



# 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.

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# **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<sub>2</sub>, 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	<b>19</b> 0° 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
FFKM	Pure Polytetrafluoroethylene (Teflon®) Seals and Perfluoroelastomer 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, FFKM = Perfluoroelastomer, ST = Special PTFE, NBR = Medium Nitrile (Buna-N), NBRS = Buna-N Silicon-Free Seals and O-Rings

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<sub>2</sub>, TEG, Flushed, High-Temp and others. Please contact Cat Pumps directly at (763) 780-5440 for more information.



<sup>\*</sup> See individual data sheet for each pump to verify actual maximum temperature allowed.

# 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, FFKM, PTFE, Silicone-free\*
- Drives: Electric, Engine, Hydraulic, Pneumatic

# Pump Features

- 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.
- Stainless steel valves, seats and springs provide corrosion resistance, positive seating and long life.
- 4 Chromemoly crankshaft provides unmatched strength and surface hardness for long life.
- The patented stepped piston rod with hard chrome-plated sleeve provides a durable wear surface and easy wet end servicing.

- Precision-polished, solid ceramic plungers provide maximum resistance to corrosion and abrasion, extending seal life.
- The high strength stainless steel plunger rods have a 360° supported crosshead providing uncompromising plunger rod alignment.
- Matched oversized connecting rods are made of highstrength material with exceptional bearing quality.
- Oversized ball bearings or tapered roller bearings provide extended bearing life.
- High-strength, lightweight die cast aluminum crankcase with splash oil design allows operation at speeds as low as 100 RPM.

# Pump Features

## **Plunger Pumps**

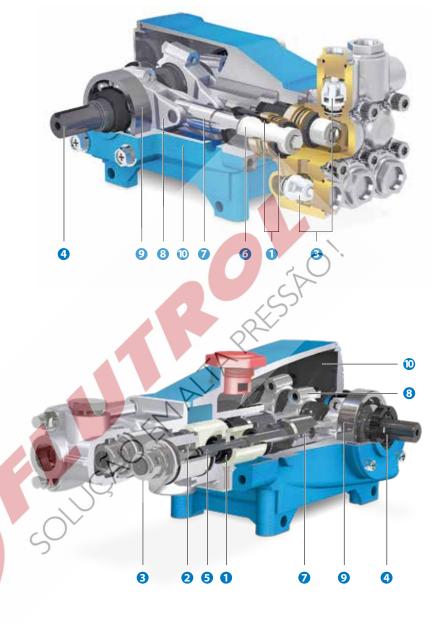
(0.13-240 gpm, 100-10,000 psi)

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)

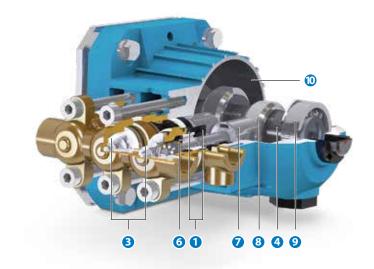
The design of the piston pump allows the fluid to move continually in one, smooth forward direction. This design allows greater suction capabilities and reduces the risk of cavitation provided the pump is properly primed. At the beginning of the stroke, the mechanically actuated inlet valve (and piston) 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**

(0.5-5.0 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.



### **DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD**

Electric Motor, %" and ¾", 56C Face



Model 4DX10ER

PUMP MODEL	MAXIMU	JM FLOW	MAXIMUN	I PRESSURE	RPM	SHAFT
	GPM	LPM	PSI	BAR		
4DX03ELR	0.3	1.1	2000	138	1750	5/8"
4DX10ER*	1.0	3.8	2000	138	3450	5/8"
4DX15ER*	1.5	5.7	2000	138	3450	5/8"
4DX20ER*	2.0	7.6	2000	138	3450	5/8"
4SP21ELR*	2.1	7.9	2000	138	1750	5⁄8"
4DX27ER*	2.7	10.3	2000	138	3450	5⁄8"
4SP29ELR*	2.85	10.8	1200	83	1750	5/8"
4DX30ER*	3.0	11.4	2000	138	3450	5/8"
2SF35ES	3.5	13.3	1500	103	3450	5/8"
2SF35GES	3.5	13.3	2000	138	3450	3/4"
2SFP500EL	5.0	19.0	500	34.5	1750	5⁄8"

Note: Pumps rated at 3450 rpm can operate at 1725 rpm, reducing flow by 50%.

<sup>\*&</sup>quot;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, 11/8", 184TC Face

PUMP MODEL	MAXIMU	JM FLOW	MAXIMUM	PRESSURE	RPM	SHAFT
	GPM	LPM	PSI	BAR		
5SP30ELU	3.0	11.4	3000	207	1750	11/8"
5SP35ELU	3.5	<b>13.</b> 3	2500	172	1750	1%"
5SP40ELU	4.0	15.2	2000	138	1750	1%"
5SP30ELR*	3.0	11.4	3000	207	1750	1%"
5SP35ELR*	3.5	13.3	2500	172	1750	1%"
5SP40ELR*	4.0	15.2	2000	138	1750	1%"

<sup>\*&</sup>quot;R" models are built with an integral pressure regulator valve.



Model 5SP35ELU

## **DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD**

Engine, 3/4"

PUMP MODEL	MAXIM	MAXIMUM FLOW		MAXIMUM PRESSURE		SHAFT	HP
	GPM	LPM	PSI	BAR			Typical Gas Engine*
4DNX25GSI	2.5	9.5	3000	207	3450	3/4"	6.5
4DNX27GSI	2.7	10.3	3000	207	3450	3/4"	8
4DX29GUIF	2.9	11.0	2600	179	3450	3/4"	6.5
2SF30GS	3.0	11.4	2000	138	3450	3/4"	6.5
2SF35GS	3.5	13.3	2000	138	3450	3/4"	8

<sup>\*</sup>Consult engine manufacturer for actual torque available at required speed.



Model 66DX40G1I

## DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD

Engine, 1"

PUMP MODEL	MAXIMU	IM FLOW	MAXIMUM	MAXIMUM PRESSURE		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

 $<sup>\</sup>hbox{$^*$Consult engine manufacturer for actual torque available at required speed.}$ 

## **DIRECT DRIVE, HOLLOW SHAFT, 316 STAINLESS STEEL MANIFOLD**

Electric Motor, %", 56C Face

PUMP MODEL	MAXIMU	JM FLOW	MAXIMUM	PRESSURE	RPM	SHAFT
	GPM	LPM	PSI	BAR		
2SF05SEEL	0.5	1.9	1200	83	1725	5%"
2SF10SEEL	1.0	3.8	1200	83	1725	5%"
2SF15SEEL	1.5	5.7	1200	83	1725	5%"
2SF22SEEL	2.2	8.4	1200	83	1725	5%"
2SFQ25SEEL	2.5	9.5	1200	83	1725	5%"
2SFQ29SEEL	2.85	10.8	1200	83	1725	5%"
2SFQ35SEEL	3.5	13.3	1200	83	1725	5%"
2SFQ42SEEL	4.2	15.9	1200	83	1725	5%"



Model 2SF22SEEL

### DIRECT DRIVE, HOLLOW SHAFT GEARBOX, BRASS MANIFOLD

Engine, 3/4" and 1"

PUMP MODEL	MAXIMU	JM 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	3/4"	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	₹ <sup>n</sup>	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	30.3	1500	103	3450	1"	11
56G1	8.0	30.3	2500	172	3600	1"	16
7CP6165CSG1	8.0	30.3	3500	241	3265	1"	25
56HSG1	8.0	30.3	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 a	re also available	in 1 1/8" size (G118)					



Model 5CP3120CSSG1



Model 7CP6165CSG1

## DIRECT DRIVE, HOLLOW SHAFT GEARBOX, 316 STAINLESS STEEL MANIFOLD

Engine, 3/4" and 1"

PUMP MODEL	MAXIMU GPM	IM FLOW	MAXIMUM PSI	PRESSURE BAR	RPM	SHAFT	HP Typical Gas Engine*
3CP1241G	3.0	11.4	2000	138	3600	3/4"	Typical das Eligilie
3CP1221G	3.5	13.3	1500	103	3600	3/4"	5
3CP1211G	3.8	14.4	1500	103	3400	3/4"	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



Model 7CP6111CSG1

Note: All 1" Gearboxes are also available in 11/8" size (G118)

<sup>\*</sup>Consult engine manufacturer for actual torque available at required speed.

Note: All 1" Gearboxes are also available in 11/8" size. (G118).

 $<sup>\</sup>hbox{$^*$Consult engine manufacturer for actual torque available at required speed.}$ 

## **DIRECT DRIVE, SOLID SHAFT, BRASS MANIFOLD**

Electric Motor-Bell Housing DI IMP MODEL



Model 3CP1120

PUMP MODEL	MAXIM	UM 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
340	4.0	15.2	1800	124	1725	20mm
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
350	5.0	19.0	1500	103	1725	20mm
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	30.3	2500	172	1760	24 mm
56HS	8.0	30.3	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



Model 7CP6185CS

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

Electric Motor-Bell Housing



Model 3CP1231

PUMP MODEL	MAXIMU	MAXIMUM FLOW		MAXIMUM PRESSURE		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
1731	15.8	59.8	1500	103	1750	30 mm



Model 277

#### DIRECT DRIVE, SOLID SHAFT, NICKEL ALUMINUM BRONZE MANIFOLD Electric Motor-Bell Housing

	9
PUMP MODEL	٨
	GP

PUMP MODEL	MAXIMUM FLOW		MAXIMUM	MAXIMUM PRESSURE		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

## **SOLID SHAFT, BRASS MANIFOLD**

PUMP MODEL	MAXIMU	M 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
45 5002120000	4.5	17.0	3500	241	1645	20mm
5CP3120CSS	4.5	17.0	3500	241	1645	20 mm
57 FCR4120CSS	4.5	17.0	4000	276	1285	24 mm
5CP4120CSS	4.5	17.0	4000	276	1750	20 mm
60 700	4.7	17.9	4000	276 345	<b>17</b> 50	24 mm 24 mm
5CP3120CSS	4.7	17.9 18.2	5000 3000	207	1750	
310	5.0	19.0	1500	103	1190	20 mm 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
550	5.0	19.0	3000	207	1415	24mm
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	30.3	1450	100	1450	20 mm
56	8.0	30.3	2500	172	1760	24 mm
56HS	8.0	30.3	3000	207	1760	24 mm
7CP6185CS	8.0	30.3	3500	241	1320	24mm
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	880	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



Model 1810



Model 310



Model 700



Model 5CP2120W

<sup>\*17-4</sup>SS Stainless Manifolds

#### **SOLID SHAFT, BRASS MANIFOLD**



Model 1570







Model 660

# **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.



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

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

\*Pitch Diameter



Model 1540E

# **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**

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

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

\*Standard 85% Overall Efficiency



Model 3535

## **SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD**

PUMP MODEL	MAXIMU GPM	M FLOW LPM	MAXIMUM PSI	PRESSURE 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	<b>4</b> 5 mm
6801	15.0	57.0	7000	483	630	45 mm
1531	15.6	59.0	1500	103	1450	30 mm
1731	15.8	59.8	1500	103	1750	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
3531DHS	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
3541DHS	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 de	fined as operating pu	mp at maximum rat	ed flow an <mark>d pressure f</mark>	or no more than 50°	% of time in ar	ıy given hour.



Model 311



Model 1051



Model 2531

## SOLID SHAFT, DUPLEX STAINLESS STEEL MANIFOLD

PUMP MODEL	MAXIMU GPM	IM FLOW LPM	MAXIMUM PSI	PRESSURE 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



Model 277



Model 6767

### SOLID SHAFT, NICKEL ALUMINUM BRONZE MANIFOLD

PUMP MODEL	MAXIMU GPM	JM FLOW LPM	MAXIMUN PSI	1 PRESSURE BAR	RPM	SHAFT
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
3507HS	10.0	38.0	5000	345	915	35 mm
1057	12.3	46.5	1800	124	1180	30 mm
3517HS	14.0	53.2	3000	207	800	35 mm
2537	25.0	95.0	1200	83	1025	30 mm
3527HS	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
3547HS	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

<sup>\*</sup>Intermittent duty cycle is defined as operating pump at maximum rated flow and pressure for no more than 50% of time in any given hour.

# Piston Pumps

## PISTON PUMPS, SOLID SHAFT, BRASS MANIFOLD



Model 280

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 3F3	OC with flushed inlet ma	nifold				

<sup>\*</sup>Available as a model 2520C with flushed inlet manifold.

PISTON PUMPS, SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD



Model 6020

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	MAXIMUM PRESSURE		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



<sup>\*17 - 4</sup>SS Stainless Steel Manifolds



Model 3520C

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

PUMP MODEL	MAXIMU	M 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
3521CHS	25.0	95.0	2000	138	870	35 mm
6821K	25.0	95.0	3000	207	615	45 mm
3531CHS	36.0	136.2	1200	83	800	35 mm
3531CHS*	40.0	152.0	2000	138	888	35 mm
6831K	40.0	152.0	2300	159	625	45 mm
3541CHS	45.0	171.0	1000	69	765	35 mm
3541CHS*	50.0	189.3	1500	103	850	35 mm
6841K	48.0	182.4	2000	138	615	45 mm
6861K	60.0	<b>2</b> 28.0	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 67102C

<sup>\*</sup>Intermittent duty cycle is defined as operating pump at maximum rated flow and pressure for no more than 50% of time in any given hour.

# 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

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



Model 3CP1120.44101

	-					
PUMP MODEL	MAXIMUN	1 FLOW	MAXIMUM F	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
5CP5135CSS.44101	6.0	<b>2</b> 2.8	3500	241	1750	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
<b>3</b> 520.44101	25.0	136.0	2000	138	870	35 mm
3535.44 <mark>10</mark> 1	36.0	136.0	1200	83	800	35 mm

Model 1050.44101

### HIGH-TEMPERATURE/TEG PUMPS, SOLID SHAFT, 316 STAINLESS STEEL

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	35 mm
1051.44101	12.3	46.5	1800	124	1180	30 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
3531DHS.44101	36.0	136.2	1200	83	800	35 mm
3531DHS.44101*	40.0	152.0	2000	138	888	35 mm

<sup>\*</sup>Intermittent duty cycle is defined as operating pump at maximum rated flow and pressure for no more than 50% of time in any given hour.

# Washout Resistant Pumps

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

PUMP MODEL	MAXIMU	JM 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<sub>2</sub> Pumps

Cat Pumps liquid  $CO_2$  series of pumps feature modifications to accommodate the unique properties of liquid  $CO_2$ . Specialty 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<sub>2</sub> 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.



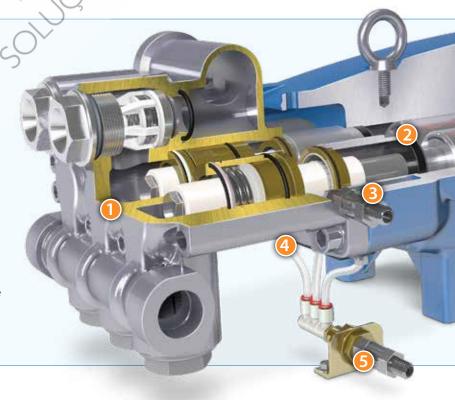
Model 1530RSCM.CO2

### CO<sub>2</sub> Pump Features:

Inverted manifolds provide improved passage for trapped vapor bubbles to escape through the inlet and return to

- the tank, avoiding potential issues caused by bubbles in the discharge line. Specially-formulated seals allow for improved operation with the low temperature and low lubricity properties of CO<sub>2</sub>.
- Drive-ends contain upgraded materials and component design to accommodate the high inlet pressures required to maintain CO₂ in a liquid state.
- Ported inlet manifolds offer protection from damage caused by CO<sub>2</sub> leaking past the high-pressure seals. Included check valve prevents ambient air from entering the pump manifold.
- Vented seal retainers offer protection against any CO₂ that escapes past the pressure seals, preventing damage to the drive-ends or pump manifolds.\*
- 6 Check valves allow the escape of vapor while preventing air and humidity from entering.\*

<sup>\*</sup> Vented seal retainers only required on 8 frame and larger pumps.



# ATEX Pumps



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

# 1CX Series Compact Misting Pumps

#### 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	<b>013</b> = .13 gpm		<b>D</b> = Pump and Motor Shipped Together-	<b>1</b> = 8180	<b>Blank</b> = No Pulse
	<b>025</b> = .25 gpm	R = Regulator	Not Assembled	<b>2</b> = 8182	Hose
	<b>050</b> = .50 gpm	Included	<b>A</b> = Pump and Motor Assembled Together	<b>3</b> = 8183	<b>P</b> = Pulse Hose
			A – Furtip and Motor Assembled Together	<b>5</b> = 8189	Included

1CX w/ Motor

**Example:** 1CX**050RA2P** = .5 gpm, Regulator, Assembled, 8182 Motor, Pulse Hose Included

**NOTE:** Without pulse hose amp draw will increase as much as 2 amps depending upon pump model and discharge pressure.

<sup>\*</sup> Excludes models equipped with gearbox

<sup>\*</sup>Motor Options:

<sup>1.</sup> 8180-4 hp, ODP, 115/230 V, 60 Hz, 1 ph, 1750 rpm, 12 inch leads

<sup>3.</sup>  $8183-\frac{1}{2}$  hp, ODP, 115/230 V, 50 Hz, 1 ph, 1450 rpm, terminal box

<sup>2. 8182-1/2</sup> hp, ODP, 115/230 V, 60 Hz, 1 ph, 1750 rpm, 12 inch leads

<sup>5.</sup>  $8189-\frac{1}{2}$  hp, TEFC, 115/230 V, 50/60 Hz, 1 ph, 1750 rpm, terminal box

<sup>\*</sup> HP Calculation (1CX Series only): GPM x PSI  $\div$  1060

# 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	НР
	0.5	600	1XP050.031		
	0.75	500	1XP075.031		
	0.85	500	1XP085.031		
	1	450	1XP100.031	4.0	1/3
	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	1/2
	1.2	800	1XP125.051		
	1.5	600	1XP150.051		
	2	450	1XP200.051		<b>A</b>
	0.9	1000	1XP100.071		
	1.1	1000	1XP125.071		
	1.4	800	1XP150.071	9.0	3/4
	1.75	700	1XP180.071		
	2	550	1XP200.071		
	1.45	1000	1XP150.101		
	1.8	800	1XP180.101	12.6	
	2	750	1XP200.101		~
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#### **AC INDUCTION MOTOR**

50 Hz, 240V (1450 rpm)

GPM	MAX PSI	PUMP ASSEMBLY	SFA	НР
0.40	600	1XP050.031		
0.60	500	1XP075.031	·	
0.70	500	1XP085.031		
0.80	450	1XP100.031	2.1	1/3
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	1/2
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	3/4
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
- · Light-weight



#### **DC PERMANENT MAGNET**

120 Volt –  $1\!\!/_{\!3}$  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 – 1/3 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 %".

Flow Range	4 to 92 gpm	Operation	Manual or Automatic
Head	5 to 61 ft	Maying upa Tanan ayatuwa	Continuous 122° F
RPM	3450 rpm	Maximum Temperature	Intermittent 140° F
Discharge Fitting	11/4", 11/2" NPT(F)	Maximum Solids Diameter	3%"
Horsepower	1/3, 1/2, 3/4, 1, 1 1/2 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	12 to 238 gpm	Operation Manual or Automatic
Head	4 to 74 ft	Continuous 104° F
RPM	3450 rpm	Maximum Temperature Intermittent 140° F
Discharge Fitting	2" NPT(F)	Maximum Solids Diameter 2"
Horsepower	½, 1, 1½, 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.

5 to 105 gpm	Discharge Fitting	1" NPT(F)
8 to 255 ft	Shaft Seal	Mech Type 21
Flooded	Horsepower	1/3, 1/2, 3/4, 1, 1 1/2, 2, 3 HP
1725 or 3450 rpm	Maximum Temperature	160° F
11/4", 11/2" NPT(F)	Material	304 Stainless Steel
	8 to 255 ft Flooded 1725 or 3450 rpm	8 to 255 ft Shaft Seal Flooded Horsepower 1725 or 3450 rpm Maximum Temperature



### 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	5 to 66 gpm	Discharge Fitting	1" NPT(F)
Head	127 to 255 ft	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	11/4", 11/2" 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	5 to 105 gpm	Discharge Fitting	1" NPT(F)
Head	3 to 255 ft	Shaft Seal	Mech Type 21
Minimum Inlet Pressure to Prime	Flooded	Horsepower	2, 3, 5
RPM	3450 RPM	Maximum Temperature	140° F
Inlet Fitting	11/4", 11/2" 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	5 to 633 gpm	Discharge Fitting Flange	ANSI 150 lb. – 11/4", 11/2", 2", 21/2"
Head	9 to 282 ft	Shaft Seal	Mech Type 21
Minimum Inlet Pressure to Prime	Flooded	Horsepower	1, 1½, 2, 3, 5, 7½, 10, 15, 20, 25, 30 HP
RPM	1725 or 3450 rpm	Maximum Temperature	160° F
Inlet Fitting Flange	ANSI 150 lb. – 2", 21/2", 3"	Material	304 Stainless Steel



#### **5K SERIES-SELF PRIMING CENTRIFUGAL PUMPS**

Sold as pump kit or motorized unit.

Flow Range	2 to 18.5 gpm	Discharge Fitting	1" NPT(F)	
Head	63 to 203 ft	Shaft Seal	Mech Type 21	
Maximum Suction Lift	25 Feet	Horsepower	1, 2 HP	
RPM	3450 rpm	Maximum Temperature	113° F	
Inlet Fitting	11/4" NPT(F)	Material	304 Stainless Stee	



### **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 3/4" spherical. Sold as motorized unit only.

Flow Range	25 to 290 gpm	Discharge Fitting	2" NPT(F) (with external hose barb)
Head	10 to 62 ft	Shaft Seal	Mech Type 21
Minimum Inlet Pressure to Prime	Flooded	Horsepower	1½, 2, 3 HP
RPM	3450 RPM	Maximum Temperature	194° F
Inlet Fitting	2", 21/2" 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	3 to 607 gpm	Discharge Fitting	1 1/4" to 4" ANSI
Head	24 to 930 ft	Shaft Seal	Mechanical – Silicon Carbide / Carbon / FPM
Minimum Inlet Pressure to Prime	Flooded	Horsepower Range	½ to 60 HP
RPM	3450 RPM	Temperature Range	-22° F to 248° F
Inlet Fitting	11/4" to 4" ANSI	Material	304 or 316 Stainless Steel



# Custom Pumping Systems

YOU DEFINE. WE DESIGN AND DELIVER.





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**

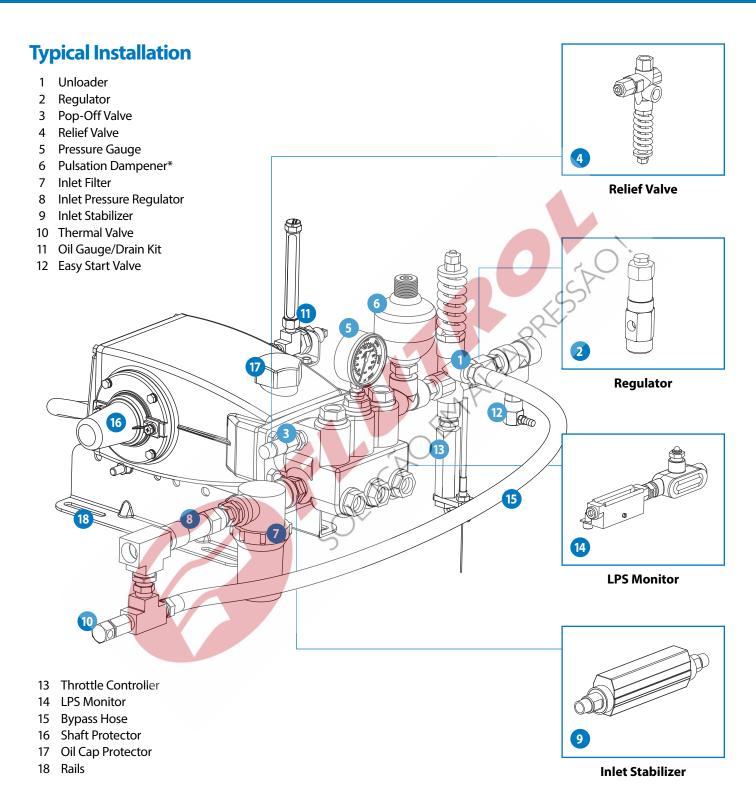
Cat Pumps offers a wide range of high quality accessories adhering to the same exacting standards as our industry-leading pumps. Every accessory is performance tested and designed to match each pump's operating specifications. By demanding genuine Cat Pumps products, you receive the best value and lowest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



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.



# **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		PRESSURI	ERANGE	PORTS	
	GPM	LPM	PSI	BAR	INLET/DISCHARGE	BYPASS
7001	0.5-5	1.9-19	100-1000	6.9-69	3/8" NPT(F)	1/2" NPT(F)
7002	0.5-5	1.9-19	500-2000	35–138	3%" NPT(F)	1/2" NPT(F)
7003	0.5-5	1.9-19	1500-3000	103-207	3/8" NPT(F)	1/2" NPT(F)
7011	1.0-10	3.8-38	100-1000	6.9-69	½" NPT(F)	3/4" NPT(F)
7012	1.0-10	3.8-38	500-2000	35–138	½" NPT(F)	3/4" NPT(F)
7013	1.0-10	3.8-38	1500-3000	103–207	1/2" NPT(F)	3/4" NPT(F)
7014	1.0-10	3.8-38	2000-4000	138–276	1/2" NPT(F)	34" NPT(F)
7021	2.5-25	9.5–95	100-1000	6.9-69	3/4" NPT(F)	1" NPT(F)
7022	2.5-25	9.5-95	500-2000	<b>3</b> 5–138	3/4" NPT(F)	1" NPT(F)
7023	2.5-25	9.5–95	1500-3000	103–207	3/4" NPT(F)	1" NPT(F)
7024	2.5–25	9.5–95	2000-4000	136-276	3/4" NPT(F)	1" NPT(F)
7031	3.5-35	13.2–132	250-1000	18-69	3/4" NPT(F)	1" NPT(F)
7032	3.5-35	13.2–132	1000-2000	69-138	3/4" NPT(F)	1" NPT(F)
7033	3.5-35	13.2–132	1500-3000	103–207	3/4" NPT(F)	1" NPT(F)

# IECHIIP



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.

## 316 STAINLESS STEEL MODELS, FLOW THROUGH

Piston and Seat are 316 Stainless Steel

	MODEL	FLOW RANGE		PRESSURI	ERANGE	PORTS		
		GPM	LPM	PSI	BAR	INLET/DISCHARGE	BYPASS	
	7001.100	<b>0.</b> 5–5	1.9–19	100-1000	6.9-69	3/8" NPT(F)	1/2" NPT(F)	
	7002.100	0.5-5	1.9–19	500-2000	35-138	3/8" NPT(F)	1/2" NPT(F)	
	7003.100	0.5-5	1.9–19	1500-3000	103-207	3/8" NPT(F)	1/2" NPT(F)	
1	7011.100	1.0-10	3.8-38	100-1000	6.9-69	1/2" NPT(F)	3/4" NPT(F)	
	7012.100	1.0-10	3.8-38	500-2000	35–138	1/2" NPT(F)	34" NPT(F)	
4	7013.100	1.0-10	3.8–38	1500-3000	105–207	1/2" NPT(F)	34" NPT(F)	
	7014.100	1.0-10	3.8-38	2000-4000	138–276	1/2" NPT(F)	34" NPT(F)	
	7720	0.5-10	1.9–38	2000-10000	138–689	1/4" NPT(F)	3/8" NPT(F)	
	7021.100	2.5-25	9.5–95	100-1000	6.9-69	3/4" NPT(F)	1" NPT(F)	
	<b>7</b> 022.100	2.5-25	9.5-95	500-2000	35–138	3/4" NPT(F)	1" NPT(F)	
	7023.100	2.5–25	9.5–95	1500-3000	103–207	3/4" NPT(F)	1" NPT(F)	
	7024.100	2.5–25	9.5–95	2000-4000	138–276	3/4" NPT(F)	1" NPT(F)	
	7031.100	3.5–35	13.2–132	250-1000	18–69	3/4" NPT(F)	1" NPT(F)	
	7032.100	3.5–35	13.2–132	1000–2000	69–138	3/4" NPT(F)	1" NPT(F)	
	7033.100	3.5-35	13.2-132	1500-3000	103-207	3/4" NPT(F)	1" NPT(F)	
	7375	10-75	38-284	100-1000	6.9-69	11/4" NPT(F)	11/2" NPT(F)	
	7376	10–75	38-284	500-2000	35–138	11/4" NPT(F)	11/2" NPT(F)	
	7410	10–100	38–378	100-1500	6.9–103	11/2" 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	1/4" NPT(F)	3/8" NPT(F)
7366	1.0-12	3.8-45	3000-6000	207–414	1/2" NPT(F)	3/4" NPT(F)
7361	10-60	38-228	400-1000	25-69	1" NPT(F)	1 1/4" NPT(F)
7363	10-60	38-228	600-1800	40-125	1" NPT(F)	1 1/4" NPT(F)

# **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.
- · All trapped pressure unloaders can be configured as a relief valve.

### **BRASS MODELS**

MODEL	FLOW	RANGE	PRESSUR	E RANGE	PORT:	5
	GPM	LPM	PSI	BAR	INLET/DISCHARGE	BYPASS
7500S	0.5-6.0	1.9-23	100-2000	6.9-138	%" NPT(M)	3/4" NPT(F)
7581	0.5-6.6	1.9–25	232–2320	16–160	3/8" NPT(M)	3/8" NPT(F)
7582	0.5-8.0	1.9-30	100-1000	6.9-69	3/8" NPT(M)	3%" NPT(F)
7583	0.5-8.0	1.9-30	250-2000	18–138	3/8" NPT(M)	3/4" NPT(F)
7620	0.5-8.0	1.9-30	319–3190	22-220	%" BSP(M)/BSP(F)	3/8" BSP(F)
7600S	2.0-5.0	8–19	700-3500	6.9-241	3/8" NPT(M)	3/4" NPT(F)
7630	2.0-10.5	7.6-40	507-5076	35-350	%" BSPP(M)/BSPP(F)	1/2" BSPP(F)
7693	2.5-10.5	9.5-40	232–2320	16–158	3/8" NPT(F)	3/4" NPT(F)
7694	2.5-10.5	9.5-40	406-4060	28-280	3/8" NPT(F)	3/4" NPT(F)
7537	1.0-21	3.8-80	406-2320	28-160	1/2" NPT(F)	1/2" NPT(F)
7542	1.0-21	3.8-80	406-4060	28-280	1/2" NPT(F)	1/2" NPT(F)
7590	10-52.8	38-200	218–2175	15-150	1" NPT(F)	1" NPT(F)
7592	10-52.8	38-200	450-2500	31–172	1" NPT(F)	1" NPT(F)
7593	10-52.8	38-200	406-4060	28-280	1" BSPP( <b>F</b> )	1" BSPP(F)
9950	50-120	190-456	290-2900	20-200	11/4" BSPP(F)	11/2" BSP <b>P</b> (F)

### BRASS, MODULAR, BUILT-IN BYPASS, 3CP, 5CP AND 66 DX SERIES

Pressure-Sensitive

MODEL	FLOW RANGE		PRESSURE RANGE		PORTS	
	GPM	LPM	PSI	BAR	INLET/DISCHARGE	MODELS
7850*	0.5-6.0	1.9-23	100-4000	6.9-276	1/2" NPT(F)/ 3%" NPT(M)	3CP, 5CP
7860	3.0-5.0	<b>11.4</b> –19.0	700-4000	50-276	1/2" NPT(F)/ 3%" NPT(M)	66DX Series
7861	3.0-5.0	11.4–19.0	700-4000	50-276	1/2" NPT(F)/ 3%" NPT(M)	66DX40DSG1
7865	0.5-6.0	1.9–23	100-4000	6.9–276	1/2" NPT(F)/ 3%" NPT(M)	5CP4116-5CP4120CSS
7866	0.5-6.0	1.9-23	100-4000	6.9–276	1/2" NPT(F)/ 3%" NPT(M)	5CP4110-5CP4114CSS
7867	0.5-6.0	1.9–23	100-4000	6.9–276	1/2" NPT(F)/ 3%" NPT(M)	5CP4110-5CP4120CSS

<sup>\*</sup> This unloader will not work on models 5CP4120, 5CP6120, 5CP6180CSS and 5CP6190 pumps.

#### STAINLESS STEEL MODELS

MODEL	FLOW	FLOW RANGE PRES		RANGE	PORT	S
	GPM	LPM	PSI	BAR	INLET/DISCHARGE	BYPASS
7501**	0.5-6.0	1.9-23	100-2000	6.9-138	3/4" NPT(M)	¾" NPT(F)
9970*	0-15.9	0-60	1160-11600	80-800	1/2" BSPP(G)	1/2" BSPP(G)
7531*	1.0-21	3.8-80	218-2175	15–150	1/2" NPT(F)	1/2" NPT(F)
7533*	1.0-21	3.8-80	406-4060	28-280	1/2" NPT(F)	1/2" NPT(F)
7536*	1.0-21	3.8-80	580-5800	40-400	1/2" NPT(F)	1/2" NPT(F)

<sup>\* 304</sup> Stainless Steel \*\* 316 Stainless Steel



# **TECH TIP**

# Regulating Unloader to Relief Valve Conversion

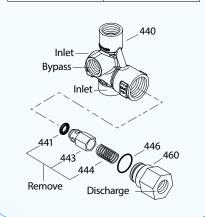
Pressure-Sensitive Regulating Unloaders are typically used as a primary pressure regulating device. They can be converted to a Relief Valve to be used as a secondary pressure relief device by removing the discharge check valve, O-ring and spring.

#### **EXAMPLE**

Unloader PN	Modifications
7537	Remove parts 441, 443, 444

#### Converted Relief Valve PNs

7537.100 (NBR Seals) 7537.1110 (FPM Seals)





# **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		L 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	3/8" NPT(F)	3/8" NPT(F)
7190	0-6.5	0-24.6	400-5000	28-345	3/8" BSP(F)	%" BSP(F)

#### 316 STAINLESS STEEL MODELS, FLOW THROUGH

MODEL	FLOW GPM	RANGE LPM	PRESSUF PSI	RE RANGE BAR	PORTS INLET/DISCHARGE	BYPASS
7034	0–21	0-80	400–2200	28–155	1/2" NPT(F)	1/2" NPT(F)
7036	0–21	0-80	800-4000	55–276	1/2" NPT(F)	1/2" NPT(F)
7037	0–21	0-80	3000-5700	207-400	1/2" NPT(F)	1/2" NPT(F)
890718	10-50	38-189	1000-8000	69-550	2" NPT(M)	2" NPT(F)
890709	20-60	76–227	1500-4000	103-276	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

MODE	L FLOW	RANGE	PRESSUR	E RANGE	PORTS	
	GPM	LPM	PSI	BAR	INLET/DISCHARGE	BYPASS
7561	0-4.0	0-15.1	100-1250	6.9-86	1/4" NPT(M)/ NPT(F)	1/4" NPT(F)
7080	0-8.0	0-30	150-1450	10-100	¾" NPT(F)	3/8" NPT(F)
7082	0-8.0	0-30	320 - 3200	22-220	%" NPT(F)	3/8" NPT(F)
997304	0-20	0-75.7	0-300	0–20	1/2" NPT(M)	1/2" NPT(F)
7196	0-21	0-80	100-7250	6.9-500	1/2" BSP(F)	%" BSP(F)
7084*	1.0-3.5	3.8-13	100-600	6.9-41	1/4" BSP(M)	1/8" BSP(F)
7085*	1.0-3.5	3.8-13	205-2300	14-158	1/4" BSP(M)	1/8" BSP(F)
7595	1.0-53	3.8-200	260-2600	18-180	3/4" NPT(F)	1/2" NPT(F)

<sup>\*</sup> Model 7084C & 7085C available with handles

# **TECH TIP**

## **Regulator vs. Unloader Valve Product Comparison**

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



www.youtube.com/watch?v=PJO8U7fq7\_s&t=3s





# **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				MAX RELIE	F SETTING	PORTS	
	GPM	LPM	PSI	BAR	PSI	BAR	INLET/DISCHARGE	BYPASS
30960	6.0	23	300-1500	20-103	1650	114	1/4" NPT(M)	¾" Barb
33960	6.0	23	300-1500	20-103	1650	114	3/8" NPT(M)	¾" Barb
33960S*	6.0	23	300-1500	20-103	1650	114	3/8" NPT(M)	¾" Barb
30961	6.0	23	1000-3000	69-207	3300	228	1/4" NPT(M)	¾" Barb
33961	6.0	23	1000-4000	69-276	4400	303	1/4" NPT(M)	3/4" Barb
33961S*	6.0	23	1000-4000	69-276	4400	303	1/4" NPT(M)	3/4" Barb
33962	6.0	23	1000-4000	69-276	4400	303	3/8" NPT(M)	3/4" Barb
33962S*	6.0	23	1000-4000	69-276	4400	303	3/8" NPT(M)	3/4" Barb
9940	25	95	1000-4000	69–276	4400	303	3/4" NPT(M)	1" Barb

<sup>\*</sup> High-temperature models up to 240° F (115° C)

#### 316 STAINLESS STEEL MODELS

MODEL	MAX FLOW		PRESSUR	RANGE	MAX RELIE	F SETTING	PORTS	D
	GPM	LPM	PSI	BAR	PSI	BAR	INLET/DISCHARGE	BYPASS
9960	6.0	23	300-1500	20-103	1650	114	1/4" NPT(M)	3/4" Barb
9960S*	6.0	23	300-1500	20-103	1650	114	1/4" NPT(M)	34" Barb
9961	6.0	23	1000-3000	69-207	3300	228	1/4" NPT(M)	¾" Barb
9961S*	6.0	23	1000-3000	69-207	3300	228	1/4" NPT(M)	¾" Barb
9962	6.0	23	1000-4000	69-276	4400	308	1/4" NPT(M)	¾" Barb
9962S*	6.0	23	1000-4000	69-276	4400	308	1/4" NPT(M)	¾" Barb
997587	15	57	1500-10000	105-689	11000	758	1/2" NPT(F)	1" NPT(F)
9941	25	95	1000-4000	69–276	4400	303	3/4" 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	55–276	5000	345	2" NPT(M)	2" NPT(F)

<sup>\*</sup> High-temperature models up to 240° F (115° C) \*\*NBR O-Rings

## **RUPTURE DISC ASSEMBLY**

MODEL	MAX FLOW		MAX RELIE	F SETTING	PORTS	
	GPM	LPM	PSI	BAR	INLET	RELIEF
9921	20	76	10000	689	3/8" NPT(M)	3/8" NPT(F)
9920	20	76	15000	1034	3/8" NPT(M)	%" NPT(F)

# **TECH TIP**

www. catpumps. com/trouble shooting-tips-pop-off-valves

## **Primary and Secondary Relief**

Cat Pumps strongly recommends equipping each high-pressure pumping system with primary and secondary safety relief devices to safeguard against over-pressurization. These cost-effective measures help to protect the system from failure, preventing damage to expensive components and minimizing costly downtime. Check out our new Troubleshooting Tips video for critical information on why and when to use a pop-off valve and how to set their pressure properly.







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# **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	MAXIMUMTE	MPERATURE	PORTS
0022	PSI	BAR	(° F)	(° C)	INLET
BRASS MODE	<b>LS</b> (BRASS FITTING A	ND BOURDON T	UBE, 304 SS CAS	E)	
6091	0–1000	0-69	160	71	1/4" NPT(M)
6092**	0–1000	0-69	160	71	1/4" NPT(M)
6086	0–1500	0–103	140	60	1/4" NPT(M)
991728**	0-1500	0-103	140	60	1/8" NPT(M)
6088	0-3000	0-207	140	60	1/4" NPT(M)
6096**	0-3000	0-207	140	60	1/8" NPT(M)
6089	0-6000	0-415	140	60	1/4" NPT(M)
STAINLESS ST	EEL MODELS (316	SS FITTING AND	BOURDON TUBE,	304 SS CASE)	
6069	0-600	0-41	200	93	1/4" NPT(M)
6071	0-1500	0-103	300	149	1/4" NPT(M)
6085	0–1500	0-103	140	60	1/4" NPT(M)
6073	0-3000	0-207	300	149	1/4" NPT(M)
6097	0-3000	0-207	140	60	1/4" NPT(M)
6127	0-4000	0–276	140	60	1/2" NPT(M)
6076	0-6000	0-415	300	149	1/4" NPT(M)
6087	0-6000	0-415	140	60	1/4" NPT(M)
6081*	0-20000	0–1379	212	100	1/2" NPT(M)

<sup>\*</sup> Black polyester case \*\* Back Mount



## 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.

1	MODEL	MODELS USED	PORT	MATERIAL
	35759	1DX, 2DX, 3DX	1/4" NPT (F)	BB
4	35761	2DX, 3DX	3/8" NPT (F)	BB
	134670	3DNX, 3SP, 3SPX, 4DX, 4DNX, 4SP, 4SPX, 5SP	1/4" NPT (F)	BB
	35758	66DX Series	3/8" NPT (F)	BB
	998954	3CP Series, 310–350, 5CP2100 Series	3/8" NPT (F)	BB
	<b>34</b> 549	45, 5CP3105-3160CSS, 5CP5120-5CP5140	3/8" NPT (F)	BB
	45939T	56-60	3/8" NPT (F)	BB
	34447	7PFR, 15PFR, 5CP6120, 5CP6180CSS, 7CP	3/8" NPT (F)	BB
	43848	1530, 1530C, 1730	1/2" NPT (F)	FBB
	76795	3507HS, 3517HS	1/4" NPT (F)	NAB
	997878	3560	1/4" NPT (F)	BB
	76678	3527HS, 3537HS, 3547HS, 3570, 3570C, 3570S	1/4" NPT (F)	NAB
	76461	6760, 6775	1/4" NPT (F)	NABC



Used to connect discharge hose to discharge hose.

Straight-through flow design or double shut-off.

	<u> </u>			
MODELS	MATERIAL	MAXIMUM		PORT
		PSI	BAR	
990469	Brass	2000	138	1/2" NPT(F) x 1/2" NPT(F)
34380	Brass	4000	276	%" NPT(F) x %" NPT(F)
34381	Steel	10000	689	1/2" NPT(F) x 1/2" NPT(F)
34382	Steel	3000	207	3/4" NPT(F) x 3/4" NPT (F)
34384	Steel	4000	276	1/2" NPT(F) x 1/2" NPT (F)



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# **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	MAXIMUI		PRESSURE		BLADDER	VOLUME	PRECHARGE	PORT			
	GPM	LPM	PSI	BAR	MATERIAL	CUBIC INCHES	PSI	INLET			
CARBON	STEEL (U	PPER BO	DDY), 316 ST	AINLESS	S STEEL (LC	WER BODY	) RECHARG	EABLE			
6029	15	57	100-3000	6.9–207	NBR	10	450	1/2" NPT(M)			
6030	15	57	100-3000	6.9-207	FPM	10	450	1/2" NPT(M)			
6011*	25	95	100-7200	6.9-500	NBR	15	2000	1/2" 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	11/4" NPT(M)			
* Carbon Steel upper and lower body											
CARBON STEEL, SEALED											
6026	15	57	300-600	20-41	NBR	10	250	1/2" NPT(M)			
6028	15	57	600–1000	41–69	NBR	10	450	1/2" 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	3/4" 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	11/4" NPT(M)			
316 STAIN	NLESS STI	EEL, REC	HARGEABI	E AND F	REBUILDAB	LE		(7)			
701501	15	57	100-4300	6.9–296	NBR	6	N/A	1/2" NPT(F)			
701521	15	57	100-4300	6.9-296	EPDM	6	N/A	1/2" NPT(F)			
701541	15	57	100-4300	6.9-296	FPM	6	N/A	1/2" NPT(F)			
701520	15	57	100-8300	6.9-572	NBR	6	N/A	1/2" NPT(F)			
701535	15	57	100-8300	6.9-572	FPM	6	N/A	1/2" NPT(F)			
701502	25	95	100-3800	6.9-265	NBR	15	N/A	1/2" NPT(F)			
701542	25	95	100-3800	6.9–265	FPM	( 15)	N/A	1/2" NPT(F)			
701522	25	95	100-3800	6.9–265	EPDM	15	N/A	1/2" NPT(F)			
701507	25	95	100–7100	6.9-490	NBR	15	N/A	1/2" NPT(F)			
701537	25	95	100-7100	6.9-490	FPM	15	N/A	1/2" NPT(F)			
701527	25	95	100-7100	6.9-490	EPDM	15	N/A	1/2" NPT(F)			
701610	25	95	100–10,000	6.9-689	NBR	15	N/A	1/2" 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	1½" 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	1½" 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

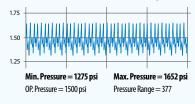
To change the preset precharge, add a .800 to the part number and specify precharge pressure.



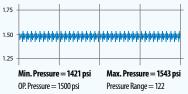
# CH TIP

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



## Model 1530 w/ Pulsation Dampener



#### **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/ PRES	SURIZED FLOW	SCRI	EEN	PO	RTS
	GPM	LPM	MESH	MATERIAL	INLET	DISCHARGE
WHITE NY	LON BODY					
7104*	6/10	23/38	80	S	1/2" NPT(F)	1/2" NPT(F)
7105*	15/20	57/76	80	S	3/4" NPT(F)	3/4" NPT(F)
7106*	20/25	76/95	80	S	1" NPT(F)	1" NPT(F)
7107*	35/50	133/189	80	S	11/4" NPT(F)	11/4" NPT(F)
7108*	60/75	227/284	80	S	11/2" NPT(F)	1½" NPT(F)
CLEAR NY	LON BODY					
7104.4*	6/10	23/38	80	S	1/2" NPT(F)	½" NPT(F)
7105.5*	15/20	57/76	80	S	3/4" NPT(F)	3/4" NPT(F)
7106.6*	20/25	76/95	80	S	1"NPT(F)	1" NPT(F)
7107.7*	35/50	133/189	80	S (	11/4" NPT(F)	11/4" NPT(F)
7108.8*	<b>60/7</b> 5	227/284	80	5)	11/2" NPT(F)	11/2" NPT(F)
POLYPRO	PYLENE BODY	(Y-INLINE)		81		
7109	100/150	378/567	80 /	SS	2" NPT(F)	2" NPT(F)
WHITE NY	LON BODY (MIC	CRO)		,		
7203	10 gpm max	38	80	S	1/2" NPT(M)	1/2" NPT(M)
7204	10 gpm max	38	80	S	1/2" NPT(F)	1/2" NPT(F)
CLEAR NY	LON BODY (MIC	CRO)				
7203.3	10 gpm max	38()	80	S	1/2" NPT(M)	1/2" NPT(M)
7204.4	10 gpm max	38	80	S	1/2" NPT(F)	1/2" NPT(F)
REINFORC	ED COMPOSIT	EBODY (W/BR/	ASS THREADED	PORTS, ¼" BSP	(F) AUXILIARY PO	RT)
32738	8 gpm max	30	50	SS	1/2" BSP(F)	1/2" BSP(M)
32748	8 gpm max	30	50	SS	1/2" BSP(F)	1/2" BSP(F)

# **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 PSI	PRESSURE BAR	TEMPERAT (° F)	URE RANGE (° C)	PORTS INLET
BRASS MODE	<b>LS</b> (BRASS FITT	ING AND BOU	JRDON TUBE,	304 SS CASE)	
6082	100	6.9	30-160	-1.1–71	1/4" NPT(M) Bottom
997901	400	28	0-150	-17–65	1/4" NPT(M) Bottom
STAINLESS S	TEEL MODE	<b>LS</b> (316 SS FIT	TTING AND BO	OURDON TUBE	, 304 SS CASE)
997068*	160	11	-4–140	-20-60	1/4" NPT(M) Bottom
997336	160	11	0-140	-17–60	1/4" NPT(M) Panel Mount
994063*	400	28	0-210	-17–98	1/2" NPT(M) Bottom
* DIl l4					·

<sup>\*</sup> Black polyester case

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



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 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				OUTLET PRESSURE		PORTS				
	GPM	LPM	PSI	BAR	PSI	BAR	INLET	OUTLET			
BRASS - NO	BRASS - NONADJUSTABLE										
7069	10	38	40-200	3–14	30-45	2–3	34" FGH	34" MGH			
7071	10	38	40-200	3-14	30-45	2–3	¾" FGH	1/2" NPT(F)			
STAINLESS	STEEL - A	DJUSTA	BLE								
7SS075	0-12	0-45	350	24	15-85	1.03-5.86	3/4" NPT(F)	3/4" 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	11/2" NPT(F)	11/2" 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 PR	ESSURE	PORTS		
	GPM	LPM	PSI	BAR	INLET	BYPASS	
BRASS						NY	
7420	0–10	0-37.8	125	8.6	1/2" NPT(M)	1/2" NPT(F)	
STAINLESS	STEEL						
7421	0–10	0-37.8	75	5.2	1/2" NPT(M)	1/2" NPT(F)	



Used to maintain consistent inlet pressure.

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

MODEL	MAXI GPM	MUM FLOW LPM	INLET PRES	SURE RANGE BAR	PORTS ADAPTER SIZES AVAILABLE
STAINLESS	STEEL			7	
711500	16	60	2.0-50	0.1-3.5	1/2", 3/4", 1", 1 1/4", 1 1/2"
714500	45	170	2.0-50	0.1-3.5	1", 11/4", 11/2", 2", 21/2"
717500	75	284	2.0-50	0.1-3.5	2", 21/2"
719500	320	1211	2.0-60	0.1–4.1	6" X ANSI 150, 6" R150 Series Flange

FITTING SIZE		INLET STA	ARII IZERS	
71111110 3122	711500	714500	717500	719500
AIGHT ADAPTER	FITTINGS			
1/2" NPT(M)	711502			
3/4" NPT(M)	711503			
1" NPT(M)	711504	714504		
1 1/4" NPT(M)	711505	714505		
1 1/2" NPT(M)	711506	714506		
2" NPT(M)		714508	717508	
2 1/2" NPT(M)			717510	
OW ADAPTER FIT	TINGS			
1 ½"	701818			
2 1/2"		701828		
211			701022	





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# 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	PO	RTS	MAXIMU	M FLOW	MAXIMUM	PRESSURE
	F°	INLET	BLEED	GPM	LPM	PSI	BAR
BRASS M	ODELS						
7140	145	1/4" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7141	145	3/8" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7142	145	1/2" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7143	165	1/4" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7144	165	3/8" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7145	165	1/2" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7146	130	1/4" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7170	180	1/4" NPT(M)	1/8" NPT(F)	25	95 🙏	125	8.6
7171	180	3/8" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7172	180	1/2" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7175	190	1/4" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7176	190	3/8" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7177	190	1/2" NPT(M)	1/8" NPT(F)	25	95	125	8.6
BRASS-N	IICRO MODEL	_S		XP.			
7116	145	3/8" BSP(M)	7 mm	25	95	145	10.0
REINFOR	CED COMPO	SITE MODEL	s				
7128	165	1/4" NPT(M)	1⁄8" NPT(F)	25	95	125	8.6
7129	165	3/8" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7130	165	1/2" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7135	145	1/4" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7136	145	3/8" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7137	145	1/2" NPT(M)	1/8" NPT(F)	25	95	125	8.6
7138	130	1/4" NPT(M)	1/8" NPT(F)	25	95	125	8.6



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	2SF, 2SFX, 4DX, 4DNX, 4SP, 4SPX Series	¾" NPT(M)
941517	Brass	3CP, 5CP, 5SP, 66DX, 67DX Series	1/2" NPT(M)



941516

# 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	MAXIMU	M FLOW	MAXIMUN	M PRESSURE	OPENING	PRESSURE	INLET PORT	BARB
	GPM	LPM	PSI	BAR	PSI	BAR		
7126	8.0	30	4050	280	105	7.25	3⁄8" NPT(M)	1/4"

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	ON PRESSURE	INLET PORT	
	PSI	BAR	PSI	BAR		
8100	4000	276	250	18	¾" NPT(M)	



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 A	SSEMBLIES
31804	3CP1110CS, 3CP1120, 3CP1 <mark>120G, 3C</mark> P113 <mark>0, 3C</mark> P1140
31810	<b>56</b> , 56G1, 56G118, 56HS, 56HSG1, 5 <mark>6HSG</mark> 11857, 60, 60G1, 60G118
31814	310, 340, 350, 5CP2120W, 5CP2140WCS, 5CP2150W
31815	45, 45G1, 5CP3120, 5CP3120CSS, 5CP3120CSSG1, 5CP5120, 5CP5120CSS, 5CP5135CSS, 5CP5135CSS, 5CP5135CSSG1, 5CP5140CSSG118
31845	530, 5 <b>50</b> , 660, 1050, 5CP612 <mark>0, 5CP6120C</mark> SSG1, 7CP6110CS, 7CP6110 <b>CSG1,</b> 7CP6 <mark>160</mark> CS, 7CP6160 <b>C</b> SG1, 7CP6165 <b>CSG1</b> , 7CP6170, 7CP6170G1, <b>7CP6185CS</b>

	OR ASSEMBL <mark>IE</mark> S						
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 6	660, 1050, 7CP6110CS, 7CP6110CSG1, 7CP6160CS, 7CP6160CSG1, 7CP6165CSG1, 7CP6170, 7CP6170G1, 7CP6185CS						
77071	2510						



8100



76560

# Specialty Accessories





34870



30664.120VAC



## **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

## **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.

MODEL		USED ON PUMP MODELS						
PLC/PC INTERFACE FOR 15 AND 18 FRAME PLUNGER PUMPS								
30664		Plunger pumps: 650 thru 1810K						
INDICATOR LI	INDICATOR LIGHT FOR 15 AND 18 FRAME PLUNGER PUMPS							
30664.120AC, 30664.240AC		Plunger pumps: 650 thru 1810K						
PLC/PC INTER	PLC/PC INTERFACE FOR 25 FRAME PISTON, 25, 28, 35 AND 38 FRAME PLUNGER PUMPS							
30290, 30292	Piston pump: 2	2520 Plunger pumps: 2530 thru 2831K, 3501HS thru 3570, 3801HS thru 3841KHS						
INDICATOR LI	INDICATOR LIGHT FOR 25 FRAME PISTON, 25, 28, 35 AND 38 FRAME PLUNGER PUMPS							

Piston pump: 2520 Plunger pumps: 2530 thru 2831K, 3501 thru 3570, 3801HS thru 3841KHS

## Float Valves

30290.120AC

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

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

MODEL	MAXIMUM FLOW		MAXIMUM IN	LET PRESSURE	INLET	INTERNAL
	GPM	LPM	PSI	BAR	PORT	BODY
ADJUSTABLE						
31013	7.1	27	145	10	3/8" BSP(M)	Brass
PRESET						
32010	8.0	30	145	10	3/4" 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.

MODEL	MAXIMUN PSI	I PRESSURE BAR	SWITCHING PSI	PRESSURE BAR	VOLTAGE RANGE	MAXIMUM AMP	INLET PORT		
STAINLESS STEEL - NPT PORTS									
31615	3650	250	215	15	12-250	6	1/4" NPT(M)		
31625	3650	250	360	25	12-250	6	1/4" NPT(M)		
31640	3650	250	580	40	12-250	6	1/4" 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.

MODEL	FLOW RANGE GPM LPM		MAXIMUM PRESSURE PSI BAR		MAXIMUM VOLTAGE	PORTS
BRASS MODELS						
33786	1.6-15.9	6-60	5100	350	230	3%" BSP(F)
33776	8-8.0	3-30	3650	250	250	3/8" BSP(M)
33778	1.0-15.9	3.8-60	5100	350	230	3/8" BSP(F)



#### 33776

## **Thermostat**

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

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

MODEL	TEMPERATURE RANGE	MAXIMUN PSI	A PRESSURE BAR	VOLTAGE RANGE	MAXIMUM AMPS	PORTS
76239	<b>86</b> °–302° F	4000	276	120-240	20	1/2" NPT(M) or 1/2" BSPP(M)



76239

# 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.





76165



1137

MODEL	EL MAXIMUM FLOW		MAXIMUM PRESSURE		PORTS		STYLE	TRIGGER
	GPM	LPM	PSI	BAR	INLET	DISCHARGE		SQUEEZE
SHUT-OFF GUN, BRASS								
33425	8	30	2900	200	3/8" NPT(F)	1/4" NPT(F)	Front load	Standard
76165	8	30	3650	252	3/8" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
31260	8	30	5100	350	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
35150	10.5	40	4500	310	3%" NPT(F)	1/4" NPT(F)	<b>Bottom</b> Load	Standard
31137	10.5	40	4500	310	3%" NPT(F)	1/4" NPT(F)	Horizontal	Standard
36140	10.5	40	5000	345	3%" NPT(F)	1/4" NPT(F)	<b>Bottom Load</b>	Standard
31265	13	49	3650	252	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
39410	21	80	7250	500	1/2" BSP(F)	1/2" BSP(F)	Bottom Load	Pressure Compensated
32183	31.7	120	4060	280	1/2" NPT(F)	1/2" NPT(F)	Horizontal	Standard
39415	32	121	1750	120	1/2" BSP(F)	1/2" BSP(F)	Bottom Load	Standard
39420	53	200	2900	200	3/4" BSP(F)	1/2" BSP(F)	<b>Bottom Load</b>	Pressure Compensated
SHUT-OFF	SHUT-OFF GUN, STAINLESS							
36126	10.5	40	4500	310	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
33600	10.5	40	5800	400	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
992641	10.5	40	14500	<b>9</b> 99	3/8" BSP(F)	%" BSP(F)	Bottom Load	Pressure Compensated
WEEP GUN	I, BRASS		4		NP			
76168	8	30	3650	<b>2</b> 52	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
35151	10.5	40	4500	310	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
36141	10.5	40	5000	345	3%" NPT(F)	1/4" NPT(F)	Bottom Load	Standard
DUMP GU	N, BRASS			N				
32300 (15" Lance)	10	<b>3</b> 8	3000	207	3/8" NPT(F)	1/8" NPT(F)	Bottom Load	Standard
32301 (39" Lance)	10	38	3000	207	3/8" NPT(F)	1/8" NPT(F)	Bottom Load	Standard
			( ) ,					





MODEL	MAXIMU GPM	JM FLOW LPM	MAXIMUM PSI	PRESSURE BAR	PO INLET	RTS DISCHARGE	LANCE LENGTH	TRIGGER SQUEEZE
SHUT-OF	F GUN, BR	ASS, BOT	TOM LOAD	), WITH LA	NCE			
39411	21	80	7250	500	1/2" BSP(F)	1/4" NPT(F)	16"	Pressure Compensated
39412	21	80	7250	500	1/2" BSP(F)	1/4" NPT(F)	32"	Pressure Compensated
39422	21	80	7250	500	1/2" BSP(F)	1/4" NPT(F)	50"	Pressure Compensated
39440	32	121	1750	120	1/2" BSP(F)	1/4" NPT(F)	32"	Standard

### Lances

A variety of lance types, lengths and materials ready to install to any  $\frac{1}{4}$ " gun.

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

	•				•					
MODEL	MAXIMU	JM FLOW	MAXIMUM	PRESSURE	LEN	IGTH	PO	RTS		
	GPM	LPM	PSI	BAR	INCHES	MM	INLET	DISCHARGE		
ZINC PLATE	D STRAIGI	HT TUBE W	ITH HAND G	RIP						
32264	10.5	40	3650	252	24	600	1/4" BSP(M)	1/4" BSP(M)		
36267	10.5	40	3650	252	36	900	1/4" BSP(M)	1/4" BSP(M)	. 0	
32268	10.5	40	3650	252	48	1200	1/4" BSP(M)	1/4" BSP(M)		
ZINC PLATE	D TUBE W	ITH VENTE	D GRIP AND	NOZZLE PR	OTECTOR					
31017	10.5	40	3650	252	27	685	1/4" BSP(M)	1/4" NPT(F)		
33201*	10.5	40	3650	252	35	890	1/4" BSP(M)	1/4" NPT(F)		
32036	10.5	40	3650	252	36	900	1/4" NPT(M)	1/4" NPT(F)	ر ( ا )	
32031	10.5	40	3650	252	36	900	1/4" BSP(M)	1/4" NPT(F)		
32032	10.5	40	3650	252	48	1200	1/4" BSP(M)	1/4" NPT(F)	(5)	
STAINLESS	STEEL TUB	E WITH VE	NTED GRIP A	ND NOZZL	E PROTECT	OR				
31219	8	30	5100	350	32	812	1/4" NPT(M)	1/4" NPT(F)		
31220	8	30	5100	350	42	1065	1/4" NPT(M)	1/4" NPT(F)		
32042	10.5	40	3650	252	36	900	1/4" NPT(M)	1/4" NPT(F)	9	- 1
33200*	10.5	40	3650	252	43	<b>10</b> 90	1/4" BSP(M)	1/4" NPT(F)	22264	22
STAINLESS	STEEL LAN	ICE ASSEM	BLY				P		32264	32
32440**	32	121	1750	120	32	812	1/2" BSP(M)	1/4" NPT(F)		
32437	53	200	7250	500	16	406	1/2" BSP(M)	1/4" NPT(F)		
32438	53	200	7250	500	32	812	1/2" BSP(M)	1/4" NPT(F)		
39194	53	200	7250	500	50	1270	1/2" BSP(M)	1/4" NPT(F)		

<sup>\*</sup> Dual Lance

<sup>\*\*</sup> Steel Zinc Plated



# Need selection help?

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

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

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

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

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

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

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

### **Nozzles**

**MODELS** 

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

- Easily mounts to a 1/4" lance.
- Nozzle types available: change over, rotating and turbo.
- Durable ceramic nozzle/insert for greater resistance to wear. **MAXIMUM FLOW**

	GPN	LPN	1	PSI	BAR	
CHANGE O	VER NOZZLE	WITH TWO	) 1/4" NPT(F)	NOZZLE HO	LDERS	
32149	7	26	2	900	200	1/4" BSP(F)
MODELS	NOZZLE	FLOW	RANGE	PRESSURI	RANGE	PORT
	SIZE	GPM	LPM	PSI	BAR	
ROTATING	NOZZLES 30	00 PSI MAX				·
7265.20	2.0	1.1–1.7	4.1-6.4	1200-3000	83-207	1/4" BSP(F)
7265.30	3.0	1.6-2.6	6.0-9.8	1200-3000	83-207	1/4" BSP(F)
7265.35	3.5	1.9–3.0	7–11.4	1200-3000	83-207	1/4" BSP(F)
7265.40	4.0	2.2–3.5	8.3 –13	1200-3000	83-207	1/4" BSP(F)
7265.45	4.5	2.4-3.9	9.1–14.8	1200-3000	83-207	1/4" BSP(F)
7265.50	5.0	2.8-4.4	10.6-16.7	1200-3000	83–207	1/4" BSP(F)
7265.55	5.5	3.0-4.8	11.1–18.2	1200-3000	83-207	1/4" BSP(F)
7265.60	6.0	3.2–5.2	<b>12.1</b> –19.7	1200-3000	83-207	1/4" BSP(F)
7265.65	6.5	3.6–5.7	13.6-21.6	1200-3000	83–207	1/4" BSP(F)
ROTATING	NOZZLES 36	50 PSI MAX		7		·
7625.30	3.0	1.6-2.9	6.1–11	1200–3650	83–252	1/4" BSP(F)
7625.35	3.5	1.9-3.3	7.2–12.5	1200–3650	83–252	1/4" BSP(F)
7625.40	4.0	2.2–3.8	8.3–14.4	1200-3650	83–252	1/4" BSP(F)
7625.45	4.5	2.4-4.3	9.1–16.3	1200–3650	83–252	1/4" BSP(F)
7625.50	5.0	2.8-4.8	10.6–18.2	1200-3650	83–252	1/4" BSP(F)
7625.55	5.5	3.0-5.2	11.4–19.7	1200-3650	83–252	1/4" BSP(F)
7625.60	6.0	3.2-5.7	12.1–21.6	1200-3650	83–252	1/4" BSP(F)
7625.65	6.5	3.6-6.2	13.6-23.5	1200-3650	83-252	1/4" BSP(F)
7625.70	7.0	3.8-6.7	14.4–25.4	1200-3650	83–252	1/4" BSP(F)
7625.80	8.0	4.4–7.7	16.7–29.1	1200-3650	83–252	1/4" BSP(F)
ROTATING	NOZZLES 50	00 PSI MAX				
7270.45	4.5	3.0-5.0	11.4–18.9	2000-5000	138–345	1/4" BSP(F)
7270.55	5.5	3.8-6.2	14.4-23.5	2000-5000	138–345	1/4" BSP(F)
7270.65	6.5	4.6-7.3	17.4–27.6	2000-5000	138–345	1/4" BSP(F)
<b>7</b> 270.80	8.0	5.6-8.9	21.2-33.7	2000-5000	138–345	1/4" BSP(F)
7270.90	9.0	6.4-10	24.2-37.9	2000-5000	138-345	1/4" BSP(F)
ROTATING	NOZZLES 5	100 PSI MAX				
7632.30	3.0	2.4-3.4	9.1–12.9	2600-5100	180-350	1/4" BSP(F)
7632.35	3.5	2.8-3.9	10.6-14.8	2600-5100	180-350	1/4" BSP(F)
7632.40	4.0	3.2-4.5	12.1–17	2600-5100	180-350	1/4" BSP(F)
7632.45	4.5	3.6-5.1	13.6-19.3	2600-5100	180-350	1/4" BSP(F)
7632.50	5.0	4.0-5.6	15.1–21.2	2600-5100	180-350	1/4" BSP(F)
7632.55	5.5	4.4-6.2	16.7-23.5	2600-5100	180-350	1/4" BSP(F)
7632.60	6.0	4.8-6.7	18.2-25.4	2600-5100	180-350	1/4" BSP(F)
7632.65	6.5	5.2-7.3	19.7–27.6	2600-5100	180-350	1/4" BSP(F)
7632.70	7.0	5.6-7.9	21.2-29.9	2600-5100	180-350	1/4" BSP(F)
7632.80	8.0	6.4-9.1	24.3-34.2	2600-5100	180-350	1/4" BSP(F)

**MAXIMUM PRESSURE** 

**PORT** 

### **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 GPM	RANGE LPM	PRESSUR PSI	E RANGE BAR	PORT		
VARI-NOZZLES								
7920	2.0	1.0-1.9	3.8-7.2	100-3650	6.9-252	1/4" BSP(F)		
7930	3.0	1.5-2.9	5.7–10.8	100-3650	6.9-252	1/4" BSP(F)		
7935	3.5	1.8-3.3	6.6-12.6	100-3650	6.9-252	1/4" BSP(F)		
7940	4.0	2.0-3.8	7.8-14.4	100-3650	6.9-252	1/4" BSP(F)		
7945	4.5	2.2-4.3	8.3-16.3	100-3650	6.9-252	1/4" BSP(F)		
7950	5.0	2.5-4.7	9.5–17.8	100-3650	6.9-252	1/4" BSP(F)		
7955	5.5	2.8-5.2	10.6-19.7	100-3650	6.9-252	1/4" BSP(F)		
7960	6.0	3.0-5.6	11.4-21.2	100-3650	6.9-252	1/4" BSP(F)		
7970	7.0	3.5-6.6	13.2-25.0	100-3650	6.9-252	1/4" BSP(F)		





### **Foamers**

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

- Lance and chemical bottle can be fitted to a standard 1/4" 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	PRESSUR	E RANGE	TYPE	PORT
	GPM	LPM	PSI	BAR		
FOAMER, WIT	TH AND WI	4				
32017	2–4	7.6-15.2	750-2900	52–200	w/o Bottle	1/4" BSP(F)
39234	2–4	7.6-15.2	750-2900	52-200	w/ 1-Liter Bottle	1/4" BSP(F)
39196	2–4	7.6-15.2	750-2900	52–200	w/ 2-Liter Bottle	1/4" BSP(F)



### **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	FLOW	RANGE	MAXIMUM	PRESSURE	PC	ORTS		
	SIZE (MM)	GPM	LPM	PSI	BAR	INLET	DISCHARGE		
BRASS - AL	BRASS – ADJUSTAB <mark>LE</mark>								
7182	1.8 mm	2–4	7.6–15	4050	279	3/8" NPT(M)	3/8" NPT(M)		
7192	1.8 mm	2–4	7.6–15	4050	279	M18 x 1.0	3/8" NPT(M)		
7183	2.1 mm	3–5	11.4-19	4050	279	%" NPT(M)	3/8" NPT(M)		
7193	2.1 mm	3–5	11.4-19	4050	279	M18 x 1.0	3/8" NPT(M)		
7184	2.3 mm	3-6	11.4-23	4050	279	3/8" NPT(M)	3/8" NPT(M)		
7194	2.3 mm	3-6	11.4-23	4050	279	M18 x 1.0	3/8" NPT(M)		
7224	2.3 mm	3-6	11.4-23	4050	279	M22 x 1.5	3/8" NPT(M)		
BRASS - FIX	KED								
7231	1.8 mm	2.0	7.6	3145	217	M18 x 1.0	3/8" NPT(M)		
7242	2.0 mm	2.9	12.9	2600	179	M18 x 1.0	3/8" NPT(M)		
7232	2.1 mm	3.0	11.4	3145	217	M18 x 1.0	3/8" NPT(M)		
7332	2.1 mm	3–4	11.4–15	3000	207	M18 x 1.0	3/8" NPT(M)		
7243	2.1 mm	3–5	11.4–19	4000	276	M22 x 1.5	3/8" NPT(M)		
7367	2.1 mm	3–5	11.4–19	4000	276	M20 x 1.0	3/8" NPT(M)		
STAINLESS	STAINLESS STEEL – ADJUSTABLE								
7722	1.8 mm	2–4	7.6–15	5100	352	3/8" NPT(M)	3/8" NPT(M)		
7723	2.1 mm	3–5	11.4–19	5100	352	3/8" NPT(M)	3/8" NPT(M)		
7724	2.3 mm	3–6	11.4–23	5100	352	38" NPT(M)	3/8" NPT(M)		



### **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 guickly 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



6340

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

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

MODEL	FLOW GPH	RANGE	PRESSUR PSI	E RANGE BAR	POR INLET	TS DISCHARGE
PULSE PUN	IPS FOR PL	UNGER AND	PISTON PUN	1PS		
6340, 6341	1.0-10.5	3.8-40.0	100–2000	6.9-138	1/8" NPT(F)	1/8" NPT(F)
6350, 6351	1.0 <b>–1</b> 2.0	3.8-45.4	500-3000	35-207	1⁄4" Hose Barb	1/8" 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 aph		

INTERNAL DIAPHRAGM MATERIAL				
6340	6341			
EPDM	FPM			

### 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 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.

PART NUMBER	CAPACITY	PUMP MODELS			
OIL					
ISO 68					
Change after first 50 h	ours, then every 500 hours				
6107	Bottle – 21 ounces				
6100	Case – (12) 21 ounce bottles				
6102	Jug – 2.5 gallons	All piston and plunger pumps			
6105	Twin pack – (2) 2.5 gallons				
6109	Drum – 30 gallons				
997657	Jug – 1 gallon	All pictors and plumger purpose. Food Crade			
997638	Case – (4) 1 gallons	<ul> <li>All piston and plunger pumps – Food Grade</li> </ul>			
ISO 100					
Change after first 20 h	ours, then every 3000 hours				
6115	Pail – 5 gallons				
6116	Drum – 16 gallons	152R060/C, 152R080/C, 152R100/C, 157R060/0 <mark>80, S</mark> pecialty Pumps			
6121	Case – (4) 4 liters	= 15/1000/000, Specialty Fulfips			

### OILERS - GRAVITY FEED WITH 1/4" NPT(M) THREADS

30278	1 ounce	2520/C, <mark>2510</mark> /11, <b>25</b> 30–2537, <b>Except</b> 2831/K, <b>35</b> /38 Series, <b>Exc</b> ept 3541HS/3541KHS, <b>3545</b> , 3841HS/3841KHS
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).

PART NUMBER	CAPACITY	PUMP MODELS		
GEAR LUBE				
6110	Bottle – 16 ounces	45G1, 56G1, 56HSG1, 60G1, 700G1, 740G1, 760G1, 781G1, 5CP3105CSSG1, 5CP3120CSSG1, 5CP3160CSSG1, 5CP5135CSSG1,		
6111	Case, (12) 16 ounce bottles	5CP5140CSSG1, 5CP5140CSSG118, 5CP6120CSSG1, 5CP6180CSSG1, 5CP6190G1, 5CPQ6221G1, 5CPQ6241CSG1, 5CPQ6251G1, 7CP6165CSG1, 7CP6170G1, 7CP6110CSG1, 7CP6111CSG1, 5CP6190G1		



6107



6110

### Lubrication Accessories



### **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.

PAR NUME		CAPACITY PUMP MODELS
PUMP P	ROTI	ECTOR
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 OU

### **Cat Pumps Pressure Washer Pump Protector**

Pressure washer pumps can be adversely affected during long-term storage, especially in cold temperatures. Cat Pumps specially formulates its Pump Protector to protect pressure washer pumps from freezing, corrosion and premature wear. Recommended for use with all pressure washers, Pump Protector adds lubrication to plungers, valves and seals to prevent sticking. There is no better way to protect a pump and safeguard your customers' investments.

www.catpumps.com/use-pump-protector-winter-storage



# Pump Accessories

### Oil Drain/Level Gauge 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 LEVE	LGAUGE
76144	Piston pumps: 2520 through 6041 Plunger pumps: 2510 thru 6861K. <b>EXCEPT</b> 35 and 38 Frame series
OIL LEVE	L GAUGE W/DRAIN KIT
76334	All Piston and Plunger pumps and 66DX, <b>EXCEPT</b> Plunger pumps 2SF, 2SFX, 4DX, 4DNX, 4SP, 4SPX and 5SP series
76074	All stainless steel or nickel aluminum bronze pumps, <b>EXCEPT</b> Plunger pumps 2SF, 2SFX, 4DX, 4DNX, 4SP, 4SPX, 5SP and 66DX series
DRAIN KI	TS
34314	Piston pumps: 6020 thru 6041 Plunger pumps: 3501 thru 3570, 3801HS thru 3841KHS, 6747 thru 6775 and 6801 thru 6861K
34334	All piston and plunger pumps and 66DX, <b>EXCEPT</b> plunger pumps 2SF, 2SFX, 4DX, 4DNX, 4SP, 4SPX and 5SP series
990394	Plunger pumps: 2SF, 2SFX, 4DX, 4DNX, 4SP, 4SPX and 5SP series
Safety de	ctors – Shaft and Oil Cap evices to eliminate exposure to rotating pump shaft and to minimize water nto pump.
· Shaft pro	otector not included with pump unless otherwise noted. rotector not included with pump except 35/38 series pumps.
PART NUMBER	MATERIAL PUMP MODELS
SHAFT PR	OTECTORS
25130	STCP 230_277 280 290 333 430

PART NUMBER	MATERIAL	PUMP MODELS
HAFT PRO	OTECTOR	s
25130	STCP	230–277, 280, 290, 333, 430
26516	STCP	2520/C, 251 <mark>0/11, 25</mark> 30–2 <b>537, 2560, 25</b> 65, 2831/K
29445	AL	6020, 6 <mark>040, 6747</mark> , 6760–6 <mark>775, 6801/K, 68</mark> 11/K, 6821/K, 6831/K, 6841/ <b>K, 6861/K, 67070</b> , 6710 <b>2</b> Included with pump
30764*	POP	650, 660, 1050, 1530, 1540E, 1560, 1570, 1580 (6 mm Holes)
30764S*	POP**	661C, 661D, 1051, 1051C, 1051D, 1057, 1531, 1541, 1541C (6 mm Holes)
855046*	POP	650, 660, 1050, 1530, 1540E, 1560, 1570, 1580 Included with pump (8 mm Holes)
855047*	POP**	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
670066	STCP	530, 550
855042	POP	3501/C, 3507HS/CHS, 3511/C, 3517HS/CHS, 3520/C, 3521DHS/CHS, 3527HS, 3531DHS/CHS, 3535/C, 3537HS, 3541DHS/CHS, 3545, 3550, 3560, 3570, 3570S, 3801/K, 3811HS/KHS, 3821HS/KHS, 3831HS/KHS, 1821HS/KHS, 3831HS/KHS, 1821HS/KHS, 1821HS/KHS/KHS/KHS/KHS/KHS/KHS/KHS/KHS/KHS/K
118672	STCP	310–350S, 311–357, 3CP1120–1140, 3CP1221–1241, 5CP2120W/2150W, 5CP3120, 5CP6120–6190, 5CPQ6221/6251
120220	STCP	7CP6170
See Tech Bu	lletin 128 **P	olypropylene 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, <b>EXCEPT</b> the 1CX, 2SF, 2SFX, 3CP, 4DX, 4DNX, 4SP, 4SPX, 5CP, 5SP, 66DX, 67DX

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





# 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	316" x 316" 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/50 <mark>G1I</mark>		
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 NUMBE	SIZE (MM)	PUMP MODELS
	30047	5 x 5 x 24	280, 290, 333, 430, <b>230–277, 3CP1120–1140, 1221–1241</b>
	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–7CP6185CS
	30089	5 x 5 x 36.5	Clutch models: 34960/961, 34964/965
\	34021	10x8x70	3501/C, 3507HS/CHS, 3511/C, 3517HS/CHS, 3520/C, 3521DHS/CHS, 3527HS, 3531DHS/CHS, 3535/C, 3537HS, 3541DHS/CHS, 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	8x7x40	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

PART

# Rail, Direct Mount and Complete Mounting Assemblies

Mount pump onto a secure, horizontal base with either rail assemblies or directmount 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.

	PUMP MODELS			
RAIL ASS	EMBLIES – 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–6185CS			7
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		S.	
76513	310–350S, 311–357, 530, 550, 56, 60, 5CP2120W–2150W, 5CP3120/3120CSS, 5CP <mark>5120–514</mark> 0CCS, 5CP6120–6190, 5CPQ6221–6251	XP	-	
92674	3501/C, 3507HS/CHS, 3511/C, 3517HS/CHS, 3520/C, 3521DHS/CHS, 3527HS, <mark>3531D</mark> HS/CHS, 3535/C, 3537HS, 3541DKHS, 3520, 3545, 3550, 3560, 3570, 3570S, 3801/K, 3811HS/KHS, 3831HS/KHS, 3841HS/KHS	``		
76514	3501/C, 3507HS/CHS, 3511/C, 3517HS/CHS, 3520/C, 3521DHS/CHS, 3527H <mark>S, 3531D</mark> HS/CHS, 3535/C, 3537HS, 3541DKHS, 3520, 3545, 3550, 3560, 3570, 3570S, 3801/K, 3811HS/KHS, 3821HS/KHS, 3831HS/KHS, 3841HS/KHS 304 Stainless Steel			
990550	650, 660–661D, 1050, 1051, 1057, 1530, 1531, 1540 <mark>E, 1541, 1</mark> 56 <mark>0, 157</mark> 0, 1580, 1730, 1810/K <b>For Diesel or Gas Mounts</b>			
DIRECT N	OUNT 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, 650–6 <mark>61D</mark> , 1050–1057, 1530/31, 1540E/41, 1560, 1570, 1580, 1810/K, 7CP6110CS–6185CS			
34018	<b>35</b> 20/C, 3535, <b>354</b> 5, 3560			
34039*	3501/C, 3507 <mark>HS</mark> /CHS, 3 <b>5</b> 11/C, 3517HS/CHS, <b>3521DH</b> S/CHS, 3527HS, <b>3531DHS/CHS, 3537HS</b> , 3541DHS/CHS, <b>38</b> 01/ <b>K</b> , 3811HS/KHS, <b>3821HS/KHS</b> , 3831HS/KHS, <b>3841HS/KHS</b>			
MOUNTI	NG ASSEMBLIES (INCLUDES: RAILS, KEY, PULLEY/HUB AND SHAFT PROTECTOR)			
30641	3CP1120-11 <mark>40, 3CP1221-1</mark> 241			
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			



# 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.



### **NEMA Bell Housing Assemblies**

NEIWA Deli Housing Assemblies						
PUMP SERIES	MODELS	MOTOR FRAME	BELL HOUSING ASSY			
		56C-145TC	76056.3CP			
3CP	All 3CP Models	182/184TC	76184.3CP			
		213/215TC	76215.3CP			
	230, 231, 237,	56C-145TC	76056.3FR			
3FR	240, 241, 247,	182/184TC	76184.3FR			
	270, 271, 277	213/215TC	76215.3FR			
		56C-145TC	76056.5CP			
5CP	All 5CP Models	182/184TC	76184.5CP			
SCP	(Except 5CP2120W)	213/215TC	76215.5CP			
		254/256TC	<b>7</b> 6256.5CP			
	240 241 247	56C-145TC	76056.5FR			
5FR	340, 341, 347, 350, 351, 357	182/184TC	76184.5FR			
	330,331,337	213/215TC	76215.5FR			
		182/184TC	76184.7CP			
7CP	All 7CP Models	213/215TC	76215.7CP			
		254/256TC	762 <b>56.7</b> CP			
	56 56116 60 700 740 760	182/184TC	76184.7FR			
7FR/8FR	56, 56HS, 60, 700, 740, 760, 781, 784, 786	213/215TC	76215.7FR			
	/01, /0 <del>1</del> , /00	254/256TC	76 <b>256.7</b> FR			
		213/215TC	762 <b>15.1</b> 5FR			
15 FR/18FR*	All 15 & 18FR models	254/256TC	<b>76</b> 256.15FR			
		284/ <b>2</b> 86TC	76286.15FR			

NEMA Flexible Coupler Assemblies

PUMP SERIES	MOTOR FRAME	FLEX COUPLER ASSY	SHAFT TO SHAFT	TORQUE RATING FT·LB
	56C	8215	16.5mm x ¾"	27
	145TC	8210	16.5mm x %"	27
3CP & 3FR	182/184TC	8220	16.5mm x 11/8"	27
	182/184TC	8225	16.5mm x 11/8"	74
	213/215TC	8270	16.5mm x 1 1/8"	92
	56C	8261	20mm x %"	74
	145 <b>TC</b>	8260	20mm x %"	74
5CP & 5FR	182/184TC	8230	20mm x 1 1/8"	74
	213/215TC	8275	20mm x 1 ¾"	92
	245/256TC	8217	20mm x 1 %"	92
	56C/145TC	8218	24mm x %"	74
	182/184TC	8370	24mm x 11/8"	74
7CP & 7FR	213/215TC	8375	24mm x 1%"	74
	254/256TC	8380	24mm x 1 %"	92
) ر	284/286TC	8389	24mm x 1%"	150
1	213/215TC	8388	30mm x 1¾"	150
15FR & 18FR	254/256TC	8382	30mm x 1%"	150
100	284/286TC	8383	30mm x 1%"	225

<sup>\*</sup> See page 47 for 1180 rpm motor options for some 15FR pumps.



76000 Series



# Need selection help?

### Q. How can I find the rpm needed to get specific gpm 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

Pump rpm

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 VOLTAGE		FRAME	PART NUMBER				
1 PH, 1750 RPM, TEFC							
0.5	115/*230	56C	8105				
0.75	115/*230	56C	8175				
1	115/*230	56C	8110				
1.5	115/*230	56C	8115				
2	115/*230	56C	8120				
2.5	115/*230	56C	8125				
3	*230/460	184TC	999839				
5 *230/460		184TC	997634				
7.5	*230/460	215TC	999766				
10	*230/460	215TC	999720				
1 PH, 3450 RPI	M, TEFC OR ODP						
1.5	115/230	56C	8054 <sup>1</sup>				
2	115/230	56C	999943				
3	115/*230	56C	992139 <sup>2</sup>				
5	230	56C	80573 <sup>3</sup>				
1 TEECtale 5/II Clear	<u>.</u>						

<sup>1</sup> TEFC with %" Shaft

### 3 PH, 1180 RPM, TEFC

5	*230/460	215TC	994274	
7.5	*230/460	256TC	<b>9</b> 94975	
10	*230/460	256TC	994910	
15	*230/460	286TC	994915	
20	*230/460	286TC	994920	
3 PH, 1750 RF	PM, TEFC		5	
0.33	20 <mark>0–2</mark> 30/460	56C	990324	
0.5	*230/460	56C	997671	
1	*230/460	56C	999189	
1.5	*230/460	56C	998843	
2	*230/460	56C	899247	
2.5	208–230/460	56C	8126	
3	*230/460	182TC	899302	
5	*230/460	184TC	996543	
7.5	*230/460	213 <b>TC</b>	999436	
10	*230/460	215TC	999377	
15	*230/460	254TC	994001	
20	*230/460	256TC	997645	
3 PH, 3450 RI	PM, TEFC			
1.5	*230/460	56C	994794	
3	230/460	56C	8053	

<sup>\*</sup> Prior to Department of Energy (DOE) EERE-2020-BT-TP-0011, motor was name platerated 208–230 Volts.

### **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



<sup>&</sup>lt;sup>2</sup> ODP with %" Shaft

<sup>&</sup>lt;sup>3</sup> ODP with <sup>3</sup>/<sub>4</sub>" Shaft

# SAE Mounting Components

### **SAE Bell Housing Assemblies**

SAE Bell Housing Assemblies								
PUMP SERIES	MODELS	SAE TYPE	BELL HOUSING ASSEMBLY					
		A2	76SAEA2.3CP					
3CP	All 3CP Models	B2	76SAEB2.3CP					
		B4	76SAEB4.3CP					
		A2	76SAEA2.3FR					
3FR	All 3-Frame Models	B2	76SAEB2.3FR					
		B4	76SAEB4.3FR					
		A2	76SAEA2.5CP					
5CP	All 5CP Models	B2	76SAEB2.5CP					
		B4	76SAEB4.5CP					
		A2	76SAEA2.5FR					
5FR	All 5-Frame Models	B2	76SAEB2.5FR					
		B4	76SAEB4.5FR					
		A2	76SAEA2.7CP					
7CP	All 7CP Models	B2	76SAEB2.7CP					
		B4	76SAEB4.7CP					
		A2	76SAEA2.7FR					
7FR	All 7-Frame Models	B2	76SAEB2.7FR					
		B4	76SAEB4.7FR					
15FR	All 15-Frame Models	B2	76SAEB2.15FR					
IDFN	All 13-Flame Models	B4	76SAEB4.15FR					
25FR	All 25-Frame Pumps	C2/C4	76SAEC.25FR					
35FR	All 35-Frame Pumps	C2/C4	76SAEC.35FR					



### **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 ¾"	74
	3CP & 3FR	B2/B4	8272	16.5mm x %"	74
	CD 0 FFD	A2	8273	20mm x %"	74
	5CP & 5FR	B2/B4	8274	20mm x %"	74
	7CD 0 7FD	A2	8371	24mm x %"	92
	7CP & 7FR	B2/B4	8372	24mm x %"	92
	15FR	B2/B4	8387	30mm x %"	150
	25FR	B2/C4	994303	30mm x 11/4"	188
		C2/C4	997872	35mm x 11/4"	350
1		C2/C4	999368	35mm x 1%"	350
ĺ	35FB	C2/C4	994403	35mm x 1½"	350
	1	C2/C4	999180	35mm x 1%"	350
	16,	C2/C4	999206	35mm x 1%"	350

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



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.

DIAMETER (MM)	ТҮРЕ	PART NUMBER	PUMP MODELS		
HUB (STEEL)					
16.5	Н	30943*	All 3-Frame, 3CP and 4-Frame Models		
20	Н	30945 *	All 5-Frame, 5CP Models		
24	Н	33000*	All 7-Frame, 7CP and 8-Frame Models		
25	Н	30234	All 10-Frame Models		
30	В	990012*	All 15 Figure 10 Figure 25 Figure and 20 Figure Madala		
30	Н	30059*	All 15-Frame, 18-Frame, 25-Frame and 28-Frame Models		
35	В	990013 *	All 35-Frame and 38-Frame Models		
45	В	990014*	All 60-Frame and 68-Frame Models		
100	М	990068	All 150R-Frame Models		
Note: *Add "Z" to	part nun	nber for zinc pla	ted hub		
HUB AND KE	Y ASSE	MBLY (STEEL	ı		
16.5	Н	30942	All 3-Frame, 3CP and 4-Frame Models		
20	Н	30944	All 5-Frame, 5CP Models		
25	Н	30284	All 10-Frame Models		
30	Н	30209	All 25-Frame and 28-Frame Models		



### 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.

MODELS	CLUTCH DIAMETER/ NUMBER OF GROOVES	BELT TYPE	PUMP SHAFT DIAMETER	PUMP MODELS
34960	7"/1	Α	16.5 mm	All 3CP Models
34961	7"/1	Α	16.5 mm	All 3-Frame and 4-Frame Models
34962	7"/1	Α	20.0 mm	All 5-Frame Models
34963	7"/2	Α	20.0 mm	All 5-Frame Models
34964	7"/2	Α	16.5 mm	All 3-Frame and 4-Frame Models
34965	7"/2	A	16.5 mm	All 3CP Models
34970	7" / 1	Α	20.0 mm	All 5CP Models
34980	7"/2	Α	20.0 mm	All SCF Models
34971	7.3" / 8	Poly-V, L-Style	24.0 mm	All 7CP Models
76970	10"/2	В	20.0 mm	All 5CP Models
76980	10"/2	В	20.0 mm	All 5-Frame Models
34628	12.4" / 1	В	24.0 mm	All 7-Frame and 8-Frame Models
34630	12.4"/2	В	24.0 mm	All 7-Frame and 8-Frame Models
34563	12.4"/2	В	30.0 mm	All 15-Frame and 18-Frame Models
30655	12.4"/2	В	30.0 mm	All 25-Frame and 28-Frame Models

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



34965

### Drive Accessories



30206

### Pulleys and Pulley/Hub w/Key

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

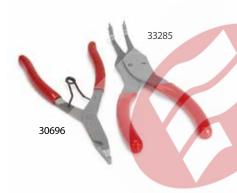
• Contact Cat Pumps for available pulley sizes for either pump or motor side.

PUMP SHAFT DIAMETER (MM)	PART NUMBER	PULLEY DIAMETER NO. OF GROOVES	BELT TYPE	PUMP MODELS				
PULLEY/HUB (	OMBINA	TION WITH TWO	SET SC	REWS (STEEL/ZINC PLATED)				
16.5	30032	5" / 1	Α	All 3-Frame, 3CP and 4-Frame Models				
16.5	30048	8"/1	A/B	All 3-Frame, 3CP and 4-Frame Models				
20	30058	8"/1	A/B	All 5-Frame and 5CP Models				
PULLEY/HUB (	PULLEY/HUB COMBINATION WITH TWO SET SCREWS AND KEY ASSEMBLY (STEEL)							
16.5	30244	8"/1	A/B	All 3-Frame, 3CP and 4-Frame Models				
16.5	30246	5"/1	Α	All 3-Frame, 3CP and 4-Frame Models				
20	30633	8"/1	A/B	All 5-Frame and 5CP Models				

### **PULLEY ONLY (CAST IRON)**

HUB SIZE	PART NUMBER	PULLEY DIAMETER NO. OF GROOVES	BELT TYPE	PUMP MODELS
Н	30206	10"/2	A/B	All 7-Frame, 8-Frame, 15-Frame, 18-Frame, 25-Frame and 28-Frame Models

### Service Tools



### **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 PI	IERS
MODEL	30696
<b>SN</b> AP RING	
MODEL	33285



### 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 1/2" drive socket or T-wrench.

1/2" DRIVE SO	OCKETS						
MODEL	33004	33005*	33006				
FRAME	5 Frame	7 Frame	15 Frame				
T-WRENCHI	T-WRENCHES						
MODEL	45103	43257	43523				
FRAME	5 Frame	7 Frame	15 Frame				

<sup>\*</sup> For model 45, use 7 frame seal case removal tool.



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 INSTALL	ATION	A		171
MODEL	25084			\( \)
FRAME	3, 4 Frame		ر	)



33004

15770

### Crankcase Oil Seal Kits for 35 Frame and 60 Frame

This specialty oil seal tool kit will assist in replacement of the 35 and 60 frame crankcase oil seals.

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

FOR 35 FRAME PUMPS				
MODEL	32273			
INCLUDES	3 Oil Seals, Guide Tool, Screws, Washers, #2 Phillips Driver			
FOR 60 FRAME PUMPS				
MODEL	31173			
INCLUDES	3 Oil Seals, Guide Tool, Screws, Washer			
MODEL	32357 (Used on Pump Models 67070, 67102, 67102C)			
INCLUDES	3 Oil Seals, Guide Tool, Screws, Washer			

35 Frame Oil Seal Replacement Tool Step-by-Step Video





32273



31173

# New Products and Updates

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.

### MODEL 1731 STAINLESS STEEL DIRECT-DRIVE PLUNGER PUMP

#### 1731

The Model 1731 direct-driven stainless steel triplex pump is capable of achieving an unequaled 15.8 gpm at 1,500 psi. With a bell housing, the Model 1731 easily attaches to a "C" face motor (1750 rpm), allowing for a space-saving footprint.

Max Flow:	15.8 gpm / 60 lpm
Max Pressure:	1500 psi / 103 bar
Max RPM:	1750
Inlet Ports (2):	1" NPT(F)
Discharge Ports (2):	34" NPT(F)

- Salt and Brackish Water Desalination (SWRO)
- Leachate Treatment
- · Gas Turbine Cooling



### NEW 7CP SERIES PUMP MODELS FOR 8 GPM AT 3,500 PSI

### 7CP6185CS (BELT-DRIVE); 7CP6165CSG1/7CP6165CSG118 (DIRECT-DRIVE)

Expansion and refinement of our existing 7CP series pumps have led to the development of three new pump models capable of 8 gpm at 3,500 psi to meet demanding mobile trailer pressure washing needs. Model 7CP6185CS is belt-driven, while the Model 7CP6165CSG1 pairs to an engine with a 1" horizontal shaft, and Model 7CP6165CSG118 mates with a 1½" shaft.

Max Flow:	8 gpm / 30.3 lpm
Max Pressure:	3500 psi / 241 bar
Max RPM (Belt-Drive):	1320
Max RPM (Direct-Drive)	3265
Inlet Ports (2):	3/4" NPT(F)
Discharge Ports (2):	1/2" NPT(F)

- Mobile Pressure Wash
- Water Jetting
- Hydro Excavating



### **5CP4100CSS SERIES MODULAR UNLOADERS**

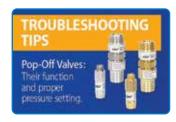
### 7865/7866/7867

By building on the simplicity and strength of our existing modular unloaders, Cat Pumps engineers have created an unloader design to match up with our 5CP4100CSS Series Pumps, and meet the demands of our customer's high-pressure application needs. Model 7865 features a 2.1 mm orifice chemical injector, and Model 7866 has a 1.8 mm orifice. For applications where an injector is not required, model 7867 includes a standard discharge fitting.

· · · · · · · · · · · · · · · · ·		
Flow Range:	0.5-6.0 gpm / 1.9-23 lpm	
Pressure Range:	100–4000 psi / 6.9–276 bar	
Maximum Temperature:	160°F/71°C	
Inlet Port (1):	1/2" NPT(F)	
Outlet Port (1):	3/6" NPT (M)	
Bypass Port:	Built-In Channel	
Dimensions:	4.12 x 1.75 x 7.00" / 105 x 44 x 178 mm	



# New Informational Videos



Pop-off valves provide backup protection as a secondary pressure relief valve to ensure complete pressure relief for maximum pump and system protection. See our pop-off valve Troubleshooting Tips video for useful information on why and when to use pop-off valves and how to set pressure properly.



www.catpumps.com/troubleshooting-tips-pop-off-valves



The typical method of replacing crankcase oil seals is complicated and involves removing the two bearing covers, the crankshaft and bearings, and the plunger rod and connecting rod assemblies before finally removing the oil seals. This can be incredibly time-consuming. Check out the new replacement tool that allows replacement of 35-frame oil seals in a fraction of the time with much less effort.



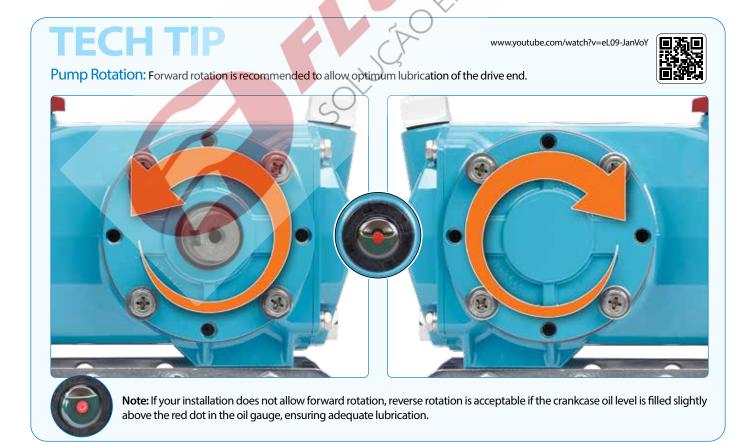
www.catpumps.com/oil-seal-replacement-tool-kit-and-service-video-35-frame-pumps



Watch the latest 1540E maintenance videos for step-by-step instructions on proper pump disassembly and reassembly, as well as the periodic inspection and replacement of valves and seals.







# 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



### 

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:

- 98.68% order fill rate, supported by world-class inventory management system
- 99.98% shipping accuracy, which means customers receive what they ordered
- 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
- "Account Access" on-line portal provides 24/7 access to registered customers to enter purchase orders, receive up-to-date pricing, and track orders. Contact Cat Pumps for more information.
- 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



99.98% Shipping Accuracy

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 square feet 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

United States, Canada

### **International Division**

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### **Territories Served**

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#### Cat Pumps International N.V.

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Territories Served United Kingdom and Ireland

www.catpumps.co.uk

### **Cat Pumps Deutschland GmbH**

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### **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



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