pumps

Cat Pumps designs and builds products to the highest quality level for one major reason: our customers depend on our products to keep their equipment running. Every design detail is optimized for long product life and reliable performance.

Cat Pumps embraces a zero defect manufacturing philosophy. Stringent process controls result in highly repeatable processes, yielding the highest level of product reliability. The Cat Pumps commitment to quality is legendary within the industry, earning the trust from customers worldwide.

## Table of Contents


**PRODUCT ORDERING** 3
**PUMP SELECTION** 4
**PUMP FEATURES** 4
**PLUNGER PUMPS** 6
Direct Drive, Hollow Shaft, Brass Manifold 6
Direct Drive, Hollow Shaft, 316 Stainless Steel Manifold 7
Direct Drive, Hollow Shaft Gearbox, Brass Manifold 7
Direct Drive, Hollow Shaft Gearbox, 316 Stainless Steel Manifold 7
Direct Drive, Solid Shaft, Brass Manifold 8
Direct Drive, Solid Shaft, 316 Stainless Steel Manifold 8
Direct Drive, Solid Shaft, Nickel Aluminum Bronze Manifold 8
Solid Shaft, Brass Manifold 9
Solid Shaft, 316 Stainless Steel Manifold 11
Solid Shaft, Duplex Stainless Steel Manifold 11
**PISTON PUMPS** 12
Solid Shaft, Nickel Aluminum Bronze Manifold 12
Piston Pumps, Solid Shaft, Brass Manifold 12
Piston Pumps, Solid Shaft, 316 Stainless Steel Manifold 12
**FLUSHED MANIFOLD PUMPS** 13
Flushed Manifold Pumps, Solid Shaft 13
Flushed Manifold Pumps, Solid Shaft, 316 Stainless Steel Manifold 13
Flushed Manifold Pumps, Solid Shaft, Duplex Stainless Steel Manifold 13
**HIGH-TEMPERATURE PUMPS** 14
**TRIETHYLENE GLYCOL (TEG) PUMPS, 240° F** 14
**WASHOUT RESISTANT PUMPS** 15
B Series, Solid Shaft, Special Brass Manifold, Vehicle Wash 15
**LIQUID $CO_2$ PUMPS** 15
**ATEX PUMPS** 16
**1CX SERIES COMPACT MISTING PUMPS** 16
**1XP SERIES PORTABLE EXTRACTOR PUMPS** 17
**CENTRIFUGAL PUMPS** 18
**CUSTOM PUMPING SYSTEMS** 20
**ACCESSORIES** 22
Typical Installation 23
**DISCHARGE ACCESSORIES** 24
CPC Pressure Regulators 24
Unloaders, Trapped Pressure 25
Pressure Relief Valves 26
Pop-Off Valves 27
Pressure Gauges 28
Valve Plug Adapters 28
Quick Disconnect Assemblies 28
Pulsation Dampeners 29
**INLET ACCESSORIES** 30
Filters 30
Inlet Pressure Gauges 30
Inlet Pressure Regulators 31
Inlet Pressure Relief Valves 31
Inlet Stabilizers 31
Thermal Valves 32
Garden Hose Assemblies 32
**SPECIALTY ACCESSORIES** 33
Easy Start Valve 33
Throttle Control 33
Mag-Jet and Pulsator Assemblies 33
Auto Shut-Off Assemblies 34
LPS Monitors 34
Float Valves 34
Pressure Switches 35
Flow Switches 35
Thermostat 35
**OPERATOR CONTROLS** 36
Guns, Gun & Lance Assemblies 36
Lances 37
Nozzles 38
Vari-Nozzles 39
Foamers 39
Chemical Injectors 39
Pulse Pumps 40
**LUBRICATION ACCESSORIES** 41
Crankcase Oil 41
Gear Lube 41
Anti-Seize and Sealants 42
Pump Protector 42
**PUMP ACCESSORIES** 43
Oil Drain/Level Indicator Kits 43
Protectors – Shaft and Oil Cap 43
Keys – Direct Drive 44
Keys – Belt Drive 44
Rail, Direct Mount and Complete Mounting Assemblies 45
**NEMA MOUNTING COMPONENTS** 46
NEMA Bell Housing Assemblies 46
NEMA Flexible Coupler Assemblies 46
**MOTOR OPTIONS** 47
**SAE MOUNTING COMPONENTS** 48
SAE Bell Housing Assemblies 48
SAE Flexible Coupler Assemblies 48
**DRIVE ACCESSORIES** 49
Hubs and Hub/Key Assemblies 49
Clutches 49
**DRIVE ACCESSORIES** 50
**SERVICE TOOLS** 50
Pulleys and Pulley/Hub w/Key 50
Pliers 50
Oil Gauge Removal Tool 50
Seal Case Removal Tools 51
Piston Pump Tools 51
Crankcase Oil Seal Kit 51
**NEW PRODUCTS AND UPDATES** 52
**CAT PUMPS RESOURCES ON-DEMAND** 54
**CUSTOMER SERVICE** 55
**CAT PUMPS LOCATIONS** 56

# Product Ordering

## Using This Catalog

The pump sections of this catalog are organized by drive type/flow rate/manifold materials (brass, 316 stainless steel, duplex stainless steel and nickel aluminum bronze). The model numbers listed represent standard pumps equipped with Buna-N seals and O-rings, except for specialty pumps, such as $CO_2$, TEG and portable extractors, which are fitted with unique seals for the application.

Standard Buna-N pump seals and/or O-rings can be changed by adding a suffix to the standard model number that represents the desired new seal material.

### Optional Seal and O-Ring Configurations

| MATERIAL CODE | DESCRIPTION | MAX. TEMPERATURE * | PUMP MODEL SUFFIX |
|---|---|---|---|
| NBR | Medium Nitrile (Buna-N) Seals and O-Rings | 160° F (71° C) | — |
| FPM | Fluorocarbon (Viton®) Seals and O-Rings, Chemical Resistance | 180° F (82° C) | .0110 |
| EPDM | Ethylene Propylene Diene Monomer Seals and O-Rings | 160° F (71° C) | .0220 |
| HT | High-Temperature High-Pressure Seals | 180° F (82° C) | .3000 |
| STHT | High-Temperature High-Pressure Seals, Special Teflon® Low-Pressure Seals, NBR O-Rings | 190° F (88° C) | .3400 |
| | High-Temperature High-Pressure Seals, Special Teflon® Low-Pressure Seals, FPM O-Rings | 190° F (88° C) | .3410 |
| PTFE | Pure Polytetrafluoroethylene (Teflon®) Seals and Buna-N O-Rings | 190° F (88° C) | .0700 |
| | Pure Polytetrafluoroethylene (Teflon®) Seals and FPM O-Rings | 200° F (93° C) | .0710 |
| IPFE | I-Perfluoroelastomer (Teflon®) Seals and Isolast® O-Rings | 200° F (93° C) | .0770 |
| ST | Special Blend PTFE High and Low-Pressure Seals, Buna-N O-Rings | 190° F (88° C) | .4400 |
| | Special Blend PTFE High and Low-Pressure Seals, FPM O-Rings | 200° F (93° C) | .4410 |
| NBRS | Buna-N Silicone-Free Seals and O-Rings | 160° F (71° C) | .6000 |

FPM = Fluorocarbon, EPDM = Ethylene Propylene Diene Monomer, HT = High-Temperature (EPDM Alternative), STHT = Special PTFE High-Temperature

PTFE = Pure Polytetrafluoroethylene, IPFE = I-Perfluoroelastomer, ST = Special PTFE, NBR = Medium Nitrile (Buna-N), NBRS = Buna-N Silicon-Free Seals and O-Rings

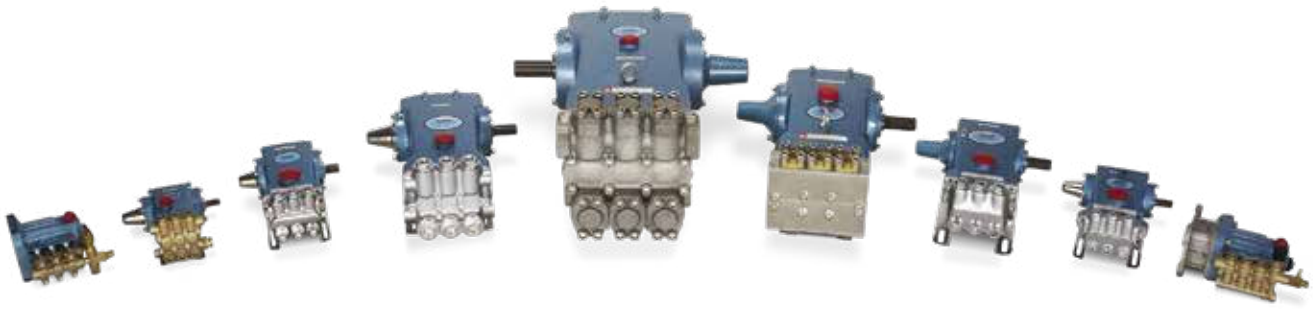
* See individual data sheet for each pump to verify actual maximum temperature allowed.

Viton® and Teflon® are registered trademarks of DuPont Dow Elastomers.

## Example

Pump model 3535 can be changed from Buna-N to FPM. To convert pump model 3535 from Buna-N seals and O-rings to FPM (Viton®), add the suffix (.0110) to the standard pump model number (3535.0110). Use this new number when ordering the pump.

Cat Pumps configures a number of pumps for special applications and certifications such as ATEX, $CO_2$, TEG, Flushed, High-Temp and others. Please contact Cat Pumps directly at (763) 780-5440 for more information.



# Pump Selection

Cat Pumps offers a complete line of positive displacement high-pressure pumps and systems that exceed industry expectations for reliability, availability and support. When high-pressure liquid is required, Cat Pumps is the supplier of choice for pumps, pumping systems and control accessories. Applications include $CO_2$ extraction, washdown, mist cooling, humidification, odor control and numerous other industry uses.

## Product Performance Range

A wide range of pump options are available, including a variety of products that meet various industry certifications and directives.

- Flow: 0.13 to 240 gpm (0.49 to 908 lpm)
- Pressure: 100 to 10,000 psi (6.9 to 689 bar)
- RPM: 100 to 3,450
- Liquid Temperature: -10° to 200°F (-23° to 93°C)

* Other materials available upon request.

- Manifold Materials: Brass, Nickel Aluminum Bronze, 304 and 316 Stainless Steel, Duplex Stainless Steel*
- Sealing Material: NBR, FPM, EPDM, PTFE, Silicone-free*
- Drives: Electric, Engine, Hydraulic, Pneumatic

# Pump Features

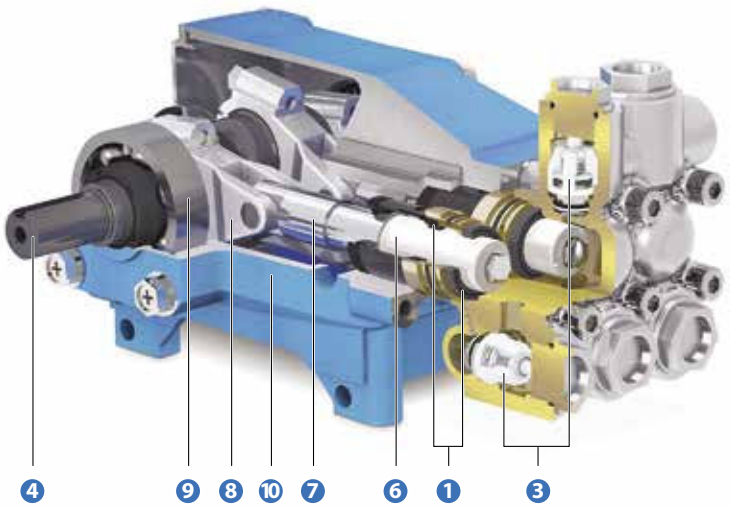
1. Specially formulated, Cat Pumps exclusive high-pressure and low-pressure seals offer unmatched performance and seal life.
2. 100% wet cup/seal design adds to service life by allowing pumped fluids to cool and lubricate the elastomers on both sides.
3. Stainless steel valves, seats and springs provide corrosion resistance, positive seating and long life.
4. Chrome-moly crankshaft provides unmatched strength and surface hardness for long life.
5. The patented stepped piston rod with hard chrome-plated sleeve provides a durable wear surface and easy wet end servicing.
6. Precision-polished, solid ceramic plungers provide maximum resistance to corrosion and abrasion, extending seal life.
7. The high strength stainless steel plunger rods have a 360° supported crosshead providing uncompromising plunger rod alignment.
8. Matched oversized connecting rods are made of high-strength material with exceptional bearing quality.
9. Oversized ball bearings or tapered roller bearings provide extended bearing life.
10. High-strength, lightweight die cast aluminum crankcase with splash oil design allows operation at speeds as low as 100 RPM.

# Pump Features

## Plunger Pumps

**(0.13–240 gpm, 100–10,000 psi)**

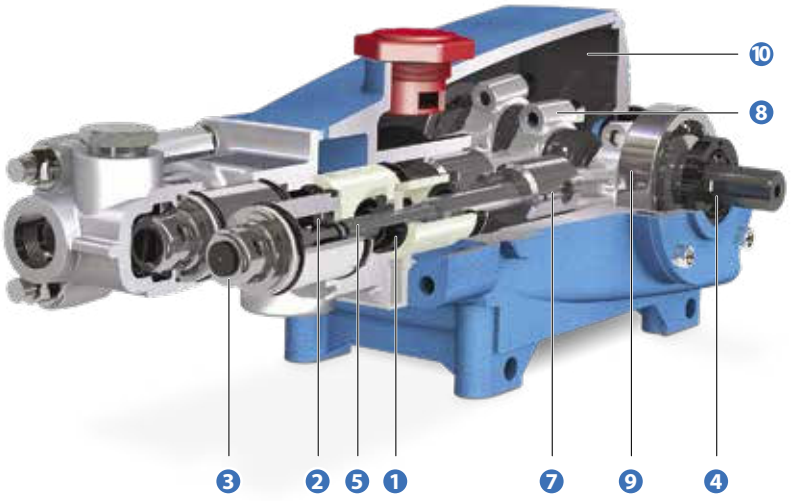
Plunger pumps utilize spring-loaded closed and hydraulically opened inlet and discharge valves to direct flow through the pump manifold. At the beginning of the stroke, the plunger displaces the liquid in the manifold chamber, forcing the discharge valve open. When the plunger reaches the end of the stroke, the discharge valve closes. As the plunger rod begins its backward stroke, the inlet valve opens to allow more liquid into the manifold chamber, thereby keeping a smooth forward flow of liquid.




## Piston Pumps

**(3.0–60 gpm, 100–1,500 psi)**

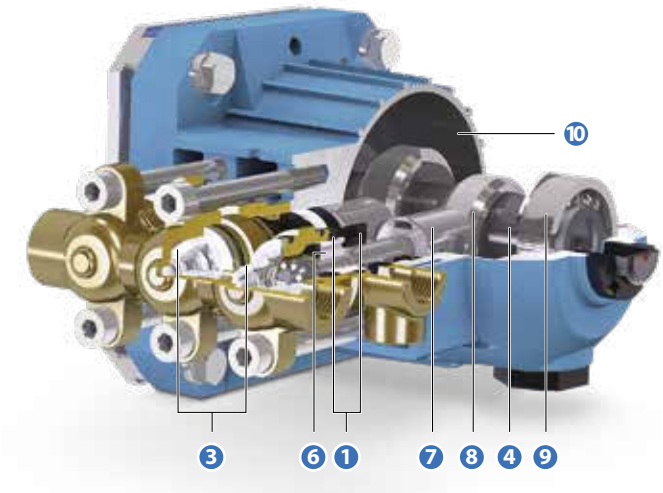
The design of the piston pump allows the fluid to move continually in one, smooth forward direction. This design allows greater suction capabilities and reduces the risk of cavitation provided the pump is properly primed. At the beginning of the stroke, the mechanically actuated inlet valve (and piston) will close. As the piston rod moves forward, the liquid is forced out through the discharge valves. Simultaneously, the liquid enters the pump inlet and flows in behind the inlet valve. As the piston rod begins the backward stroke, the inlet valve mechanically opens, permitting the liquid to continue its flow forward through the piston into the pumping chamber.




## SF Series Pumps

**(0.5–4.2 gpm, 100–2,500 psi)**

In SF series pumps, both the inlet and discharge valves are spring-loaded closed and hydraulically opened, similar to plunger pumps, however, they have a flow-through ceramic plunger design. The continuous forward flow characteristic of piston pumps is utilized in conjunction with the packing design of the plunger pumps. These features give SF pumps both strong suction capabilities and higher pressure performances.



# Plunger Pumps

Model 4DX10ER

**DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD**
Electric Motor, ⅝" and ¾", 56C Face

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 4DX03ELR | 0.3 | 1.1 | 2000 | 138 | 1750 | ⅝" |
| 4DX10ER* | 1.0 | 3.8 | 2000 | 138 | 3450 | ⅝" |
| 4DX15ER* | 1.5 | 5.7 | 2000 | 138 | 3450 | ⅝" |
| 4DX20ER* | 2.0 | 7.6 | 2000 | 138 | 3450 | ⅝" |
| 4SP21ELR* | 2.1 | 7.9 | 2000 | 138 | 1750 | ⅝" |
| 4DX27ER* | 2.7 | 10.3 | 2000 | 138 | 3450 | ⅝" |
| 4SP29ELR* | 2.85 | 10.8 | 1200 | 83 | 1750 | ⅝" |
| 4DX30ER* | 3.0 | 11.4 | 2000 | 138 | 3450 | ⅝" |
| 2SF35ES | 3.5 | 13.3 | 1500 | 103 | 3450 | ⅝" |
| 2SF35GES | 3.5 | 13.3 | 2000 | 138 | 3450 | ¾" |
| 2SFP500EL | 5.0 | 19.0 | 500 | 34.5 | 1750 | ⅝" |

Note: Pumps rated at 3450 rpm can operate at 1725 rpm, reducing flow by 50%.
*"R" models are built with an integral pressure regulator valve. "U" models are available with an integral unloader valve.

Model 2SF35ES

**DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD**
Electric Motor, 1 ⅛", 184TC Face

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 5SP30ELR* | 3.0 | 11.4 | 3000 | 207 | 1750 | 1 ⅛" |
| 5SP35ELR* | 3.5 | 13.3 | 2500 | 172 | 1750 | 1 ⅛" |
| 5SP40ELR* | 4.0 | 15.2 | 2000 | 138 | 1750 | 1 ⅛" |

*"R" models are built with an integral pressure regulator valve. "U" models are available with an integral unloader valve.

Model 5SP35ELU

**DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD**
Engine, ¾"

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT | HP |
|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | | Typical Gas Engine* |
| 4DNX25GSI | 2.5 | 9.5 | 3000 | 207 | 3450 | ¾" | 6.5 |
| 4DNX27GSI | 2.7 | 10.3 | 3000 | 207 | 3450 | ¾" | 8 |
| 4DX29GUIF | 2.9 | 11.0 | 2600 | 179 | 3450 | ¾" | 6.5 |
| 2SF30GS | 3.0 | 11.4 | 2000 | 138 | 3450 | ¾" | 6.5 |
| 2SF35GS | 3.5 | 13.3 | 2000 | 138 | 3450 | ¾" | 8 |

*Consult engine manufacturer for actual torque available at required speed.

Model 66DX40G1I

**DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD**
Engine, 1"

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT | HP |
|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | | Typical Gas Engine* |
| 66DX30G1I | 3.0 | 11.4 | 4000 | 276 | 3400 | 1" | 13 |
| 4SPX32G1I | 3.2 | 12.2 | 3000 | 207 | 3450 | 1" | 9 |
| 66DX35G1I | 3.5 | 13.3 | 4000 | 276 | 3400 | 1" | 13 |
| 66DX40G1I | 4.0 | 15.2 | 4000 | 276 | 3400 | 1" | 16 |
| 66DX50G1I | 5.0 | 19.0 | 3500 | 241 | 3250 | 1" | 13 |

*Consult engine manufacturer for actual torque available at required speed.

# Plunger Pumps

### DIRECT DRIVE, HOLLOW SHAFT, 316 STAINLESS STEEL MANIFOLD
Electric Motor, ⅝", 56C Face

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 2SF05SEEL | 0.5 | 1.9 | 1200 | 83 | 1725 | ⅝" |
| 2SF10SEEL | 1.0 | 3.8 | 1200 | 83 | 1725 | ⅝" |
| 2SF15SEEL | 1.5 | 5.7 | 1200 | 83 | 1725 | ⅝" |
| 2SF22SEEL | 2.2 | 8.4 | 1200 | 83 | 1725 | ⅝" |
| 2SFQ25SEEL | 2.5 | 9.5 | 1200 | 83 | 1725 | ⅝" |
| 2SFQ29SEEL | 2.85 | 10.8 | 1200 | 83 | 1725 | ⅝" |
| 2SFQ35SEEL | 3.5 | 13.3 | 1200 | 83 | 1725 | ⅝" |
| 2SFQ42SEEL | 4.2 | 15.9 | 1200 | 83 | 1725 | ⅝" |

Model 2SF22SEEL

### DIRECT DRIVE, HOLLOW SHAFT GEARBOX, BRASS MANIFOLD
Engine, ¾" and 1"

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT | HP |
|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | | Typical Gas Engine* |
| 740G1 | 2.8 | 10.6 | 5000 | 345 | 3465 | 1" | 13 |
| 3CP1120G | 3.5 | 13.3 | 2200 | 152 | 3600 | ¾" | 8 |
| 760G1 | 3.5 | 13.3 | 5000 | 345 | 3465 | 1" | 16 |
| 5CP3160CSSG1 | 4.0 | 15.2 | 3500 | 241 | 3320 | 1" | 13 |
| 5CP3120CSSG1 | 4.5 | 17.0 | 3500 | 241 | 3353 | 1" | 16 |
| 60G1 | 4.5 | 17.0 | 4000 | 276 | 3450 | 1" | 18 |
| 700G1 | 4.5 | 17.0 | 5000 | 345 | 3465 | 1" | 20 |
| 5CP3150CSSG1 | 5.0 | 19.0 | 3000 | 207 | 3450 | 1" | 13 |
| 5CP5135CSSG1 | 5.8 | 21.9 | 3500 | 241 | 3450 | 1" | 13 |
| 5CP5140CSSG1 | 6.2 | 23.4 | 3000 | 207 | 3450 | 1" | 18 |
| 5CP6120CSSG1 | 7.2 | 27.2 | 1500 | 103 | 3450 | 1" | 8 |
| 5CP6180CSSG1 | 8.0 | 30.4 | 1500 | 103 | 3450 | 1" | 11 |
| 56G1 | 8.0 | 30.4 | 2500 | 172 | 3600 | 1" | 16 |
| 56HSG1 | 8.0 | 30.4 | 3000 | 207 | 3600 | 1" | 22 |
| 5CP6190G1 | 9.7 | 36.7 | 1200 | 83 | 3450 | 1" | 11 |
| 7CP6110CSG1 | 10.0 | 38.0 | 2000 | 138 | 3400 | 1" | 18 |
| 7CP6160CSG1 | 10.0 | 38.0 | 2500 | 172 | 3400 | 1" | 22 |
| 7CP6170G1 | 12.0 | 45.4 | 1800 | 124 | 3264 | 1" | 16 |

Note: All 1" Gearboxes are also available in 1 ⅛" size (G118)
*Consult engine manufacturer for actual torque available at required speed.

Model 56G1

Model 5CP3120CSSG1

### DIRECT DRIVE, HOLLOW SHAFT GEARBOX, 316 STAINLESS STEEL MANIFOLD
Engine, ¾" and 1"

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT | HP |
|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | | Typical Gas Engine* |
| 3CP1241G | 3.0 | 11.4 | 2000 | 138 | 3600 | ¾" | 5 |
| 3CP1221G | 3.5 | 13.3 | 1500 | 103 | 3600 | ¾" | 5 |
| 3CP1211G | 3.8 | 14.4 | 1500 | 103 | 3400 | ¾" | 5 |
| 5CPQ6241CSG1 | 4.0 | 15.2 | 2000 | 138 | 3600 | 1" | 8 |
| 781G1 | 4.5 | 17.0 | 5000 | 345 | 3465 | 1" | 20 |
| 5CPQ6251G1 | 5.0 | 19.0 | 2000 | 138 | 3600 | 1" | 9 |
| 5CPQ6221G1 | 7.4 | 28.0 | 1500 | 103 | 3600 | 1" | 9 |
| 7CP6111CSG1 | 10.0 | 38.0 | 2000 | 138 | 3400 | 1" | 18 |

Note: All 1" Gearboxes are also available in 1 ⅛" size. (G118).
*Consult engine manufacturer for actual torque available at required speed.

Model 7CP6111CSG1

# Plunger Pumps

Model 3CP1120

Model 5CP3160CSS

Model 3CP1231

Model 277

## DIRECT DRIVE, SOLID SHAFT, BRASS MANIFOLD

Electric Motor–Bell Housing

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 5CP4110CSS | 2.2 | 8.4 | 4000 | 276 | 1750 | 20 mm |
| 3CP1130 | 2.4 | 9.1 | 2200 | 138 | 1725 | 16.5 mm |
| 5CP3105CSS | 2.5 | 9.5 | 3500 | 241 | 1750 | 20 mm |
| 5CP4112CSS | 2.7 | 10.3 | 4000 | 276 | 1750 | 20 mm |
| 740 | 2.9 | 11.0 | 5000 | 345 | 1750 | 24 mm |
| 5CP4114CSS | 3.2 | 12.1 | 4000 | 276 | 1750 | 20 mm |
| 3CP1140 | 3.6 | 13.7 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP3110CSS | 3.6 | 13.7 | 3500 | 241 | 1750 | 20 mm |
| 760 | 3.6 | 13.6 | 5000 | 345 | 1750 | 24 mm |
| 5CP4116CSS | 3.8 | 14.4 | 4000 | 276 | 1750 | 20 mm |
| 5CP2140WCS | 4.0 | 15.2 | 2500 | 172 | 1725 | 20 mm |
| 3CP1120 | 4.2 | 16.0 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP4118CSS | 4.2 | 16.0 | 4000 | 276 | 1750 | 20 mm |
| 5CP3160CSS | 4.3 | 16.3 | 3500 | 241 | 1750 | 20 mm |
| 5CP4120CSS | 4.5 | 17.0 | 4000 | 276 | 1750 | 20 mm |
| 60 | 4.7 | 17.9 | 4000 | 276 | 1750 | 24 mm |
| 700 | 4.7 | 17.9 | 5000 | 345 | 1750 | 24 mm |
| 5CP3120CSS | 4.8 | 18.2 | 3000 | 207 | 1750 | 20 mm |
| 5CP2150W | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |
| 5CP3150CSS | 5.2 | 19.8 | 3000 | 207 | 1750 | 20 mm |
| 5CP5120 | 6.0 | 22.8 | 2500 | 172 | 1750 | 20 mm |
| 5CP5135CSS | 6.0 | 22.8 | 3500 | 241 | 1750 | 20 mm |
| 5CP5140CSS | 6.4 | 24.3 | 3000 | 207 | 1750 | 20 mm |
| 5CP6120 | 7.4 | 28.1 | 1500 | 103 | 1725 | 20 mm |
| 56 | 8.0 | 30.4 | 2500 | 172 | 1760 | 24 mm |
| 56HS | 8.0 | 30.4 | 3000 | 207 | 1760 | 24 mm |
| 5CP6180CSS | 8.2 | 31.0 | 1500 | 103 | 1750 | 20 mm |
| 5CP6190 | 10.0 | 38.0 | 1200 | 83 | 1750 | 20 mm |
| 7CP6110CS | 10.5 | 39.9 | 2000 | 138 | 1750 | 24 mm |
| 7CP6160CS | 10.6 | 40.1 | 2500 | 172 | 1750 | 24 mm |
| 1730 | 15.8 | 59.8 | 1500 | 103 | 1750 | 30 mm |

## DIRECT DRIVE, SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD

Electric Motor–Bell Housing

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 3CP1231 | 2.3 | 8.7 | 2000 | 138 | 1725 | 16.5 mm |
| 784 | 2.9 | 11.0 | 5000 | 345 | 1750 | 24 mm |
| 3CP1241 | 3.6 | 13.7 | 2000 | 138 | 1725 | 16.5 mm |
| 786 | 3.6 | 13.7 | 5000 | 345 | 1750 | 24 mm |
| 5CPQ6241CS | 4.0 | 15.2 | 2000 | 138 | 1725 | 20 mm |
| 3CP1221 | 4.2 | 16.0 | 2000 | 138 | 1725 | 16.5 mm |
| 781 | 4.7 | 17.8 | 5000 | 345 | 1750 | 24 mm |
| 3CP1211CS | 5.0 | 19.0 | 1700 | 117 | 1750 | 16.5 mm |
| 5CPQ6251 | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |
| 5CPQ6281CSS | 5.5 | 20.9 | 2000 | 138 | 1725 | 20 mm |
| 5CPQ6271CSS | 6.6 | 25.1 | 1800 | 124 | 1725 | 20 mm |
| 5CPQ6221 | 7.4 | 28.0 | 1500 | 103 | 1725 | 20 mm |
| 7CP6111CS | 10.5 | 39.9 | 2000 | 138 | 1750 | 24 mm |

## DIRECT DRIVE, SOLID SHAFT, NICKEL ALUMINUM BRONZE MANIFOLD

Electric Motor–Bell Housing

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 237 | 2.3 | 8.7 | 1500 | 103 | 1725 | 16.5 mm |
| 247 | 3.6 | 13.7 | 1200 | 83 | 1725 | 16.5 mm |
| 277 | 4.2 | 16.0 | 1000 | 69 | 1725 | 16.5 mm |
| 347 | 4.0 | 15.2 | 1800 | 124 | 1725 | 20 mm |
| 357 | 5.0 | 19.0 | 1500 | 103 | 1725 | 20 mm |

# Plunger Pumps

**SOLID SHAFT, BRASS MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 5CP4110CSS | 2.2 | 8.4 | 4000 | 276 | 1750 | 20 mm |
| 3CP1130 | 2.4 | 9.1 | 2200 | 138 | 1725 | 16.5 mm |
| 5CP3105CSS | 2.5 | 9.5 | 3500 | 241 | 1750 | 20 mm |
| 5CP4112CSS | 2.7 | 10.3 | 4000 | 276 | 1750 | 20 mm |
| 740 | 2.9 | 11.0 | 5000 | 345 | 1750 | 24 mm |
| 1810* | 3.0 | 11.4 | 10000 | 689 | 1500 | 30 mm |
| 5CP4114CSS | 3.2 | 12.1 | 4000 | 276 | 1750 | 20 mm |
| 3CP1140 | 3.6 | 13.7 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP3110CSS | 3.6 | 13.7 | 3500 | 241 | 1750 | 20 mm |
| 760 | 3.6 | 13.7 | 5000 | 345 | 1750 | 24 mm |
| 5CP4116CSS | 3.8 | 14.4 | 4000 | 276 | 1750 | 20 mm |
| 310 | 4.0 | 15.2 | 2200 | 152 | 950 | 20 mm |
| 5CP2120W | 4.0 | 15.2 | 2500 | 172 | 950 | 20 mm |
| 5CP2140WCS | 4.0 | 15.2 | 2500 | 172 | 1725 | 20 mm |
| 3CP1120 | 4.2 | 16.0 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP4118CSS | 4.2 | 16.0 | 4000 | 276 | 1750 | 20 mm |
| 5CP3160CSS | 4.3 | 16.3 | 3500 | 241 | 1750 | 20 mm |
| 5CP3120CSS | 4.5 | 17.0 | 3500 | 241 | 1645 | 20 mm |
| 57 | 4.5 | 17.0 | 4000 | 276 | 1285 | 24 mm |
| 5CP4120CSS | 4.5 | 17.0 | 4000 | 276 | 1750 | 20 mm |
| 60 | 4.7 | 17.9 | 4000 | 276 | 1750 | 24 mm |
| 700 | 4.7 | 17.9 | 5000 | 345 | 1750 | 24 mm |
| 5CP3120CSS | 4.8 | 18.2 | 3000 | 207 | 1750 | 20 mm |
| 310 | 5.0 | 19.0 | 1500 | 103 | 1190 | 20 mm |
| 5CP2150W | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |
| 530 | 5.0 | 19.0 | 2500 | 172 | 1100 | 24 mm |
| 5CP5120 | 5.0 | 19.0 | 3000 | 207 | 1415 | 20 mm |
| 5CP3150CSS | 5.2 | 19.7 | 3000 | 207 | 1750 | 20 mm |
| 56 | 5.5 | 20.9 | 3500 | 241 | 1210 | 24 mm |
| 5CP5140CSS | 5.5 | 20.9 | 3500 | 241 | 1500 | 20 mm |
| 5CP5120 | 6.0 | 22.8 | 2500 | 172 | 1750 | 20 mm |
| 5CP5135CSS | 6.0 | 22.8 | 3500 | 241 | 1750 | 20 mm |
| 1570 | 6.0 | 22.8 | 6000 | 414 | 1350 | 30 mm |
| 5CP5140CSS | 6.4 | 24.3 | 3000 | 207 | 1750 | 20 mm |
| 5CP6180CSS | 6.9 | 26.1 | 1500 | 103 | 1450 | 20 mm |
| 650 | 7.0 | 26.6 | 3000 | 207 | 1000 | 30 mm |
| 5CP6120 | 7.4 | 28.1 | 1500 | 103 | 1725 | 20 mm |
| 5CP6120CS | 7.4 | 28.1 | 1500 | 103 | 1725 | 20 mm |
| 5CP6190 | 8.0 | 30.4 | 1450 | 100 | 1450 | 20 mm |
| 56 | 8.0 | 30.4 | 2500 | 172 | 1760 | 24 mm |
| 56HS | 8.0 | 30.4 | 3000 | 207 | 1760 | 24 mm |
| 5CP6180CSS | 8.2 | 31.0 | 1500 | 103 | 1750 | 20 mm |
| 1560 | 9.0 | 34.0 | 4000 | 276 | 1280 | 30 mm |
| 5CP6190 | 10.0 | 38.0 | 1200 | 83 | 1750 | 20 mm |
| 1050 | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 660 | 10.0 | 38.0 | 3000 | 207 | 1429 | 30 mm |
| 3550 | 10.0 | 38.0 | 6000 | 414 | 940 | 35 mm |
| 6810* | 10.0 | 38.0 | 10000 | 689 | 600 | 45 mm |
| 7CP6110CS | 10.5 | 39.9 | 2000 | 138 | 1750 | 24 mm |
| 7CP6160CS | 10.6 | 40.1 | 2500 | 172 | 1750 | 24 mm |
| 7CP6170 | 11.0 | 41.6 | 2000 | 138 | 1450 | 24 mm |
| 7CP6170 | 12.0 | 45.4 | 1800 | 124 | 1600 | 24 mm |
| 1580 | 12.0 | 45.4 | 3000 | 207 | 1180 | 30 mm |
| 1050 | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 1530 | 15.6 | 59.3 | 1500 | 103 | 1450 | 30 mm |
| 1730 | 15.8 | 59.8 | 1500 | 103 | 1750 | 30 mm |

* 17–4SS Stainless Manifolds

Model 1810

Model 310

Model 700

Model 5CP2120W

# Plunger Pumps

Model 1570

Model 660

Model 1540E

Model 3535

**SOLID SHAFT, BRASS MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 2560 | 16.0 | 60.5 | 3000 | 207 | 1510 | 30 mm |
| 1540E | 19.3 | 73.0 | 1200 | 83 | 1180 | 30 mm |
| 2510 | 20.0 | 76.0 | 2000 | 138 | 1450 | 30 mm |
| 2565 | 20.0 | 76.0 | 2500 | 172 | 1450 | 30 mm |
| 3560 | 20.0 | 76.0 | 4000 | 276 | 1160 | 35 mm |
| 2530 | 25.0 | 95.0 | 1200 | 83 | 1025 | 30 mm |
| 3520 | 25.0 | 95.0 | 2000 | 138 | 870 | 35 mm |
| 3570 | 30.0 | 113.6 | 2500 | 172 | 1080 | 35mm |
| 3570S* | 30.0 | 113.6 | 3000 | 207 | 1080 | 35 mm |
| 3560 | 25.0 | 95.0 | 3000 | 207 | 1450 | 35 mm |
| 3535 | 36.0 | 136.2 | 1200 | 83 | 800 | 35 mm |
| 3535HS* | 40.0 | 152.0 | 2000 | 138 | 888 | 35 mm |
| 6835 | 40.0 | 152.0 | 3000 | 207 | 625 | 45 mm |
| 3545 | 45.0 | 171.0 | 1000 | 69 | 765 | 35 mm |
| 3545HS* | 50.0 | 189.3 | 1500 | 103 | 850 | 35 mm |
| 67070 | 50.0 | 189.3 | 2000 | 138 | 653 | 45 mm |
| 6760 | 60.0 | 228.0 | 1200 | 83 | 520 | 45 mm |
| 67070* | 65.0 | 246.0 | 2000 | 138 | 850 | 45 mm |
| 6775 | 75.0 | 285.0 | 1200 | 83 | 650 | 45 mm |

*Intermittent duty cycle is defined as operating pump at stated flow and pressure for no more than 50% of time in any given hour.

## Selecting a Drive

A variety of different drive options are offered by Cat Pumps. Most systems are belt-driven by a pulley or clutch, but there are also direct-drive options such as direct coupled, gearbox or hollow shaft direct drive.

**Commonly Used Formulas**

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

$$\text{Pump Pulley*} \times \frac{\text{Pump rpm}}{\text{Motor/Engine rpm}} = \text{Motor Pulley*}$$

*Pitch Diameter

## Selecting a Power Source

Positive displacement pumps can use a variety of different power sources, including electric motors, gas or diesel engines, hydraulic and pneumatic motors. Note: system power sources must be sized with adequate horsepower to handle the maximum system flow and pressure required.

**Commonly Used Formulas**

$$\text{Electric Motor Horsepower (HP)*} = \frac{\text{gpm x psi}}{1460}$$

$$\text{Hydraulic Torque (ft. lbs.) Required} = 3.6 \times \frac{\text{gpm x psi}}{\text{rpm}}$$

*Standard 85% Overall Efficiency

# Plunger Pumps

### SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD

| PUMP MODEL | MAXIMUM FLOW GPM | LPM | MAXIMUM PRESSURE PSI | BAR | RPM | SHAFT |
|---|---|---|---|---|---|---|
| 3CP1231 | 2.3 | 8.7 | 2000 | 138 | 1725 | 16.5 mm |
| 784 | 2.9 | 11.0 | 5000 | 345 | 1750 | 24 mm |
| 3CP1241 | 3.6 | 13.7 | 2000 | 138 | 1725 | 16.5 mm |
| 786 | 3.6 | 13.7 | 5000 | 345 | 1750 | 24 mm |
| 341 | 4.0 | 15.2 | 1800 | 124 | 1725 | 20 mm |
| 5CPQ6241CS | 4.0 | 15.2 | 2000 | 138 | 1725 | 20 mm |
| 311 | 4.0 | 15.2 | 2200 | 152 | 950 | 20 mm |
| 3CP1221 | 4.2 | 16.0 | 2000 | 138 | 1725 | 16.5 mm |
| 781 | 4.7 | 17.9 | 5000 | 345 | 1750 | 24 mm |
| 351 | 5.0 | 19.0 | 1500 | 103 | 1725 | 20 mm |
| 3CP1211CS | 5.0 | 19.0 | 1700 | 117 | 1750 | 16.5 mm |
| 5CPQ6251 | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |
| 5CPQ6221 | 6.0 | 22.8 | 2000 | 138 | 1400 | 20 mm |
| 5CPQ6221 | 7.4 | 28.0 | 1500 | 103 | 1725 | 20 mm |
| 1051 | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 3501 | 10.0 | 38.0 | 5000 | 345 | 915 | 35 mm |
| 7CP6111CS | 10.5 | 39.9 | 2000 | 138 | 1750 | 24 mm |
| 7CP6171CS | 11.0 | 41.6 | 2000 | 138 | 1450 | 24 mm |
| 7CP6171CS | 12.0 | 45.0 | 1800 | 124 | 1600 | 24 mm |
| 1051 | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 3511 | 14.0 | 53.2 | 3000 | 207 | 800 | 35 mm |
| 6811 | 15.0 | 57.0 | 5000 | 345 | 630 | 45 mm |
| 6801 | 15.0 | 57.0 | 7000 | 483 | 630 | 45 mm |
| 1531 | 15.6 | 59.0 | 1500 | 103 | 1450 | 30 mm |
| 1541 | 19.3 | 73.0 | 1200 | 83 | 1180 | 30 mm |
| 2511 | 20.0 | 76.0 | 1500 | 103 | 1450 | 30 mm |
| 2531 | 25.0 | 95.0 | 1200 | 83 | 1025 | 30 mm |
| 3521DHS | 25.0 | 95.0 | 2000 | 138 | 870 | 35 mm |
| 6821 | 25.0 | 95.0 | 3000 | 207 | 615 | 45 mm |
| 3531D | 36.0 | 136.2 | 1200 | 83 | 800 | 35 mm |
| 3531DHS* | 40.0 | 152.0 | 2000 | 138 | 888 | 35 mm |
| 6831 | 40.0 | 152.0 | 2300 | 159 | 625 | 45 mm |
| 3541D | 45.0 | 171.0 | 1000 | 69 | 765 | 35 mm |
| 6841 | 48.0 | 182.4 | 2000 | 138 | 615 | 45 mm |
| 3541DHS* | 50.0 | 189.3 | 1500 | 103 | 850 | 35 mm |
| 6761 | 60.0 | 228.0 | 1200 | 83 | 520 | 45 mm |

*Intermittent duty cycle is defined as operating pump at stated flow and pressure for no more than 50% of time in any given hour.

Model 311

Model 1051

Model 2531

### SOLID SHAFT, DUPLEX STAINLESS STEEL MANIFOLD

| PUMP MODEL | MAXIMUM FLOW GPM | LPM | MAXIMUM PRESSURE PSI | BAR | RPM | SHAFT |
|---|---|---|---|---|---|---|
| 1051D | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 661D | 10.0 | 38.0 | 3000 | 207 | 1429 | 30 mm |
| 1051D | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 6762 | 60.0 | 228.0 | 1200 | 83 | 520 | 45 mm |
| 67102 | 80.0 | 302.8 | 1200 | 83 | 540 | 45 mm |
| 67102 | 100.0 | 378.5 | 1000 | 69 | 680 | 45 mm |
| 157R060 | 100.0 | 380.0 | 2700 | 186 | 310 | 100 mm |
| 152R060 | 115.0 | 437.0 | 1200 | 83 | 360 | 100 mm |
| 152R061 | 115.0 | 437.0 | 2000 | 138 | 360 | 100 mm |
| 152R080 | 200.0 | 760.0 | 1200 | 83 | 355 | 100 mm |
| 152R081 | 200.0 | 760.0 | 1560 | 108 | 355 | 100 mm |
| 152R100 | 240.0 | 912.0 | 1000 | 69 | 270 | 100 mm |

Model 6762

# Plunger Pumps

Model 277

Model 6767

**SOLID SHAFT, NICKEL ALUMINUM BRONZE MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 237 | 2.3 | 8.7 | 1500 | 103 | 1725 | 16.5 mm |
| 277 | 3.5 | 13.3 | 1500 | 103 | 1420 | 16.5 mm |
| 247 | 3.6 | 13.7 | 1200 | 83 | 1725 | 16.5 mm |
| 347 | 4.0 | 15.2 | 1800 | 124 | 1725 | 20 mm |
| 317 | 4.0 | 15.2 | 2200 | 152 | 950 | 20 mm |
| 277 | 4.2 | 16.0 | 1000 | 69 | 1725 | 16.5 mm |
| 357 | 5.0 | 19.0 | 1500 | 103 | 1725 | 20 mm |
| 1057 | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 3507 | 10.0 | 38.0 | 5000 | 345 | 915 | 35 mm |
| 1057 | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 3517 | 14.0 | 53.2 | 3000 | 207 | 800 | 35 mm |
| 2537 | 25.0 | 95.0 | 1200 | 83 | 1025 | 30 mm |
| 3527 | 25.0 | 95.0 | 2000 | 138 | 870 | 35 mm |
| 3537 | 36.0 | 136.2 | 1200 | 83 | 800 | 35 mm |
| 3537HS* | 40.0 | 152.0 | 2000 | 138 | 888 | 35 mm |
| 3547 | 45.0 | 171.0 | 1000 | 69 | 765 | 35 mm |
| 6747 | 48.0 | 182.4 | 2000 | 138 | 615 | 45 mm |
| 3547HS* | 50.0 | 189.3 | 1500 | 103 | 850 | 35 mm |
| 6767 | 60.0 | 228.0 | 1200 | 83 | 520 | 45 mm |

*Intermittent duty cycle is defined as operating pump at stated flow and pressure for no more than 50% of time in any given hour.

# Piston Pumps

Model 280

**PISTON PUMPS, SOLID SHAFT, BRASS MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 280 | 3.0 | 11.4 | 1000 | 69 | 1330 | 16.5 mm |
| 290 | 3.5 | 13.3 | 1200 | 83 | 1200 | 16.5 mm |
| 333 | 4.0 | 15.2 | 1200 | 83 | 1070 | 16.5 mm |
| 430 | 5.0 | 19.0 | 1000 | 69 | 1040 | 16.5 mm |
| 323 | 5.0 | 19.0 | 1500 | 103 | 1000 | 20 mm |
| 623 | 6.0 | 22.8 | 1200 | 83 | 850 | 25 mm |
| 820 | 10.0 | 38.0 | 1000 | 69 | 940 | 25 mm |
| 390 | 12.0 | 45.4 | 600 | 41 | 1200 | 20 mm |
| 1010 | 13.0 | 49.4 | 700 | 48 | 900 | 25 mm |
| 2520* | 25.0 | 95.0 | 800 | 55 | 772 | 30 mm |
| 6040 | 40.0 | 152.0 | 1500 | 103 | 500 | 45 mm |
| 6020 | 60.0 | 228.0 | 1000 | 69 | 500 | 45 mm |

*Available as a model 2520C with flushed inlet manifold.

Model 6020

**PISTON PUMPS, SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 281 | 3.0 | 11.4 | 1000 | 69 | 1330 | 16.5 mm |
| 291 | 3.5 | 13.3 | 1200 | 83 | 1200 | 16.5 mm |
| 331 | 4.0 | 15.2 | 1200 | 83 | 1070 | 16.5 mm |
| 431 | 5.0 | 19.0 | 1000 | 69 | 1040 | 16.5 mm |
| 621 | 6.0 | 22.8 | 1200 | 83 | 850 | 25 mm |
| 821 | 10.0 | 38.0 | 1000 | 69 | 940 | 25 mm |
| 1011 | 13.0 | 49.4 | 700 | 48 | 900 | 25 mm |
| 6041 | 40.0 | 152.0 | 1500 | 103 | 500 | 45 mm |
| 6021 | 60.0 | 228.0 | 1000 | 69 | 500 | 45 mm |

# Flushed Manifold Pumps

### FLUSHED MANIFOLD PUMPS, SOLID SHAFT

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 1810K* | 3.0 | 11.4 | 10000 | 689 | 1500 | 30 mm |
| 1530C | 15.6 | 59.0 | 1500 | 103 | 1450 | 30 mm |
| 1540EC | 19.3 | 73.0 | 1200 | 83 | 1180 | 30 mm |
| 2520C | 25.0 | 95.0 | 800 | 55 | 772 | 30 mm |
| 3520C | 25.0 | 95.0 | 2000 | 138 | 870 | 35 mm |
| 3570C | 30.0 | 114.0 | 2500 | 172 | 1080 | 30 mm |
| 3535C | 36.0 | 136.2 | 1200 | 83 | 800 | 35 mm |

Model numbers ending in "C" indicate flushed cast manifold and "K" indicate flushed block manifold.
*17 - 4SS Stainless Steel Manifolds

Model 3520C

### FLUSHED MANIFOLD PUMPS, SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 341C | 4.0 | 15.2 | 1800 | 124 | 1725 | 20 mm |
| 311C | 4.0 | 15.2 | 2200 | 152 | 950 | 20 mm |
| 781K | 4.7 | 17.9 | 5000 | 345 | 1750 | 24 mm |
| 351C | 5.0 | 19.0 | 1500 | 103 | 1725 | 20 mm |
| 1051C | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 661C | 10.0 | 38.0 | 3000 | 207 | 1429 | 30 mm |
| 3501C | 10.0 | 38.0 | 5000 | 345 | 915 | 35 mm |
| 7CP6171CCS | 11.0 | 41.6 | 2000 | 138 | 1450 | 24 mm |
| 7CP6171CCS | 12.0 | 45.0 | 1800 | 124 | 1600 | 24 mm |
| 7CP6111CCS | 10.5 | 39.9 | 2000 | 138 | 1750 | 24 mm |
| 1051C | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 3511C | 14.0 | 53.2 | 3000 | 207 | 800 | 35 mm |
| 6811K | 15.0 | 57.0 | 5000 | 345 | 630 | 45 mm |
| 6801K | 15.0 | 57.0 | 7000 | 483 | 630 | 45 mm |
| 1541C | 19.3 | 73.0 | 1200 | 83 | 1180 | 30 mm |
| 2531C | 25.0 | 95.0 | 1200 | 83 | 1025 | 30 mm |
| 3521C | 25.0 | 95.0 | 2000 | 138 | 870 | 35 mm |
| 6821K | 25.0 | 95.0 | 3000 | 207 | 615 | 45 mm |
| 3531C | 36.0 | 136.2 | 1200 | 83 | 800 | 35 mm |
| 6831K | 40.0 | 152.0 | 2300 | 159 | 625 | 45 mm |
| 3541C | 45.0 | 171.0 | 1000 | 69 | 765 | 35 mm |
| 6841K | 48.0 | 182.4 | 2000 | 138 | 615 | 45 mm |
| 6861K | 60.0 | 228.0 | 1200 | 83 | 520 | 45 mm |

Model numbers ending in "C" indicate flushed cast manifold and "K" indicate flushed block manifold.

Model 781K

Model 1051C

### FLUSHED MANIFOLD PUMPS, SOLID SHAFT, DUPLEX STAINLESS STEEL MANIFOLD

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 67102C | 100.0 | 378.5 | 1000 | 69 | 680 | 45 mm |
| 152R060C | 115.0 | 437.0 | 1200 | 83 | 360 | 100 mm |
| 152R080C | 200.0 | 760.0 | 1200 | 83 | 355 | 100 mm |
| 152R100C | 240.0 | 912.0 | 1000 | 69 | 270 | 100 mm |

Model numbers ending in "C" indicate flushed cast manifold and "K" indicate flushed block manifold.

Model 67102

# High-Temperature Pumps

Model 1051.3400

**.3400 SERIES, HIGH-TEMPERATURE AND INTERMITTENT RUN DRY**

The ".3400" Series pumps feature specially blended seals and V-packings, expanding pump operating performance to 190° F / 88° C. This modification also allows the pump to run intermittently dry without damaging the seals. Standard plunger pumps can be fitted with these specially blended seals. Ordering this configuration requires adding .3400 to pump base model. For example, a 310 pump fitted with high temperature seals will be 310.3400. Contact Cat Pumps for additional information.

# Triethylene Glycol (TEG) Pumps, 240° F

Model 3CP1120.44101

**HIGH-TEMPERATURE/TEG PUMPS, SOLID SHAFT, BRASS MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 3CP1130.44101 | 2.4 | 9.1 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP3105CS.44101 | 2.5 | 9.5 | 3500 | 241 | 1750 | 20 mm |
| 3CP1140.44101 | 3.6 | 13.7 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP2120W.44101 | 4.0 | 15.2 | 2500 | 172 | 950 | 20 mm |
| 5CP2140CS.44101 | 4.0 | 15.2 | 2500 | 172 | 1725 | 20 mm |
| 3CP1120.44101 | 4.2 | 16.0 | 2200 | 152 | 1725 | 16.5 mm |
| 5CP2150W.44101 | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |
| 5CP6120.44101 | 7.4 | 28.0 | 1500 | 103 | 1725 | 20 mm |
| 1050.44101 | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 1050.44101 | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 1530.44101 | 15.6 | 59.0 | 1500 | 103 | 1450 | 30 mm |
| 1540E.44101 | 19.3 | 73.0 | 1200 | 83 | 1180 | 30 mm |
| 2510.44101 | 20.0 | 76.0 | 2000 | 138 | 1450 | 30 mm |
| 2530.44101 | 25.0 | 95.0 | 1200 | 83 | 1025 | 30 mm |
| 3535.44101 | 36.0 | 136.0 | 1200 | 83 | 800 | 35 mm |

Model 1050.44101

**HIGH-TEMPERATURE/TEG PUMPS, SOLID SHAFT, 316 STAINLESS STEEL AND NICKEL ALUMINUM BRONZE MANIFOLD**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 3CP1231.44101 | 2.3 | 8.7 | 2000 | 138 | 1725 | 16.5 mm |
| 3CP1241.44101 | 3.6 | 13.7 | 2000 | 138 | 1725 | 16.5 mm |
| 5CPQ6241.44101 | 4.0 | 15.2 | 2000 | 138 | 1725 | 20 mm |
| 3CP1221.44101 | 4.2 | 16.0 | 2000 | 138 | 1725 | 16.5 mm |
| 5CPQ6251.44101 | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |
| 5CPQ6221.44101 | 6.0 | 22.8 | 2000 | 138 | 1400 | 20 mm |
| 5CPQ6221.44101 | 7.4 | 28.0 | 1500 | 103 | 1725 | 20 MM |
| 1051.44101 | 10.0 | 38.0 | 2200 | 152 | 958 | 30 mm |
| 3501.44101 | 10.0 | 38.0 | 5000 | 345 | 915 | 35mm |
| 1051.44101 | 12.3 | 46.5 | 1800 | 124 | 1180 | 30 mm |
| 3517.44101* | 14.0 | 53.0 | 3000 | 207 | 800 | 35 mm |
| 1531.44101 | 15.6 | 59.0 | 1500 | 103 | 1450 | 30 mm |
| 1541.44101 | 19.3 | 73.0 | 1200 | 83 | 1180 | 30 mm |
| 3521DHS.44101 | 25.0 | 95.0 | 2000 | 138 | 870 | 35 mm |
| 2531.44101 | 25.0 | 95.0 | 1200 | 83 | 1025 | 30 mm |
| 3531D.44101 | 36.0 | 136.2 | 1200 | 83 | 800 | 35 mm |

*Nickel Aluminum Bronze Manifold

# Washout Resistant Pumps

**B SERIES, SOLID SHAFT, SPECIAL BRASS MANIFOLD, VEHICLE WASH**

| PUMP MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | RPM | SHAFT |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| 340B | 4.0 | 15.2 | 1800 | 124 | 1725 | 20 mm |
| 310B | 4.0 | 15.2 | 2200 | 152 | 950 | 20 mm |
| 5CP2120B | 4.0 | 15.2 | 2500 | 172 | 950 | 20 mm |
| 5CP2140BCS | 4.0 | 15.2 | 2500 | 172 | 1725 | 20 mm |
| 350B | 5.0 | 19.0 | 1500 | 103 | 1725 | 20 mm |
| 5CP2150B | 5.0 | 19.0 | 2000 | 138 | 1725 | 20 mm |

Model 310B

# Liquid $CO_2$ Pumps

Cat Pumps liquid $CO_2$ series of pumps feature modifications to accommodate the unique properties of liquid $CO_2$. Specialt-y seals are used to handle low lubricity and low temperature that liquid $CO_2$ applications require. Pump manifolds are modified to allow higher inlet pressures and discharge pressures up to 7,000 psi (483 bar). Drive-end and manifold material combinations are available to cover a wide flow range of flow from 0.34 to 50 gpm (1.3 to 189.2 lpm).

Cat Pumps offers full technical and engineering support to properly select pumps for the specific application. Pumps are available in brass and 316 stainless steel. Cat Pumps has provided liquid $CO_2$ pumping solutions for over 25 years, working closely with research facilities, universities, equipment manufacturers and site locations to design and provide the best solutions. Please contact Cat Pumps for additional information.

Model 1530RSCM.CO2

## TECH TIP

### Pump Rotation

Forward rotation (towards the manifold) is recommended to allow optimum lubrication of the crosshead area. If your installation does not allow for forward rotation, reverse rotation is acceptable if the crankcase oil is above the red dot in the oil gauge. This indicates adequate lubrication.

**Forward Rotation**

**Oil Gauge**

# ATEX Pumps

3560 ATEX

Under the ATEX Directive, equipment is designated by group, category and zone. Cat Pumps has been certified as ATEX 2, which also covers ATEX 3 requirements.

ATEX-certified high-pressure pumps will be specially labeled and supplied with a signed ATEX Declaration of Conformity. Pumps will be numbered with the ".ATEX2" suffix added to the standard pump model number. Contact Cat Pumps for additional information.

The following pump series comply with the ATEX directive for Group 2, Category 2, and Zones 1 and 2. This Group 2 includes Zones G (1 & 2)

## Pump Series

- 3CP* Plunger Pumps
- 3 Frame* Plunger Pumps
- 5CP* Plunger Pumps
- 5 Frame* Plunger Pumps
- 7CP* Plunger Pumps
- 7 Frame* Plunger Pumps
- 8 Frame* Plunger Pumps
- 15 Frame Plunger Pumps
- 18 Frame Plunger Pumps
- 25 Frame Plunger Pumps
- 28 Frame Plunger Pumps
- 35 Frame Plunger Pumps
- 38 Frame Plunger Pumps
- 60 Frame Plunger Pumps
- 68 Frame Plunger Pumps

* Excludes models equipped with gearbox

# 1CX Series Compact Misting Pumps

1CX w/ Motor

**MODEL NUMBER SELECTION CHART**
Pump with Electric Motor, 1250 psi Maximum Pressure

| PUMP SERIES | FLOW (1750 RPM) | REGULATOR | ASSEMBLE OPTION | MOTOR OPTION* | PULSE HOSE OPTION |
|---|---|---|---|---|---|
| **1CX** | **013** = .13 gpm | **R** = Regulator Included | **D** = Pump and motor shipped together–not assembled | **1** = 8180 | **Blank** = No Pulse Hose |
| | **025** = .25 gpm | | | **2** = 8182 | |
| | **050** = .50 gpm | | **A** = Pump and motor assembled together | **3** = 8183 | **P** = Pulse Hose Included |
| | | | | **5** = 8186 | |

**Example:** 1CX050RA2P = .5 gpm, Regulator, Assembled, 8182 Motor, Pulse Hose Included

*Motor Options:

1. 8180–¼ hp, ODP, 115/230 V, 60 Hz, 1 ph, 1750 rpm, 12 inch leads
2. 8182–½ hp, ODP, 115/230 V, 60 Hz, 1 ph, 1750 rpm, 12 inch leads
3. 8183–½ hp, ODP, 115/230 V, 50 Hz, 1 ph, 1450 rpm, terminal box
5. 8186–½ hp, TEFC, 115/230 V, 60 Hz, 1 ph, 1750 rpm, terminal box

* HP Calculation (1CX Series only): GPM x PSI ÷ 1060
**NOTE:** Without pulse hose amp draw will increase as much as 2 amps depending upon pump model and discharge pressure.

# 1XP Series Portable Extractor Pumps

## 1XP Pump with AC Induction Motor

- Long service life
- Dual-frequency for world-wide use
- Constant torque

**AC INDUCTION MOTOR**
60 Hz, 120V (1750 rpm)

| GPM | MAX PSI | PUMP ASSEMBLY | SFA | HP |
|---|---|---|---|---|
| 0.5 | 600 | 1XP050.031 | | |
| 0.75 | 500 | 1XP075.031 | | |
| 0.85 | 500 | 1XP085.031 | | |
| 1 | 450 | 1XP100.031 | 4.0 | ⅓ |
| 1.25 | 400 | 1XP125.031 | | |
| 1.5 | 325 | 1XP150.031 | | |
| 2 | 250 | 1XP200.031 | | |
| 0.4 | 1000 | 1XP050.051 | | |
| 0.7 | 1000 | 1XP075.051 | | |
| 0.8 | 1000 | 1XP085.051 | | |
| 0.9 | 800 | 1XP100.051 | 8.0 | ½ |
| 1.2 | 800 | 1XP125.051 | | |
| 1.5 | 600 | 1XP150.051 | | |
| 2 | 450 | 1XP200.051 | | |
| 0.9 | 1000 | 1XP100.071 | | |
| 1.1 | 1000 | 1XP125.071 | | |
| 1.4 | 800 | 1XP150.071 | 9.0 | ¾ |
| 1.75 | 700 | 1XP180.071 | | |
| 2 | 550 | 1XP200.071 | | |
| 1.45 | 1000 | 1XP150.101 | | |
| 1.8 | 800 | 1XP180.101 | 12.6 | 1 |
| 2 | 750 | 1XP200.101 | | |

**AC INDUCTION MOTOR**
50 Hz, 240V (1450 rpm)

| GPM | MAX PSI | PUMP ASSEMBLY | SFA | HP |
|---|---|---|---|---|
| 0.40 | 600 | 1XP050.031 | | |
| 0.60 | 500 | 1XP075.031 | | |
| 0.70 | 500 | 1XP085.031 | | |
| 0.80 | 450 | 1XP100.031 | 2.1 | ⅓ |
| 1 | 400 | 1XP125.031 | | |
| 1.2 | 325 | 1XP150.031 | | |
| 1.70 | 250 | 1XP200.031 | | |
| 0.30 | 1000 | 1XP050.051 | | |
| 0.60 | 1000 | 1XP075.051 | | |
| 0.70 | 1000 | 1XP085.051 | | |
| 0.75 | 800 | 1XP100.051 | 3.8 | ½ |
| 1 | 800 | 1XP125.051 | | |
| 1.2 | 600 | 1XP150.051 | | |
| 1.70 | 450 | 1XP200.051 | | |
| 0.75 | 1000 | 1XP100.071 | | |
| 0.90 | 1000 | 1XP125.071 | | |
| 1.20 | 800 | 1XP150.071 | 4.6 | ¾ |
| 1.50 | 700 | 1XP180.071 | | |
| 1.70 | 550 | 1XP200.071 | | |
| 1.20 | 1000 | 1XP150.101 | | |
| 1.40 | 800 | 1XP180.101 | 6.3 | 1 |
| 1.70 | 750 | 1XP200.101 | | |

## 1XP Pump with DC Permanent Magnet Motor

- Low amp draw
- Compact
- Lighter weight

**DC PERMANENT MAGNET**
120 Volt – ⅓ HP – ODP and TEFC Enclosures

| GPM | MAX PSI | AMPS (AT MAX PSI) | PUMP ASSEMBLY ODP MOTOR | PUMP ASSEMBLY TEFC MOTOR |
|---|---|---|---|---|
| 0.5 | 600 | 4.0 | 1XP050.03DC | 1XP050.03DCT |
| 0.75 | 500 | 4.0 | 1XP075.03DC | 1XP075.03DCT |
| 0.85 | 400 | 4.0 | 1XP085.03DC | 1XP085.03DCT |
| 1 | 350 | 4.0 | 1XP100.03DC | 1XP100.03DCT |
| 1.25 | 300 | 4.0 | 1XP125.03DC | 1XP125.03DCT |
| 1.5 | 250 | 4.0 | 1XP150.03DC | 1XP150.03DCT |
| 2.3 | 150 | 4.0 | 1XP200.03DC | 1XP200.03DCT |

**DC PERMANENT MAGNET**
240 Volt – ⅓ HP ODP

| GPM | MAX PSI | AMPS (AT MAX PSI) | PUMP ASSEMBLY ODP MOTOR |
|---|---|---|---|
| 0.5 | 600 | 2.0 | 1XP050.03DC2 |
| 0.75 | 500 | 2.0 | 1XP075.03DC2 |
| 0.85 | 400 | 2.0 | 1XP085.03DC2 |
| 1 | 350 | 2.0 | 1XP100.03DC2 |
| 1.25 | 300 | 2.0 | 1XP125.03DC2 |
| 1.5 | 250 | 2.0 | 1XP150.03DC2 |
| 2.3 | 150 | 2.0 | 1XP200.03DC2 |

# Centrifugal Pumps

### 1K SERIES–SUBMERSIBLE SUMP PUMPS

Stainless steel submersible sump pumps offer solutions to pumping semi-dirty water or fresh water with suspended solids up to ⅜".

| | | | |
|---|---|---|---|
| Flow Range | Up to 88 gpm | Operation | Manual or Automatic |
| Pressure Range (up to 24 psi) | 55 ft. Head | Maximum Temperature | Continuous 122° F |
| RPM | 3450 rpm | | Intermittent 140° F |
| Discharge Fitting | 1 ¼", 1 ½" NPT(F) | Maximum Solids Diameter | ⅜" |
| Horsepower | ⅓, ½, ¾, 1, 1 ½ HP | Material | 304 Stainless Steel |

### 2K SERIES–SUBMERSIBLE PUMPS

Stainless steel submersible pumps offer reliable pumping of freshwater or industrial waste water with suspended solids up to 2".

| | | | |
|---|---|---|---|
| Flow Range | Up to 180 gpm | Operation | Manual or Automatic |
| Pressure Range (up to 19.5 psi) | 46 ft. Head | Maximum Temperature | Continuous 104° F |
| RPM | 3450 rpm | | Intermittent 140° F |
| Discharge Fitting | 2" NPT(F) | Maximum Solids Diameter | 2" |
| Horsepower | ½, 1, 1 ½, 2 HP | Material | 304 Stainless Steel |

### 3K SERIES–END-SUCTION CENTRIFUGAL PUMPS, SINGLE STAGE

Stainless steel end-suction centrifugal pumps offer dependable performance and flexibility in moving high-volume liquids at low pressure. Single stage sold as either pump kit or motorized unit.

| | | | |
|---|---|---|---|
| Flow Range | Up to 90 gpm | Discharge Fitting | 1" NPT(F) |
| Pressure Range (up to 63 psi) | 145 ft. Head | Shaft Seal | Mech Type 21 |
| Minimum Inlet Pressure to Prime | Flooded | Horsepower | ⅓, ½, ¾, 1, 1 ½, 2, 3 HP |
| RPM | 1725 or 3450 rpm | Maximum Temperature | 160° F |
| Inlet Fitting | 1 ¼", 1 ½" NPT(F) | Material | 304 Stainless Steel |

### 3K SERIES–END-SUCTION CENTRIFUGAL PUMPS, TWO STAGE (METRIC FRAME)

Stainless steel end-suction centrifugal pumps offer dependable performance and flexibility in moving high-volume liquids at low pressure. Sold as motorized unit only.

| | | | |
|---|---|---|---|
| Flow Range | Up to 66 gpm | Discharge Fitting | 1" NPT(F) |
| Pressure Range (up to 106 psi) | 245 ft. Head | Shaft Seal | Mech Type 21 |
| Minimum Inlet Pressure to Prime | Flooded | Horsepower | 2, 3, 5 (IP 55 TEFC) |
| RPM | 3450 RPM | Maximum Temperature | 140° F |
| Inlet Fitting | 1 ¼", 1 ½" NPT(F) | Material | 304 Stainless Steel |

### 3K SERIES–END-SUCTION CENTRIFUGAL PUMPS, TWO STAGE (NEMA FRAME)

Stainless steel end-suction centrifugal pumps offer dependable performance and flexibility in moving high volume liquids at low pressure. Sold as either pump kit or motorized unit.

| | | | |
|---|---|---|---|
| Flow Range | Up to 66 gpm | Discharge Fitting | 1" NPT(F) |
| Pressure Range (up to 106 psi) | 245 ft. Head | Shaft Seal | Mech Type 21 |
| Minimum Inlet Pressure to Prime | Flooded | Horsepower | 2, 3, 5 |
| RPM | 3450 RPM | Maximum Temperature | 140° F |
| Inlet Fitting | 1 ¼", 1 ½" NPT(F) | Material | 304 Stainless Steel |

# Centrifugal Pumps

### 4K SERIES–END-SUCTION CENTRIFUGAL PUMPS, SINGLE STAGE

Sold as pump kit or motorized unit.

| | | | |
|---|---|---|---|
| Flow Range | Up to 380 gpm | Discharge Fitting Flange | ANSI 150 lb. – 1¼", 1½", 2" |
| Pressure Range (up to 124 psi) | 286 ft. Head | Shaft Seal | Mech Type 21 |
| Minimum Inlet Pressure to Prime | Flooded | Horsepower | 1, 1 ½, 2, 3, 5, 7 ½, 10, 15 HP |
| RPM | 1725 or 3450 rpm | Maximum Temperature | 160° F |
| Inlet Fitting Flange | ANSI 150 lb. – 2", 2 ½", 3" | Material | 304 Stainless Steel |

### 5K SERIES–SELF PRIMING CENTRIFUGAL PUMPS

Sold as pump kit or motorized unit.

| | | | |
|---|---|---|---|
| Flow Range | Up to 18.5 gpm | Discharge Fitting | 1" NPT(F) |
| Pressure Range (up to 82 psi) | 190 ft. Head | Shaft Seal | Mech Type 21 |
| Maximum Suction Lift | 25 Feet | Horsepower | 1, 2 HP |
| RPM | 3450 rpm | Maximum Temperature | 113° F |
| Inlet Fitting | 1 ¼" NPT(F) | Material | 304 Stainless Steel |

### 6K SERIES–OPEN IMPELLER END-SUCTION CENTRIFUGAL PUMPS

Stainless steel open impeller centrifugal pumps handles suspended solids in liquid and dirty water, and handles solids up to ¾" spherical. Sold as motorized unit only.

| | | | |
|---|---|---|---|
| Flow Range | Up to 250 gpm | Discharge Fitting | 2" NPT(F) (with external hose barb) |
| Pressure Range (up to 28 psi) | 65 ft. Head | Shaft Seal | Mech Type 21 |
| Minimum Inlet Pressure to Prime | Flooded | Horsepower | 1 ½, 2, 3 |
| RPM | 3450 RPM | Maximum Temperature | 194° F |
| Inlet Fitting | 2", 2 ½" NPT(F) | Material | 304 Stainless Steel |

### 8K SERIES–VERTICAL MULTIPLE STAGE CENTRIFUGAL PUMPS

Stainless steel vertical multiple stage pumps designed for high volume and high ft. head clean or hot water applications. Sold as a bare pump or motorized unit (w/NEMA motor sizes).

| | | | |
|---|---|---|---|
| Flow Range | Up to 390 gpm | Discharge Fitting | 1 ¼" to 4" ANSI |
| Pressure Range (up to 403 psi) | 930 ft. Head | Shaft Seal | Mechanical - Silicon / Carbide / Carbon / FPM |
| Minimum Inlet Pressure to Prime | Flooded | Horsepower Range | ½ to 50 HP |
| RPM | 3450 RPM | Temperature Range | –22° F to 248° F |
| Inlet Fitting | 1 ¼" to 4" ANSI | Material | 304 or 316 Stainless Steel |

# Custom Pumping Systems

YOU DEFINE. WE DESIGN AND DELIVER.

## Custom-Engineered to Meet Your Application Demands

Cat Pumps is an industry leader in providing customers with quality custom-engineered pumping systems to meet a wide range of application needs. By selecting a Cat Pumps pumping system, customers eliminate the hassle and expense of designing, multiple source buying, fabricating and testing. Our knowledgeable and helpful technical sales team assists with proper component selection as well as installation, operation and maintenance support.

All systems are designed, built and pressure tested to verify performance. To begin the quoting process, contact us at (763) 780-5440 or submit the custom system quote form at catpumps.com.

With thousands of installations running around the world, Cat Pumps is the supplier of choice for custom pumping systems.

### Call or go online to start your quote today.

# Custom Pumping Systems

## System Configuration

With extensive experience building thousands of systems, Cat Pumps can help determine the best configuration for any application.

### ☑ Base

System design starts with choosing the base that best fits the application. Numerous base configurations are available to meet space, portability, sound and material demands.

• Standard • Vertically Stacked • Portable • Enclosed • Multiple Pump

### ☑ Power Source

A qualified technical staff with extensive experience can assist in recommending the correct product for any power source available.

• Electric • Gas • Diesel • Hydraulic • Pneumatic

### ☑ Drive Package

A wide variety of drive packages are available to complement any power source of choice.

• Belt • Direct Drive • Gearbox • Flex Coupling/Bell Housing • Clutch

### ☑ Accessories

Choose from hundreds of high-quality genuine Cat Pumps accessories for optimum system performance and life.

• Regulator • Unloader • Relief / Pop-off Valve • Pressure Gauge
• Pulsation Dampener • Inlet Stabilizer • Inlet Filter / Strainer • Guns • Oil

## Cat Pumps Advanced Control Options

Ask about the wide variety of advanced control options designed to provide maximum system performance as well as maximum system protection.
Options include:

- Variable Frequency Drives (VFD)
- PID Loop (varies speed of pump to maintain system pressure)
- Multiple Pump Systems
- Low-Pressure Seal Monitors
- Auto Shutdowns (Temperature and Low Inlet Pressure)

Other control options are available upon request.

# Accessories

## Demand Genuine Cat Pumps Accessories

Cat Pumps offers a wide range of high quality accessories adhering to the same exacting standards as our industry-leading pumps. Every accessory is performance tested and designed to match each pump's operating specifications. By demanding genuine Cat Pumps products, you receive the best value and lowest cost of ownership over the life of the system.

For maximum system protection, Cat Pumps recommends the use of a primary regulating device, secondary pressure relief device, and discharge pressure gauge. In addition to these system components, this catalog includes hundreds of other genuine Cat Pumps accessories. Improve system performance and protect your pumping system investment with the brand you can trust — Cat Pumps.

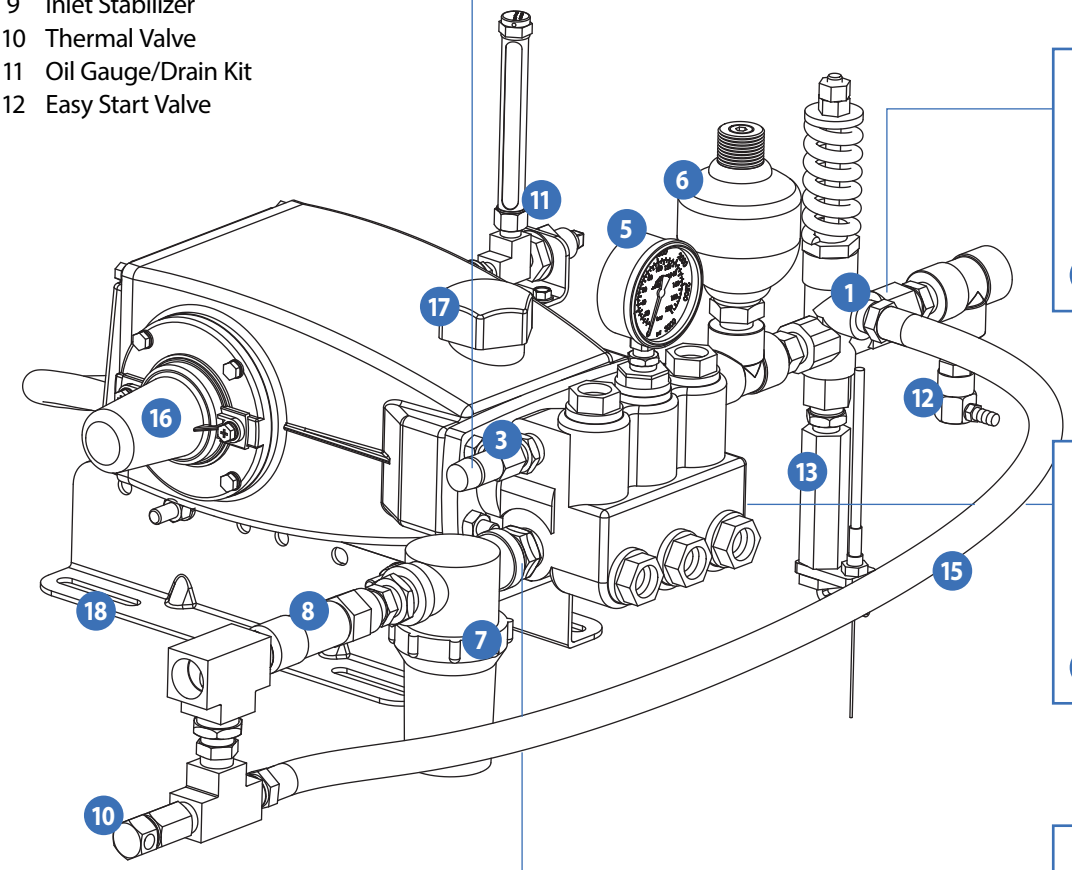
## Maximum System Performance

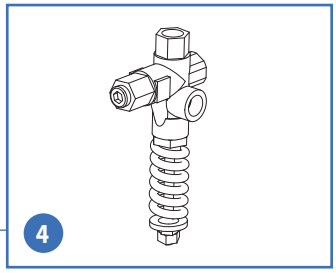
Cat Pumps offers a wide range of high quality accessories adhering to the same exacting standards as our industry-leading pumps. Every accessory is performance tested and designed to match each pump's operating specifications. By demanding genuine Cat Pumps products, you receive the best value and lowest cost of ownership over the life of the system. Protect your pumping system investment with the brand you can trust — Cat Pumps.

# Accessories

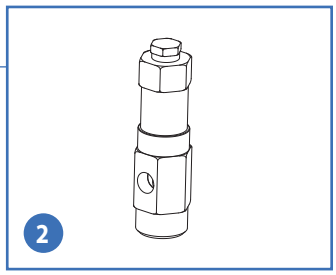
## Typical Installation

1 Unloader
2 Regulator
3 Pop-Off Valve
4 Relief Valve
5 Pressure Gauge
6 Pulsation Dampener*
7 Inlet Filter
8 Inlet Pressure Regulator
9 Inlet Stabilizer
10 Thermal Valve
11 Oil Gauge/Drain Kit
12 Easy Start Valve

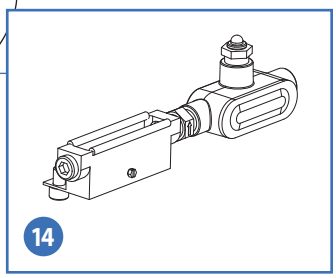


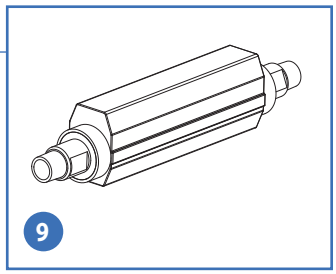

**Relief Valve**




**Regulator**




**LPS Monitor**




**Inlet Stabilizer**

13 Throttle Controller
14 LPS Monitor
15 Bypass Hose
16 Shaft Protector
17 Oil Cap Protector
18 Rails

NOTE: These illustrations show the basic elements for a typical installation of a high-pressure piston or plunger pump. **Not all components shown are required for all applications or systems.** Proper system installation, routine lubrication, monitoring and maintenance of components are basic guarantees of optimum pump performance. Cat Pumps does not assume any liability or responsibility for the design or operation of a customer's high-pressure system.

*Preferred mounting of the pulsation dampener is directly on the discharge manifold of the pump. Systems using a pressure unloader require the pulsation dampener installed down stream when the bypass is returned to the inlet of the pump and an inlet pressure regulator or check valve is used.

# Discharge Accessories

## Primary Pressure Control

### CPC Pressure Regulators

- Cat Pumps manufactured product.
- Typically used for multiple pump, nozzle and gun applications.
- Conical design lowers minimum required bypass flow and eliminates cavitation effects, extending performance life.

**STEEL NICKEL PLATED MODELS, FLOW THROUGH**

Piston and Seat are 316 Stainless Steel

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7001 | 0.5–5 | 1.9–19 | 100–1000 | 6.9–69 | ⅜" NPT(F) | ½" NPT(F) |
| 7002 | 0.5–5 | 1.9–19 | 500–2000 | 35–138 | ⅜" NPT(F) | ½" NPT(F) |
| 7003 | 0.5–5 | 1.9–19 | 1500–3000 | 103–207 | ⅜" NPT(F) | ½" NPT(F) |
| 7011 | 1.0–10 | 3.8–38 | 100–1000 | 6.9–69 | ½" NPT(F) | ¾" NPT(F) |
| 7012 | 1.0–10 | 3.8–38 | 500–2000 | 35–138 | ½" NPT(F) | ¾" NPT(F) |
| 7013 | 1.0–10 | 3.8–38 | 1500–3000 | 103–207 | ½" NPT(F) | ¾" NPT(F) |
| 7014 | 1.0–10 | 3.8–38 | 2000–4000 | 138–275 | ½" NPT(F) | ¾" NPT(F) |
| 7021 | 2.5–25 | 9.5–95 | 100–1000 | 6.9–69 | ¾" NPT(F) | 1" NPT(F) |
| 7022 | 2.5–25 | 9.5–95 | 500–2000 | 35–138 | ¾" NPT(F) | 1" NPT(F) |
| 7023 | 2.5–25 | 9.5–95 | 1500–3000 | 103–207 | ¾" NPT(F) | 1" NPT(F) |
| 7024 | 2.5–25 | 9.5–95 | 2000–4000 | 136–275 | ¾" NPT(F) | 1" NPT(F) |
| 7031 | 3.5–35 | 13.2–132 | 250–1000 | 18–69 | ¾" NPT(F) | 1" NPT(F) |
| 7032 | 3.5–35 | 13.2–132 | 1000–2000 | 69–138 | ¾" NPT(F) | 1" NPT(F) |
| 7033 | 3.5–35 | 13.2–132 | 1500–3000 | 103–207 | ¾" NPT(F) | 1" NPT(F) |

**316 STAINLESS STEEL MODELS, FLOW THROUGH**

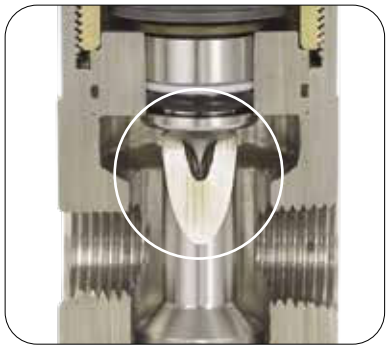
Piston and Seat are 316 Stainless Steel

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7001.100 | 0.5–5 | 1.9–19 | 100–1000 | 6.9–69 | ⅜" NPT(F) | ½" NPT(F) |
| 7002.100 | 0.5–5 | 1.9–19 | 500–2000 | 35–138 | ⅜" NPT(F) | ½" NPT(F) |
| 7003.100 | 0.5–5 | 1.9–19 | 1500–3000 | 103–207 | ⅜" NPT(F) | ½" NPT(F) |
| 7011.100 | 1.0–10 | 3.8–38 | 100–1000 | 6.9–69 | ½" NPT(F) | ¾" NPT(F) |
| 7012.100 | 1.0–10 | 3.8–38 | 500–2000 | 35–138 | ½" NPT(F) | ¾" NPT(F) |
| 7013.100 | 1.0–10 | 3.8–38 | 1500–3000 | 105–207 | ½" NPT(F) | ¾" NPT(F) |
| 7014.100 | 1.0–10 | 3.8–38 | 2000–4000 | 138–275 | ½" NPT(F) | ¾" NPT(F) |
| 7720 | 0.5–10 | 1.9–38 | 2000–10000 | 138–689 | ¼" NPT(F) | ⅜" NPT(F) |
| 7021.100 | 2.5–25 | 9.5–95 | 100–1000 | 6.9–69 | ¾" NPT(F) | 1" NPT(F) |
| 7022.100 | 2.5–25 | 9.5–95 | 500–2000 | 35–138 | ¾" NPT(F) | 1" NPT(F) |
| 7023.100 | 2.5–25 | 9.5–95 | 1500–3000 | 103–207 | ¾" NPT(F) | 1" NPT(F) |
| 7024.100 | 2.5–25 | 9.5–95 | 2000–4000 | 138–275 | ¾" NPT(F) | 1" NPT(F) |
| 7031.100 | 3.5–35 | 13.2–132 | 250–1000 | 18–69 | ¾" NPT(F) | 1" NPT(F) |
| 7032.100 | 3.5–35 | 13.2–132 | 1000–2000 | 69–138 | ¾" NPT(F) | 1" NPT(F) |
| 7033.100 | 3.5–35 | 13.2–132 | 1500–3000 | 103–207 | ¾" NPT(F) | 1" NPT(F) |
| 7375 | 10–75 | 38–284 | 100–1000 | 6.9–69 | 1 ¼" NPT(F) | 1 ½" NPT(F) |
| 7376 | 10–75 | 38–284 | 500–2000 | 35–138 | 1 ¼" NPT(F) | 1 ½" NPT(F) |
| 7410 | 10–100 | 38–378 | 100–1500 | 6.9–103 | 1 ½" NPT(F) | 2" NPT(F) |

**316 STAINLESS STEEL MODELS, TEE MOUNT**

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7350 | 1.0–12 | 3.8–45 | 400–1500 | 25–103 | ¼" NPT(F) | ⅜" NPT(F) |
| 7366 | 1.0–12 | 3.8–45 | 3000–6000 | 207–414 | ½" NPT(F) | ¾" NPT(F) |
| 7361 | 10–60 | 38–228 | 400–1000 | 25–69 | 1" NPT(F) | 1 ¼" NPT(F) |
| 7363 | 10–60 | 38–228 | 600–1800 | 40–125 | 1" NPT(F) | 1 ¼" NPT(F) |

## TECH TIP



7001–7033, 7375, 7376 Series Regulators exclusively from Cat Pumps feature conical design delivering unmatched performance and life.

**Features:**

- Conical design lowers minimum bypass flow from 10%–5%, optimizing system performance
- Virtually eliminates cavitation effects across piston and seat, significantly extending life
- Compact in-line plumbing
- Low-pressure override provides smooth and stable operation without chatter.

# Discharge Accessories

## Primary Pressure Control

### Unloaders, Trapped Pressure

- Typically used with trigger gun applications.
- Reduces load on pump and motor when in bypass.
- Easily converted into a relief valve.

**BRASS MODELS**

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7500S | 0.5–6.0 | 1.9–23 | 100–2000 | 6.9–138 | ⅜" NPT(M) | ⅜" NPT(F) |
| 7581 | 0.5–6.5 | 1.9–25 | 230–2300 | 16–158 | ⅜" NPT(M) | ⅜" NPT(F) |
| 7582 | 0.5–8.0 | 1.9–30 | 100–1000 | 6.9–69 | ⅜" NPT(M) | ⅜" NPT(F) |
| 7583 | 0.5–8.0 | 1.9–30 | 250–2000 | 18–138 | ⅜" NPT(M) | ⅜" NPT(F) |
| 7620 | 0.5–8.0 | 1.9–30 | 100–3200 | 6.9–220 | ⅜" BSP(M)/BSP(F) | ⅜" BSP(F) |
| 7693 | 2.5–10.5 | 9.5–40 | 230–2300 | 16–158 | ⅜" NPT(F) | ⅜" NPT(F) |
| 7694 | 2.5–10.5 | 9.5–40 | 400–4050 | 28–280 | ⅜" NPT(F) | ⅜" NPT(F) |
| 7630 | 2.0–10.5 | 8–40 | 400–5100 | 28–350 | ⅜" NPT(M)/BSP(F) | ½" NPT(F) |
| 7537 | 1.0–21 | 3.8–80 | 230–2600 | 16–179 | ½" NPT(F) | ½" NPT(F) |
| 7542 | 1.0–21 | 3.8–80 | 800–4000 | 55–275 | ½" NPT(F) | ½" NPT(F) |
| 7590 | 10–52 | 38–200 | 400–2175 | 28–150 | 1" NPT(F) | 1" NPT(F) |
| 7592 | 10–52 | 38–200 | 450–2500 | 31–175 | 1" NPT(F) | 1" NPT(F) |
| 7593 | 10–52 | 38–200 | 750–4050 | 51–280 | 1" BSPP(G) | 1" BSPP(G) |
| 9950 | 50–120 | 190–456 | 100–2900 | 6.9–200 | 1 ¼" BSP(F) | 1 ½" BSP(F) |

**BRASS, MODULAR, BUILT IN BYPASS, 3CP AND 5CP SERIES**
Pressure-Sensitive

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7850 | 0.5–6.0 | 1.9–23 | 100–4000 | 6.9–275 | ½" NPT(F)/ ⅜" NPT(M) | Modular/3CP, 5CP |

* This unloader will not work on models 5CP4120, 5CP6120, 5CP6180CSS and 5CP6190 pumps.

**STAINLESS STEEL MODELS**

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7501** | 0.5–6.0 | 1.9–23 | 100–2000 | 6.9–138 | ⅜" NPT(M) | ⅜" NPT(F) |
| 9970* | 0–15.9 | 0–60 | 1160–11600 | 80–800 | ½" BSPP(G) | ½" BSPP(G) |
| 7531* | 1.0–21 | 3.8–80 | 400–2200 | 28–155 | ½" NPT(F) | ½" NPT(F) |
| 7533* | 1.0–21 | 3.8–80 | 800–4000 | 55–275 | ½" NPT(F) | ½" NPT(F) |
| 7536* | 1.0–21 | 3.8–80 | 3000–6000 | 207–414 | ½" NPT(F) | ½" NPT(F) |

* 304 Stainless Steel ** 316 Stainless Steel

## CHECK OUT

### Regulator Relief vs. Unloader Valve Product Comparison

This product comparison video offers an in-depth look at one of our most common inquiries–the difference between a pressure regulator and pressure regulating unloader valve.

**www.youtube.com/CatPumps1968**

YouTube

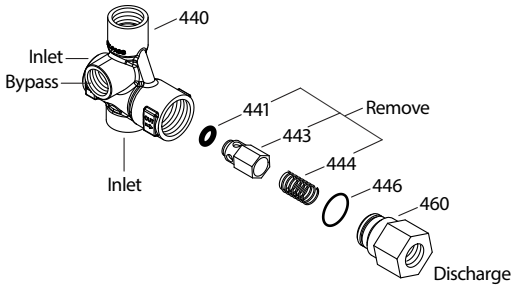
## TECH TIP

### REGULATING UNLOADER TO RELIEF VALVE CONVERSION

Pressure-Sensitive Regulating Unloaders are typically used as a primary pressure regulating device. They can be converted to a Relief Valve to be used as a secondary pressure relief device by removing the discharge check valve, O-ring and spring.

**Example:**

| Unloader PN | Modifications | Converted Relief Valve PNs | |
|---|---|---|---|
| 7537 | Remove parts 441, 443, 444 | 7537.100 (NBR Seals) | 7537.1110 (FPM Seals) |



# Discharge Accessories

## Primary or Secondary Pressure Control

### Pressure Relief Valves

- Heavy duty; conveniently mounts directly into discharge line.
- Wide pressure and flow range models available.

**BRASS MODELS**

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7189 | 0.5–6.6 | 1.9–24.9 | 100–650 | 6.9–45 | ⅜" NPT(F) | ⅜" NPT(F) |
| 7190 | 0–6.5 | 0–24.6 | 400–5000 | 28–345 | ⅜" BSP(F) | ⅜" BSP(F) |

**316 STAINLESS STEEL MODELS, FLOW THROUGH**

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7034 | 0–21 | 0–80 | 400–2200 | 28–155 | ½" NPT(F) | ½" NPT(F) |
| 7036 | 0–21 | 0–80 | 800–4000 | 55–275 | ½" NPT(F) | ½" NPT(F) |
| 7037 | 0–21 | 0–80 | 3000–5700 | 207–400 | ½" NPT(F) | ½" NPT(F) |
| 890718 | 10–50 | 38–189 | 1000–8000 | 69–550 | 2" NPT(M) | 2" NPT(F) |
| 890709 | 20–60 | 76–227 | 1500–4000 | 103–275 | 2" NPT(F) | 2" NPT(M) |
| 890731 | 15–75 | 56–284 | 100–400 | 6.9–28 | 2" NPT(F) | 2" NPT(M) |
| 890700 | 30–180 | 114–680 | 1000–3000 | 69–207 | 2" NPT(F) | 2" NPT(M) |
| 890702 | 25–210 | 95–795 | 500–2000 | 35–138 | 2" NPT(F) | 2" NPT(M) |
| 890706 | 15–260 | 57–984 | 250–1000 | 17–69 | 2" NPT(F) | 2" NPT(M) |
| 890704 | 45–320 | 170–1211 | 500–2000 | 35–138 | 2" NPT(F) | 2" NPT(M) |

Note: All trapped pressure unloaders can be configured as a relief valve, see page 25.

**BRASS MODELS, TEE MOUNT**

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 7084* | 1.0–3.5 | 3.8–13 | 100–600 | 6.9–41 | ¼" BSP(M) | ⅛" BSP(F) |
| 7085* | 1.0–3.5 | 3.8–13 | 205–2300 | 14–158 | ¼" BSP(M) | ⅛" BSP(F) |
| 7561 | 0–4.0 | 0–15.1 | 100–1250 | 6.9–86 | ¼" NPT(M)/ NPT(F) | ¼" NPT(F) |
| 7080 | 2.8–7.8 | 9.5–30 | 150–1450 | 10–100 | ⅜" NPT(F) | ⅜" NPT(F) |
| 7082 | 2.8–7.8 | 9.5–30 | 850 –3575 | 59–246 | ⅜" NPT(F) | ⅜" NPT(F) |
| 997304 | 0–20 | 0–75.7 | 0–300 | 0–20 | ½" NPT(M) | ½" NPT(F) |
| 7196 | 0–21 | 0–80 | 100–7250 | 6.9–500 | ½" BSP(F) | ⅜" BSP(F) |
| 7595 | 1.0–53 | 3.8–200 | 260–2600 | 18–180 | ¾" NPT(F) | ½" NPT(F) |

* Model 7084C & 7085C available with handles

## Need selection assistance?

Browse the complete Cat Pumps accessory catalog using the product selector at catpumps.com. Search by applicable information including model number, performance, material or product type.

You can also browse the Service & Training section to find system design, installation and maintenance information, as well as handy formulas and charts to assist in all phases of selection and design.

# Discharge Accessories

## Secondary Pressure Control

### Pop-Off Valves

- Opens when system exceeds preset pressure.
- Lightweight, compact design quickly and conveniently mounts directly into discharge line.
- Ultra compact models for portable systems.

**BRASS MODELS**

| MODEL | MAX FLOW | | PRESSURE RANGE | | MAX RELIEF SETTING | | PORTS | |
|---|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 30960 | 6.0 | 23 | 300–1500 | 20–103 | 1650 | 114 | ¼" NPT(M) | ¾" Barb |
| 33960 | 6.0 | 23 | 300–1500 | 20–103 | 1650 | 114 | ⅜" NPT(M) | ¾" Barb |
| 33960S* | 6.0 | 23 | 300–1500 | 20–103 | 1650 | 114 | ⅜" NPT(M) | ¾" Barb |
| 30961 | 6.0 | 23 | 1000–3000 | 69–207 | 3300 | 228 | ¼" NPT(M) | ¾" Barb |
| 33961 | 6.0 | 23 | 1000–4000 | 69–275 | 4400 | 303 | ¼" NPT(M) | ¾" Barb |
| 33961S* | 6.0 | 23 | 1000–4000 | 69–275 | 4400 | 303 | ¼" NPT(M) | ¾" Barb |
| 33962 | 6.0 | 23 | 1000–4000 | 69–275 | 4400 | 303 | ⅜" NPT(M) | ¾" Barb |
| 33962S* | 6.0 | 23 | 1000–4000 | 69–275 | 4400 | 303 | ⅜" NPT(M) | ¾" Barb |
| 9940 | 25 | 95 | 1000–4000 | 69–275 | 4400 | 303 | ¾" NPT(M) | 1" Barb |

* High-temperature models up to 240° F (115° C)

**316 STAINLESS STEEL MODELS**

| MODEL | MAX FLOW | | PRESSURE RANGE | | MAX RELIEF SETTING | | PORTS | |
|---|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | PSI | BAR | INLET/DISCHARGE | BYPASS |
| 9960 | 6.0 | 23 | 300–1500 | 20–103 | 1650 | 114 | ¼" NPT(M) | ¾" Barb |
| 9960S* | 6.0 | 23 | 300–1500 | 20–103 | 1650 | 114 | ¼" NPT(M) | ¾" Barb |
| 9961 | 6.0 | 23 | 1000–3000 | 69–207 | 3300 | 228 | ¼" NPT(M) | ¾" Barb |
| 9961S* | 6.0 | 23 | 1000–3000 | 69–207 | 3300 | 228 | ¼" NPT(M) | ¾" Barb |
| 9962 | 6.0 | 23 | 1000–4000 | 69–275 | 4400 | 308 | ¼" NPT(M) | ¾" Barb |
| 9962S* | 6.0 | 23 | 1000–4000 | 69–275 | 4400 | 308 | ¼" NPT(M) | ¾" Barb |
| 997587 | 15 | 57 | 1500–10000 | 105–689 | 11000 | 758 | ½" NPT(F) | 1" NPT(F) |
| 9941 | 25 | 95 | 1000–4000 | 69–275 | 4400 | 303 | ¾" NPT(M) | 1" Barb |
| 890711 | 50 | 189 | 1000–6000 | 69–414 | 7500 | 517 | 1" NPT(M) | 1" NPT(F) |
| 890710 | 100 | 378 | 300–1500 | 20–103 | 1875 | 129 | 1" NPT(M) | 1" NPT(F) |
| 890714** | 100 | 378 | 300–1500 | 20–103 | 1875 | 129 | 1" NPT(M) | 1" NPT(F) |
| 890715 | 100 | 378 | 1000–8000 | 69–550 | 10000 | 689 | 2" NPT(M) | 2" NPT(F) |
| 890712 | 115 | 435 | 500–3000 | 35–207 | 3750 | 258 | 1" NPT(M) | 1" NPT(F) |
| 890703 | 135 | 511 | 400–1500 | 28–103 | 1875 | 129 | 2" NPT(M) | 2" NPT(F) |
| 890713 | 210 | 795 | 800–4000 | 55–275 | 5000 | 345 | 2" NPT(M) | 2" NPT(F) |

* High-temperature models up to 240° F (115° C) **NBR O-Rings

**RUPTURE DISC ASSEMBLY**

| MODEL | MAX FLOW | | MAX RELIEF SETTING | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET | RELIEF |
| 9921 | 20 | 76 | 10000 | 689 | ⅜"NTP(M) | ⅜" NPT(F) |
| 9920 | 20 | 76 | 15000 | 1034 | ⅜" NPT(M) | ⅜" NPT(F) |

TECH TIP

## Primary and Secondary Relief

Cat Pumps always recommends each high-pressure pumping system to be equipped with a primary and secondary safety relief device as a safeguard against over pressurization. Either a pressure regulator or pressure regulating unloader can be used as a primary relief device, but a pressure relief or pop-off valve should always be included when designing a system. This is an economical alternative to protect a system from failure that can damage expensive system components and lead to costly downtime.

# Discharge Accessories

6088

6096

6097

## Pressure Gauges

**Accurately monitors pump outlet pressure.**

- Glycerine-filled for consistent and accurate pressure readings.
- Sealed stainless steel case eliminates corrosion risk.

| MODEL | PRESSURE RANGE PSI | PRESSURE RANGE BAR | MAXIMUM TEMPERATURE (° F) | MAXIMUM TEMPERATURE (° C) | PORTS INLET |
|---|---|---|---|---|---|
| **BRASS MODELS** (BRASS FITTING AND BOURDON TUBE, 304 SS CASE) | | | | | |
| 6091 | 0–1000 | 0–69 | 160 | 71 | ¼" NPT(M) |
| 6092** | 0–1000 | 0–69 | 160 | 71 | ¼" NPT(M) |
| 6086 | 0–1500 | 0–103 | 140 | 60 | ¼" NPT(M) |
| 6094** | 0–1500 | 0–103 | 140 | 60 | ⅛" NPT(M) |
| 6088 | 0–3000 | 0–207 | 140 | 60 | ¼" NPT(M) |
| 6096** | 0–3000 | 0–207 | 140 | 60 | ⅛" NPT(M) |
| 6089 | 0–6000 | 0–415 | 140 | 60 | ¼" NPT(M) |
| **STAINLESS STEEL MODELS** (316 SS FITTING AND BOURDON TUBE, 304 SS CASE) | | | | | |
| 6069 | 0–600 | 0–41 | 200 | 93 | ¼" NPT(M) |
| 6071 | 0–1500 | 0–103 | 300 | 149 | ¼" NPT(M) |
| 6085 | 0–1500 | 0–103 | 140 | 60 | ¼" NPT(M) |
| 6073 | 0–3000 | 0–207 | 300 | 149 | ¼" NPT(M) |
| 6097 | 0–3000 | 0–207 | 140 | 60 | ¼" NPT(M) |
| 6127 | 0–4000 | 0–275 | 140 | 60 | ½" NPT(M) |
| 6076 | 0–6000 | 0–415 | 300 | 149 | ¼" NPT(M) |
| 6087 | 0–6000 | 0–415 | 140 | 60 | ¼" NPT(M) |
| 6081* | 0–20000 | 0–1379 | 212 | 100 | ½" NPT(M) |

* Black polyester case ** Back Mount

34549

## Valve Plug Adapters

**Used to add an accessory to discharge port**

- Replaces one top valve plug with a ported valve plug to add a pressure gauge, pop-off valve or other accessory.
- Eliminates the need for additional plumbing on the discharge port.

| MODEL | MODELS USED | PORT | MATERIAL |
|---|---|---|---|
| 35759 | 1DX, 2DX, 3DX | ¼" NPT (F) | BB |
| 35761 | 2DX, 3DX | ⅜" NPT (F) | BB |
| 134670 | 3DNX, 3SP, 3SPX, 4DX, 4DNX, 4SP, 4SPX, 5SP | ¼" NPT (F) | BB |
| 35758 | 66DX Series | ⅜" NPT (F) | BB |
| 998954 | 3CP Series, 310–350, 5CP2100 Series | ⅜" NPT (F) | BB |
| 34549 | 45, 5CP3105–3160CSS, 5CP5120–5CP5140 | ⅜" NPT (F) | BB |
| 45939T | 56–60 | ⅜" NPT (F) | BB |
| 34447 | 7PFR, 15PFR, 5CP6120, 5CP6180CSS, 7CP | ⅜" NPT (F) | BB |
| 43848 | 1530, 1530C, 1730 | ½" NPT (F) | FBB |
| 76795 | 3507, 3517 | ¼" NPT (F) | NAB |
| 997878 | 3560 | ¼" NPT (F) | BB |
| 76678 | 3527, 3537, 3547, 3570, 3570C, 3570S | ¼" NPT (F) | NAB |
| 76461 | 6760, 6775 | ¼" NPT (F) | NABC |

34380

## Quick Disconnect Assemblies

**Used to connect discharge hose to discharge hose.**

- Straight-through flow design.

| MODELS | MATERIAL | MAXIMUM PSI | MAXIMUM BAR | PORT |
|---|---|---|---|---|
| 990469 | Brass | 2000 | 138 | ½" NPT(F) x ½" NPT(F) |
| 34380 | Brass | 4000 | 275 | ⅜" NPT(F) x ⅜" NPT(F) |
| 34381 | Steel | 10000 | 689 | ½" NPT(F) x ½" NPT(F) |

# Discharge Accessories

## Pulsation Dampeners

**Used when a smooth output flow and pressure are required.**

- Pressurized bladder absorbs impact from pressure spikes, providing smoother flow.
- Most models are field repairable and rechargeable.

| MODEL | MAXIMUM FLOW GPM | LPM | PRESSURE RANGE PSI | BAR | BLADDER MATERIAL | VOLUME CUBIC INCHES | PRECHARGE PSI | PORT INLET |
|---|---|---|---|---|---|---|---|---|
| **CARBON STEEL (UPPER BODY), 316 STAINLESS STEEL (LOWER BODY) RECHARGEABLE** | | | | | | | | |
| 6029 | 15 | 57 | 100–3000 | 6.9–207 | NBR | 10 | 450 | ½" NPT(M) |
| 6030 | 15 | 57 | 100–3000 | 6.9–207 | FPM | 10 | 450 | ½" NPT(M) |
| 6011* | 25 | 95 | 100–7200 | 6.9–500 | NBR | 15 | 2000 | ½" NPT(F) |
| 6018 | 40 | 151 | 100–3000 | 6.9–207 | NBR | 45 | 450 | 1" NPT(M) |
| 6022 | 70 | 265 | 100–1500 | 6.9–103 | NBR | 120 | 450 | 1 ¼" NPT(M) |
| * Carbon Steel upper and lower body | | | | | | | | |
| **CARBON STEEL, SEALED** | | | | | | | | |
| 6026 | 15 | 57 | 300–600 | 20–41 | NBR | 10 | 250 | ½" NPT(M) |
| 6028 | 15 | 57 | 600–1000 | 41–69 | NBR | 10 | 450 | ½" NPT(M) |
| **316 STAINLESS STEEL, RECHARGEABLE** | | | | | | | | |
| 6032 | 10 | 37.8 | 100–10000 | 6.9–689 | NBR | 15 | 6000 | ½" NPT(F) |
| 6031 | 15 | 57 | 100–2400 | 6.9–168 | NBR | 10 | 450 | ½" NPT(M) |
| 6014 | 25 | 95 | 100–2400 | 6.9–168 | NBR | 20 | 450 | ¾" NPT(M) |
| 6016 | 40 | 151 | 100–2000 | 6.9–138 | NBR | 45 | 450 | 1" NPT(M) |
| 6013 | 40 | 151 | 100–2000 | 6.9–138 | FPM | 45 | 450 | 1" NPT(M) |
| 6015 | 70 | 265 | 100–1500 | 6.9–103 | NBR | 120 | 450 | 1 ¼" NPT(M) |
| **316 STAINLESS STEEL, RECHARGEABLE AND REBUILDABLE** | | | | | | | | |
| 701501 | 15 | 57 | 100–4300 | 6.9–296 | NBR | 6 | N/A | ½" NPT(F) |
| 701521 | 15 | 57 | 100–4300 | 6.9–296 | EPDM | 6 | N/A | ½" NPT(F) |
| 701541 | 15 | 57 | 100–4300 | 6.9–296 | FPM | 6 | N/A | ½" NPT(F) |
| 701520 | 15 | 57 | 100–8300 | 6.9–572 | NBR | 6 | N/A | ½" NPT(F) |
| 701535 | 15 | 57 | 100–8300 | 6.9–572 | FPM | 6 | N/A | ½" NPT(F) |
| 701502 | 25 | 95 | 100–3800 | 6.9–265 | NBR | 15 | N/A | ½" NPT(F) |
| 701542 | 25 | 95 | 100–3800 | 6.9–265 | FPM | 15 | N/A | ½" NPT(F) |
| 701522 | 25 | 95 | 100–3800 | 6.9–265 | EPDM | 15 | N/A | ½" NPT(F) |
| 701507 | 25 | 95 | 100–7100 | 6.9–490 | NBR | 15 | N/A | ½" NPT(F) |
| 701537 | 25 | 95 | 100–7100 | 6.9–490 | FPM | 15 | N/A | ½" NPT(F) |
| 701527 | 25 | 95 | 100–7100 | 6.9–490 | EPDM | 15 | N/A | ½" NPT(F) |
| 701610 | 25 | 95 | 100–10,000 | 6.9–689 | NBR | 15 | N/A | ½" NPT(F) |
| 701503 | 75 | 284 | 100–3000 | 6.9–207 | NBR | 30 | N/A | 1" NPT(F) |
| 701543 | 75 | 284 | 100–3000 | 6.9–207 | FPM | 30 | N/A | 1" NPT(F) |
| 701523 | 75 | 284 | 100–3000 | 6.9–207 | EPDM | 30 | N/A | 1" NPT(F) |
| 701550 | 100 | 378 | 100–3365 | 6.9–232 | NBR | 122 | N/A | 1 ½" NPT(F) |
| 701555 | 100 | 378 | 100–6350 | 6.9–438 | NBR | 60 | N/A | 1" NPT(F) |
| 701557 | 320 | 1211 | 100–1275 | 6.9–88 | NBR | 214 | N/A | 1 ½" NPT(F) |

## Pulsation Dampener Ordering Information

For optimal performance, pulsation dampener precharge should be set accordingly:

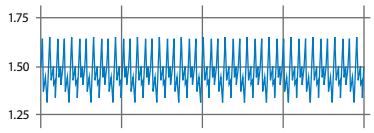
- Rechargeable (6011–6031) should be preset at 50% of the operating pressure
- Rebuildable (701501–701610) should be preset to 75% of the operating pressure

To change the preset precharge, add a .800 to the part number and specify precharge pressure.

## TECH TIP

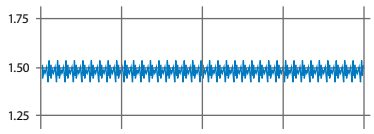
Due to the design of positive displacement pumps, small pressure spikes are caused during each rotation. In certain operations, these spikes can cause accelerated wear or damage to the pump or downstream components. The installation of a pulsation dampener is the best practice to reduce pressure fluctuations.

### Model 1530 w/o Pulsation Dampener




**Min. Pressure = 1275 psi** **Max. Pressure = 1652 psi**
OP. Pressure = 1500 psi Pressure Range = 377

### Model 1530 w/ Pulsation Dampener




**Min. Pressure = 1421 psi** **Max. Pressure = 1543 psi**
OP. Pressure = 1500 psi Pressure Range = 122

### Pulsation Dampener Benefits:

- Produces smooth, consistent flow
- Protects downstream components (e.g., regulator, unloader, relief valve)
- Reduces water hammer
- Improved performance at low rpm

# Inlet Accessories

## Filters

**Used to filter solid particulates in water.**

- Flow from inside-to-outside allows sediment to collect inside the removable filter screen.
- Removable bowl permits easy cleaning without removing filter or plumbing.

| MODEL | SUCTION/ PRESSURIZED FLOW | | SCREEN | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | MESH | MATERIAL | INLET | DISCHARGE |
| **WHITE NYLON BODY** | | | | | | |
| 7104* | 6/10 | 23/38 | 80 | S | ½" NPT(F) | ½" NPT(F) |
| 7105* | 15/20 | 57/76 | 80 | S | ¾" NPT(F) | ¾" NPT(F) |
| 7106* | 20/25 | 76/95 | 80 | S | 1" NPT(F) | 1" NPT(F) |
| 7107* | 35/50 | 133/189 | 80 | S | 1 ¼" NPT(F) | 1 ¼" NPT(F) |
| 7108* | 60/75 | 227/284 | 80 | S | 1 ½" NPT(F) | 1 ½" NPT(F) |
| **CLEAR NYLON BODY** | | | | | | |
| 7104.4* | 6/10 | 23/38 | 80 | S | ½" NPT(F) | ½" NPT(F) |
| 7105.5* | 15/20 | 57/76 | 80 | S | ¾" NPT(F) | ¾" NPT(F) |
| 7106.6* | 20/25 | 76/95 | 80 | S | 1" NPT(F) | 1" NPT(F) |
| 7107.7* | 35/50 | 133/189 | 80 | S | 1 ¼" NPT(F) | 1 ¼" NPT(F) |
| 7108.8* | 60/75 | 227/284 | 80 | S | 1 ½" NPT(F) | 1 ½" NPT(F) |
| **POLYPROPYLENE BODY** (Y-INLINE) | | | | | | |
| 7109 | 100/150 | 378/567 | 80 | SS | 2" NPT(F) | 2" NPT(F) |
| **WHITE NYLON BODY** (MICRO) | | | | | | |
| 7203 | 10 gpm max | 38 | 80 | S | ½" NPT(M) | ½" NPT(M) |
| 7204 | 10 gpm max | 38 | 80 | S | ½" NPT(F) | ½" NPT(F) |
| **CLEAR NYLON BODY** (MICRO) | | | | | | |
| 7203.3 | 10 gpm max | 38 | 80 | S | ½" NPT(M) | ½" NPT(M) |
| 7204.4 | 10 gpm max | 38 | 80 | S | ½" NPT(F) | ½" NPT(F) |
| **REINFORCED COMPOSITE BODY** (W/ BRASS THREADED PORTS, ¼" BSP(F) AUXILIARY PORT) | | | | | | |
| 32738 | 8 gpm max | 30 | 50 | SS | ½" BSP(F) | ½" BSP(M) |
| 32748 | 8 gpm max | 30 | 50 | SS | ½" BSP(F) | ½" BSP(F) |

S = 304 Stainless steel, SS = 316 Stainless steel Optional Mesh sizes available
* For suction applications refer to Data Sheets for inlet pressure losses vs. flow to prevent cavitation.

## Inlet Pressure Gauges

**Accurately monitors pump inlet pressure.**

- Glycerine-filled for consistent and accurate pressure readings.
- Sealed stainless steel case eliminates corrosion risk.

| MODEL | MAXIMUM PRESSURE | | TEMPERATURE RANGE | | PORTS |
|---|---|---|---|---|---|
| | PSI | BAR | (° F) | (° C) | INLET |
| **BRASS MODELS** (BRASS FITTING AND BOURDON TUBE, 304 SS CASE) | | | | | |
| 6082 | 100 | 6.9 | 30-160 | -1.1–71 | ¼" NPT(M) Bottom |
| 997901 | 400 | 28 | 0-150 | -17–65 | ¼" NPT(M) Bottom |
| **STAINLESS STEEL MODELS** (316 SS FITTING AND BOURDON TUBE, 304 SS CASE) | | | | | |
| 997068* | 160 | 11 | -4–140 | -20–60 | ¼" NPT(M) Bottom |
| 997336 | 160 | 11 | 0–140 | -17–60 | ¼" NPT(M) Panel Mount |
| 994063* | 400 | 28 | 0–210 | -17–98 | ½" NPT(M) Bottom |

* Black polyester case
Note: Maximum inlet pressure is 70 psi on most pumps. Review pump data sheet.

# Inlet Accessories

## Inlet Pressure Regulators

**Used to set and maintain consistent pressure at pump inlet.**

- Convenient, compact in-line installation.
- Adjustable and non-adjustable models available.
- Improves pump performance.

| MODEL | MAXIMUM FLOW | | INLET PRESSURE | | OUTLET PRESSURE | | PORTS | |
|---|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | PSI | BAR | INLET | OUTLET |
| **BRASS – NONADJUSTABLE** | | | | | | | | |
| 7069 | 10 | 38 | 40–200 | 3–14 | 30–45 | 2–3 | ¾" FGH | ¾" MGH |
| 7071 | 10 | 38 | 40–200 | 3–14 | 30–45 | 2–3 | ¾" FGH | ½" NPT(F) |
| **STAINLESS STEEL – ADJUSTABLE** | | | | | | | | |
| 7SS075 | 0–12 | 0–45 | 350 | 24 | 15–85 | 1.03–5.86 | ¾" NPT(F) | ¾" NPT(F) |
| 7SS100 | 0–20 | 0–76 | 350 | 24 | 15–85 | 1.03–5.86 | 1" NPT(F) | 1" NPT(F) |
| 7SS150 | 0–50 | 0–189 | 350 | 24 | 15–85 | 1.03–5.86 | 1 ½" NPT(F) | 1 ½" NPT(F) |
| 7SS200 | 0–75 | 0–284 | 350 | 24 | 15–85 | 1.03–5.86 | 2" NPT(F) | 2" NPT(F) |

## Inlet Pressure Relief Valves

**Protects the inlet line from overpressurization.**

- Simple preset design to protect from excessive inlet pressure or pressure spikes.
- Built for convenient compact installation.

| MODEL | FLOW RANGE | | RELIEF PRESSURE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INLET | BYPASS |
| **BRASS** | | | | | | |
| 7420 | 0–10 | 0–37.8 | 125 | 8.6 | ½" NPT(M) | ½" NPT(F) |
| **STAINLESS STEEL** | | | | | | |
| 7421 | 0–10 | 0–37.8 | 75 | 5.2 | ½" NPT(M) | ½" NPT(F) |

## Inlet Stabilizers

**Used to maintain consistent inlet pressure.**

- Eliminates cavitation and potentially damaging surges and hydraulic spikes.
- Compact, easy installation with matching adapter assemblies.

| MODEL | MAXIMUM FLOW | | INLET PRESSURE RANGE | | PORTS |
|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | ADAPTER SIZES AVAILABLE |
| **STAINLESS STEEL** | | | | | |
| 711500 | 15 | 57 | 2.0–50 | 0.1–3.5 | ½", ¾", 1", 1 ¼", 1 ½" |
| 714500 | 45 | 170 | 2.0–50 | 0.1–3.5 | 1", 1 ¼", 1 ½", 2", 2 ½" |
| 717500 | 75 | 284 | 2.0–50 | 0.1–3.5 | 2", 2 ½" |
| 719500 | 320 | 1211 | 2.0–60 | 0.1–4.1 | 6" X ANSI 150, 6" R150 Series Flange |

| FITTING SIZE | INLET STABILIZERS | | | |
|---|---|---|---|---|
| | 711500 | 714500 | 717500 | 719500 |
| **STRAIGHT ADAPTER FITTINGS** | | | | |
| ½" NPT(M) | 711502 | | | |
| ¾" NPT(M) | 711503 | | | |
| 1" NPT(M) | 711504 | 714504 | | |
| 1 ¼" NPT(M) | 711505 | 714505 | | |
| 1 ½" NPT(M) | 711506 | 714506 | | |
| 2" NPT(M) | | 714508 | 717508 | |
| 2 ½" NPT(M) | | | 717510 | |
| **ELBOW ADAPTER FITTINGS** | | | | |
| 1 ½" | 701818 | | | |
| 2 ½" | | 701828 | | |
| 3" | | | 701833 | |
| 6" | | | | 719529 |

# Inlet Accessories

## Thermal Valves

**Reduces heat build-up in a closed-loop bypass system.**

- Lightweight with three port size options for easy installation.
- Recommended when bypass is redirected to pump inlet.

| MODEL | TEMPERATURE F° | PORTS INLET | PORTS BLEED | MAXIMUM FLOW GPM | MAXIMUM FLOW LPM | MAXIMUM PRESSURE PSI | MAXIMUM PRESSURE BAR |
|---|---|---|---|---|---|---|---|
| **BRASS MODELS** | | | | | | | |
| 7140 | 145 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7141 | 145 | ⅜" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7142 | 145 | ½" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7143 | 165 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7144 | 165 | ⅜" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7145 | 165 | ½" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7146 | 130 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7170 | 180 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7171 | 180 | ⅜" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7172 | 180 | ½" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7175 | 190 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7176 | 190 | ⅜" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7177 | 190 | ½" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| **BRASS-MICRO MODELS** | | | | | | | |
| 7116 | 145 | ⅜" BSP(M) | 7 mm | 25 | 95 | 145 | 10.0 |
| **REINFORCED COMPOSITE MODELS** | | | | | | | |
| 7128 | 165 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7129 | 165 | ⅜" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7130 | 165 | ½" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7135 | 145 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7136 | 145 | ⅜" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7137 | 145 | ½" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |
| 7138 | 130 | ¼" NPT(M) | ⅛" NPT(F) | 25 | 95 | 125 | 8.6 |

## Garden Hose Assemblies

**Used to connect garden hose to pump inlet port.**

- Convenient swivel for easy inlet connection.
- Inlet screen for filtering.

| MODELS | MATERIAL | USED ON PUMP MODELS | PORT |
|---|---|---|---|
| 941516 | Brass | 4DX Series, 4DNX Series, 4SP | ⅜" NPT(M) |
| 941517 | Brass | 4SF Series, 66DX Series, 5CP, 5SP | ½" NPT(M) |

# Specialty Accessories

## Easy Start Valve

**Designed to relieve pump discharge line pressure during system start-up.**

- Use with a pressure-sensitive regulating unloader (install after unloader).
- Requires less engine or motor start-up power.

| MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | OPENING PRESSURE | | INLET PORT | BARB |
|---|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | PSI | BAR | | |
| 7126 | 8.0 | 30 | 4050 | 280 | 105 | 7.25 | ⅜" NPT(M) | ¼" |

7126

## Throttle Control

**Reduces engine wear and fuel consumption by lowering rpm when pump is in bypass.**

- Can be used on any size gas engine.
- Used with pressure-sensitive regulating unloaders.

| MODEL | MAXIMUM PRESSURE | | ACTUATION PRESSURE | | INLET PORT |
|---|---|---|---|---|---|
| | PSI | BAR | PSI | BAR | |
| 8100 | 4000 | 275 | 250 | 18 | ⅜" NPT(M) |

8100

## Mag-Jet and Pulsator Assemblies

**Converts water-pressure pump to a water-jetting pump.**

- Eliminates traditional dry pumping chamber that causes damage to pump.
- Easily mounts in the manifold inlet plug on most Cat Pumps models.

| MODEL | USED ON PUMP MODELS |
|---|---|
| **MAG-JET ASSEMBLIES** | |
| 31804 | 3CP1110CS, 3CP1120, 3CP1120G, 3CP1130, 3CP1140 |
| 31810 | 56, 56G1, 56G118, 56HS, 56HSG1, 56HSG11857, 60, 60G1, 60G118 |
| 31814 | 310, 340, 350, 5CP2120W, 5CP2140WCS, 5CP2150W |
| 31815 | 45, 45G1, 5CP3120, 5CP3120CSS, 5CP3120CSSG1, 5CP5120, 5CP5120CSS, 5CP5135CSS, 5CP5135CSS, 5CP5135CSSG1, 5CP5140, 5CP5140CSS, 5CP5140CSSG1, 5CP5140CSSG118 |
| 31845 | 530, 550, 660, 1050, 5CP6120, 5CP6120CSSG1, 7CP6110CS, 7CP6110CSG1, 7CP6160CS, 7CP6160CSG1, 7CP6170, 7CP9170G1 |
| **PULSATOR ASSEMBLIES** | |
| 34455 | 2SFX Series Pumps |
| 76560 | 1560 |
| 35450 | 66DX Series |
| 34451 | 56, 56HG1, 56G118, 56HS, 56HSG1, 56HSG117, 57, 60, 60G1, 60G118 |
| 34458 | 45, 5CP3120, 5CP3120CSS, 5CP3120CSSG1, 5CP5120, 5CP5120CSS, 5CP5140, 5CP5140CSS, 5CP5140CSSG1, 5CP5140CSSG118 |
| 34448 | 660, 1050, 7CP6110CS, 7CP6110CSG1, 7CP6160CS, 7CP6160CSG1, 7CP6170, 7CP6170G1 |
| 77071 | 2510 |

31845

76560

# Specialty Accessories

12VAUTO80
Auto Shutoff
Control

## Auto Shut-Off Assemblies

**Used to automatically shut system off when trigger gun is released or nozzle is closed.**

- Assembly includes a pair of pressure switches, mechanical relay, electrical box and toggle switch.
- Higher horsepower units use a magnetic motor starter and overload heaters.

| MODEL | HORSEPOWER/ PHASE | VOLTAGE | PRESSURE SWITCH MODELS | MECHANICAL RELAY MODEL | STARTER |
|---|---|---|---|---|---|
| 34870 | 2/1 | 115 | 31615, 31625 | 34542 | NA |
| 34871 | 3/1 | 220 | 31615, 31625 | 34543 | NA |
| 12VAUTO80 | 1/DC | 12 | 31615, 31625 | 76593 | NA |

34870

## LPS Monitors

**Designed to sense water leakage past the low-pressure seals.**

- Can configure the monitor to PLC or PC based systems.
- Light option to alert maintenance personnel when pump seal replacement is required.

30664.120VAC

| MODEL | USED ON PUMP MODELS |
|---|---|
| **PLC/PC INTERFACE FOR 15 AND 18 FRAME PLUNGER PUMPS** | |
| 30664 | Plunger pumps: 650 thru 1810K |
| **INDICATOR LIGHT FOR 15 AND 18 FRAME PLUNGER PUMPS** | |
| 30664.120AC, 30664.240AC | Plunger pumps: 650 thru 1810K |
| **PLC/PC INTERFACE FOR 25 FRAME PISTON, 25, 28, 35 AND 38 FRAME PLUNGER PUMPS** | |
| 30290, 30292 | Piston pump: 2520 Plunger pumps: 2530 thru 2831K, 3501 thru 3570, 3801 thru 3841K |
| **INDICATOR LIGHT FOR 25 FRAME PISTON, 25, 28, 35 AND 38 FRAME PLUNGER PUMPS** | |
| 30290.120AC | Piston pump: 2520 Plunger pumps: 2530 thru 2831K, 3501 thru 3570, 3801 thru 3841K |

## Float Valves

**Maintains adequate liquid level in reservoir to provide consistent flow to pump inlet.**

- Adjustable or preset models available.
- Compact and easy to install.

31013 32010

| MODEL | MAXIMUM FLOW GPM | MAXIMUM FLOW LPM | MAXIMUM INLET PRESSURE PSI | MAXIMUM INLET PRESSURE BAR | INLET PORT | INTERNAL BODY |
|---|---|---|---|---|---|---|
| **ADJUSTABLE** | | | | | | |
| 31013 | 7.1 | 27 | 145 | 10 | ⅜" BSP(M) | Brass |
| **PRESET** | | | | | | |
| 32010 | 8.0 | 30 | 145 | 10 | ¾" BSP(M) | Polyethylene |

# Specialty Accessories

## Pressure Switches

**Pressure-activated control device to control on-off operation of low amp system components.**

- Non-adjustable, preset pressure setting for consistent system protection.
- 3-wire construction for either normally open or normally closed operation.

31615

| MODEL | MAXIMUM PRESSURE | | SWITCHING PRESSURE | | VOLTAGE RANGE | MAXIMUM AMP | INLET PORT |
|---|---|---|---|---|---|---|---|
| | PSI | BAR | PSI | BAR | | | |
| **STAINLESS STEEL – NPT PORTS** | | | | | | | |
| 31615 | 3650 | 250 | 215 | 15 | 12–250 | 6 | ¼" NPT(M) |
| 31625 | 3650 | 250 | 360 | 25 | 12–250 | 6 | ¼" NPT(M) |
| 31640 | 3650 | 250 | 580 | 40 | 12–250 | 6 | ¼" NPT(M) |

## Flow Switches

**Flow control device used to shut down pump when trigger on gun is released.**

- Mount to discharge fitting of unloader to monitor when gun is open or closed.
- Use in conjunction with a relay switch.

33786

33776

| MODEL | FLOW RANGE | | MAXIMUM PRESSURE | | MAXIMUM VOLTAGE | PORTS |
|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | | |
| **BRASS MODELS** | | | | | | |
| 33786 | 1.6–15.9 | 6–60 | 5100 | 350 | 230 | ⅜" BSP(F) |
| 33776 | 0.8–8 | 3–30 | 3650 | 250 | 250 | ⅜" BSP(M) |
| 33778 | 1.0–15.9 | 3.8–60 | 5100 | 350 | 230 | ⅜" BSP(F) |

## Thermostat

**Device to adjust and maintain temperature of a high-pressure water system.**

- Adjustable to an accuracy of ±5° F.
- UL/CSA approved.

76239

| MODEL | TEMPERATURE RANGE | MAXIMUM PRESSURE | | VOLTAGE RANGE | MAXIMUM AMPS | PORTS |
|---|---|---|---|---|---|---|
| | | PSI | BAR | | | |
| 76239 | 86°–302° F | 4000 | 276 | 120–240 | 20 | ½" NPT(M) or ½" BSPP(M) |

# Operator Controls

## Guns, Gun & Lance Assemblies

**Ergonomic construction with smooth trigger action-reducing operator fatigue.**

- Safety lock to prevent unintentional operation.
- Stainless steel seat and ball for thousands of continuous cycles.

33425

76165

31137

| MODEL | MAXIMUM FLOW GPM | MAXIMUM FLOW LPM | MAXIMUM PRESSURE PSI | MAXIMUM PRESSURE BAR | PORTS INLET | PORTS DISCHARGE | STYLE | TRIGGER SQUEEZE |
|---|---|---|---|---|---|---|---|---|
| **SHUT-OFF GUN, BRASS** | | | | | | | | |
| 33425 | 8 | 30 | 2900 | 200 | ⅜" NPT(F) | ¼" NPT(F) | Front load | Standard |
| 76165 | 8 | 30 | 4000 | 275 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 35150 | 8 | 30 | 5000 | 345 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 31260 | 8 | 30 | 5100 | 350 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 31137 | 10 | 38 | 4500 | 310 | ⅜" NPT(F) | ¼" NPT(F) | Horizontal | Standard |
| 36140 | 10.5 | 40 | 5000 | 345 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 31265 | 13 | 49 | 3650 | 252 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 39410 | 21 | 80 | 7250 | 500 | ½" BSP(F) | ½" BSP(F) | Bottom Load | Pressure Compensated |
| 39415 | 32 | 121 | 1750 | 120 | ½" BSP(F) | ½" BSP(F) | Bottom Load | Standard |
| 39420 | 53 | 200 | 2900 | 200 | ¾" BSP(F) | ½" BSP(F) | Bottom Load | Pressure Compensated |
| **SHUT-OFF GUN, STAINLESS** | | | | | | | | |
| 36126 | 10 | 38 | 4000 | 275 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 33600 | 10.5 | 40 | 5800 | 400 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 992641 | 10.5 | 40 | 14500 | 999 | ⅜" BSP(F) | ⅜" BSP(F) | Bottom Load | Pressure Compensated |
| **WEEP GUN, BRASS** | | | | | | | | |
| 76168 | 8 | 30 | 4000 | 275 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 35151 | 8 | 30 | 5000 | 345 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| 36141 | 10.5 | 40 | 5000 | 345 | ⅜" NPT(F) | ¼" NPT(F) | Bottom Load | Standard |
| **DUMP GUN, BRASS** | | | | | | | | |
| 32300 (15" Lance) | 10 | 38 | 3000 | 207 | ⅜" NPT(F) | ⅛" NPT(F) | Bottom Load | Standard |
| 32301 (39" Lance) | 10 | 38 | 3000 | 207 | ⅜" NPT(F) | ⅛" NPT(F) | Bottom Load | Standard |

39411

32300

| MODEL | MAXIMUM FLOW GPM | MAXIMUM FLOW LPM | MAXIMUM PRESSURE PSI | MAXIMUM PRESSURE BAR | PORTS INLET | PORTS DISCHARGE | LANCE LENGTH | TRIGGER SQUEEZE |
|---|---|---|---|---|---|---|---|---|
| **SHUT-OFF GUN, BRASS, BOTTOM LOAD, WITH LANCE** | | | | | | | | |
| 39411 | 21 | 80 | 7250 | 500 | ½" BSP(F) | ¼" NPT(F) | 16" | Pressure Compensated |
| 39412 | 21 | 80 | 7250 | 500 | ½" BSP(F) | ¼" NPT(F) | 32" | Pressure Compensated |
| 39422 | 21 | 80 | 7250 | 500 | ½" BSP(F) | ¼" NPT(F) | 50" | Pressure Compensated |
| 39440 | 32 | 121 | 1750 | 120 | ½" BSP(F) | ¼" NPT(F) | 32" | Standard |

# Operator Controls

## Lances

**A variety of lance types, lengths and materials ready to install to any ¼" gun.**

- Ventilated insulator for operator comfort and safety.
- Durable nozzle protector reducing nozzle and property damage.

| MODEL | MAXIMUM FLOW | | MAXIMUM PRESSURE | | LENGTH | | PORTS | |
|---|---|---|---|---|---|---|---|---|
| | GPM | LPM | PSI | BAR | INCHES | MM | INLET | DISCHARGE |
| **ZINC PLATED STRAIGHT TUBE WITH HAND GRIP** | | | | | | | | |
| 32264 | 10.5 | 40 | 3650 | 252 | 24 | 600 | ¼" BSP(M) | ¼" BSP(M) |
| 36267 | 10.5 | 40 | 3650 | 252 | 36 | 900 | ¼" BSP(M) | ¼" BSP(M) |
| 32268 | 10.5 | 40 | 3650 | 252 | 48 | 1200 | ¼" BSP(M) | ¼" BSP(M) |
| **ZINC PLATED TUBE WITH VENTED GRIP AND NOZZLE PROTECTOR** | | | | | | | | |
| 31017 | 10.5 | 40 | 3650 | 252 | 27 | 685 | ¼" BSP(M) | ¼" NPT(F) |
| 33201* | 10.5 | 40 | 3650 | 252 | 35 | 890 | ¼" BSP(M) | ¼" BSP(F) |
| 32036 | 10.5 | 40 | 3650 | 252 | 36 | 900 | ¼" NPT(M) | ¼" NPT(F) |
| 32031 | 10.5 | 40 | 3650 | 252 | 36 | 900 | ¼" BSP(M) | ¼" NPT(F) |
| 32032 | 10.5 | 40 | 3650 | 252 | 48 | 1200 | ¼" BSP(M) | ¼" NPT(F) |
| **STAINLESS STEEL TUBE WITH VENTED GRIP AND NOZZLE PROTECTOR** | | | | | | | | |
| 31219 | 8 | 30 | 5100 | 350 | 32 | 812 | ¼" NPT(M) | ¼" NPT(F) |
| 31220 | 8 | 30 | 5100 | 350 | 42 | 1065 | ¼" NPT(M) | ¼" NPT(F) |
| 32042 | 10.5 | 40 | 3650 | 252 | 36 | 900 | ¼" NPT(M) | ¼" NPT(F) |
| 33200* | 10.5 | 40 | 3650 | 252 | 43 | 1090 | ¼" BSP(M) | ¼" BSP(F) |
| **STAINLESS STEEL LANCE ASSEMBLY** | | | | | | | | |
| 32437 | 21 | 80 | 7250 | 500 | 16 | 406 | ½" BSP(M) | ¼" NPT(F) |
| 32438 | 21 | 80 | 7250 | 500 | 32 | 812 | ½" BSP(M) | ¼" NPT(F) |
| 39194 | 21 | 80 | 7250 | 500 | 50 | 1270 | ½" BSP(M) | ¼" NPT(F) |
| 32440** | 32 | 121 | 1750 | 120 | 32 | 812 | ½" BSP(M) | ¼" NPT(F) |

* Dual Lance

** Steel Zinc Plated

32264 32036

# Operator Controls

## Nozzles

**Applicator/orifice defines rate and pattern of fluid.**

- Easily mounts to a ¼" lance.
- Nozzle types available: change over, rotating and turbo.
- Durable ceramic nozzle/insert for greater resistance to wear.

| MODELS | MAXIMUM FLOW GPM | MAXIMUM FLOW LPM | MAXIMUM PRESSURE PSI | MAXIMUM PRESSURE BAR | PORT |
|---|---|---|---|---|---|
| **CHANGE OVER NOZZLE WITH TWO ¼" NPT(F) NOZZLE HOLDERS** | | | | | |
| 32149 | 7 | 26 | 2900 | 200 | ¼" BSP(F) |

| MODELS | NOZZLE SIZE | FLOW RANGE GPM | FLOW RANGE LPM | PRESSURE RANGE PSI | PRESSURE RANGE BAR | PORT |
|---|---|---|---|---|---|---|
| **TURBO-NOZZLES** 3000 PSI MAX | | | | | | |
| 7265.20 | 2.0 | 1.1–1.7 | 4.1–6.4 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.30 | 3.0 | 1.6–2.6 | 6.0–9.8 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.35 | 3.5 | 1.9–3.0 | 7–11.4 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.40 | 4.0 | 2.2–3.5 | 8.3 –13 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.45 | 4.5 | 2.4–3.9 | 9.1–14.8 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.50 | 5.0 | 2.8–4.4 | 10.6–16.7 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.55 | 5.5 | 3.0–4.8 | 11.1–18.2 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.60 | 6.0 | 3.2–5.2 | 12.1–19.7 | 1200–3000 | 83–207 | ¼" BSP(F) |
| 7265.65 | 6.5 | 3.6–5.7 | 13.6–21.6 | 1200–3000 | 83–207 | ¼" BSP(F) |
| **TURBO-NOZZLES** 5000 PSI MAX | | | | | | |
| 7270.45 | 4.5 | 3.0–5.0 | 11.4–18.9 | 2000–5000 | 138–345 | ¼" BSP(F) |
| 7270.55 | 5.5 | 3.8–6.2 | 14.4–23.5 | 2000–5000 | 138–345 | ¼" BSP(F) |
| 7270.65 | 6.5 | 4.6–7.3 | 17.4–27.6 | 2000–5000 | 138–345 | ¼" BSP(F) |
| 7270.80 | 8.0 | 5.6–8.9 | 21.2–33.7 | 2000–5000 | 138–345 | ¼" BSP(F) |
| 7270.90 | 9.0 | 6.4–10 | 24.2–37.9 | 2000–5000 | 138–345 | ¼" BSP(F) |
| **ROTATING NOZZLES** 3650 PSI MAX | | | | | | |
| 7625.30 | 3.0 | 1.6–2.9 | 6.1–11 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.35 | 3.5 | 1.9–3.3 | 7.2–12.5 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.40 | 4.0 | 2.2–3.8 | 8.3–14.4 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.45 | 4.5 | 2.4–4.3 | 9.1–16.3 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.50 | 5.0 | 2.8–4.8 | 10.6–18.2 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.55 | 5.5 | 3.0–5.2 | 11.4–19.7 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.60 | 6.0 | 3.2–5.7 | 12.1–21.6 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.65 | 6.5 | 3.6–6.2 | 13.6–23.5 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.70 | 7.0 | 3.8–6.7 | 14.4–25.4 | 1200–3650 | 83–252 | ¼" BSP(F) |
| 7625.80 | 8.0 | 4.4–7.7 | 16.7–29.1 | 1200–3650 | 83–252 | ¼" BSP(F) |
| **ROTATING NOZZLES** 5100 PSI MAX | | | | | | |
| 7632.30 | 3.0 | 2.4–3.4 | 9.1–12.9 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.35 | 3.5 | 2.8–3.9 | 10.6–14.8 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.40 | 4.0 | 3.2–4.5 | 12.1–17 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.45 | 4.5 | 3.6–5.1 | 13.6–19.3 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.50 | 5.0 | 4.0–5.6 | 15.1–21.2 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.55 | 5.5 | 4.4–6.2 | 16.7–23.5 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.60 | 6.0 | 4.8–6.7 | 18.2–25.4 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.65 | 6.5 | 5.2–7.3 | 19.7–27.6 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.70 | 7.0 | 5.6–7.9 | 21.2–29.9 | 2600–5100 | 180–350 | ¼" BSP(F) |
| 7632.80 | 8.0 | 6.4–9.1 | 24.3–34.2 | 2600–5100 | 180–350 | ¼" BSP(F) |

# Need selection help?

If psi and nozzle gpm is known, then nozzle number can be calculated as follows:

$$\text{Nozzle number} = \text{gpm} \times \sqrt{\frac{4000}{\text{psi}}}$$

If psi and nozzle number is known, then gpm can be calculated as follows:

$$\text{gpm} = \text{nozzle number} \times \sqrt{\frac{\text{psi}}{4000}}$$

If gpm and nozzle number is known, then psi can be calculated as follows:

$$\text{psi} = \left(\frac{\text{gpm}}{\text{nozzle number}}\right)^2 \times 4000$$

A nozzle selection chart can also be found online at catpumps.com in the Literature section under Reference Documents.

# Operator Controls

## Vari-Nozzles

**Used with downstream chemical injector to apply chemical at low pressure.**

- Adjusts spray angle from 0° to 60° for cleaning flexibility.

| MODELS | NOZZLE SIZE | FLOW RANGE GPM | FLOW RANGE LPM | PRESSURE RANGE PSI | PRESSURE RANGE BAR | PORT |
|---|---|---|---|---|---|---|
| **VARI-NOZZLES** | | | | | | |
| 7920 | 2.0 | 1.0–1.9 | 3.8–7.2 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7930 | 3.0 | 1.5–2.9 | 5.7–10.8 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7935 | 3.5 | 1.8–3.3 | 6.6–12.6 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7940 | 4.0 | 2.0–3.8 | 7.8–14.4 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7945 | 4.5 | 2.2–4.3 | 8.3–16.3 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7950 | 5.0 | 2.5–4.7 | 9.5–17.8 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7955 | 5.5 | 2.8–5.2 | 10.6–19.7 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7960 | 6.0 | 3.0–5.6 | 11.4–21.2 | 100–3650 | 6.9–252 | ¼" BSP(F) |
| 7970 | 7.0 | 3.5–6.6 | 13.2–25.0 | 100–3650 | 6.9–252 | ¼" BSP(F) |

7920

## Foamers

**Draws chemical and air to create thick foam.**

- Lance and chemical bottle can be fitted to a standard ¼" gun.
- Convenient chemical injector adjustment knob or handle for adjusting chemical draw.
- Stainless Steel orifice and FPM O-rings for chemical compatibility.

| MODELS | FLOW RANGE GPM | FLOW RANGE LPM | PRESSURE RANGE PSI | PRESSURE RANGE BAR | TYPE | PORT |
|---|---|---|---|---|---|---|
| **FOAMER, WITH AND WITHOUT BOTTLE** | | | | | | |
| 32017 | 2–4 | 7.6–15.2 | 750–2900 | 52–200 | w/o Bottle | ¼" BSP(F) |
| 39234 | 2–4 | 7.6–15.2 | 750–2900 | 52–200 | w/ 1-Liter Bottle | ¼" BSP(F) |
| 39196 | 2–4 | 7.6–15.2 | 750–2900 | 52–200 | w/ 2-Liter Bottle | ¼" BSP(F) |

39234

## Chemical Injectors

**Provides and regulates chemicals into pump stream.**

- Mount directly to unloader or in-line on discharge plumbing.
- Must be used with low-pressure nozzle to activate chemical draw.

| MODEL | ORIFICE SIZE (MM) | FLOW RANGE GPM | FLOW RANGE LPM | MAXIMUM PRESSURE PSI | MAXIMUM PRESSURE BAR | PORTS INLET | PORTS DISCHARGE |
|---|---|---|---|---|---|---|---|
| **BRASS – ADJUSTABLE** | | | | | | | |
| 7182 | 1.8 mm | 2–4 | 7.6–15 | 3500 | 241 | ⅜" NPT(M) | ⅜" NPT(M) |
| 7192 | 1.8 mm | 2–4 | 7.6–15 | 3500 | 241 | M18 x 1.0 | ⅜" NPT(M) |
| 7183 | 2.1 mm | 3–5 | 11.4–19 | 3500 | 241 | ⅜" NPT(M) | ⅜" NPT(M) |
| 7193 | 2.1 mm | 3–5 | 11.4–19 | 3500 | 241 | M18 x 1.0 | ⅜" NPT(M) |
| 7184 | 2.3 mm | 3–6 | 11.4–23 | 3500 | 241 | ⅜" NPT(M) | ⅜" NPT(M) |
| 7194 | 2.3 mm | 3–6 | 11.4–23 | 3500 | 241 | M18 x 1.0 | ⅜" NPT(M) |
| 7224 | 2.3 mm | 3–6 | 11.4–23 | 3500 | 241 | M22 x 1.5 | ⅜" NPT(M) |
| **BRASS – FIXED** | | | | | | | |
| 7231 | 1.8 mm | 2.0 | 7.6 | 3145 | 217 | M18 x 1.0 | ⅜" NPT(M) |
| 7242 | 2.0 mm | 2.9 | 12.9 | 2600 | 179 | M18 x 1.0 | ⅜" NPT(M) |
| 7232 | 2.1 mm | 3.0 | 11.4 | 3145 | 217 | M18 x 1.0 | ⅜" NPT(M) |
| 7332 | 2.1 mm | 3–4 | 11.4–15 | 3000 | 207 | M18 x 1.0 | ⅜" NPT(M) |
| 7243 | 2.1 mm | 3–5 | 11.4–19 | 4000 | 275 | M22 x 1.5 | ⅜" NPT(M) |
| 7367 | 2.1 mm | 3–5 | 11.4–19 | 4000 | 275 | M20 x 1.0 | ⅜" NPT(M) |
| **STAINLESS STEEL – ADJUSTABLE** | | | | | | | |
| 7722 | 1.8 mm | 2–4 | 7.6–15 | 3500 | 241 | ⅜" NPT(M) | ⅜" NPT(M) |
| 7723 | 2.1 mm | 3–5 | 11.4–19 | 3500 | 241 | ⅜" NPT(M) | ⅜" NPT(M) |
| 7724 | 2.3 mm | 3–6 | 11.4–23 | 3500 | 241 | ⅜" NPT(M) | ⅜" NPT(M) |

7192

# Operator Controls

## Pulse Pumps

Harsh chemicals can damage the inner components of a high-pressure pump if run through the main pumping chamber. Pulse pumps from Cat Pumps are a cost-effective solution to bypass the primary pump, injecting these solutions down-stream and preventing premature wear on parts. This allows users to run standard high-pressure pumps instead of special, more costly stainless steel pumps with chemical-resistant seals.

The same proven quality and attention to detail that customers have come to expect from Cat Pumps is built into every pulse pump chemical injector. With pressures up to 207 bar (3,000 psi) and injection rates up to 12 gph, these pulse pumps can be used on a wide variety of new or existing systems. The installation process is so simple that pumps can be retrofitted quickly in the field.

### Features

- Long lasting and simple to service
- Can be used with a wide range of high-pressure pumps, from small direct-drive to large belt-driven pumps
- Easy to retrofit in the field
- Accurate and easy-to-control injection rates
- Two pulse pumps can be used on one high-pressure pump to double chemical injection rate or use two separate chemicals
- Chemical pump can be turned on and off independently from main system

### Typical Applications

- Sanitizing / Disinfecting
- Pressure Wash
- Truck Mount
- Vehicle and Equipment Wash
- Surface Cleaning

6350

6340

**High-pressure injection downstream from the system pump.**

- Eliminates harsh chemicals passing through pump.
- Simple field retrofit of existing pumps.

| MODEL | FLOW RANGE | | PRESSURE RANGE | | PORTS | |
|---|---|---|---|---|---|---|
| | GPH | LPH | PSI | BAR | INLET | DISCHARGE |
| **PULSE PUMPS FOR PLUNGER AND PISTON PUMPS** | | | | | | |
| 6340, 6341 | 1.0–10.5 | 3.8–40.0 | 100–2000 | 6.9–138 | ⅛" NPT(F) | ⅛" NPT(F) |
| 6350, 6351 | 1.0–12.0 | 3.8–45.4 | 500–3000 | 35–207 | ¼" Hose Barb | ⅛" NPT(F) |

Note: Contact Cat Pumps for selection of Adapter Assembly to fit your pump model.

**6340/6341 MAXIMUM INJECTION RATE**

| PUMP RPM | INJECTION RATE | PUMP RPM | INJECTION RATE |
|---|---|---|---|
| 1000 | 5.5 gph | 1500 | 10.0 gph |
| 1100 | 7.0 gph | 1600 | 10.5 gph |
| 1200 | 8.0 gph | 1700 | 10.5 gph |
| 1300 | 9.0 gph | 1800 | 10.5 gph |
| 1400 | 9.5 gph | | |

**6350/6351 MAXIMUM INJECTION RATE**

| PUMP RPM | INJECTION RATE | PUMP RPM | INJECTION RATE |
|---|---|---|---|
| 500 | 5.0 gph | 1000 | 10.0 gph |
| 600 | 6.0 gph | 1100 | 11.0 gph |
| 700 | 7.0 gph | 1200 | 12.0 gph |
| 800 | 8.0 gph | 1800 | 12.0 gph |
| 900 | 9.0 gph | | |

| INTERNAL DIAPHRAGM MATERIAL | |
|---|---|
| **6340** | **6341** |
| EPDM | FPM |

| INTERNAL O-RING & VALVE MATERIAL | |
|---|---|
| **6350** | **6351** |
| FPM O-Ring | FPM O-Ring |
| Acetal Inlet Valve | Stainless Steel Inlet Valve |

# Lubrication Accessories

## Crankcase Oil

**Genuine Cat Pumps crankcase oil provides maximum life and performance.**

- Custom blend, premium grade, petroleum-based hydraulic oil for all Cat Pumps.
- Anti-wear additives protects metal-to-metal drive surfaces, extending drive life.
- High oxidative and chemical stability resists deposit formations and provides consistent fluid performance.
- Premium anti-corrosion additives offer protection in the most demanding operating environments.

6107

| PART NUMBER | CAPACITY | PUMP MODELS |
|---|---|---|
| **OIL** | | |
| **ISO 68**<br>Change after first 50 hours, then every 500 hours | | |
| 6107 | Bottle – 21 ounces | All piston and plunger pumps |
| 6100 | Case – (12) 21 ounce bottles | |
| 6102 | Jug – 2.5 gallons | |
| 6105 | Twin pack – (2) 2.5 gallons | |
| 6109 | Drum – 30 gallons | |
| 997657 | Jug – 1 gallon | All piston and plunger pumps – Food Grade |
| 997638 | Case – (4) 1 gallons | |
| **ISO 100**<br>Change after first 20 hours, then every 3000 hours | | |
| 6115 | Pail – 5 gallons | 152R060/C, 152R080/C, 152R100/C, 157R060/080, Specialty Pumps |
| 6116 | Drum – 16 gallons | |
| 6121 | Case – (4) 4 liters | |
| **OILERS – GRAVITY FEED WITH ¼" NPT(M) THREADS** | | |
| 30278 | 1 ounce | 2520/C, 2510/11, 2530–2537, **Except** 2831/K, 35/38 Series, **Except** 3541/C, 3545, 3841/K |
| 30429 | 10 ounces | 6020, 6040, 6760–6777, **Except** 6747 6861/K, **Except** 6801/K–6841/K |

## Gear Lube

**Maximize life with genuine Cat Pumps Gear Lube.**

- Low friction and operating temperature for low wear, extending gear box life.
- Anti-wear, anti-rust, anti-corrosion formulation to extend gearbox life.
- Excellent oxidation and thermal stability extends fluid life.
- Used on all Cat Pumps gearbox pumps except 3CP1120G, 3CP1211G and 3CP1221G. (crankcase oil is used instead of Gear Lube).

6110

| PART NUMBER | CAPACITY | PUMP MODELS |
|---|---|---|
| **GEAR LUBE** | | |
| 6110 | Bottle – 16 ounces | 45G1, 56G1, 56HSG1, 60G1, 700G1, 740G1, 760G1, 781G1, 5CP3105CSSG1, 5CP3120CSSG1, 5CP3160CSSG1, 5CP5135CSSG1, 5CP5140CSSG1, 5CP5140CSSG118, 5CP6120CSSG1, 5CP6180CSSG1, 5CP6190G1, 5CPQ6221G1, 5CPQ6241CSG1, 5CPQ6251G1, 7CP6170G1, 7CP6110CSG1, 7CP6111CSG1, 5CP6190G1 |
| 6111 | Case, (12) 16 ounce bottles | |

# Lubrication Accessories

6124

6106

6139

## Anti-Seize and Sealants

**Sealant and anti-seize ensure proper pump operation.**

- Anti-Seize protects metal-to-metal surfaces from galling, seizing, friction and wear.
- Sealant is used to fill between mating surfaces within the manifold.

| PART NUMBER | CAPACITY | PUMP MODELS |
|---|---|---|
| **ANTI-SEIZE AND SEALANTS** | | |
| 6106 | 2 milliliters | Anti-seize for pump shafts and keys – all plunger pumps |
| 6139 | 8 ounces | Anti-seize for threads – all stainless steel plunger pumps |
| 6124 | 3 ounces | Liquid gasket for O-rings, seals – all plunger pumps |

Loctite is a registered trademark of Henkel Corporation.

## Pump Protector

**The Ultimate Protection for Long-Term Storage of Pressure Washer Pumps.**

The best solution: use specially formulated Pump Protector from Cat Pumps to protect your pressure washer pump from freezing, corrosion, mineral deposits and premature wear. Recommended for use with all pressure washers, Pump Protector adds lubrication to pistons, valves and seals to prevent sticking.

| PART NUMBER | CAPACITY | PUMP MODELS |
|---|---|---|
| **PUMP PROTECTOR** | | |
| 6208 | Case–(6) 12 oz bottles | All pressure washer pump models |

**How to Order:** Order part number 6208 for a case of six bottles; 12 fluid ounces (355 ml) each

## CHECK OUT

**Cat Pumps Pressure Washer Pump Protector**

There is no better way to protect your pump than using Pump Protector.

**www.youtube.com/CatPumps1968**

YouTube

# Pump Accessories

## Oil Drain/Level Indicator Kits

**Easily monitor crankcase oil level at-a-glance and improve pump maintenance.**

- Conveniently monitor oil when existing bubble gauge is obscured.
- Oil drain kit can be mounted at desired location for easy maintenance.

| MODEL | USED ON PUMP MODELS |
|---|---|
| **OIL LEVEL INDICATOR** | |
| 76144 | Piston pumps: 2520 through 6041 Plunger pumps: 2510 thru 6861K. **EXCEPT** 35 and 38 Frame series |
| **OIL LEVEL INDICATOR W/DRAIN KIT** | |
| 76334 | All Piston and Plunger pumps and 66DX, **EXCEPT** Plunger pumps 2SF, 2SFX, 4DX, 4DNX, 4SF, 4SP, 4SPX and 5SP series |
| 76074 | All stainless steel or nickel aluminum bronze pumps, **EXCEPT** Plunger pumps 2SF, 2SFX, 4DX, 4DNX, 4SF, 4SP, 4SPX, 5SP and 66DX series |
| **DRAIN KITS** | |
| 34314 | Piston pumps: 6020 thru 6041 Plunger pumps: 3501 thru 3570, 3801 thru 3841K, 6747 thru 6775 and 6801 thru 6861K |
| 34334 | All piston and plunger pumps and 66DX, **EXCEPT** plunger pumps 2SF, 2SFX, 4DX, 4DNX, 4SF, 4SP, 4SPX and 5SP series |
| 990394 | Plunger pumps: 2SF, 2SFX, 4DX, 4DNX, 4SF, 4SP, 4SPX and 5SP series |

76334

## Protectors – Shaft and Oil Cap

**Safety devices to eliminate exposure to rotating pump shaft and to minimize water leakage into pump.**

- Shaft protector not included with pump unless otherwise noted.
- Oil cap protector not included with pump except 35/38 series pumps.

| PART NUMBER | MATERIAL | PUMP MODELS |
|---|---|---|
| **SHAFT PROTECTORS** | | |
| 25130 | STCP | 230–277, 280, 290, 333, 430 |
| 26516 | STCP | 2520/C, 2510/11, 2530–2537, 2560, 2565, 2831/K |
| 29445 | AL | 6020, 6040, 6747, 6760–6775, 6801/K, 6811/K, 6821/K, 6831/K, 6841/K, 6861/K, 67070, 67102 **Included with pump** |
| 30764* | NY | 650, 660, 1050, 1530, 1540E, 1560, 1570, 1580 (6 mm Holes) |
| 30764S* | NY** | 661C, 661D, 1051, 1051C, 1051D, 1057, 1531, 1541, 1541C (6 mm Holes) |
| 855046* | NY | 650, 660, 1050, 1530, 1540E, 1560, 1570, 1580 **Included with pump** (8 mm Holes) |
| 855047* | NY** | 661C, 661D, 1051, 1051C, 1051D, 1057, 1531, 1541, 1541C **Included with pump** (8 mm Holes) |
| 26516.15FR | STCP | 1050.44101, 1051.44101, 1051C.44101, 1530.44101, 1531.44101, 1540E.44101, 1541.44101, 1541M.44101 **Included with pump** (8 mm Holes) |
| 43139 | STCP | 621, 623, 820, 821, 1010, 1011 |
| 43256 | STCP | 530, 550 |
| 855042 | NY | 3501/C, 3507/C, 3511/C, 3517/C, 3520/C, 3521DHS/C, 3527, 3531D/C, 3535/C, 3537, 3541D/C, 3545, 3550, 3560, 3570, 3570S, 3801/K, 3811/K, 3821HS/KHS, 3831/K, 3841/K **Included with pump** |
| 118672 | STCP | 310–350S, 311–357, 3CP1120–1140, 3CP1221–1241, 5CP2120W/2150W, 5CP3120, 5CP6120–6190, 5CPQ6221/6251 |
| 120220 | STCP | 7CP6170 |
| * See Tech Bulletin 128 **Nylon protectors w/ two stainless screws. | | |
| **OIL CAP PROTECTORS** | | |
| Oil fill cap protector prevents water from entering crankcase. Not included with pump except on 4DX, 35 and 38 series pumps. | | |
| 127409 | PE | 3CP, 5CP and 66DX Series |
| 549726 | PE | 4DNX and 4DX Series |
| 828710 | PE | All piston and plunger pumps, **EXCEPT** the 1CX, 2SF, 2SFX, 3CP, 4DX, 4DNX, 4SF, 4SP, 4SPX, 5CP, 5SP, 66DX, 67DX |

Material codes: AL = Aluminum, NY = Nylon, PE = Polyethylene, STCP = Steel/Chrome Plated

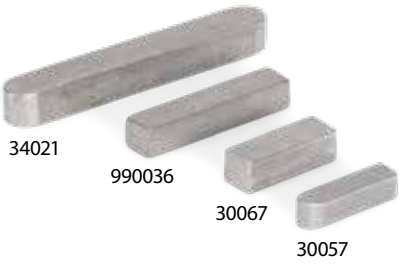
29445

30764

118672

828710

# Pump Accessories




## Keys – Direct Drive

**Provides alignment and secures pump shaft to motor shaft or hub/pulley.**

- Keys supplied with Cat Pumps.
- Keys supplied with gearboxes and flexible couplings.

| PART NUMBER | SIZE | PUMP MODELS |
|---|---|---|
| 30050 | 3⁄16" x 3⁄16" x 1 1⁄4" | 2SF Electric, Gas and Stainless Steel Series |
| 30088 | 1⁄4" x 1⁄4" x 1 3⁄8" | Flexible Couplings: 8220, 8225, 8230 |
| 34050 | 3⁄16" x 3⁄16" x 27mm | 4DNX25GSI/27GSI, 4DX Series, 4SP Series |
| 44294 | 3⁄16" x 3⁄16" x 1 3⁄4" | Gearboxes (engine side): 8010, 8075 |
| 44459 | 8 x 7 x 24mm | Gearboxes (pump side): 8071, 8081 |
| 45217 | 1⁄4" x 1⁄4" x 64mm | 66DX30G1I/35G1I/40G1I/50G1I |
| 49411 | 1⁄4" x 1⁄4" x 59mm | 67DX39G1I |
| 57352 | 5 x 5 x 21mm | Gearboxes (pump side): 8010, 8075 |
| 101814 | 6 x 6 x 27mm | Gearboxes (pump side): 8065, 8068, 8076, 8077 |
| 134760 | 1⁄4" x 1⁄4" x 45mm | 5SP Series |
| 831844 | 1⁄4" x 1⁄4" x 56mm | 4SPX32G1I |

## Keys – Belt Drive

**Provides alignment and secures pump shaft to hub/pulley.**

- Keys not supplied with pump.

| PART NUMBER | SIZE | PUMP MODELS |
|---|---|---|
| 30047 | 5 x 5 x 24 | 280, 290, 333, 430, 230–277, 3CP1120–1140, 1221–1241 |
| 30057 | 6 x 6 x 25 (round end) | 323, 390, 45, 310–350S, 311–357, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 and Clutch models: 34962/63, 34970/80 |
| 30067 | 8 x 7.25 x 25 | 56, 530, 550, 700, 740, 760, 781/K, 784, 786, 650–661D, 1050–1057, 1530/31, 1540E/41, 1810/K, 7CP6110CS–7CP6171CS |
| 30089 | 5 x 5 x 36.5 | Clutch models: 34960/961, 34964/965 |
| 34021 | 10 x 8 x 70 | 3501/C, 3507/C, 3511/C, 3517/C, 3520/C, 3521DHS/C, 3527, 3531D/C, 3535/C, 3537, 3541D/C, 3545, 3550, 3560, 3570, 3570S 3801–3841K |
| 35034 | 6 x 8 x 26 (Step) | Clutch model: 34299 |
| 43048 | 14 x 9 x 90 | 6020, 6040, 6747, 6760–6775, 6801–6861K, 67070, 67102/C |
| 50146 | 7 x 7 x 40 | 621, 623, 820, 821, 1010, 1011, 1951 |
| 890601 | 28 x 170 (Step) | 152R060/C, 152R080/C, 152R100/C, 157R060, 157R080 |
| 890602 | 28 x 16 x 170 | 152R060/C, 152R080/C, 152R100/C, 157R060, 157R080 |
| 990036 | 8 x 7 x 40 | 1530/31, 1540E/41, 1560, 1570, 1580, 2510/11, 2520/C, 2530–2537, 2560, 2565, 2831/K |
| 990069 | 8 x 6.35 x 40 | Clutch model: 34563 |
| 991036 | 8 x 7 x 36 | Clutch models: 34628, 34630 |

# Pump Accessories

## Rail, Direct Mount and Complete Mounting Assemblies

**Mount pump onto a secure, horizontal base with either rail assemblies or direct-mount assemblies.**

- Rail assembly, direct mount assembly or complete mounting assembly not included with pump unless otherwise noted.
- Use direct mount assembly when mounting block or flat base is used or pulley extends over edge of base.

92674

30612

| PART NUMBER | PUMP MODELS |
|---|---|
| **RAIL ASSEMBLIES – STEEL/ZINC PLATED/STAINLESS STEEL** | |
| 126604 | 6020, 6040, 6747, 6760–6775, 6801/K, 6811/K, 6821/K, 6831/K, 6841/K, 6861/K Included with pump |
| 30611 | 333, 430, 323, 390, 310–350S, 311–357, 530, 550, 700, 740, 760, 781/K, 784, 786, 31, 45, 60, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 |
| 30612 | 280, 290, 230–277, 3CP1120–1140, 3CP1221–1241, 3CP1211CS |
| 30613 | 623–1010, 650–661D, 1050–1057, 1530/31,1540E/41, 1560, 1570, 1580, 1810/K, 7CP6110CS–6171CS |
| 30614 | 2520/2520C, 2510/11, 2530–2537, 2560, 2565, 2831/K |
| 30637 | 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 (Retrofit to GP/IP**) |
| 30645 | 530, 550, 45, 56, 60, 700, 740, 760, 781/K, 784, 786 |
| 76513 | 310–350S, 311–357, 530, 550, 56, 60, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CCS, 5CP6120–6190, 5CPQ6221–6251 |
| 92674 | 3501/C, 3507/C, 3511/C, 3517/C, 3520/C, 3521DHS/C, 3527, 3531D/C, 3535/C, 3537, 3541DK, 3520, 3545, 3550, 3560, 3570, 3570S, 3801/K, 3811/K, 3821HS/KHS, 3831/K, 3841/K |
| 76514 | 3501/C, 3507/C, 3511/C, 3517/C, 3520/C, 3521DHS/C, 3527, 3531D/C, 3535/C, 3537, 3541DK, 3520, 3545, 3550, 3560, 3570, 3570S, 3801/K, 3811/K, 3821HS/KHS, 3831/K, 3841/K **304 Stainless Steel** |
| 990550 | 650, 660–661D, 1050, 1051, 1057, 1530, 1531, 1540E, 1541, 1560, 1570, 1580, 1730, 1810/K **For Diesel or Gas mounts** |
| **DIRECT MOUNT ASSEMBLIES – STEEL/ZINC PLATED** | |
| 30243 | 333, 430, 323, 390, 310–350S, 311–357, 530, 550, 700, 740, 760, 781/K, 784, 786, 45, 56, 60, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 |
| 30264 | 623–1010, 650–661D, 1050–1057, 1530/31, 1540E/41, 1560, 1570, 1580, 1810/K, 7CP6110CS–6171CS |
| 34018 | 3520/C, 3535, 3545, 3560 |
| 34039* | 3501/C, 3507/C, 3511/C, 3517/C, 3521DHS/C, 3527, 3531D/C, 3537, 3541D/C, 3801/K, 3811/K, 3821HS/KHS, 3831/K, 3841/K |
| **MOUNTING ASSEMBLIES** (INCLUDES: RAILS, KEY, PULLEY/HUB AND SHAFT PROTECTOR) | |
| 30641 | 3CP1120–1140, 3CP1221–1241 |
| 30651 | 280, 290, 230–277 |
| 30652 | 333, 430 |
| 30653 | 623–1010 |
| 30659 | 323, 390, 310–350S, 311–357, 5CP2120W–5CP2150W, 5CP3120/CSS, 5CP5120–5CP5140CSS, 5CP6120–5CP6190, 5CPQ6221–6251 |
| 30660 | 530, 550, 700, 740, 760, 781/K, 784, 786, 56, 60 |
| 30661 | 650–661D, 1050–1057, 1530/31, 1540E/41, 1560, 1810/K |

* 304 stainless steel ** See Tech Bulletin 078

# NEMA Mounting Components

## Bell Housing and Flexible Coupling

**Compact direct mounting to hydraulic or electric motors reducing space requirements.**

- Coupling assembly includes metric and standard coupling halves, spyder and keys.
- Special urethane flexible spyder designed for extended life with high temperature and high rpm.
- Used with standard NEMA electric motors.

56HS with NEMA Bell Housing and Motor

### NEMA Bell Housing Assemblies

| PUMP SERIES | MODELS | MOTOR FRAME | BELL HOUSING ASSY |
|---|---|---|---|
| 3CP | All 3CP Models | 56C–145TC | 76056.3CP |
| | | 182/184TC | 76184.3CP |
| | | 213/215TC | 76215.3CP |
| 3FR | 230, 231, 237, 240, 241, 247, 270, 271, 277 | 56C–145TC | 76056.3FR |
| | | 182/184TC | 76184.3FR |
| | | 213/215TC | 76215.3FR |
| 5CP | All 5CP Models | 56C–145TC | 76056.5CP |
| | | 182/184TC | 76184.5CP |
| | | 213/215TC | 76215.5CP |
| | | 254/256TC | 76256.5CP |
| 5FR | 340, 341, 347, 350, 351, 357 | 56C–145TC | 76056.5FR |
| | | 182/184TC | 76184.5FR |
| | | 213/215TC | 76215.5FR |
| 7CP | All 7CP Models | 182/184TC | 76184.7CP |
| | | 213/215TC | 76215.7CP |
| | | 254/256TC | 76256.7CP |
| 7FR/8FR | 56–60, 700–760, 781–786 | 182/184TC | 76184.7FR |
| | | 213/215TC | 76215.7FR |
| | | 254/256TC | 76256.7FR |
| 15 FR/18FR * | All 15 & 18FR models | 213/215TC | 76215.15FR |
| | | 254/256TC | 76256.15FR |
| | | 284/286TC | 76286.15FR |

* See page 48 for 1180 RPM motor options for some 15FR pumps.

### NEMA Flexible Coupler Assemblies

| PUMP SERIES | MOTOR FRAME | FLEX COUPLER ASSY | SHAFT TO SHAFT | TORQUE RATING FT·LB |
|---|---|---|---|---|
| 3CP & 3FR | 56C | 8215 | 16.5mm x 5/8" | 27 |
| | 145TC | 8210 | 16.5mm x 7/8" | 27 |
| | 182/184TC | 8220 | 16.5mm x 1 1/8" | 27 |
| | 182/184TC | 8225 | 16.5mm x 1 1/8" | 74 |
| | 213/215TC | 8270 | 16.5mm x 1 3/8" | 92 |
| 5CP & 5FR | 56C | 8261 | 20mm x 5/8" | 74 |
| | 145TC | 8260 | 20mm x 7/8" | 74 |
| | 182/184TC | 8230 | 20mm x 1 1/8" | 74 |
| | 213/215TC | 8275 | 20mm x 1 3/8" | 92 |
| | 245/256TC | 8217 | 20mm x 1 5/8" | 92 |
| 7CP & 7FR | 56C/145TC | 8218 | 24mm x 5/8" | 74 |
| | 182/184TC | 8370 | 24mm x 1 1/8" | 74 |
| | 213/215TC | 8375 | 24mm x 1 3/8" | 74 |
| | 254/256TC | 8380 | 24mm x 1 5/8" | 92 |
| | 284/286TC | 8389 | 24mm x 1 7/8" | 150 |
| 15FR & 18FR | 213/215TC | 8388 | 30mm x 1 3/8" | 150 |
| | 254/256TC | 8382 | 30mm x 1 5/8" | 150 |
| | 284/286TC | 8383 | 30mm x 1 7/8" | 225 |

76000 Series

8230

# Need selection help?

**Q. How can I find the rpm needed to get specific gpm (Gallons Per Minute) I want?**

A. Desired rpm = Desired gpm x $\frac{\text{Rated rpm}}{\text{Rated gpm}}$

**Q. I have to run my pump at a certain rpm. How do I figure the gpm I'll get?**

A. Desired gpm = Desired rpm x $\frac{\text{Rated gpm}}{\text{Rated rpm}}$

**Q. Is there a simple way to find the approximate horsepower I'll need to run the pump?**

A. Electric Brake Horsepower (Standard 85% Mech. Efficiency)

Required hp* = $\frac{\text{gpm x psi}}{1460}$

**Q. What size motor pulley should I use?**

A. Pump Pulley (Outer Diameter) x $\frac{\text{Pump rpm}}{\text{Motor/ Engine rpm}}$

*Consult Engine Manufacturer

# Motor Options

## "C" Face, 60 Hz

**Provides easily-assembled pump and motor units.**

- Motors from Marathon Electric, WorldWide Electric and WEG
- Contact Cat Pumps for additional motor options, like IEC, 50 Hz, RPM options, EXP and more.

| HORSE POWER | VOLTAGE | FRAME | PART NUMBER |
|---|---|---|---|
| **1 PH, 1750 RPM, TEFC** | | | |
| 0.5 | 115/208–230 | 56C | 8105 |
| 0.75 | 115/208–230 | 56C | 8175 |
| 1 | 115/208–230 | 56C | 8110 |
| 1.5 | 115/208–230 | 56C | 8115 |
| 2 | 115/208–230 | 56C | 8120 |
| 2.5 | 115/208–230 | 56C | 8125 |
| 3 | 208–230/460 | 184TC | 999839 |
| 5 | 208–230/460 | 184TC | 997634 |
| 7.5 | 208–230/460 | 215TC | 999766 |
| 10 | 208–230/460 | 215TC | 999720 |
| **1 PH, 3450 RPM, TEFC OR ODP** | | | |
| 1.5 | 115/230 | 56C | 8054* |
| 2 | 115/230 | 56C | 8052* |
| 3 | 115/208-230 | 56C | 992139** |
| 5 | 230 | 56C | 8057*** |
| **3 PH, 1180 RPM, TEFC** | | | |
| 5 | 208–230/460 | 215TC | 994274 |
| 7.5 | 208–230/460 | 256TC | 994975 |
| 10 | 208–230/460 | 256TC | 994910 |
| 15 | 208–230/460 | 286TC | 994915 |
| 20 | 208–230/460 | 286TC | 994920 |
| **3 PH, 1750 RPM, TEFC** | | | |
| 0.33 | 208–230/460 | 56C | 990324 |
| 0.5 | 208–230/460 | 56C | 997671 |
| 1 | 208–230/460 | 56C | 999189 |
| 1.5 | 208–230/460 | 56C | 998843 |
| 2 | 208–230/460 | 56C | 899247 |
| 2.5 | 208–230/460 | 56C | 8126 |
| 3 | 208–230/460 | 182TC | 899302 |
| 5 | 208–230/460 | 184TC | 996543 |
| 7.5 | 208–230/460 | 213TC | 999436 |
| 10 | 208–230/460 | 215TC | 999377 |
| 15 | 208–230/460 | 254TC | 994001 |
| 20 | 208–230/460 | 256TC | 997645 |
| **3 PH, 3450 RPM, TEFC** | | | |
| 1.5 | 208–230/460 | 56C | 994794 |
| 3 | 230/460 | 56C | 8053 |

* TEFC with ⅝" Shaft
** ODP with ⅝" Shaft
*** ODP with ¾" Shaft

### Drive Flexibility

Motors can be sold separately or with a pump as an assembled unit.

## Motor-Driven Applications

- Pressure Washers
- Industrial High-Pressure Power Units
- Self-Serve Car Wash
- Car Wash Prep Units
- Washdown Systems
- Misting/Cooling/ Fogging System
- Salt Water Desalination/SWRO

# SAE Mounting Components

## SAE Bell Housing Assemblies

| PUMP SERIES | MODELS | SAE TYPE | BELL HOUSING ASSEMBLY |
|---|---|---|---|
| 3CP | 3CP1120–1140, 3CP1231–1241 | A2 | 76SAEA2.3CP |
| | | B2 | 76SAEB2.3CP |
| | | B4 | 76SAEB4.3CP |
| 3FR | 237, 247, 277 | A2 | 76SAEA2.3FR |
| | | B2 | 76SAEB2.3FR |
| | | B4 | 76SAEB4.3FR |
| 5CP | 5CP3105, 3110, 3160, 3120, 5CP4120, 5120, 6120, 6180CSS, 6190, 5CPQ6221–6271 | A2 | 76SAEA2.5CP |
| | | B2 | 76SAEB2.5CP |
| | | B4 | 76SAEB4.5CP |
| 5FR | 347, 357 | A2 | 76SAEA2.5FR |
| | | B2 | 76SAEB2.5FR |
| | | B4 | 76SAEB4.5FR |
| 7CP | 7CP6110CS, 7CP6111CS | A2 | 76SAEA2.7CP |
| | | B2 | 76SAEB2.7CP |
| | | B4 | 76SAEB4.7CP |
| 7FR | 56, 60, 700, 740, 760, 781, 784, 786 | A2 | 76SAEA2.7FR |
| | | B2 | 76SAEB2.7FR |
| | | B4 | 76SAEB4.7FR |
| 15FR | 1570, 1560, 660, 1580, 1530, 1540E, 1541, 1051, 1531, 1057 | B2 | 76SAEB2.15FR |
| | | B4 | 76SAEB4.15FR |
| 25FR | All 25FR Pumps | C2/C4 | 76SAEC.25FR |
| 35FR | All 35FR Pumps 3501–3517, 3520–3527, 3535–3545, 3560, 3570 | C2/C4 | 76SAEC.35FR |

Bell Housing Assemblies include mounting hardware and flange

**SAE TYPE:**
A2 = SAE "A" 2 Bolt, 3.25" Pilot
B2 = SAE "B" 2 Bolt, 4" Pilot
B4 = SAE "B" 4 Bolt, 4" Pilot
C2 = SAE "C" 2 Bolt, 5" Pilot
C4 = SAE "C" 4 Bolt, 5" Pilot

5CP3120CSS with SAE Bell Housing and Motor

## SAE Flexible Coupler Assemblies

| PUMP SERIES | SAE TYPE | FLEX COUPLER ASSY | SHAFT TO SHAFT | TORQUE RATING FT·LB |
|---|---|---|---|---|
| 3CP & 3FR | A2 | 8271 | 16.5mm x ⅝" | 74 |
| | B2/B4 | 8272 | 16.5mm x ⅞" | 74 |
| 5CP & 5FR | A2 | 8273 | 20mm x ⅝" | 74 |
| | B2/B4 | 8274 | 20mm x ⅞" | 74 |
| 7CP & 7FR | A2 | 8371 | 24mm x ⅝" | 92 |
| | B2/B4 | 8372 | 24mm x ⅞" | 92 |
| 15FR | B2/B4 | 8387 | 30mm x ⅞" | 150 |
| 25FR | B2/C4 | 994303 | 30mm x 1 ¼" | 188 |
| 35FR | C2/C4 | 997872 | 35mm x 1 ¼" | 350 |
| | C2/C4 | 999368 | 35mm x 1 ⅜" | 350 |
| | C2/C4 | 994403 | 35mm x 1 ½" | 350 |
| | C2/C4 | 999180 | 35mm x 1 ⅝" | 350 |
| | C2/C4 | 999206 | 35mm x 1 ⅞" | 350 |

76SAEB4.7CP

8274

# Drive Accessories

## Hubs and Hub/Key Assemblies

**Metric sized hubs to match metric shaft diameter of pump.**

- Contact Cat Pumps for available hubs for motor shafts.
- Metric sized hub with matching metric key for pump shaft only.

990013

| DIAMETER (MM) | TYPE | PART NUMBER | PUMP MODELS |
|---|---|---|---|
| **HUB** (STEEL) | | | |
| 16.5 | H | 30943 * | 230–277, 280, 290, 333, 430, 3CP1120–140, 3CP1221–1241 |
| 20 | H | 30945 * | 310–350S, 323, 390, 311–357, 45, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 |
| 24 | H | 33000 * | 530, 550, 700, 740, 760, 781/K, 784, 786, 56, 60, 7CP6110CS–7CP6171CS |
| 25 | H | 30234 | 621, 623, 820, 821, 1010, 1011 |
| 30 | B | 990012 * | 650–661D, 1050–1057, 1530/31, 1540E/41, 1560, 1570, 1580, 1810/K, 2510/11, 2530–2537, 2560, 2565, 2831/K |
| 30 | H | 30059 * | |
| 35 | B | 990013 * | 3501/C, 3507/C, 3511/C, 3517/C, 3520/C, 3521DHSD/C, 3527, 3531D/C, 3535/C, 3537, 3541D/C, 3545, 3550, 3560, 3570, 3570S, 801/K, 3811/K, 3821HS/KHS, 3831/K, 3841/K |
| 45 | B | 990014 * | 6020, 6040, 6747, 6760–6775, 6801/K, 6811/K, 6821/K, 6831/K, 6841/K, 6861/K, 67102, 67070 |
| 100 | M | 990068 | 152R060/C, 152R080/C, 152R100/C, 157R060, 157R080 |
| Note: *Add "Z" to part number for zinc plated hub | | | |
| **HUB AND KEY ASSEMBLY** (STEEL) | | | |
| 16.5 | H | 30942 | 280, 290, 333, 430, 3CP1120–1140, 3CP1221–1241, 230–277 |
| 20 | H | 30944 | 323, 390, 310–350S, 311–357, 45, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 |
| 25 | H | 30284 | 621, 623, 820, 821, 1010, 1011 |
| 30 | H | 30209 | 2510/11, 2520/C, 2530–2537, 2831/K |

## Clutches

**Engages/disengages pump and drive device to meet flow demands.**

- Reduces amount of time pump is running, saving energy and increasing pump life.
- Broad range of clutches up to 100 ft·lb torque for high performance.

34965

| MODELS | CLUTCH DIAMETER/ NUMBER OF GROOVES | BELT TYPE | PUMP SHAFT DIAMETER | PUMP MODELS |
|---|---|---|---|---|
| 34960 | 7" / 1 | A | 16.5 mm | 3CP1120–1140, 3CP1221–1241 |
| 34961 | 7" / 1 | A | 16.5 mm | 280, 290, 333, 430, 230–277 |
| 34962 | 7" / 1 | A | 20.0 mm | 323, 390, 310–350S, 311–357, 45 |
| 34963 | 7" / 2 | A | 20.0 mm | 323, 390, 310–350S, 311–357, 45 |
| 34964 | 7" / 2 | A | 16.5 mm | 280, 290, 333, 430, 230–277 |
| 34965 | 7" / 2 | A | 16.5 mm | 3CP1120–1140, 3CP1221–1241 |
| 34970 | 7" / 1 | A | 20.0 mm | 5CP2120W–2150W, 3120/3120CSS, 5120–5140CSS, 5CP6120–6190, 5CPQ6221–6251 |
| 34980 | 7" / 2 | A | 20.0 mm | |
| 34971 | 7.3" / 8 | Poly-V, L-Style | 24.0 mm | 7CP6110CS–7CP6171CS |
| 76970 | 10" / 2 | B | 20.0 mm | 5CP Plunger Pumps |
| 76980 | 10" / 2 | B | 20.0 mm | 323, 390, 310–350S, 311–357, 45 |
| 34628 | 12.4" / 1 | B | 24.0 mm | 56, 60, 530, 550, 700, 740, 760, 781/K, 784, 786 |
| 34630 | 12.4" / 2 | B | 24.0 mm | 56, 60, 530, 550, 700, 740, 760, 781/K, 784, 786 |
| 34563 | 12.4" / 2 | B | 30.0 mm | 650–661D, 1050–1057, 1530/31, 1540E/41, 1560, 1570, 1580, 1810/K |
| 30655 | 12.4" / 2 | B | 30.0 mm | 2510, 2511, 2530, 2530E, 2531, 2537, 2560, 2565, 2831 |

Note: Do not exceed 100 ft·lb for models 2560, 2565

# Drive Accessories

30206

## Pulleys and Pulley/Hub w/Key

**A combination one-piece pulley and hub construction for pump shaft installation.**

- Contact Cat Pumps for available pulley sizes for either pump or motor side.

| PUMP SHAFT DIAMETER (MM) | PART NUMBER | PULLEY DIAMETER NO. OF GROOVES | BELT TYPE | PUMP MODELS |
|---|---|---|---|---|
| **PULLEY/HUB COMBINATION WITH TWO SET SCREWS** (STEEL/ZINC PLATED) | | | | |
| 16.5 | 30032 | 5" / 1 | A | 230, 290, 333, 430, 3CP Series |
| 16.5 | 30048 | 8" / 1 | A/B | 230, 290, 333, 430, 3CP Series |
| 20 | 30058 | 8" / 1 | A/B | 310–357, 5CP Series |
| **PULLEY/HUB COMBINATION WITH TWO SET SCREWS AND KEY ASSEMBLY** (STEEL) | | | | |
| 16.5 | 30244 | 8" / 1 | A/B | 230, 290, 333, 430, 3CP Series |
| 16.5 | 30246 | 5" / 1 | A | 230, 290, 333, 430, 3CP Series |
| 20 | 30633 | 8" / 1 | A/B | 310–357, 5CP Series |

**PULLEY ONLY** (CAST IRON)

| HUB SIZE | PART NUMBER | PULLEY DIAMETER NO. OF GROOVES | BELT TYPE | PUMP MODELS |
|---|---|---|---|---|
| H | 30206 | 10" / 2 | A/B | 530, 550, 623–1010, 700, 740, 760, 781/K, 784, 786, 650–661D, 1050–1057, 1530/31, 1540E/41, 1560, 1810/K, 2510/11, 2530–2537, 2560, 2565, 2831/K |

# Service Tools

33285

30696

## Pliers

**Quick valve and snap ring removal/installation.**

- Reverse pliers used for easy valve seat removal.
- Snap ring pliers used for Inlet Stabilizers assemblies.

| | |
|---|---|
| **REVERSE PLIERS** | |
| **MODEL** | 30696 |
| **SNAP RING** | |
| **MODEL** | 33285 |

44050

## Oil Gauge Removal Tool

**Quick and easy replacement of crankcase oil gauge.**

- Required for replacement of oil gauge.

| | |
|---|---|
| **MODEL** | 44050 |
| **SIZE** | M28 |

# Service Tools

## Seal Case Removal Tools

**Simplifies seal replacement for various plunger pumps.**

- Available as ½" drive socket or T-wrench.

**½" DRIVE SOCKETS**

| MODEL | 33004 | 33005* | 33006 |
|---|---|---|---|
| FRAME | 5 Frame | 7 Frame | 15 Frame |

**T-WRENCHES**

| MODEL | 45103 | 43257 | 43523 |
|---|---|---|---|
| FRAME | 5 Frame | 7 Frame | 15 Frame |

* For model 45, use 7 frame seal case removal tool.

43257

33004

## Piston Pump Tools

**These specialty installation tools minimize risk of damage to cup/seal during replacement.**

- Used for piston pumps only.

**CUP INSTALLATION**

| MODEL | 16981 | 22130 | 43548 | 43749 | 27964 | 15770 | 27853 |
|---|---|---|---|---|---|---|---|
| MODELS USED | 280, 290, 820 | 280, 290, 820 | 320, 323 | 333 | 390 | 1010 | 2520 |

**SEAL INSTALLATION**

| MODEL | 25084 |
|---|---|
| FRAME | 3, 4 Frame |

Seal Tool
25084

Cup Tool
15770

## Crankcase Oil Seal Kit

**This specialty oil seal tool kit will assist in replacement of the 60 frame crankcase oil seals.**

- Remove and re-install crankcase oil seal from wet-end.
- Minimize risk of damage to plunger/piston rod surfaces.
- Used for plunger or piston pumps

| MODEL | 31173 |
|---|---|
| INCLUDES | Guide, washer, 9 screws and 3 oil seals |

# New Products and Updates

## New Pumps

Cat Pumps continues to build on its market leading position with the introduction of new products. Every new product is built with the same winning business philosophy: manufacture the longest-lasting most dependable products and back them with availability from stock. Contact us to learn why customers worldwide trust Cat Pumps to keep their equipment running.

| SPECIFICATIONS | | TYPICAL APPLICATIONS |
|---|---|---|
| **1730** | | |
| Max Flow: | 15.8 gpm / 60 lpm | • Car Wash<br>• Tank Cleaning<br>• Equipment Washdown |
| Max Pressure: | 1500 psi / 103 bar | |
| Max RPM: | 1750 | |
| Inlet Ports (2): | 1" NPT(F) | |
| Discharge Ports (2): | ¾" NPT(F) | |

| | | |
|---|---|---|
| **2560** | | |
| Max Flow: | 16 gpm / 60.8 lpm | • Hydro Excavating<br>• Water Jetting<br>• Equipment Washdown |
| Max Pressure: | 3000 psi / 207 bar | |
| Max RPM: | 1510 | |
| Inlet Ports (2): | 1 ¼" NPT(F) | |
| Discharge Ports (2): | ¾" NPT(F) | |

| | | |
|---|---|---|
| **2565** | | |
| Max Flow: | 20 gpm / 76 lpm | • Hydro Excavating<br>• Water Jetting<br>• Central Cleaning System |
| Max Pressure: | 2500 psi / 172 bar | |
| Max RPM: | 1450 | |
| Inlet Ports (2): | 1 ¼" NPT(F) | |
| Discharge Ports (2): | ¾" NPT(F) | |

| | | |
|---|---|---|
| **66DX50G1I** | | |
| Max Flow: | 5.0 gpm / 18.9 lpm | • High-Pressure Wash<br>• Surface Cleaner<br>• Water Jetting |
| Max Pressure: | 3500 psi / 241 bar | |
| Max RPM: | 3250 | |
| Inlet Ports (2): | ½" NPT(F) | |
| Discharge Ports (2): | ⅜" NPT(F), ⅜" NPT(M) | |
| Shaft: | 1" Hollow | |

| | | |
|---|---|---|
| **56HS** | | |
| Max Flow: | 8.0 gpm / 30.2 lpm | • Hydro Excavating<br>• High-Pressure Wash<br>• Water Jetting |
| Max Pressure: | 3000 psi / 207 bar | |
| Max RPM: | 1760 | |
| Inlet Ports (2): | ½" NPT(F) | |
| Discharge Ports (2): | ⅜" NPT(F) | |

# New Products and Updates

## 25FR PUMPS – BELL HOUSINGS FOR HYDRAULIC MOTOR (SAE)

### 25FR PUMPS – MODELS 2510, 2530, 2560, 2565

A simple upgrade to the crankcase allows 25 FR Pumps to be direct bell house-driven by SAE "C" 2 or 4-bolt hydraulic motors. Bell housings and flex couplers are stock items.

| | PART NUMBER |
|---|---|
| Bell Housing Assembly | 76SAEC.25FR |
| Flex Coupler Assembly | 994303 |

# Cat Pumps Resources On-Demand

Take advantage of the many support options Cat Pumps offers its distributors, OEMs and end users. From live service and support to 24/7 online information and materials, customers can get help they need, when they need it.

## ☑ All-New catpumps.com

Answers to your questions can be just a click away. Get up-to-date product information, service documents and videos, pump and system configuration tools, and more!

- A blog to keep you updated on the latest Cat Pumps news and developments
- A new mobile-friendly platform, ensuring the best experience on any device
- Upgraded worldwide distributor search engine offers faster, more customizable results

## ☑ Product, Application & Service Literature

Complete catalogs of pumps, accessories and systems are available in print and online on our website. Sales literature includes the following items:

- Sell Sheets and brochures for specific markets and products
- Design guides for high-pressure systems and flush-style pumps
- Technical Bulletins

## ☑ Training Videos

Informative "Whiteboard Sessions" videos cover a variety of technical topics in short and easy-to-comprehend lessons conducted by Cat Pumps engineering.

Find them at www.catpumps.com/whiteboard-sessions and on the Cat Pumps YouTube channel.

## ☑ Service Videos

Learn how to service seal and valve kits in these authorized Cat Pumps videos, hosted on the Cat Pumps YouTube channel and website.

Find them at these links:
www.catpumps.com/service-videos www.youtube.com/catpumps1968

## ☑ Live Industry-Leading Service & Support

Cat Pumps knowledgeable and experienced customer service team provides assistance with order information, as well as technical support in product selection, installation, maintenance, pump repair and general system troubleshooting.

**Live Support is available M–F, 8:00 a.m. to 5:00 p.m. CST at (763) 780-5440.**
**Customer Care: orders@catpumps.com | Tech Support: techsupport@catpumps.com**

# Customer Service — Another Cat Pumps Difference

When customers do business with Cat Pumps, they benefit not only from long-lasting dependable products, but also from excellent customer service and support. Cat Pumps customers enjoy the following benefits:

- 99.4% order fill rate, supported by world-class inventory management system
- 99.9% shipping accuracy, which means customers receive what they ordered
- 99.8% of orders ship within 24 hours for fast on-the-job delivery
- Worldwide distribution network stocking genuine Cat Pumps products and parts
- Industry-leading customer service with "live" support, from phone operators to Technical Services
- Experienced staff on call to assist with inquiries, from designing power units to system troubleshooting
- Email sales@catpumps.com for fast response to questions and requests or call (763) 780-5440

Sales and service support is provided by highly qualified distribution network covering the U.S., Canada, and Mexico. Cat Pumps has an international presence with sales offices in the U.K., Belgium and Germany as well as a worldwide distribution channel.

## Complete, Accurate and Fast Order Shipping

Pumps and parts are stocked for off-the-shelf delivery. Wherever customers are in the world, Cat Pumps service and support are never far away. Long-lasting products backed by excellent customer service are why Cat Pumps is the best choice for high-pressure pumps and systems.

Cat Pumps occupies over 145,000 sq. ft. at its world headquarters in Minneapolis, MN.

# Cat Pumps Locations

**Cat Pumps–World Headquarters**
1681 94th Lane Northeast
Minneapolis, MN 55449
USA
P: (763) 780-5440
F: (763) 780-2958
techsupport@catpumps.com
www.catpumps.com

**Territories Served**
U.S., Canada

**International Division**
P: (763) 780-5440
F: (763) 785-4329
intlsales@catpumps.com
www.catpumps.com

**Territories Served**
Africa, Asia, Australia, Central and South America, Mexico, Middle East, New Zealand, Turkey

**Cat Pumps International N.V.**
Heiveldekens 6A
2550 Kontich
Belgium
P: 32 3 450 71 50
F: 32 3 450 71 51
cpi@catpumps.be
www.catpumps.be

**Territories Served**
Western Europe (except U.K., Germany, and Austria)

**Cat Pumps (U.K.) Ltd.**
1 Fleet Business Park, Sandy Lane
Church Crookham
FLEET, Hampshire GU52 8BF
England
P: +44 (0) 1252 622031
F: +44 (0) 1252 626655
sales@catpumps.co.uk
technical@catpumps.co.uk
www.catpumps.co.uk

**Territories Served**
U.K. and Ireland

**Cat Pumps Deutschland GmbH**
Buchwiesse 2, D-65510
Idstein
Germany
P: +49 6126 9303 0
F: +49 6126 9303 33
info@catpumps.de
www.catpumps.de

**Territories Served**
Austria, Commonwealth of Independent States (CIS), Germany and Eastern Europe

**SALES, DISTRIBUTION, SERVICE** Call today for product and application assistance. (763) 780-5440 or visit us at www.catpumps.com

The Pumps with Nine Lives

**CAT PUMPS**
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**For International inquiries go to www.catpumps.com and navigate to the "Contact Us" link.**

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