

Simplex Pump & Cylinder Sets Provide Pre-Matched Hand Pump, Hose, Gauge And Cylinder For Ordering Convenience.



Eliminate the hassle of matching the right hand pump to the right cylinder by ordering Simplex pre-matched pump & cylinder sets. All 2 speed hand pumps have been carefully chosen to provide maximum efficiency and service, and each set comes with a 6 foot hose equipped with a high flow coupler, gauge and gauge adaptor.

- Maximum versatility with a wide variety of cylinders.
- Optimal performance is provided with matched hand pump & cylinder.
- Use cylinders in upright, inverted or horizontal position.
- Maximum control & safety is provided with the pressure gauge included.
- Heavy duty spring for fast and full cylinder retraction.
- High flow couplers.
- Complies with ANSI/ASME B30.1 safety standards.

Low Profile Sets

Model Two Speed Pump	Cap. (tons)	Stroke (in)	Closed Height (in)	Included In Set				
				Cylinder Model	Pump Model	Hose	Gauge	Gauge Adapter
ST101A	10	1 1/2	3 15/32	RLS101	P42	HC6	GT5	GA1
ST201A	20	1 3/4	3 7/8	RLS201			GT20	
ST302A	30	2 7/16	4 5/8	RLS302			GT30	
ST502A	50	2 3/8	4 13/16	RLS502			GT20	
ST1002A	100	2 1/4	5 9/16	RLS1002			P82	

Standard Spring Return Sets

ST102A	10	2 1/8	4 25/32	R102	P42	HC6	GT5	GA1
ST106A	10	6 1/8	9 3/4	R106				
ST1010A	10	10 1/8	13 3/4	R1010				
ST252A	25	2	6 1/2	R252				
ST254A	25	4	8 1/2	R254				
ST256A	25	6 1/4	10 3/4	R256	P82	GT25		
ST2514A	25	14 1/4	18 3/4	R2514				
ST556A	55	6 1/4	11 1/8	R556				

Hard-Kor™ Sets

ST302HCA	30	2 1/2	7	RC302	P42	HC6	GTH12	GA1
ST306HCA	30	6 1/8	12 1/4	RC306	P82			

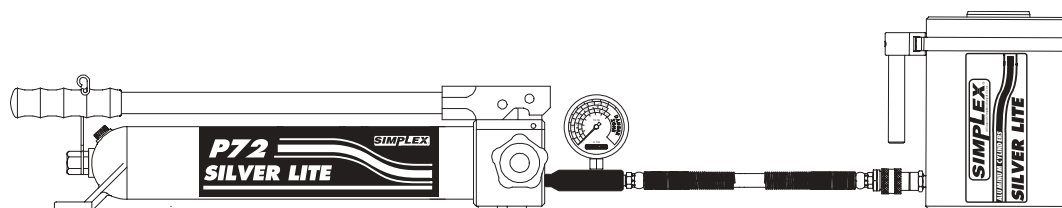
For more information on hand pump performances & cylinder speeds, see page 35.

PUMP AND CYLINDER SETS

Simplex New Silver Lite Aluminum Pump & Cylinder Sets Provides High Power and Light Weight in One Convenient Package.



- Maximum versatility with a wide variety of cylinders.
- Optimal performance is provided with matched hand pump & cylinder.
- Use cylinders in upright, inverted or horizontal position.
- Maximum control & safety is provided with the pressure gauge included.
- Heavy duty spring for fast and full cylinder retraction.
- High flow couplers.
- Complies with ANSI/ASME B30.1 safety standards.



Silver Lite Aluminum Spring Return Sets

STL302	30	2	4 25/32	RAS302B	P72	HC6	G5	GA1
STL306	30	6	9 3/4	RAS306B				
STL502	50	5	13 3/4	RAS502B				
STL504	50	4	6 1/2	RAS504B				
STL1002	100	2	8 1/2	RAS1002B				

Silver Lite Aluminum Spring Return Center Hole Sets

STL303HC	30	3	11 3/4	RAC303	P72	HC6	G5	GA1
STL306HC	30	6	17 3/4	RAC306				
STL603HC	60	3	13 1/8	RAC603				

For more information on hand pump performances & cylinder speeds, see page 35.

THE SIMPLEX HAND PUMP



THE SIMPLEX PLUS

Wide Variety

Simplex offers the widest selection of hand pump, styles, reservoir sizes, and flow rates to meet your everyday needs. Each pump has specific features that make certain models better suited for particular jobs. Select a hand pump with features that best fit your application.

■ Built for Rugged Industrial/Construction Use

Shipyards, steel mills, construction sites and weld shops can be rough environments for hand pumps. Simplex's all metal construction withstands real world conditions.

■ Total Control of Hand Pump Operation

Simplex release valves have a **fine pitch screw and man size valve handles for maximum control**. Check ball valve design is more reliable than needle valves, and less costly to repair.

■ Lowest Handle Effort

Simplex hand pumps have low, back saving handle efforts to **reduce operator fatigue & back injury**.

■ Highest Oil Displacement Per Stroke

More oil per stroke means **less handle strokes per job**. Simplex pumps have the highest available oil displacement per stroke, **in many cases reducing the number of handle strokes as much as 50%**.

■ Adjustable Handle Efforts To Meet Your Needs

Along with providing the most oil per stroke, Simplex P140 & P300 Series hand pumps are **designed with two pivot pin locations**. Front pivot allows the highest flow of oil per stroke. Rear pivot provides very low handle effort for repetitive applications at full pressure.

■ Light weight & Easy to Carry

Use pump locking handle to pickup and go.

■ Easy To Use/Built To Last

Pivot linkage provides uniform handle effort at all points along the arc of the pump handle stroke. The pivot **reduces piston side loading** for longer pump life. Some pump models have four-way valves for use with double-acting cylinders.

■ Maximum Versatility

Simplex portable high performance hand pumps incorporate an external adjustable pressure relief valve for maximum protection in a wide variety of lower pressure applications. Most pumps have mounting holes for secure mounting in fixed applications.

PORTABLE HAND PUMPS



- **Single Speed Compact Hand Pump:** Delivers a constant flow to smaller cylinders or hydraulic powered tools regardless of load. Ideal when light weight and portability are important.

HEAVY DUTY HAND PUMPS



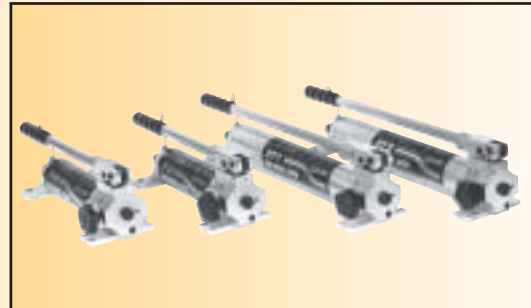
- **Two-Speed Hand Pump:** With the cylinder unloaded, pump delivers a high volume of oil for fast cylinder speed. Once the load is engaged, the pump automatically switches to the high pressure stage.

HAND PUMPS WITH 4 WAY VALVES



- **Hand Pumps With 4 Way Valves:** Are used to power double-acting cylinders.

ALUMINUM HAND PUMPS



- **Aluminum Hand Pumps:** The perfect choice when a light weight pump is required. The alloy construction resists corrosion and stands up to heat, welding sparks and other environments whereas composite pumps may not be suited.

SPECIALTY HAND PUMPS



- **Specialty Hand Pumps:** Are perfect for OEM applications or as emergency backup pumps. The pumps were designed to fit in tight spaces and are ideal for fixed bolt down applications.

-sizing the proper hand pump to your cylinder

Once you have selected your cylinder, find the required reservoir capacity in the cylinder specification chart, and choose a hand pump with at least 10% more reservoir capacity per cylinder.

EXAMPLE

An R-256 cylinder (page 12) has a required oil capacity of 32.2 cu. in. The P-42 hand pump (page 36) with a reservoir capacity of 45 cu. in. can pump this cylinder to its full stroke. If two R-256 cylinders are to be raised, use a P-140 with a reservoir capacity of 180 cu. in. 1/4" I.D. hose requires .6 cu. in. oil per foot. 3/8" I.D. hose requires 1.3 cu. in. per foot.

TYPE OF CYLINDERS

Most hand pumps are designed to operate single-acting cylinders. Hand pumps with 4-way valves can operate double-acting cylinders.

QUICK REFERENCE CHART

Use this chart to match the appropriate size hand pump to your single-acting Simplex cylinders. Match your cylinder capacity (across the top) with the cylinder strokes listed (in the left hand column). The intersecting box will give you the recommended hand pump for general applications.

CYLINDER STROKE (in)	CYLINDER CAPACITY (TONS)										
	5 Ton	10 Ton	15 Ton	20 Ton	25 Ton	30 Ton	50/55 Ton	60 Ton	75 Ton	100 Ton	150 Ton
1	P41/P71	P41/P71		P41/P71	P42/P72	P42/P72	P42/P72		P42/P72	P42/P72	P42/P72
2		P42/P72	P42/P72	P42/P72	P42/P72	P42/P72	P42/P72			P82-P140	P140
3	P41/P71							P82-P140			
4		P42/P72	P42/P72		P42/P72						
5	P42/P72										
6		P42/P72	P42/P72		P42/P72	P82-P140	P82-P140		P82-P140	P230	P230
7	P42/P72										
8		P42/P72	P42/P72		P82-P140	P82-P140				P230	P300
9	P42/P72										
10		P42/P72	P42/P72		P82-P140					P230	P461
12		P42/P72			P82-P140						
13							P230				
14		P42/P72	P82-P140		P82-P140						

For higher speeds, use power pumps to operate multiple cylinder systems or long stroke cylinders over 50 tons.

HAND PUMP/CYLINDER SPEED CHART

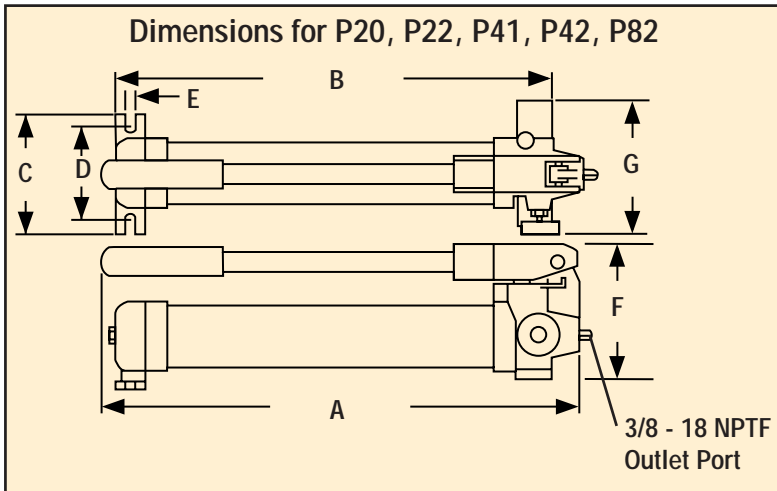
Use this chart to determine the number of full pump handle strokes required to extend a Simplex cylinder 1". You may take handle stroke per inch and multiply it by the cylinder stroke to determine the number of strokes required to fully extend the cylinder.

HAND PUMP MODEL NO.	STROKES PER 1 in. OF CYLINDER TRAVEL	CYLINDER CAPACITY (TONS)									
		5 Ton	10 Ton	15 Ton	20 Ton	25 Ton	30 Ton	50/55 Ton	60 Ton	75 Ton	100 Ton
P41/P71	NO LOAD	7	15	21	31	34	43	73	88	106	137
	LOAD	7	15	21	31	34	43	73	88	106	137
P20/P42/P32/P82	NO LOAD	2	3	4	6	7	8	14	17	20	26
	LOAD	7	15	21	31	34	43	73	88	106	137
P72/P30	NO LOAD	2	3	4	6	7	8	13	16	18	23
	LOAD	7	15	21	31	34	43	73	88	106	137
P140/P300	NO LOAD	1	1	2	2	2	3	5	5	6	8
	LOAD	4	10	14	22	22	27	46	58	66	86
P230/P461	NO LOAD	1	1	1	1	1	1	2	2	2	3
	LOAD	3	8	11	16	18	22	38	45	54	70

Simplex Hand Pumps Are Light Weight & Easy To Use.



- 5 Models for maximum versatility.
- Light weight for maximum portability.
- All metal construction for durability.
- Carrying handles for easy pick-up.
- External adjustable relief valve.
- Low handle effort for easy operation.
- Single or two speed models.
- 3/8" NPTF outlet ports.



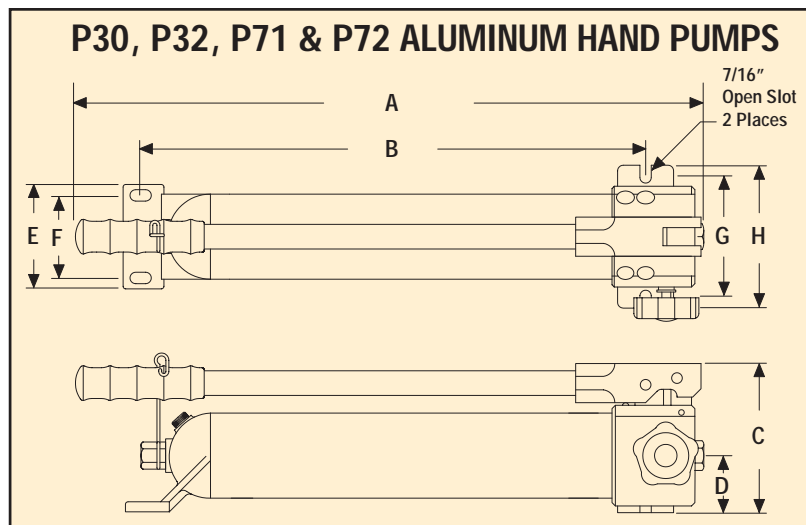
Simplex hand pumps can power a wide variety of hydraulic cylinders and tools. Light weight and portable, yet heavy duty, Simplex hand pumps are perfect for every manual pump application.

Light Weight Hand Pumps For Single-Acting Cylinders

Model Number	Speed	Pressure Rating (PSI)	Oil Volume Per Stroke (cu. in.)	Usable Oil Capacity (cu. in.)	A (in)	B (in)	C (in)	D (in)	E Slot Size (in)	F (in)	G (in)	Weight (lbs)
P20	2	1 Stage 200	.82	20	13	11 1/2	2 5/8	1 1/2	19/32	5 3/4	4 3/4	10
		2 Stage 2850	.16									
P22	2	1 Stage 200	.23	45	13 1/2	11 1/2	2 5/8	1 1/2	19/32	5 3/4	5 3/4	18
		2 Stage 10,000	.06									
P41	1	10,000	.16	45	23	21 3/4	5	---	---	5 3/4	5 3/4	18
P42	2	1 Stage 200	.82	45	23	21 3/4	5	---	---	5 3/4	5 3/4	18
		2 Stage 10,000	.16									
P82	2	1 Stage 200	.82	145	23	17 1/2	5 1/2	5	1/2	6 5/8	5 3/4	24
		2 Stage 10,000	.16									



- 5 standard models in 30 and 70 cu. in. reservoir capacity.
- P30 is ideal for low pressure applications when a small light weight pump is required.
- Lever bar fastens for use as carrying handle.
- 25% faster per stroke than comparative pumps means less work for the operator.
- Low handle effort for easy operation.
- All alloy construction resists corrosion.
- 3/8" NPTF outlet ports.
- Complies with ANSI/ASME B30.1 safety standards.
- Weighing just 9 lbs. with a full 70 cu. in. of usable oil gives the P71 & P72 the highest available capacity at the least amount of weight.



Silver Lite Aluminum Hand Pumps For Single-Acting Cylinders

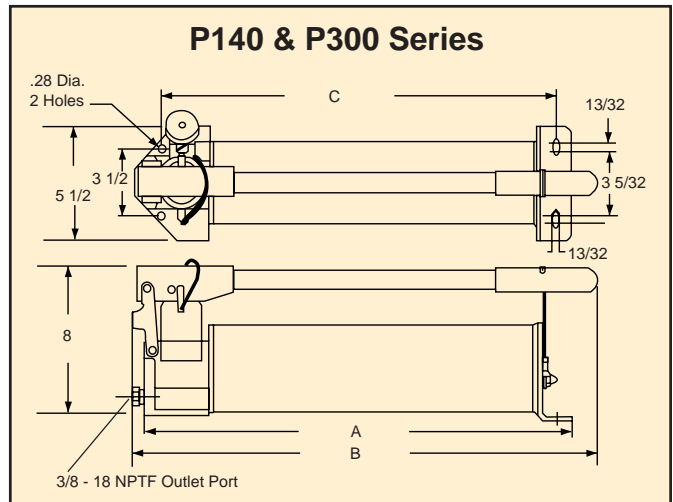
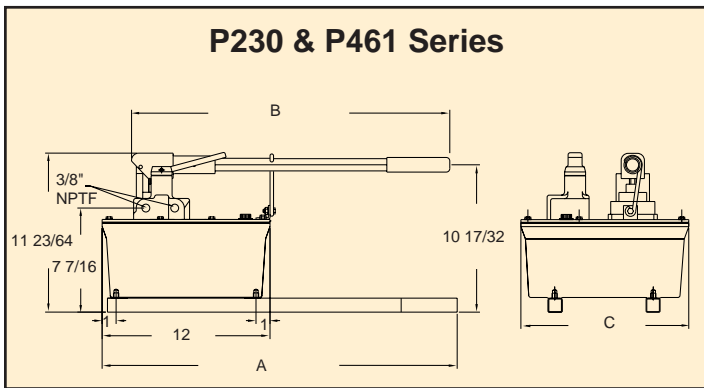
Model Number	Speed	Pressure Rating (PSI)	Oil Volume Per Stroke (cu. in.)	Usable Oil Capacity (cu. in.)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	Weight (lbs)
P30	2	1 Stage 200	.91	30	16.46	11.81	5.55	2	4.41	3.19	4.56	5.50	8
		2 Stage 3000	.19										
P32	2	1 Stage 200	.82	70	24.09	19.44	5.55	2	4.41	3.19	4.56	5.50	9
		2 Stage 10,000	.16										
P71/P71V*	1	10,000	.19										
P72	2	1 Stage 200	.91	70	24.09	19.44	5.55	2	4.41	3.19	4.56	5.50	9
		2 Stage 10,000	.19										

*P71V is equipped with Viton seals.

Simplex Hand Pumps Set New Safety & Performance Standards.



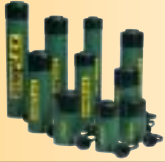


- 8 Models.
- Low, back saving handle effort.
- High displacements of oil per stroke.
- Adjustable handle effort / dual pivot points.
- Heavy duty, all metal construction for durability.
- Handle latch for easy carrying.
- Large, easy fill reservoirs.
- External adjustable relief valves.



Two Speed Hand Pumps For Single & Double Acting Cylinders

Model Number	Type of Cyl.	Pressure Rating (PSI)	Oil Volume Per Stroke (cu in)	Usable Oil Capacity (cu in)	A (in)	B (in)	C (in)	Weight (lbs)
P140	Single Acting	1 Stage 400 2 Stage 10,000	2.8	180	24 13/16	27 1/4	23 5/16	26
P300			.24	300	28 1/2	31	26 1/2	37
P230			7.7	230	25 3/8	22 3/4	9	49
P461			.3	460		12	61	
P140D	Double Acting	1 Stage 400 2 Stage 10,000	2.8	180	29 1/2	31 1/2	23 5/16	30
P300D			.24	300	32 11/16	34 11/16	26 1/2	41
P230D			7.7	230	25 3/8	22 3/4	9	49
P461D			.3	460		12	61	

Simplex combined high flows and low handle efforts in these larger, high performance hand pumps. Low handle efforts and fast advance are achieved through an adjustable handle pivot. In the normal setting, these pumps supply maximum flow, reducing the number of required handle strokes. For tough jobs at maximum pressure, **adjust the pivot point and reduce the handle effort by 30%. (P140 and P300 Series only).**

		
Hydraulic Cylinders pgs. 11-30	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72

NO JOB IS TOO TOUGH FOR SIMPLEX HEAVY DUTY HAND PUMPS



When US recovery teams needed to dismantle and remove a downed US Navy EP-3 surveillance plane from Hainan Island, China, they used Simplex P140 hand pumps and 50 ton cylinders. "We had a short time frame to complete a large job; Simplex hand pumps and cylinders gave us the speed and power we needed to get the job done."

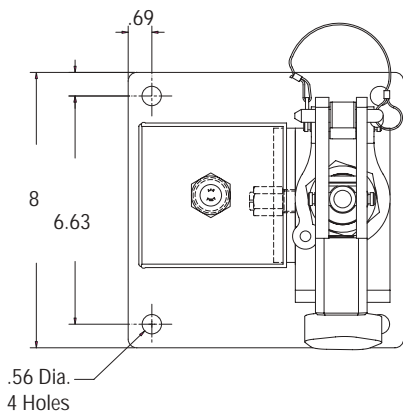
Place Them Into Hydraulic Systems, Or Use Them As Standby Or Back-Up Pumps.

For those special applications that require **tight mounting space, backup manual power or lower pressure & high flows**, these special hand pumps are what you've been looking for. Ideal for fixed applications when pumps need to be bolted in place. The P-160A Series fits in an 8" x 8" space, yet still delivers 148 cu in. of oil.

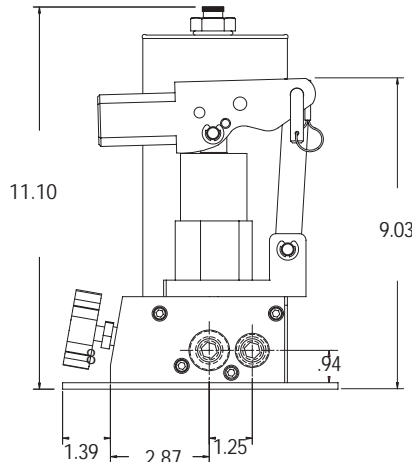
The P-1000A Series can be tapped into existing system reservoirs. **All metal construction**, plated pistons, light weight and high flow make these pumps the right choice for long life and trouble free duty. **All pumps have 3/8" NPTF ports.**

Special Application Hand Pumps

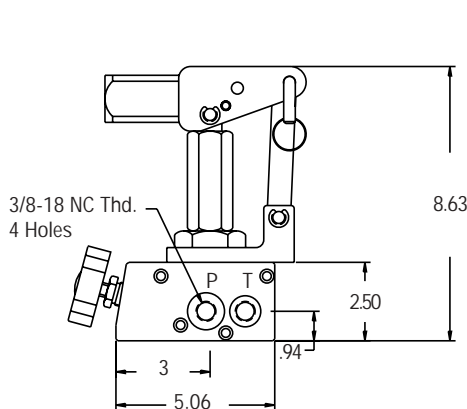
Model Number	Usable Reservoir Capacity (cu. in.)	Operating Pressure (PSI)	Volume/Stroke (cu. in.)	Maximum Handle Effort (lbs)	Weight (lbs)
P1603A	148	12,000	.30	119	20
P1604A	148	6,500	.53	116	20
P1606A	148	3,000	1.33	119	20
P10003A	----	12,000	.30	119	9
P10004A	----	6,500	.53	116	9
P10006A	----	3,000	1.33	119	9
P10008A	----	1,000	2.11	106	11
P100012A	----	750	4.56	79	11



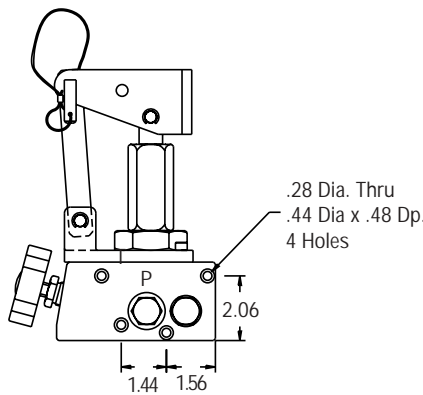
P160A Series



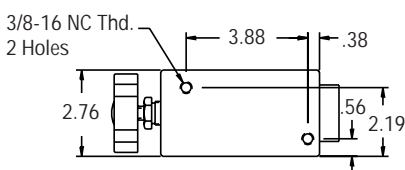
P1604A



P1000A Series



P10003A



THE SIMPLEX POWER PUMP



THE SIMPLEX PLUS

■ Wide Variety

Simplex offers more pump models, motor selections, valve styles, reservoir sizes, accessories & controls to meet your everyday needs.

■ Maximum Flexibility

Adjustable pressure relief valves for variable pressure settings, plus many interchangeable control valves and reservoirs for a wide range of applications. **Dual Voltage & Dual Hertz** electric motors for applications requiring alternate power sources.

■ Built for Long Life & Continuous Duty

Unified "Clydesdale" chassis provides high strength, fewer potential leak points and solid construction for severe duty.

■ High Performance/Fast Cycle Times

Crossover pressure up to 2,000 psi. Provides high, first stage flows well into the work cycle. This extra power provides higher speeds in **Prestressing, Bending, Crimping, Compressing & Post-Tensioning** applications.

■ Cool Running & Dependable Performance

High first stage performance is achieved through field proven **Gear Pump** technology. In addition to gear pumps, an unloading valve passes **full power** to the second stage once crossover pressure is reached. No power is lost and less heat is generated.

■ Quiet Operation

Low motor RPM, **internally lubricated bearings**, and close coupled motor mounting make these pumps among the quietest on the market. (Approximately 80dBA at 10,000 psi.)

■ Starts Under Full Load/Runs on Reduced Voltage

Simplex pump motors run well within their recommended duty factors **drawing less amps, creating less heat, and lasting longer** than competitive pump motors.

■ What Is SUC-O-MATIC™

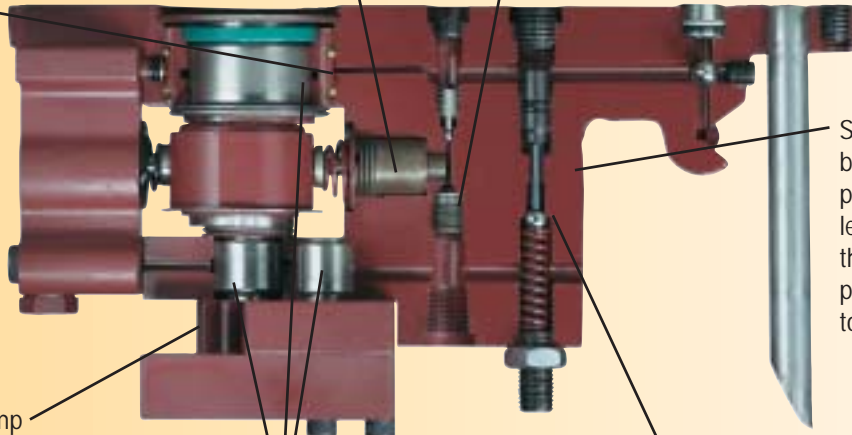
A feature that draws oil out of any single-acting cylinder. In the retract position, SUC-O-MATIC™ pumps generate a 12 psi vacuum that fully retracts any single-acting load return cylinder automatically, and provides faster retraction of spring return cylinders.

CLYDESDALE TECHNOLOGY IS THE HEART OF ALL SIMPLEX PUMPS!

Only Simplex Clydesdale pumps incorporate an oiler system that sprays the upper unit with oil, and keeps critical components lubricated and running cool, especially when most of the reservoir oil is being used at the tool.

Sleeved piston bores allow easy replacement of precision components without replacing the entire pump body.

High pressure ball seats are designed as replaceable cartridges rather than machined into the body. Worn or damaged seats can be easily replaced without replacing the body.



Solid one piece pump body with internal flow paths eliminates potential leak points caused by threaded fittings, high pressure tubing and bolt together pump bodies.

High efficiency gear pump provides more first stage flow, and higher crossover pressures. Field proven gear pumps run cooler and last longer and are proven to provide years of trouble free service.

Four full size, full complement bearings add life & efficiency while contributing to cool & quiet running.

Unloading valve passes full power to the second stage at crossover. No power is lost holding relief valves open & less heat is generated.

The Clydesdale Plus

Power Pump Speed Selection Chart

Simplex pumps are the world's only 10,000 psi pumps to offer a new standard in pump construction and reliability. Close coupled motor and the one piece Clydesdale chassis combine to offer a rigid unit with minimal flex and wear characteristics. Traditional pumps consist of various components bolted together, and are more susceptible to internal leakage, overheating and expensive repair.

The Clydesdale chassis, field proven gear pumps, replaceable piston bores and ball seats, higher crossovers, and quality motors are just a few of the extras incorporated in all Simplex pumps.

Use the speed chart below and select the right size pump to obtain the cylinder speed you desire.

For multiple cylinder system speeds, divide the inches per minute by number of cylinders in the system.

Cylinder Capacity (Tons)	Inches Per Minute					
		10 Series	20 Series	40/70 Series	50 Series	60 Series
10	Loaded	9	9	24	45	76
	Unloaded	104	169	169	290	290
20/25	Loaded	4	4	10	20	33
	Unloaded	50	75	75	132	132
30	Loaded	3	3	8 1/2	16	26
	Unloaded	39	60	60	104	104
50/55	Loaded	2	2	5	9	15
	Unloaded	23	35	35	61	61
60/75	Loaded	1 1/2	1 1/2	3 1/2	6	10
	Unloaded	16	24	24	43	43
100	Loaded	1	1	3	5	8 1/2
	Unloaded	13	19	19	34	34
150	Loaded	1/2	1/2	1 3/4	3	5
	Unloaded	7	11	11	20	20
200	Loaded	3/8	3/8	1	2	4
	Unloaded	5	8	8	15	15



$$\frac{\text{Inches Per Minute}}{60} = \text{Cylinder Speed In Seconds}$$

PORTABLE & LIGHT WEIGHT ELECTRIC PUMPS



- **Crimping, Cutting, Pressing, Punching & Bending** jobs are performed quickly and easily using 10 or 20 Series dump pumps. The motor runs only in the advancing cycle; spring return cylinders automatically retract when work is complete and motor is switched off.

HEAVY DUTY ELECTRIC PUMPS



- **Multiple Cylinder System, Heavy Lifting, High Tonnage and Large Positioning Jobs** that require **advance, hold and retract** operation are no challenge for 40, 50 & 60 Series pumps equipped with standard manual or solenoid valves.

RUGGED CONSTRUCTION SITE PUMPS



- **Construction Sites, Ship Yards, Railroads and Other Field Applications** require portable pumps that start and run on less than ideal power conditions. The 70 Series pump incorporates a powerful 1.5 HP Permanent Magnet motor that will start under full load and run reliably on long extension cords & reduced voltage. This is the new standard for construction applications.

PRODUCTION PUMPS



- **Production Assembly Lines** are no place for light duty pumps. Add optional **remote control and filtration** to the 70 Series & you have a pump that can take whatever heavy industry can dish out.
- **Clamping, Holding, Lifting, Positioning & Lowering** applications or any job that requires **advance, hold & retract** operations are perfect for 40 or 70 Series pumps equipped with the standard manual or solenoid valves.

GASOLINE MOTOR PUMPS



- **Outdoor Jacking Systems** that require high performance, large oil reservoirs and full control capabilities are ideal applications for PGM Series pumps. Add Simplex 4 port manifolds, pressure gauges or any of a wide variety of Simplex hydraulic accessories, and you are ready to power the largest systems.



PEM1021

LIGHT WEIGHT AND ECONOMICAL



The Simplex Pow'r-Buddy™ easily provides hydraulic power to this nut splitter during routine maintenance of heat treating equipment. "Our crews have to move this equipment all around the plant; the Simplex Pow'r-Buddy™ is easy to carry and never lets us down."

- 4 standard models.
- Two-speed operation provides fast advance.
- Light weight, only 30 lbs., & compact design.
- Adjustable relief for variable pressure settings.
- Integrated handle for easy pick-up.
- 12 VAC pendant with 10' cord for user safety.
- 115 VAC 50/60Hz cycle universal motor.
- Starts under full load & runs on as low as 60 VAC.
- Ideal for use with long extension cords.
- Ideal for use with smaller hydraulic cylinders or tools.
- Integrated gauge port for 2 way valves.
- 2 position valve includes auto retract feature on PED1021 only.

PE-10 Series 0.5 HP Electric Powered Pumps - 10,000 psi capacity




	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate	Weight (lbs)
			Model	Style	Function			
D/A Single-Acting	PEM1001	1	Dump	Auto Retract		Advance/Retract	250 cu. in. @200 PSI	30
	PEM1021		VP2	2 Position 2 Way	Manual			32
	PEM1031		VP3	3 Position 3 Way		Adv./Hold/Retract	19 cu. in. @10,000 PSI	
	PEM1041		VP4	3 Position 4 Way				

Pow'r-Buddy pumps for single-acting cylinders come standard with motor pendant switch.

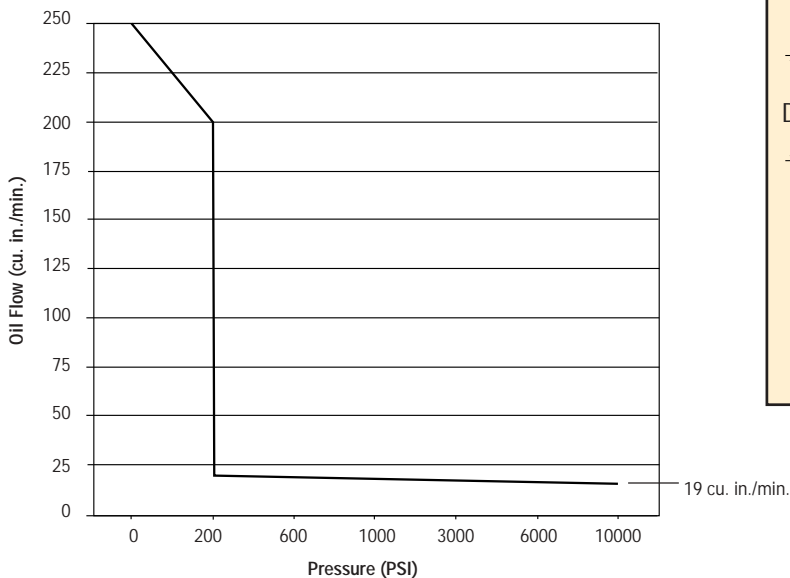


At home on any construction site, the Pow'r-Buddy™ starts and runs reliably on long extension cords. This rebar bending application is no challenge for the Simplex industrial grade pump design. "Easy to carry and simple to use, the Pow'r-Buddy™ helps us through tough construction jobs without problems."

The new Pow'r-Buddy™ is the perfect pump when light weight and easy carrying is desired. The Pow'r-Buddy™ is recommended to power all small and medium sized tools. The universal motor is well suited to start and run reliably on long extension cords and portable generators.

		
35 Ton Portable Punch pg. 76	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72

PERFORMANCE CHART

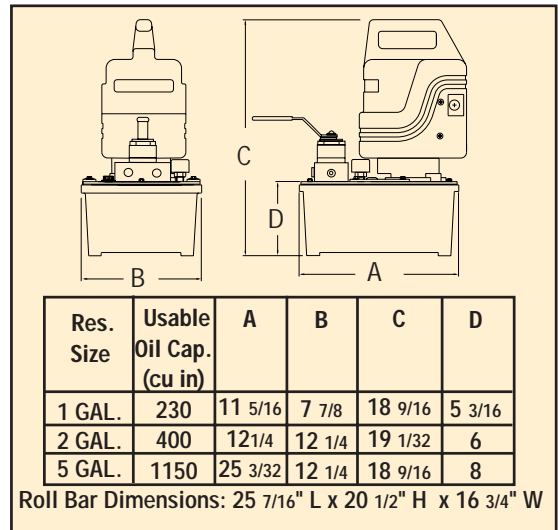


Res. Size (Gal.)	Usable Oil Cap. (cu. in.)	Oil Fill Cap. (cu. in.)	A (in)	B (in)	C (in)	D (in)
1	230	230	10.52	8.08	15.95	5.25



PEM2022

- 16 standard models.
- Rated for continuous duty.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation provides fast advance.
- Higher crossover for faster cylinder cycle.
- Starts under full load.
- Runs reliably on long extension cords.
- Maximum amperage draw 10 amps.
- Adjustable relief for variable pressure settings.
- Dual ports for easier plumbing.
- Quiet Running (80dBA).
- All dump pumps come standard with motor pendant switch with 20' cord.



Hydraulic Cylinders pgs. 11-30	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72

PE-20 Series 0.5 HP Electric Powered Pumps - 10,000 psi capacity

	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate @ 115 VAC	Weight (lbs)	
			Model	Style	Function				
Single-Acting	PED2001	1	Dump	Auto Retract	Remote Actuated	0.5 HP Single Phase Permanent Magnet 115 VAC 50/60 Hz 10 amps at 10,000 PSI	400 cu. in. @600 PSI	56	
	PED2002	2	Dump					64	
	PEM2021	1	VP2	Standard	2 Position 2 Way			Manual Lever Actuated	56
	PEM2022	2	VP2						64
	PEM2031	1	VP3*	Locking	3 Position 3 Way			Remote Solenoid Actuated	62
	PEM2032	2	VP3*						70
	PEM2052	2	VPL3*	Standard	3 Position 4 Way			Manual Lever Actuated	71
	PES2031	1	VPS3*						66
	PES2032	2	VPS3*						73
Double-Acting	PES2052	2	VPSL3*	Locking	Remote Solenoid Actuated	20 cu. in. @10,000 PSI	74		
	PEM2041	1	VP4	Standard	Manual Lever Actuated	10 amps at 10,000 PSI	@10,000 PSI	62	
	PEM2042	2	VP4					70	
	PEM2062	2	VPL4	Locking	Remote Solenoid Actuated			71	
	PES2041	1	VPS4	Standard				66	
	PES2042	2	VPS4		73				
PES2062	2	VPSL4	Locking	74					

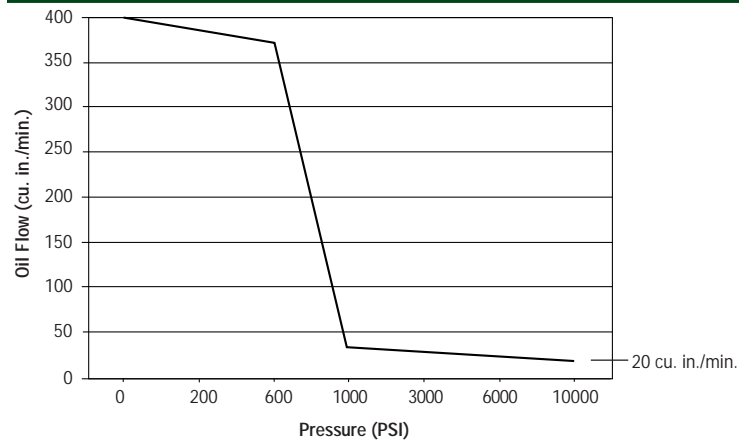
For more information on valve models, see pages 63-67.

* Includes Suc-O-Matic.



Ship repair demands durable and reliable tools. This Simplex 20 Series pump provides trouble free hydraulic power to a variety of hydraulic cylinders, spreaders and tools. "Shipyards are no place for cheap, second rate pumps; Simplex tools never let us down."

PERFORMANCE CHART



20 SERIES POWER PUMP OPTIONS

PUMP CONTROL DEVICES



- PPM - Motor Control Pendant
 - PES - Valve Directional Control Pendant
 - PPS - Motor Control & Valve Directional Control Pendant (dual switches)
- All pendants include 20' cord.



- PFM - Motor Control Foot Switch
- Includes 20' cord.

PUMP PROTECTION



- P03 - Roll Bars
- For 1, 2 & 5 gallon reservoirs only. Order (1) under Options in the Custom Build Chart.



- P04 - External filter for pumps with 3 & 4 way valves.
- Order (4) under Options in the Custom Build Chart. Replacement filter elements, use order number P05E.

ALL PUMP OPTIONS ARE FACTORY INSTALLED

CUSTOM BUILD

Using the chart below you can add roll bars, different size reservoirs or other options.

Description	Model	Selections
Product	P	Power Pump
Motor Control Options	E	E = No Options P = Pendant Switch F = Foot Switch
Valve Style	S	D = Dump S = Solenoid M = Manual
Pump Series	2	0.5 HP, 115VAC 50/60 Hz, Permanent Magnet Motor
Options	1	0 = No Options 4 = Filter only 1 = Roll Bars only 5 = Roll Bars & Filter
Valve Type	3	0 = Dump 4 = 4 Way 3 Position 2 = 2 Way 2 Position 5 = 3 Way Locking Style 3 = 3 Way 3 Position 6 = 4 Way Locking Style
Reservoir Size	2	1 = 1 Gallon 5 = 5 Gallon 2 = 2 Gallon
Motor Voltage		Blank = 115 VAC Single Phase A = 230 VAC Single Phase



PPS4032

Quiet running 1725 RPM motors are perfect for in house production jobs. Dual voltage, dual amp induction motors fit a wide variety of applications.

- 14 standard models.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation provides fast advance.
- Higher crossover for faster cylinder cycle.
- Dual voltage 115/230 VAC 50/60 Hz Motor.
- Motor starts under full load.
- Runs reliably on 20 amp circuits.
- Maximum amperage draw 17 amps at 115 VAC.
- Adjustable relief for variable pressure settings.
- Dual ports for easier plumbing.
- Quiet running (80dBA).
- Optional dump pumps come standard with motor pendant switch with 20' cord.

Res. Size	Usable Oil Cap. (cu in)	A	B	C	D
2 GAL.	400	12 1/4	12 1/4	20 5/16	5 51/64
5 GAL.	1150	19 5/8	12 1/4	19 23/32	8
10 GAL.	2300	19 5/8	12 1/4	23 19/32	12 1/2
20 GAL.	4600	19 5/8	23 1/2	23 11/16	12 1/2

Roll Bar Dimensions: 25 7/16" L x 20 1/2" H x 16 3/4" W

Hydraulic Cylinders pgs. 11-30	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72

PE-40 Series 1.5 HP Electric Powered Pumps - 10,000 psi capacity

	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate @ 115 VAC	Weight (lbs)		
			Model	Style	Function					
Single-Acting	PEM4022	2	VP2	2 Position 2 Way	Manual Lever Actuated	1.5 HP Single Phase Induction Motor 115/230 VAC 50/60 Hz 17 amps at 10,000 PSI (Factory Wired @ 115 VAC)	400 cu. in. @1,200 PSI	66		
	PEM4025	5	VP2					124		
	PEM4032	2	VP3*	3 Position 3 Way	Remote Solenoid Actuated			71		
	PEM4035	5	VP3*					129		
	PEM4055	5	VPL3*					Locking	130	
	Double-Acting	PES4032	2	VPS3*	Standard			Advance/ Hold/ Retract	55 cu. in. @10,000 PSI	73
		PES4035	5	VPS3*						131
PES4055		5	VPSL3*	Locking	132					
PEM4042		2	VP4	Standard	Manual Lever Actuated	71				
PEM4045		5	VP4			129				
PEM4065		5	VPL4	Locking	130					
PES4042		2	VPS4	Standard	Remote Solenoid Actuated	73				
PES4045	5	VPS4	131							
PES4065	5	VPSL4	Locking			132				

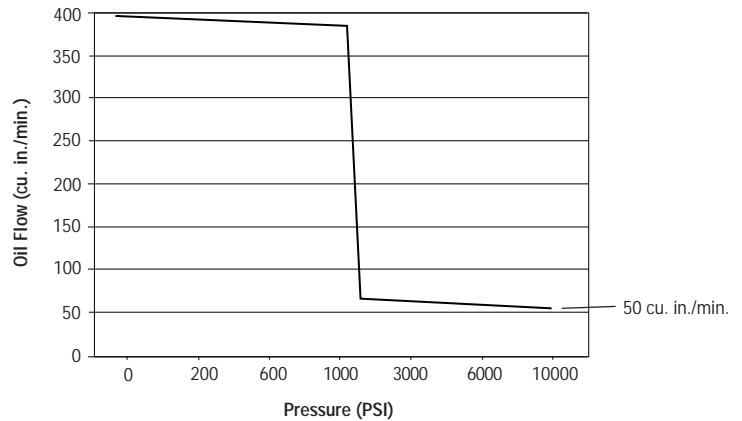
For more information on valve models, see pages 63-67.

* Includes Suc-O-Matic.



This 40 Series Simplex pump is standard equipment on this large concrete processing machinery. "Our customers can't afford downtime regardless of conditions at the job site." The Simplex 40 Series is a cool, quiet running pump that is the perfect choice for larger applications that require maximum dependability.

PERFORMANCE CHART



CUSTOM BUILD

Using the chart below you can add roll bars, different size reservoirs or other options.

Description	Model	Selections
Product	P	Power Pump
Motor		
Control Options	E	E = No Options P = Pendant Switch F = Foot Switch
Valve Style	S	S = Solenoid M = Manual D = Dump
Pump Series	4	1.5 HP, 115/230 VAC 50/60 Hz, Induction Motor
Options	1	0 = No Options 4 = Filter only 1 = Roll Bars only 5 = Roll Bars & Filter 2 = Heat Exchanger & Filter 3 = Roll Bars Plus Heat Exchanger & Filter
Valve Type	3	3 = 3 Way 3 Position 6 = 4 Way Locking Style 4 = 4 Way 3 Position 5 = 3 Way Locking Style
Reservoir Size	5	2 = 2 Gallon 6 = 10 Gallon 5 = 5 Gallon 7 = 20 Gallon
Motor Voltage		Blank = 115 VAC Single Phase A = 230 VAC Single Phase

40 SERIES POWER PUMP OPTIONS

PUMP CONTROL DEVICES



- PPM - Motor Control Pendant
 - PES - Valve Directional Control Pendant
 - PPS - Motor Control & Valve Directional Control Pendant (dual switch)
- All pendants include 20' cord.



- PFM - Motor Control Foot Switch
- Includes 20' cord.

PUMP PROTECTION



- P03 - Roll Bars
- For 1, 2 & 5 gallon reservoirs only. Order (1) under Options in the Custom Build Chart.



- P04 - Heat Exchanger & Filter.
- Order (2) under Option in the Custom Build Chart. Replacement Filter, order number PO5E.

ALL PUMP OPTIONS ARE FACTORY INSTALLED



PEM7042

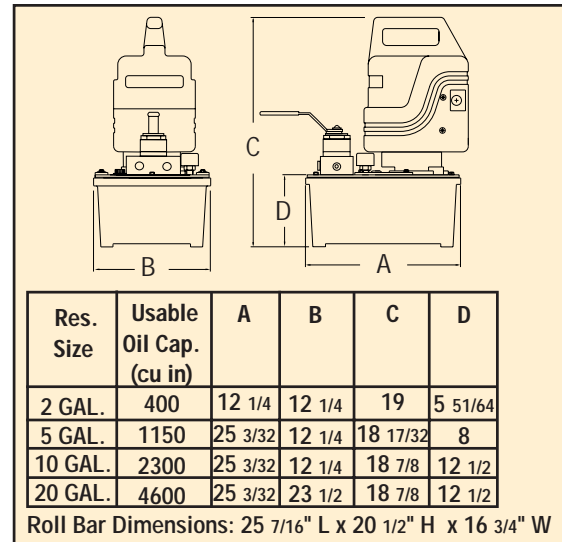
- 14 standard models.
- Permanent magnet motor.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation provides fast advance.
- Higher crossover for faster cylinder cycle.
- Starts under full load.
- Runs reliably on long extension cords.
- Maximum amperage draw 17 amps.
- Adjustable relief for variable pressure settings.
- Dual ports for easier plumbing.
- Available with optional roll bars.
- Quiet running (80dBA).
- Optional dump pumps come standard with motor pendant switch with 20' cord.



Hydraulic Cylinders
pgs. 11-30

Hoses
pgs. 70-71

Accessories & Fittings
pgs. 68-72



PE-70 Series 1.5 HP Electric Powered Pumps - 10,000 psi capacity

	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate @ 115 VAC	Weight (lbs)		
			Model	Style	Function					
Single-Acting	PEM7022	2	VP2	2 Position 2 Way	Manual Lever Actuated	1.5 HP Single Phase Permanent Magnet 115 VAC 50/60 Hz 17 amps at 10,000 PSI	400 cu. in. @ 1,200 PSI	66		
	PEM7025	5	VP2					124		
	PEM7032	2	VP3*	3 Position 3 Way	Remote Solenoid Actuated			71		
	PEM7035	5	VP3*					129		
	PEM7052	2	VPL3*					Locking	130	
	Double-Acting	PES7032	2	VPS3*	Standard			Remote Solenoid Actuated	50 cu. in. @10,000 PSI	73
		PES7035	5	VPS3*						131
PES7052		2	VPSL3*	Locking	73					
PEM7042		2	VP4	Standard	Manual Lever Actuated	71				
PEM7045		5	VP4			129				
PEM7062		2	VPL4	Locking	73					
PES7042		2	VPS4	Standard	Remote Solenoid Actuated	73				
PES7045	5	VPS4	131							
PES7062	2	VPSL4	Locking			73				

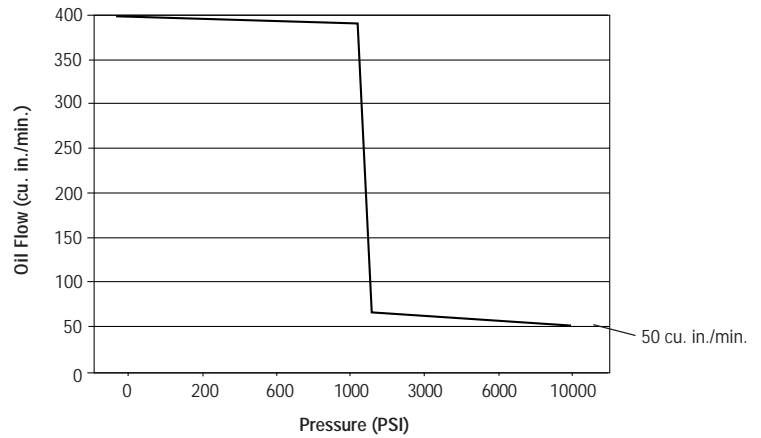
For more information on valve models, see pages 63-67.

* Includes Suc-O-Matic.



Simplex 70 Series pump & 50 ton flat jack cylinders makes easy work of bridge lifting. "We had to make complete bearing change outs on 90 bridges along Interstate 80. The Simplex 70 Series pump with its permanent magnet motor just kept running even with long extension cord and portable generator power."

PERFORMANCE CHART



70 SERIES POWER PUMP OPTIONS

PUMP CONTROL DEVICES



- PPM - Motor Control Pendant
 - PES - Valve Directional Control Pendant
 - PPS - Motor Control & Valve Directional Control Pendant (dual switch)
- All pendants include 20' cord.



- PFM - Motor Control Foot Switch
- Includes 20' cord.

PUMP PROTECTION



- P03 - Roll Bars
- For 1, 2 & 5 gallon reservoirs only. Order (1) under Options in the Custom Build Chart.



- P04 - Heat Exchanger & Filter.
- Order (2) under Option in the Custom Build Chart. Replacement Filter, order number PO5E.

- Pressure Switch
- Order (6) under Option in the Custom Build Chart.

ALL PUMP OPTIONS ARE FACTORY INSTALLED

CUSTOM BUILD

Using the chart below you can add roll bars, different size reservoirs or other options.

Description	Model	Selections								
Product	P	Power Pump								
Motor Control Options	E	E = No Options P = Pendant Switch F = Foot Switch								
Valve Style	S	S = Solenoid M = Manual D = Dump								
Pump Series	7	1.5 HP 115 VAC 50/60 Hz, Permanent Magnet Motor								
Options	0	<table border="0"> <tr> <td>0 = No Options</td> <td>4 = Filter only</td> </tr> <tr> <td>1 = Roll Bars only</td> <td>5 = Roll Bars & Filter</td> </tr> <tr> <td>2 = Heat Exchanger & Filter</td> <td>6 = Pressure Switch</td> </tr> <tr> <td>3 = Roll Bars Plus Heat Exchanger & Filter</td> <td>7 = Pressure Switch Plus Heat Exchanger & Filter</td> </tr> </table>	0 = No Options	4 = Filter only	1 = Roll Bars only	5 = Roll Bars & Filter	2 = Heat Exchanger & Filter	6 = Pressure Switch	3 = Roll Bars Plus Heat Exchanger & Filter	7 = Pressure Switch Plus Heat Exchanger & Filter
0 = No Options	4 = Filter only									
1 = Roll Bars only	5 = Roll Bars & Filter									
2 = Heat Exchanger & Filter	6 = Pressure Switch									
3 = Roll Bars Plus Heat Exchanger & Filter	7 = Pressure Switch Plus Heat Exchanger & Filter									
Valve Type	3	<table border="0"> <tr> <td>3 = 3 Way 3 Position</td> <td>6 = 4 Way Locking Style</td> </tr> <tr> <td>4 = 4 Way 3 Position</td> <td></td> </tr> <tr> <td>5 = 3 Way Locking Style</td> <td></td> </tr> </table>	3 = 3 Way 3 Position	6 = 4 Way Locking Style	4 = 4 Way 3 Position		5 = 3 Way Locking Style			
3 = 3 Way 3 Position	6 = 4 Way Locking Style									
4 = 4 Way 3 Position										
5 = 3 Way Locking Style										
Reservoir Size	5	<table border="0"> <tr> <td>2 = 2 Gallon</td> <td>6 = 10 Gallon</td> </tr> <tr> <td>5 = 5 Gallon</td> <td>7 = 20 Gallon</td> </tr> </table>	2 = 2 Gallon	6 = 10 Gallon	5 = 5 Gallon	7 = 20 Gallon				
2 = 2 Gallon	6 = 10 Gallon									
5 = 5 Gallon	7 = 20 Gallon									
Motor Voltage		Blank = 115 VAC Single Phase A = 230 VAC Single Phase								



PEM5045

- 12 standard models.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation for fast advance.
- Higher crossover for faster cylinder cycle.
- 3 HP / 3 phase dual voltage motors (230/460).
- Starter box standard on all models.
- Adjustable relief for variable pressure settings.
- Dual ports for easier plumbing.
- Quiet running (80dBA).

Res. Size	Usable Oil Cap. (cu in)	A	B	C	D	E
5 GAL.	1150	19 5/8	12 5/16	18 5/16	8	25 3/32
10 GAL.	2300	19 5/8	12 5/16	23 3/4	12 1/2	25 3/32
20 GAL.	4600	19 5/8	23 1/2	23 3/4	12 1/2	25 3/32

Hydraulic Cylinders pgs. 11-30	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72

PE-50 Series 3 HP Electric Powered Pumps - 10,000 PSI capacity

	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate	Weight (lbs)
			Model	Style	Function			
Single-Acting	PEM5035	5	VP3*	Standard	Manual Lever Actuated	3 HP Three Phase 230/460 volts 10 amps @ 230 volt	650 cu. in. @1,500 PSI	162
	PEM5036	10	VP3*					217
	PEM5056	10	VPL3*	Locking	3 Position 3 Way			218
	PES5035	5	VPS3*	Standard				Remote Solenoid Actuated
	PES5036	10	VPS3*		220			
	PES5056	10	VPSL3*	Locking	221			
Double-Acting	PEM5045	5	VP4	Standard	Manual Lever Actuated	3 HP Three Phase 230/460 volts 10 amps @ 230 volt	110 cu. in. @10,000 PSI	162
	PEM5046	10	VP4					217
	PEM5066	10	VPL4	Locking	3 Position 4 Way			218
	PES5045	5	VRS4	Standard				Remote Solenoid Actuated
	PES5046	10	VRS4		220			
	PES5066	10	VRSL4	Locking	221			

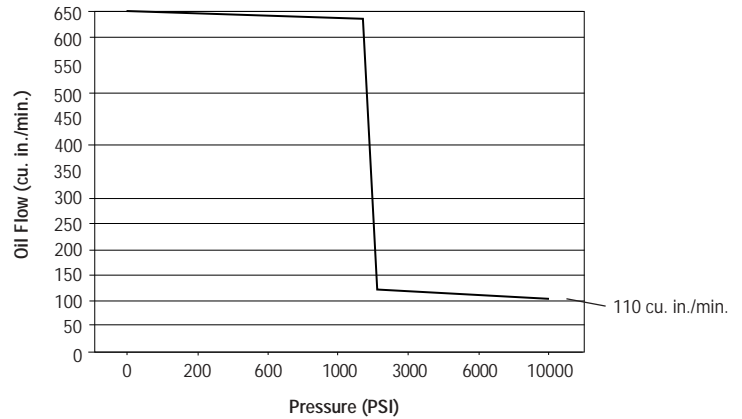
For more information on valve models, see pages 63-67.

* Includes Suc-O-Matic

PERFORMANCE CHART



Simplex 50 Series pump & high tonnage press are used for many different pressing jobs. "The Simplex pump has been running trouble free for over six years. This is some of the most reliable equipment we have in our shop."



3 HP 3 phase motor comes complete with thermal overload protection, motor starter and heater elements as standard equipment.

CUSTOM BUILD

Using the chart below you can add different size reservoirs or other options.

Description	Model	Selections
Product	P	Power Pump
Motor Control Options	E	E = No Options P = Pendant Switch F = Foot Switch
Valve Style	S	S = Solenoid M = Manual
Pump Series	5	3 HP, 230/460 VAC 3 Phase Motor/w Starter Box
Options	2	0 = No Options 2 = Heat Exchanger & Filter 4 = Filter only
Valve Type	3	3 = 3 Way 3 Position 5 = 3 Way Locking Style 4 = 4 Way 3 Position 6 = 4 Way Locking Style
Reservoir Size	5	5 = 5 Gallon 7 = 20 Gallon 6 = 10 Gallon
Motor Voltage*		Blank = 230 VAC Three Phase A = 460 VAC Three Phase

50 SERIES POWER PUMP OPTIONS

PUMP CONTROL DEVICES



- PPM - Motor Control Pendant
 - PES - Valve Directional Control Pendant
 - PPS - Motor Control & Valve Directional Control Pendant (dual switch)
- All pendants include 20' cord.



- PFM - Motor Control Foot Switch
- Includes 20' cord.

Pendant & foot switch options include starter box.

PUMP PROTECTION



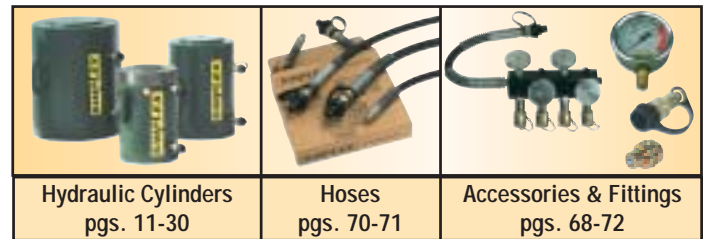
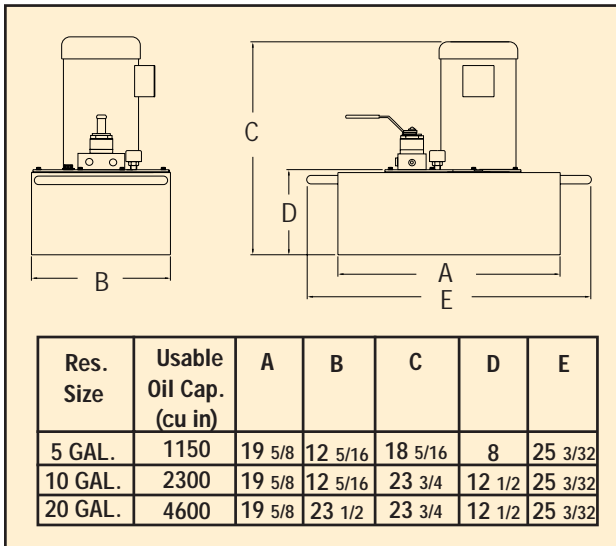
- P04 - Heat Exchanger & Filter.
- Order (2) under Option in the Custom Build Chart. Replacement Filter order, number P05E.

ALL PUMP OPTIONS ARE FACTORY INSTALLED



PES6045

- 8 standard models.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation fast advance.
- Higher crossover means faster cylinder cycle.
- 5 HP / 3 Phase dual voltage motors (230/460).
- Starter box standard on all models.
- Dual ports for easier plumbing.
- 138 bar crossover.
- Quiet running (80dBA).
- Adjustable relief for variable pressure settings.



PE-60 Series 5 HP Electric Powered Pumps - 10,000 psi capacity

	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate	Weight (lbs)		
			Model	Style	Function					
Sing.-Act	PEM6035	5	VP3*	Standard	3 Position 3 Way	Manual Lever	Advance/ Hold/ Retract	5 HP Three Phase 230/460 volts 13 amps @ 230 volt	650 cu. in. @2,000 PSI	162
	PEM6036	10	VP3*							217
	PES6035	5	VPS3*							165
	PES6036	10	VPS3*							220
Doub.-Act	PEM6045	5	VP4	Standard	3 Position 4 Way	Manual Lever	Advance/ Hold/ Retract	5 HP Three Phase 230/460 volts 13 amps @ 230 volt	175 cu. in. @10,000 PSI	162
	PEM6046	10	VP4							217
	PES6045	5	VPS4							165
	PES6046	10	VPS4							220

For more information on valve models, see pages 63-67.

* Includes Suc-O-Matic.

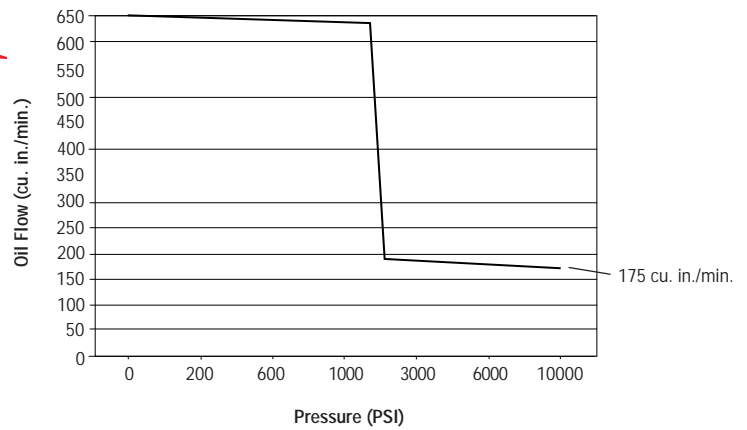


Simplex supplies custom cylinders with up to 1,500 ton capacities.

When one of the world's largest drag lines needed to be raised for roller replacement, the maintenance crew relied on the high tonnage expertise of Simplex. Weighing over 5,000 tons, this was no job for amateurs. "We used RDA50012 and PE60 Series pumps; Simplex provided all the hoses & valving, and the operation went flawlessly."

5 HP 3 phase motor comes complete with thermal overload protection, motor starter and heater elements as standard equipment.

PERFORMANCE CHART



CUSTOM BUILD

Using the chart below you can add different size reservoirs or other options.

Description	Model	Selections
Product	P	Power Pump
Motor Control Options	E	E = No Options P = Pendant Switch F = Foot Switch
Valve Style	S	S = Solenoid M = Manual
Pump Series	6	5 HP, 230/460 VAC 3 Phase Motor/w Starter Box
Options	2	0 = No Options 2 = Heat Exchanger & Filter 4 = Filter only
Valve Type	3	3 = 3 Way 3 Position 5 = 3 Way Locking Style 4 = 4 Way 3 Position 6 = 4 Way Locking Style
Reservoir Size	5	5 = 5 Gallon 7 = 20 Gallon 6 = 10 Gallon
Motor Voltage*		Blank = 230 VAC Three Phase A = 460 VAC Three Phase

60 SERIES POWER PUMP OPTIONS

PUMP CONTROL DEVICES



- PPM - Motor Control Pendant
 - PES - Valve Directional Control Pendant
 - PPS - Motor Control & Valve Directional Control Pendant (dual switch)
- All pendants include 20' cord.



- PFM - Motor Control Foot Switch
- Includes 20' cord.

Pendant & foot switch options include starter box.

PUMP PROTECTION



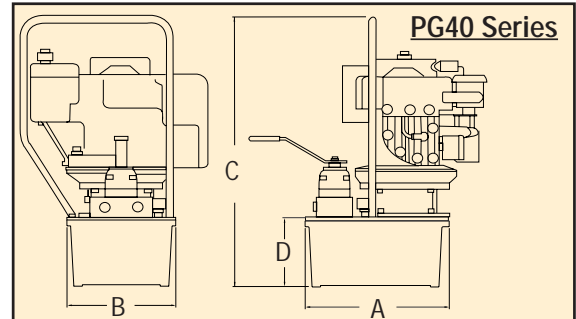
- P04 - Heat Exchanger & Filter.
- Order (2) under Option in the Custom Build Chart. Replacement Filter, order number PO5E.

ALL PUMP OPTIONS ARE FACTORY INSTALLED



PGM4042

- 16 standard models.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation provides fast advance.
- Higher crossover for faster cylinder cycle.
- 3.75 HP, 5.5 HP, 6 HP & 8 HP gas engines.
- Adjustable relief for variable pressure settings.
- Dual ports for easier plumbing.



Res. Size	Usable Oil Cap. (cu in)	A	B	C	D
2 GAL.	400	12 1/4	12 1/4	20 1/4	6
5 GAL.	1150	19 5/8	12 1/4	19 3/8	8
10 GAL.	2300	19 5/8	12 1/4	23 7/8	12 1/2
20 GAL.	4600	19 5/8	23 1/2	N/A	12 1/2

Roll Bar Dimensions: 25 7/16" L x 20 1/2" H x 16 3/4" W
(For 3.75 H.P. pumps only.)

Briggs & Stratton 3.75 HP	Honda 5.5 HP	Briggs & Stratton 6 HP	Tecumsa 8 HP

PG40 Series 3.75 HP, PGH50 Series 5.5 HP, PG60 Series 6 HP & PGT80 Series 8 HP Gasoline Powered Pumps - 10,000 PSI capacity

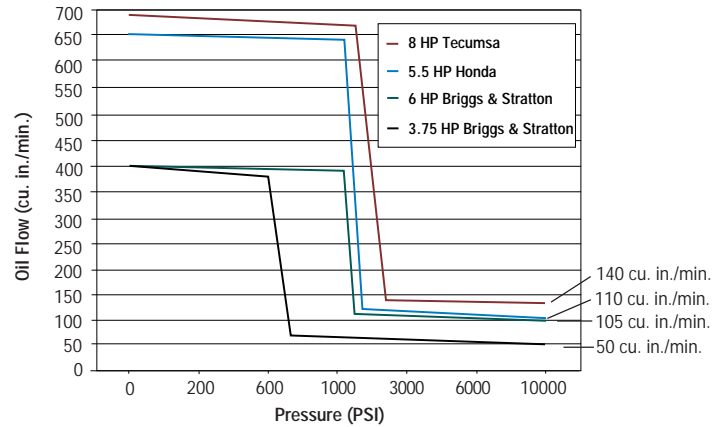
Model Number	Reservoir Size (Gal.)	Valve			Motor Type	Flow Rate	Weight (lbs)	
		Model	Style	Function				
PGM4032	2	VP3	Standard	Manual Lever	Briggs & Stratton 3.75 HP	400 cu. in. @ 600 psi 50 cu. in. @10,000 psi	53 108 53 108	
PGM4035	5	VP3						3 Position 3 Way
PGM4042	2	VP4						3 Position 4 Way
PGM4045	5	VP4						3 Position 3 Way
PGHM5032	2	VP3			3 Position 4 Way	Honda 5.5 HP	650 cu. in. @ 1200 psi 110 cu. in. @10,000 psi	68 123 68 123
PGHM5035	5	VP3			3 Position 3 Way			
PGHM5042	2	VP4			3 Position 4 Way			
PGHM5045	5	VP4			3 Position 3 Way			
PGM6032	2	VP3			3 Position 4 Way			
PGM6035	5	VP3			3 Position 3 Way			
PGM6042	2	VP4			3 Position 4 Way	Tecumsa 8 HP	680 cu. in. @1500 psi 140 cu. in. @10,000 psi	130 185 130 185
PGM6045	5	VP4			3 Position 3 Way			
PGTM8035	5	VP3			3 Position 4 Way			
PGTM8036	10	VP3			3 Position 3 Way			
PGTM8045	5	VP4			3 Position 4 Way			
PGTM8046	10	VP4						

For more information on valve models, see pages 63-67.
Contact Factory for 8 HP Dimensions.



PGHM5132

PERFORMANCE CHART



PGH50 Series

Res. Size	Usable Oil Cap. (cu in)	A	B	C	D
2 GAL.	400	12 1/4	12 1/4	22	6
5 GAL.	1150	19 5/8	12 1/4	24	8
10 GAL.	2300	19 5/8	12 1/4	28 1/2	12 1/2
20 GAL.	4600	19 5/8	23 1/2	28 1/2	12 1/2

Roll Bar Dimensions: 25 7/16" L x 20 1/2" H x 16 3/4" W

PG60 Series

Res. Size	Usable Oil Cap. (cu in)	A	B	C	D
2 GAL.	400	12 1/4	12 1/4	21	6
5 GAL.	1150	19 5/8	12 1/4	23	8
10 GAL.	2300	19 5/8	12 1/4	27 1/2	12 1/2
20 GAL.	4600	19 5/8	23 1/2	27 1/2	12 1/2

Roll Bar Dimensions: 25 7/16" L x 20 1/2" H x 16 3/4" W

CUSTOM BUILD

Using the chart below you can add roll bars, different size reservoirs or other options.

Description	Model	Selections
Product	P	Power Pump
Motor Controls	G	G = Gasoline Motor
Motor Type	M	Blank = Briggs & Stratton H = Honda T = Tecumsa
Valve Style	M	M = Manual D = Dump
Pump Series	4	4 = 3.75 HP 5 = 5.5 HP 6 = 6 HP 8 = 8 HP
Options	1	0 = No Options 4 = Filter only 1 = Roll Bars only 5 = Roll Bars & Filter**
Valve Type	3	2 = 2 Way 2 Position 5 = 3 Way Locking Style* 3 = 3 Way 3 Position* 6 = 4 Way Locking Style 4 = 4 Way 3 Position
Reservoir Size	5	2 = 2 Gallon 6 = 10 Gallon 5 = 5 Gallon 7 = 20 Gallon

* With Suc-O-Matic™

40, 50, 60 & 80 SERIES GAS POWER PUMP OPTIONS

PUMP PROTECTION



■ P03 - Roll Bars
For 1, 2 & 5 Gallon reservoirs only. Order (1) under Options in the Custom Build Chart.



■ P04 - External filter for pumps with 3 & 4 way valves. Order (4) under Options in the Custom Build Chart. Replacement filter elements, use order number PO5E.

ALL PUMP OPTIONS ARE FACTORY INSTALLED



PAM4042

Res. Size	Usable Oil Cap. (cu in)	A	B	C	D
2 GAL.	400	12 1/4	12 1/4	13 5/8	6
5 GAL.	1150	19 5/8	12 1/4	15 11/16	8
10 GAL.	2300	19 5/8	12 1/4	20 1/2	12 7/16
20 GAL.	4600	19 5/8	23 1/2	N/A	12 7/16

Roll Bar Dimensions: 25 7/16" L x 20 1/2" H x 16 3/4" W

- 6 standard models.
- Suc-O-Matic feature reduces retraction time.
- Two-speed operation provides fast advance.
- Higher crossover for faster cylinder cycle.
- Rotary air @ 50 cfm.
- Adjustable relief for variable pressure settings.
- Dual ports for easier plumbing.
- Available with remote air pendant control.
- Higher crossover for faster cycles.
- Large muffler for quieter operation.

PA-40 Series 1.5 HP Air Powered Pumps - 10,000 psi capacity

	Model Number	Reservoir Size (Gal.)	Valve			Motor Specifications	Flow Rate	Weight (lbs)	
			Model	Style	Function				
S/A	PAM4032	2	Standard	3 Position 3 Way	Manual Lever Actuated	Rotary Air 50 cfm 90 PSI	400 cu. in. @ 600 PSI	50	
	PAM4035	5						108	
D/A	PAM4042	2		3 Position 4 Way	Solenoid Actuated		Advance/ Hold/ Retract	@10,000 PSI	50
	PAM4045	5							108
	PAS4042	2		52					
	PAS4045	5		110					

For more information on valve models, see pages 63-67.

* Includes Suc-O-Matic.

For quieter operation where compressed air is available, or for use in explosive environments. Delivers high speed operation for a variety of medium sized cylinders, hydraulic tools or systems.

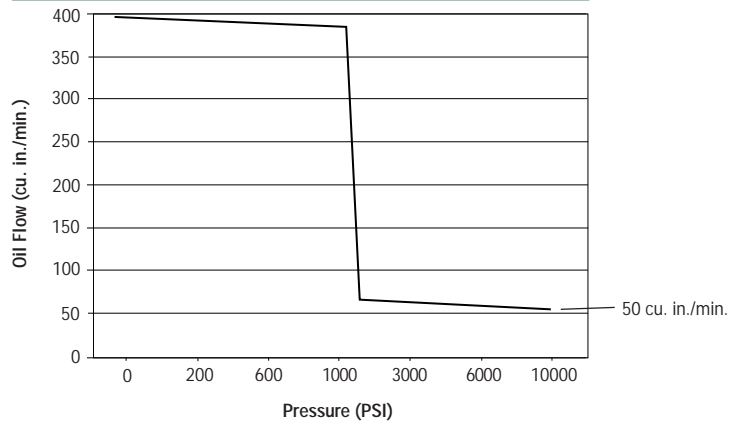



A233

Air Filter-Lubricator

Provides lubricated and filtered air, and contributes to long and trouble free product life. Recommended for use with all air pumps.

PERFORMANCE CHART



		
Hydraulic Cylinders pgs. 11-30	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72

CUSTOM BUILD

Using the chart below you can add roll bars, different size reservoirs or other options.

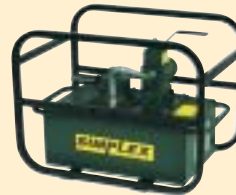
Description	Model	Selections
Product	P	Power Pump
Motor Controls	A	A = Rotary Air Motor
Valve Style	M	M = Manual S = Solenoid** D = Dump
Pump Series	4	Rotary Air @ 50 cfm
Options	1	0 = No Options 4 = Filter only 1 = Roll Bars only 5 = Roll Bars & Filter
Valve Type	3	2 = 2 Way 2 Position 5 = 3 Way Locking Style* 3 = 3 Way 3 Position* 6 = 4 Way Locking Style 4 = 4 Way 3 Position
Reservoir Size	5	2 = 2 Gallon 6 = 10 Gallon 5 = 5 Gallon 7 = 20 Gallon

* With Suc-O-Matic™

** Dump & 4 way valve only

40 SERIES AIR POWER PUMP OPTIONS

PUMP PROTECTION



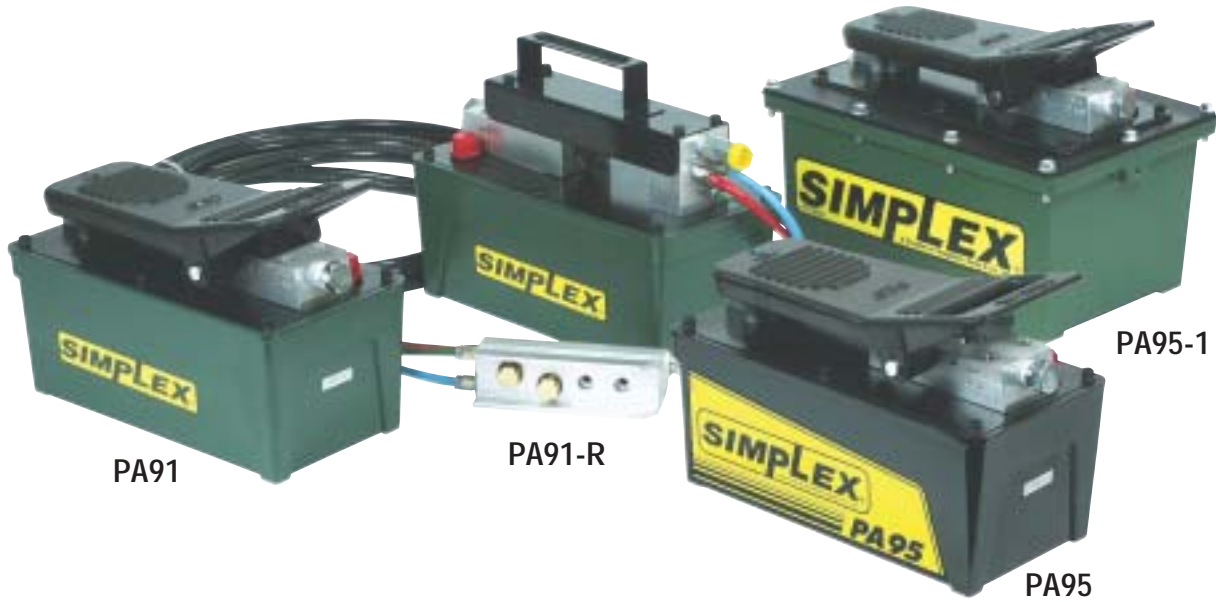
■ P03 - Roll Bars
For 1, 2 & 5 gallon reservoirs only. Order (1) under Options in the Custom Build Chart.



■ P04 - External filter for pumps with 3 & 4 way valves. Order (4) under Options in the Custom Build Chart. Replacement filter elements, use order number P05E.

ALL PUMP OPTIONS ARE FACTORY INSTALLED

The Simplex Air Hydraulic pumps Are The Toughest, Most Reliable In The Field.



Easy Operation with Hand or Foot Control

					<p>The PA91D utilizes a 3 position 4 way valve for use with double acting tools.</p>
Hydraulic Cylinders pgs. 11-30	Presses Pgs. 89-96	Hoses pgs. 70-71	Accessories & Fittings pgs. 68-72		

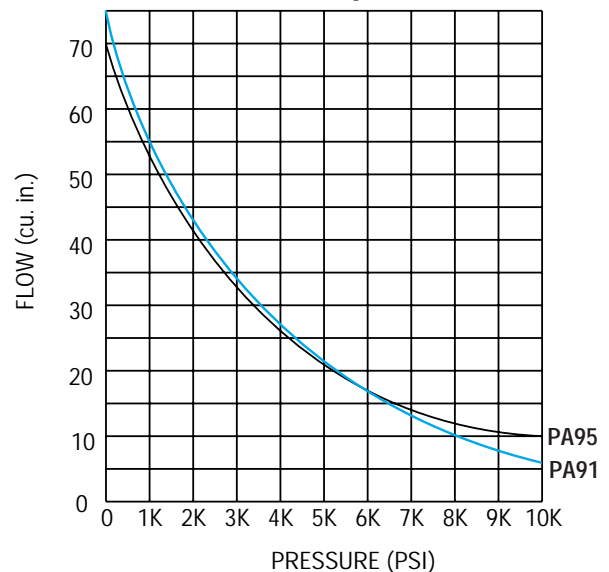
- PA91 is ideal for most applications and provides exceptional value.
- PA95 provides high performance in a compact, easy to use package.
- Powers a wide variety of single-acting tools.
- PA91D powers a wide variety of double-acting tools.
- Rugged all metal construction.
- High performance/fast operation.
- Pressure relief valve protects hydraulic circuit.
- Reduced noise for in house production.
- Reduced operator fatigue.
- 3 position treadle for advance, hold and retract.
- Uses standard shop air.

PA91 & PA95 Air Over Oil Pump

Model Number	Usable Oil Capacity (cu. in.)	Oil Flow @ 0 psi (cu. in.)	Oil Flow @ 10,000 psi (cu. in.)	Operating Air Pressure Range (psi)	Weight (lbs)
PA91	90	75	6	60 - 150	20
PA91-R					21
PA91-1	230	70	10		28
PA91-1R					29
PA91D	90				19
PA95	90				20
PA95-1	230			28	

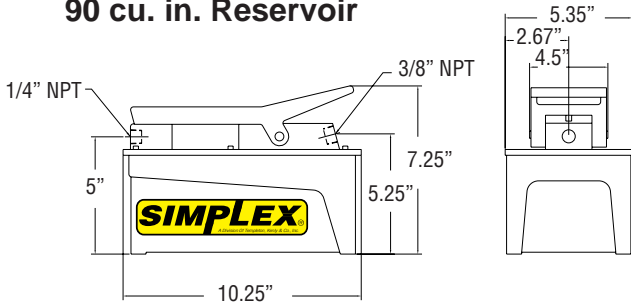
PERFORMANCE CHART

Flow @ 100 psi Air

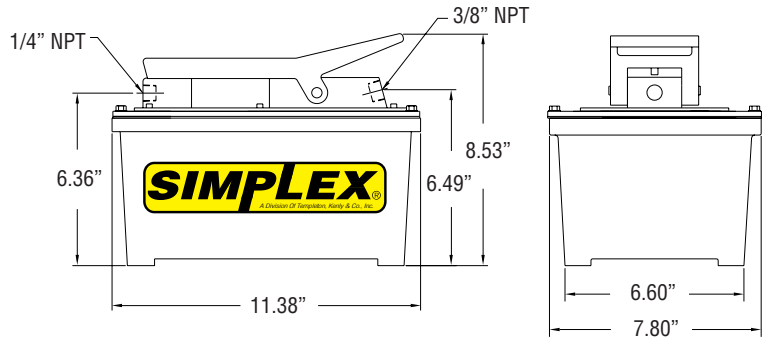


NEW!!

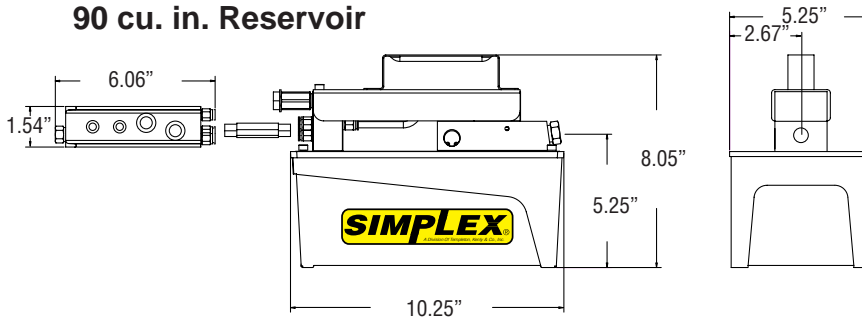
PA91 & PA95
90 cu. in. Reservoir



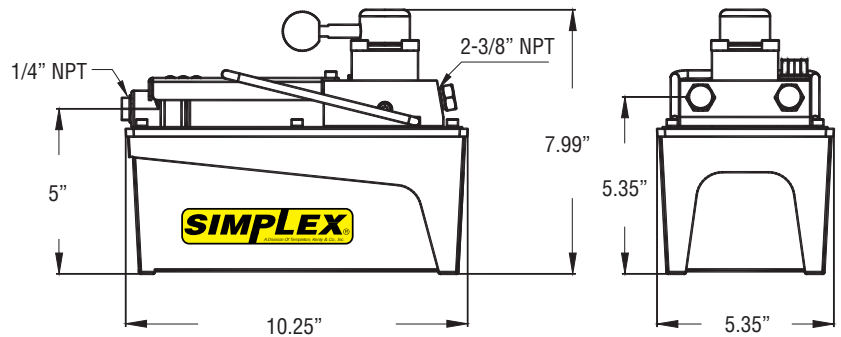
PA91-1 & PA95-1
230 cu. in. Reservoir



PA91-R
90 cu. in. Reservoir



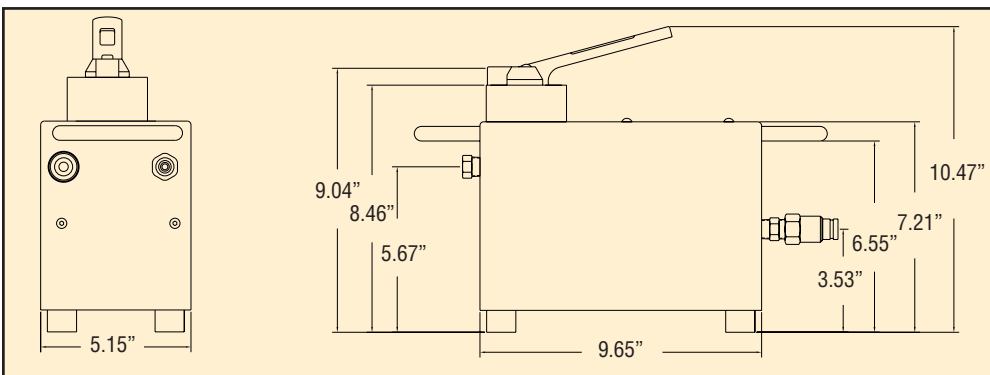
PA91D
90 cu. in. Reservoir



Engineers selected the Simplex air pump when reliable 10,000 psi power was needed to run this production line fixture, industrial engineers chose the Simplex PA91. "The three position treadle is easy to use and the pump runs on standard shop air."



- Converts on board mobile hydraulic systems into high pressure (10,000 psi) power source.
- Converts low pressure (2,000 psi) pumps into a high pressure (10,000 psi) power source.
- Ideal for utilities, railroads, construction, riggers.
- Operates single or double-acting cylinders and tools.
- Compact, easy to carry.
- No reservoir oil level to maintain; uses low pressure system as oil supply.
- 3/8" NPTF ports with quick disconnect couplers.
- Integrated pressure gauge.
- Ideal for use in aerial buckets and utility applications.



Model Number	Valve		Input Flow Range (GPM)	Input Pressure (PSI)	Output Pressure Max. (PSI)	Output Flow Range (GPM)	Output Flow Ratio	Output Pressure Ratio	Weight (lbs)
	Type	Function							
PI2	4 Way/3 Position	Advance/Hold/Retract	5 - 10	300-2,000	10,000	2	1:5	5:1	30
PI3	3 Way/3 Position								

Contact Factory for additional dimensions.