CAT PUMPS®

The Pumps with Nine Lives

Pump Catalog

Product Quality, Reliability and Support You Expect

www.catpumps.com

World Leader in Triplex Reciprocating High-Pressure Pumps

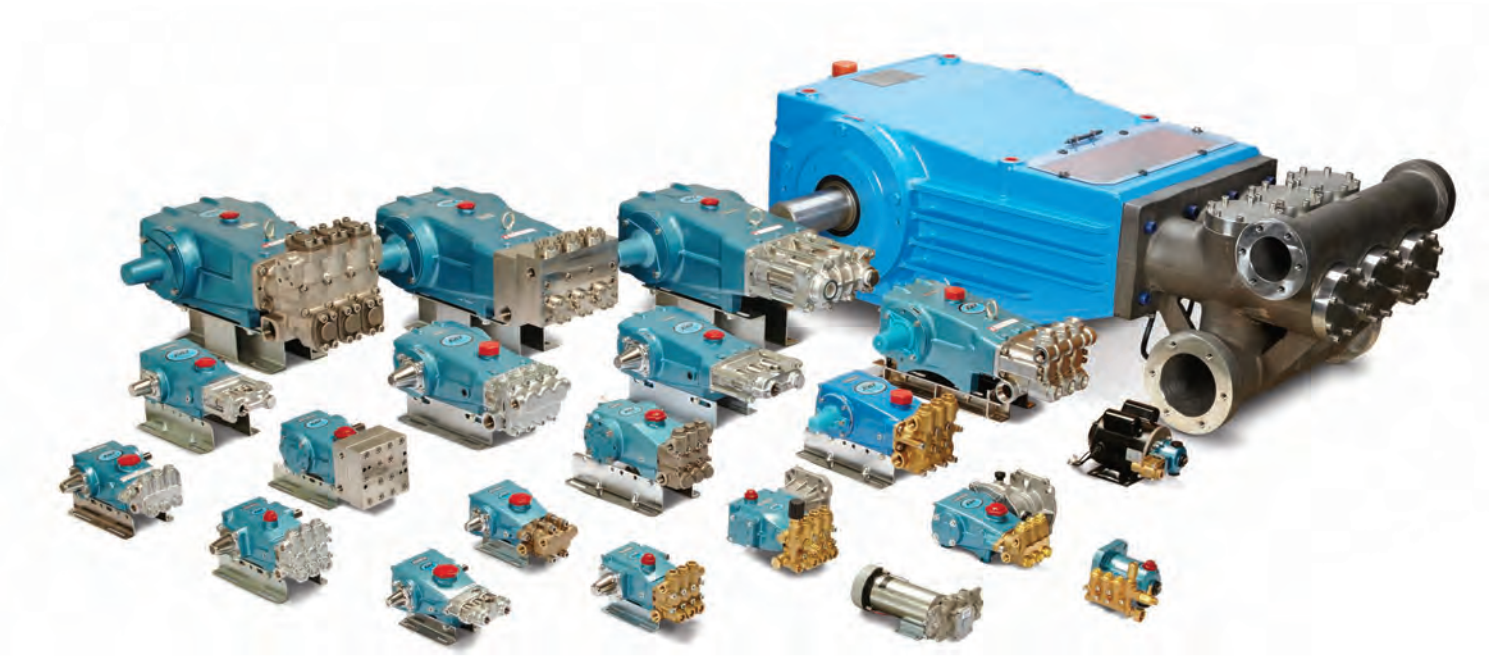
Cat Pumps designs and builds products to the highest quality level for one major reason: our customers depend on our products to keep their equipment running. Every design detail is optimized for long product life and reliable performance.

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

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 3450
- Liquid Temperature: -10° to 240°F (-23° to 115°C)
- Manifold Materials: Brass, Nickel Aluminum Bronze, 304 and 316 Stainless Steel, Duplex Stainless Steel
- Drives: Electric, Engine, Hydraulic, Pneumatic



Product Ordering

Using This Catalog

The pump sections of this catalog are organized by drive type/flow rate/manifold materials: brass, 316 stainless steel, duplex stainless steel and nickel aluminum bronze. The model numbers listed represent standard pumps equipped with Buna-N seals and O-rings, except for specialty pumps, such as CO_2, TEG and portable extractor, 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
FPM	Fluorocarbon (Viton®) seals and O-Rings, chemical resistance	180°F (82°C)	0.0110
EPDM	Ethylene Propylene Diene Monomer seals and O-Rings	160°F (71°C)	0.0220
HT	High-temperature high pressure seals	180°F (82°C)	0.3000
STHT	Special Teflon® high temperature low and high pressure seals, NBR O-Rings	200°F (93°C)	0.3400
	Special Teflon® high temperature low and high pressure seals, FPM O-Rings	200°F (93°C)	0.3410
PTFE	Pure Polytetrafluoroethylene (Teflon®) Seals and Buna-N O-Rings	200°F (93°C)	0.0700
	Pure Polytetrafluoroethylene (Teflon®) Seals and FPM O-Rings	200°F (93°C)	0.0710
IPFE	I-Perfluoroelastomer (Teflon®) Seals and Isolast O-Rings	200°F (93°C)	0.0770
ST4	Special blend PTFE high and low pressure seals, Buna-N O-Rings	200°F (93°C)	0.4400
	Special blend PTFE high and low pressure seals, FPM O-Rings	200°F (93°C)	0.4410
NBRS	Buna-N silicone free seals and O-Rings	160°F (71°C)	0.6000

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

PTFE = Pure Polytetrafluoroethylene, IPFE = I-Perfluoroelastomer, ST4 = Speical PTFE 4, NBRS = Buna-N silicon free seals and O-Rings

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

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

Example

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

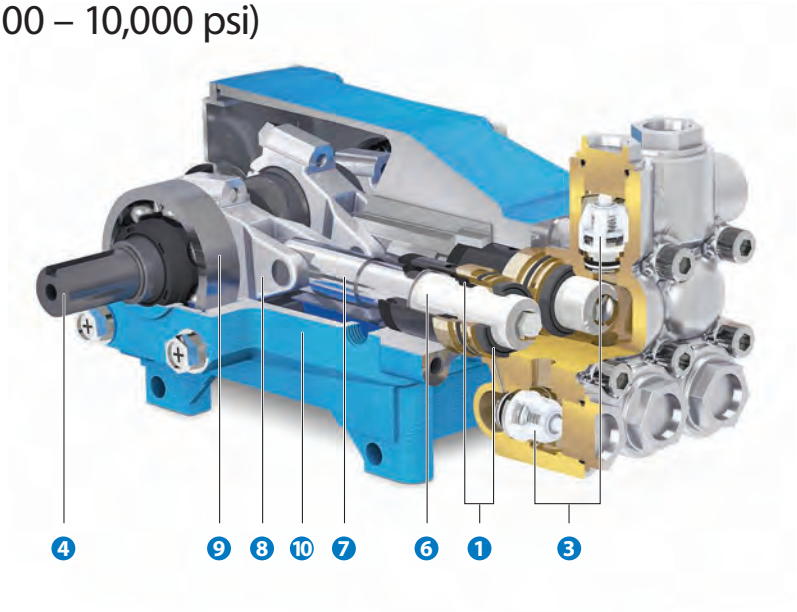
Cat Pumps configures a number of pumps for special applications and certifications such as ATEX, CO_2, TEG, Flushed, High-Temp and others. Please contact Cat Pumps directly at (763) 780-5440 for more information.

Table of Contents

Selecting your pump

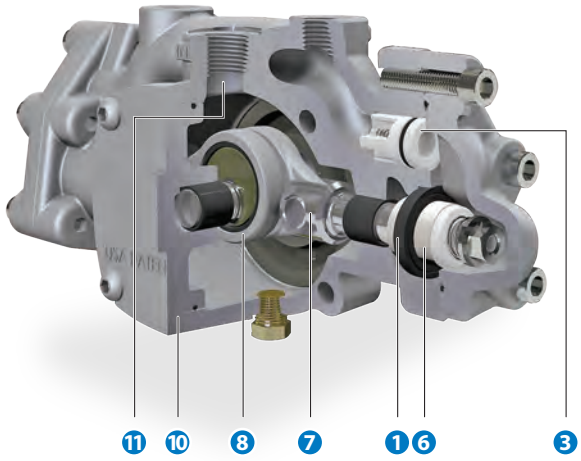
Plunger Pumps (0.13 – 240 gpm, 100 – 10,000 psi)

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.



XP Series Pumps (0.5 – 2 gpm, 100 – 1,000 psi)

In XP series pumps, fluid enters the inlet port and flows through the drive-end, lubricating the connecting rods and plunger rods as it passes to the inlet valves. Both inlet and discharge valves are spring-loaded closed and hydraulically opened, similar to plunger pumps, however, they utilize a flow- through ceramic plunger design. The continuous forward flow characteristics in conjunction with the packing design of plunger pumps result in improved suction capabilities as well as extended seal life.

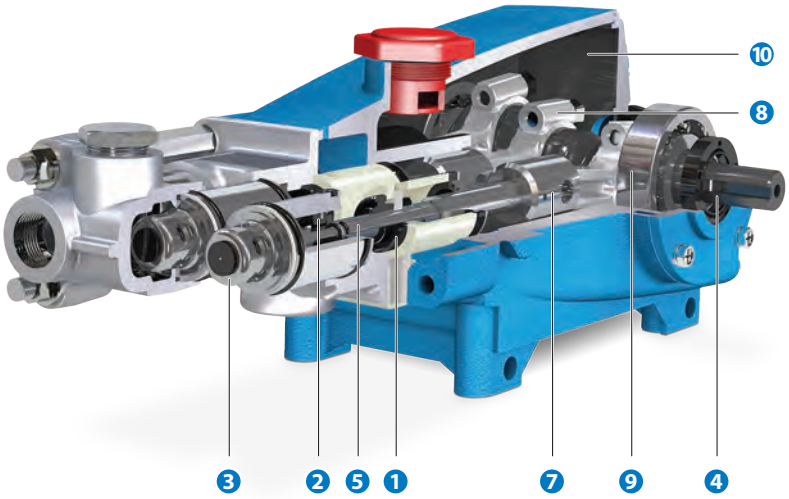


Features

1. Specially formulated, Cat Pumps exclusive high pressure and low pressure seals offer unmatched performance and seal life.
2. 100% wet cup/seal design adds to service life by allowing pumped fluids to cool and lubricate the elastomers on both sides.
3. Stainless steel valves, seats, and springs provide corrosion-resistance, positive seating, and long life.
4. Chrome-moly crankshaft provides unmatched strength and surface hardness for long life.
5. The patented stepped piston rod with hard chrome-plated sleeve provides a durable wear surface and easy wet end servicing.
6. Precision-polished, solid ceramic plungers provide maximum resistance to corrosion and abrasion, extending seal life.

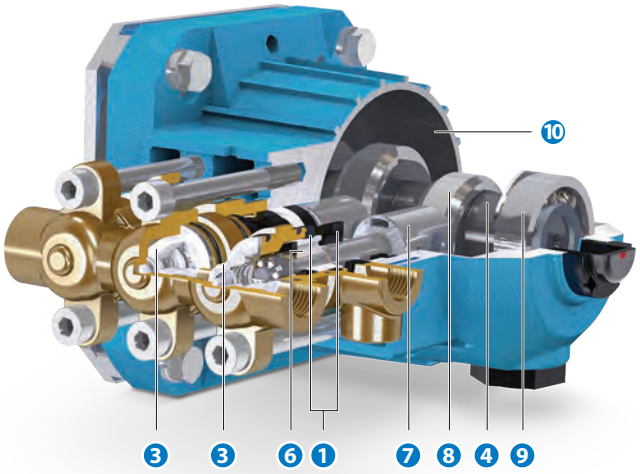
Piston Pumps (3.0 – 60 gpm, 100 – 1,500 psi)

The design of the piston pump is for 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 discharge chamber.



SF Series Pumps (0.5 – 5 gpm, 100 – 3,500 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.



7. The high strength stainless steel plunger rods have a 360° supported crosshead providing uncompromising plunger rod alignment.
8. Matched oversized connecting rods are made of high strength material with exceptional bearing quality.
9. Oversized ball bearings or tapered roller bearings provide extended bearing life.
10. High Strength, light weight die cast aluminum crankcase with splash oil design allows operation at speeds as low as 100 RPM.
11. Patented greaseless design uses water from inlet as lubrication, eliminating the maintenance and mess of grease or oil.

Plunger Pumps

Model 4DX10ER

DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD
Electric Motor, 5/8" and 3/4", 56C Face

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
4DX03ELR	0.3	1.1	2000	138	1725	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	1725	5/8"
4DX30ER	3.0	11.4	2000	138	3450	5/8"
2SF30GES	3.0	11.4	2000	138	3450	3/4"
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%.

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

Model 2SF22ES

DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD
Electric Motor, 1 1/8", 184TC Face

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
5SP30ELR	3.0	11.4	3000	207	1750	1-1/8"
5SP35ELR	3.5	13.3	2500	172	1750	1-1/8"
5SP40ELR	4.0	15.2	2000	138	1750	1-1/8"

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

Model 5SP35ELR

DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD
Engine, 3/4"

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	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
3DX29GSI	2.9	11.0	2500	172	3450	3/4"	6.5
2SF35GS	3.5	13.3	2000	138	3450	3/4"	8

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

Model 66DX40G1I

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

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT	HP
	gpm	lpm	psi	bar			Typical Gas Engine*
66DX30G1I	3.0	11.4	4000	276	3450	1"	13
4SPX32G1I	3.2	12.2	3000	207	3450	1"	9
66DX35G1I	3.5	13.3	4000	276	3450	1"	13
66DX40G1I	4.0	15.2	4000	276	3450	1"	16
4SF45GSI	4.5	17.0	3000	207	3450	1"	13

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

Plunger Pumps

DIRECT DRIVE, HOLLOW SHAFT, 316 STAINLESS STEEL MANIFOLD
Electric Motor, 5/8", 56C Face

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
2SF05SEEL	0.5	1.9	1200	83	1725	5/8"
2SF10SEEL	1.0	3.8	1200	83	1725	5/8"
2SF15SEEL	1.5	5.7	1200	83	1725	5/8"
2SF22SEEL	2.2	8.4	1200	83	1725	5/8"
2SFQ25SEEL	2.5	9.5	1200	83	1725	5/8"
2SFQ29SEEL	2.85	10.8	1200	83	1725	5/8"
2SFQ35SEEL	3.5	13.3	1200	83	1725	5/8"
2SFQ42SEEL	4.2	15.9	1000	69	1725	5/8"

Model 2SF22SEEL

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

DIRECT DRIVE, HOLLOW SHAFT GEARBOX, BRASS MANIFOLD
Engine, 3/4" and 1"

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM		SHAFT	HP
	gpm	lpm	psi	bar	Pump	Engine		Typical Gas Engine*
740G1	2.8	10.6	5000	345	1700	3465	1"	13
3CP1120G	3.5	13.3	2200	152	1420	3600	3/4"	8
760G1	3.5	13.3	5000	345	1700	3465	1"	16
5CP3160CSSG1	4.0	15.2	3500	241	1627	3320	1"	13
60G1	4.2	16.0	4000	276	1570	3200	1"	18
5CP3120CSSG1	4.5	17.0	3500	241	1645	3353	1"	16
700G1	4.5	17.0	5000	345	1700	3465	1"	20
5CP5135CSSG1	5.0	19.0	3500	241	1515	3090	1"	16
5CP5140CSSG1	5.5	20.9	3500	241	1500	3060	1"	18
5CP6120CSSG1	6.7	25.5	1600	110	1570	3200	1"	8
56G1	8.0	30.4	2500	172	1760	3600	1"	16
5CP6190G1	8.7	33.1	1200	83	1570	3200	1"	11
7CP6110CSG1	10.0	38.0	2000	138	1667	3400	1"	18
7CP6170G1	12.0	45.4	1800	124	1600	3264	1"	16

Note: All 1" Gearboxes are also available in 1 1/8" size (G118)
*Consult engine manufacturer for actual torque available at required speed.

Model 56G1

Model 5CP3120CSSG1

DIRECT DRIVE, HOLLOW SHAFT GEARBOX, 316 STAINLESS STEEL MANIFOLD
Engine, 3/4" and 1"

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM		SHAFT	HP
	gpm	lpm	psi	bar	Pump	Engine		Typical Gas Engine*
3CP1241G	3.0	11.4	2000	138	1410	3600	3/4"	5
3CP1211G	3.8	14.4	1500	103	1330	3400	3/4"	5
5CPQ6241CSG1	4.0	15.2	2000	138	1760	3600	1"	8
781G1	4.5	17.0	5000	345	1700	3465	1"	20
5CPQ6251G1	5.0	19.0	2000	138	1760	3600	1"	9
5CPQ6221G1	7.4	28.0	1200	83	1760	3600	1"	8
7CP6111CSG1	10.0	38.0	2000	138	1667	3400	1"	18

Note: All 1" Gearboxes are also available in 1 1/8" size. (G118). *Consult engine manufacturer for actual torque available at required speed.

Model 7CP6111CSG1

Plunger Pumps

SOLID SHAFT, BRASS MANIFOLD

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
5CP6120	6.0	22.8	1600	110	1400	20 mm
5CP5120	6.0	22.8	2500	172	1725	20 mm
1570	6.0	22.8	6000	414	1350	30 mm
5CP5140CSS	6.7	25.4	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	1200	83	1725	20 mm
5CP6190	8.0	30.4	1450	100	1450	20 mm
56	8.0	30.4	2500	172	1725	24 mm
5CP6180CSS	8.2	31.0	1500	103	1750	20 mm
1560	9.0	34.0	4000	276	1280	30 mm
5CP6190	10.0	38.0	1200	83	1750	20 mm
1050	10.0	38.0	2200	152	958	30 mm
660	10.0	38.0	3000	207	1429	30 mm
3550	10.0	38.0	6000	414	940	35 mm
6810**	10.0	38.0	10000	689	600	45 mm
7CP6110CS	10.5	39.9	2000	138	1725	24 mm
7CP6170	11.0	41.6	2000	138	1450	24 mm
1050	12.0	45.4	1800	124	1150	30 mm
7CP6170	12.0	45.4	1800	124	1600	24 mm
1580	12.0	45.4	3000	207	1180	30 mm
1530	15.6	59.3	1500	103	1450	30 mm
1540E	18.0	68.4	1200	83	1100	30 mm
2510	20.0	76.0	2000	138	1450	30 mm
3560	20.0	76.0	4000	276	1160	35 mm
2530	25.0	95.0	1200	83	1025	30 mm
3520	25.0	95.0	2000	138	870	35 mm
3560	25.0	95.0	3000	207	1450	35 mm
3570*	30.0	113.6	3000	207	1080	35 mm
3535	36.0	136.2	1200	83	800	35 mm
3535HS*	40.0	152.0	2000	138	888	35 mm
6835	40.0	152.0	3000	207	625	45 mm
3545	45.0	171.0	1000	69	765	35 mm
3545HS*	50.0	189.3	1500	103	850	35 mm
67070	50.0	189.3	2000	138	653	45 mm
6760	60.0	228.0	1200	83	520	45 mm
67070*	65.0	246.0	2000	138	850	45 mm
6775	75.0	285.0	1200	83	650	45 mm

* Intermittent duty only – operating pump at stated flow and pressure for no more than 50% of time in any given hour.
** 304 Stainless Manifold

Electric Brake Hp = $\frac{\text{gpm x psi}}{1460}$

Model 1570

Model 660

Model 1540E

Model 3535

Selecting a Drive

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

Commonly Used Formulas

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

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

*Pitch Diameter

Plunger Pumps

Model 311

Model 1051

Model 2531

Model 6811

SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
3CP1231	2.3	8.7	2000	138	1725	16.5 mm
784	2.9	11.0	5000	345	1750	24 mm
3CP1241	3.6	13.7	2000	138	1725	16.5 mm
786	3.6	13.7	5000	345	1750	24 mm
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	1200	83	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	1725	24 mm
7CP6171CS	10.5	39.9	2000	138	1450	24 mm
1051	12.0	45.4	1800	124	1150	30 mm
3511	14.0	53.2	3000	207	800	35 mm
6811	15.0	57.0	5000	345	600	45 mm
6801	15.0	57.0	7000	483	600	45 mm
1531	15.6	59.0	1500	103	1450	30 mm
1541	18.0	68.4	1200	83	1100	30 mm
2511	20.0	76.0	1500	103	1450	30 mm
2531	25.0	95.0	1200	83	1025	30 mm
6821	25.0	95.0	3000	207	615	45 mm
3531D	36.0	136.2	1200	83	800	35 mm
3531DHS*	40.0	152.0	2000	138	888	35 mm
6831	40.0	152.0	2300	159	625	45 mm
3541D	45.0	171.0	1000	69	765	35 mm
6841	48.0	182.4	2000	138	615	45 mm
3541DHS*	50.0	189.3	1500	103	850	35 mm
6761	60.0	228.0	1200	83	520	45 mm

* Intermittent duty only – operating pump at stated flow and pressure for no more than 50% of time in any given hour.

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

Plunger Pumps

SOLID SHAFT, DUPLEX STAINLESS STEEL MANIFOLD

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
1051D	10.0	38.0	2200	152	958	30 mm
661D	10.0	38.0	3000	207	1429	30 mm
1051D	12.0	45.4	1800	124	1150	30 mm
3521DHS	25.0	95.0	2000	138	870	35 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

Electric Brake Hp = $\frac{\text{gpm x psi}}{1460}$

Model 152R100

BELT DRIVE, SOLID SHAFT, NICKEL ALUMINUM BRONZE MANIFOLD

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
237	2.3	8.7	1500	103	1725	16.5 mm
277	3.5	13.3	1500	103	1420	16.5 mm
247	3.6	13.7	1200	83	1725	16.5 mm
347	4.0	15.2	1800	124	1725	20 mm
317	4.0	15.2	2200	152	950	20 mm
277	4.2	16.0	1000	69	1725	16.5 mm
357	5.0	19.0	1500	103	1725	20 mm
1057	10.0	38.0	2200	152	958	30 mm
3507	10.0	38.0	5000	345	915	35 mm
1057	12.0	45.4	1800	124	1150	30 mm
3517	14.0	53.2	3000	207	800	35 mm
2537	25.0	95.0	1200	83	1025	30 mm
3527	25.0	95.0	2000	138	870	35 mm
3537	36.0	136.2	1200	83	800	35 mm
3537HS*	40.0	152.0	2000	138	888	35 mm
6747	48.0	182.4	2000	138	615	45 mm
6767	60.0	228.0	1200	83	520	45 mm

* Intermittent duty only – operating pump at stated flow and pressure for no more than 50% of time in any given hour.

Model 277

Electric Brake Hp = $\frac{\text{gpm x psi}}{1460}$

Model 3517

Piston Pumps

Model 280

Model 820

Model 2520

Model 6020

PISTON PUMPS, SOLID SHAFT, BRASS MANIFOLD
Belt Drive

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

*Available as a model 2520C with flushed inlet manifold

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

PISTON PUMPS, SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD
Belt Drive

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

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

TECH TIP

Pump Rotation

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

Forward Rotation

Reverse Rotation

Flushed Manifold Pumps

FLUSHED MANIFOLD PUMPS, SOLID SHAFT, BRASS, NICKEL ALUMINUM BRONZE
Belt Drive

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
1810K**	3.0	11.4	10000	689	1500	30 mm
1530C	15.6	59.0	1500	103	1450	30 mm
1540EC	18.0	68.4	1200	83	1100	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	3000	207	1080	30 mm
3535C	36.0	136.2	1200	83	800	35 mm

Model numbers ending in "C" indicate flushed cast manifold and "K" indicate flushed block manifold.
**304 Stainless Steel Manifold

Model 3520C

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

FLUSHED MANIFOLD PUMPS, SOLID SHAFT, 316 STAINLESS STEEL MANIFOLD
Belt Drive

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
341C	4.0	15.2	1800	124	1725	20 mm
311C	4.0	15.2	2200	152	950	20 mm
781K	4.7	17.9	5000	345	1750	24 mm
351C	5.0	19.0	1500	103	1725	20 mm
1051C	10.0	38.0	2200	152	958	30 mm
661C	10.0	38.0	3000	207	1429	30 mm
3501C	10.0	38.0	5000	345	915	35 mm
7CP6171CCS	10.5	39.9	2000	138	1450	24 mm
7CP6111CCS	10.5	39.9	2000	138	1750	24 mm
1051C	12.0	45.4	1800	124	1150	30 mm
3511C	14.0	53.2	3000	207	800	35 mm
6811K	15.0	57.0	5000	345	600	45 mm
6801K	15.0	57.0	7000	483	600	45 mm
1541C	18.0	68.0	1200	83	1100	30 mm
2531C	25.0	95.0	1200	83	1025	30 mm
3521C	25.0	95.0	2000	138	870	35 mm
6821K	25.0	95.0	3000	207	615	45 mm
3531C	36.0	136.2	1200	83	800	35 mm
6831K	40.0	152.0	2300	159	625	45 mm
3541C	45.0	171.0	1000	69	765	35 mm
6841K	48.0	182.4	2000	138	615	45 mm
6861K	60.0	228.0	1200	83	520	45 mm
67102C	100.0	378.5	1000	69	680	45 mm

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

Model 781K

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

Model 1051C

FLUSHED MANIFOLD PUMPS, SOLID SHAFT, DUPLEX STAINLESS STEEL MANIFOLD
Belt Drive

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
152R060C	115.0	437.0	1200	83	360	100 mm
152R080C	200.0	760.0	1200	83	355	100 mm
152R100C	240.0	912.0	1000	69	270	100 mm

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

Model 67102

$$\text{Electric Brake Hp} = \frac{\text{gpm x psi}}{1460}$$

Washout Resistant Pumps

B SERIES, SOLID SHAFT, SPECIAL BRASS MANIFOLD, VEHICLE WASH
Belt and Bell Housing Drive

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT
	gpm	lpm	psi	bar		
340B	4.0	15.2	1800	124	1725	20 mm
310B, 310BQ*	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

*"Q" Option is designed for applications where a reduced sound level is desirable.

Electric Brake Hp = $\frac{\text{gpm x psi}}{1460}$

Model 310B

Liquid CO2 Pumps

Cat Pumps liquid CO_2 series of pumps feature modifications to accommodate the unique properties of liquid CO_2. The seals are modified to handle low lubricity and low temperature that liquid CO_2 applications require. Pump manifolds are modified for inlet pressures to 800 psi (55 bar) and discharge pressures up to 5,000 psi (345 bar). Drive-end and manifold combinations are available to cover a wide flow range of flow from 0 .68 to 30 gpm (2.6 to 113.6 lpm).

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

Model 1530RSCM.CO2

Demand Genuine Cat Pumps Accessories

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.

Check out our complete line of accessories online at **catpumps.com**