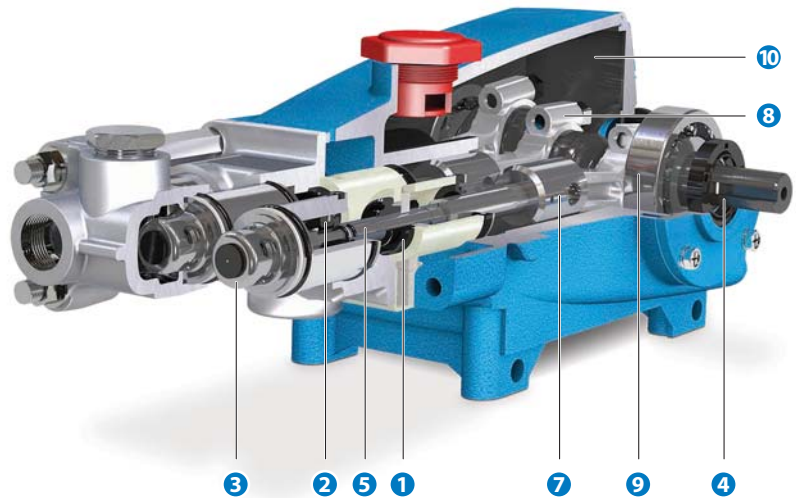


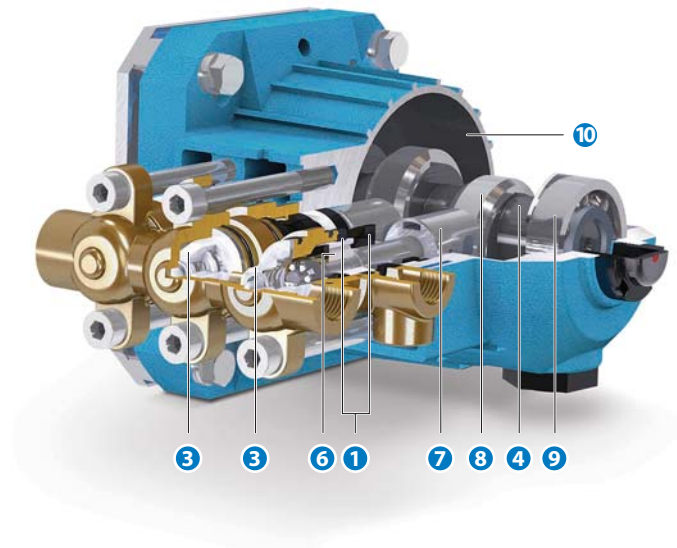
Piston Pumps (3.0 – 60 gpm, 100 – 1,500 psi)

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 – 5.0 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



Model 2SF22ES



Model 5SP35ELR



Model 66DX40G1I

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%.

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

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"

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

DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD

Engine, 3/4"

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT	HP Typical Gas Engine*
	GPM	LPM	PSI	BAR			
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
2SF35GS	3.5	13.3	2000	138	3450	3/4"	8

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

DIRECT DRIVE, HOLLOW SHAFT, BRASS MANIFOLD

Engine, 1"

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM	SHAFT	HP Typical Gas Engine*
	GPM	LPM	PSI	BAR			
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
66DX50G1I	5.0	19.0	3500	241	3400	1"	13

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

Plunger Pumps

DIRECT DRIVE, HOLLOW SHAFT, 316 STAINLESS STEEL MANIFOLD

Electric Motor, 3/4", 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"

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



Model 2SF22SEEL

DIRECT DRIVE, HOLLOW SHAFT GEARBOX, BRASS MANIFOLD

Engine, 3/4" and 1"

PUMP MODEL	MAXIMUM FLOW		MAXIMUM PRESSURE		RPM ENGINE	SHAFT	HP Typical Gas Engine*
	GPM	LPM	PSI	BAR			
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	1"	13
5CP5135CSSG1	5.8	21.9	3500	241	3450	1"	13
5CP5140CSSG1	6.2	23.4	3000	207	3450	1"	18
5CP6120CSSG1	7.2	27.2	1500	103	3450	1"	8
5CP6180CSSG1	8.0	30.4	1500	103	3450	1"	11
56G1	8.0	30.4	2500	172	3600	1"	16
56HSG1	8.0	30.4	3000	207	3600	1"	22
5CP6190G1	9.7	36.7	1200	83	3450	1"	11
7CP6110CSG1	10.0	38.0	2000	138	3400	1"	18
7CP6160CSG1	10.0	38.0	2500	172	3400	1"	22
7CP6170G1	12.0	45.4	1800	124	3264	1"	16

Note: All 1" Gearboxes are also available in 1 1/2" 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 ENGINE	SHAFT	HP Typical Gas Engine*
	GPM	LPM	PSI	BAR			
3CP1241G	3.0	11.4	2000	138	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	1200	83	3600	1"	8
7CP6111CSG1	10.0	38.0	2000	138	3400	1"	18

Note: All 1" Gearboxes are also available in 1 1/2" size. (G118). *Consult engine manufacturer for actual torque available at required speed.



Model 7CP6111CSG1