

PUMPS



PUMPS

HIGH PERFORMANCE HIGH FORCE HYDRAULICS



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PUMP SELECTION

Choose the Right Pump



- Step 1** – Select the hydraulic cylinder that best suits the application. See pages 6-8.
- Step 2** – Select the series of hydraulic pump with adequate oil output and reservoir capacity to power cylinder. See page 45. Check speed/selection chart on page 6.
- Step 3** – Select pump within series with the valve option that is best suited to the cylinder and application. See pages 120-121.

CONSIDERATIONS:

What maximum system operating pressure (psi) is required?

What volume of oil delivery is required? (For manual pumps, cu. in. of oil per handle stroke; for powered pumps, cu. in./min. of oil).

Is a single- or 2-speed pump required? (2-speed pumps deliver high oil volume at low pressure for rapid cylinder piston advance, then shift to the high pressure, low volume stage under load).

What is the preferred source of power?

- Manual (hand or foot operated). Provides portability, can be used where electricity or shop air are not available.
- Air/Hydraulic. Uses shop air or a portable air compressor.
- Electric /Hydraulic. What voltage is available? Is a battery operated pump preferred?
- Gasoline Engine/Hydraulic. Powers high-output pumps at remote job sites where air or electricity are unavailable.

Is portability of the pump a factor to consider?

Will the pump be used intermittently, or will it need to provide high-cycle operation? Does the application require that the pump be capable of starting under load?

Is fluid heat build-up a factor in your application? High cycle applications may require a larger capacity oil reservoir for cooling. Also, if you are using large displacement

cylinders, the reservoir capacity must be sufficient to fully extend the piston of the cylinder.

Will the application require large displacement or multiple cylinders? Reservoir size and pump output levels will be factors to consider.

Does the working environment require a pump having a low operating noise (dBA) level?

Must the pump operate in a spark-free environment?

MANUALLY-OPERATED HYDRAULIC PUMPS:

P12, P23, P55 – These single-speed pumps are for use with single-acting cylinders. See page 46.

P19, P59, P59F, P157, P159, P300, P460 – These 2-speed pumps are used with single-acting cylinders. The 2-speed feature provides high oil volume for fast cylinder piston approach to the work; pump automatically shifts to the high pressure stage. This reduces the number of pump handle strokes required. See pages 47-48.

P157D, P159D, P300D, P460D – These 2-speed pumps are used with double-acting cylinders. See page 48.



AIR/HYDRAULIC PUMPS

Used where air is the preferred energy source or where electricity is not available. Ideal for use in petrochemical, mines or other inflammable or explosive environments.

PA6 Series – These single-speed pumps drive single- or double-acting cylinders. See pages 50- 51.

PA9 Series – These new single-speed pumps drive single-acting cylinders and are ideal for powering portable hydraulic tools. See pages 54-55.

PA50 Series – These single-speed pumps drive single- or double-acting low pressure (3,200 psi) cylinders. See pages 58, 59.

PA60 – This 2-speed pump is equipped with a manifold to operate multiple cylinders, and provides a 2-gallon reservoir capacity. See pages 56-57.

PA64 – Similar to PA60, this 2-speed pump drives single- or double-acting cylinders. See pages 56-57.

PA172 and PA174 – These “economy” 2-speed pumps drive single- or double-acting cylinders, depending on the model chosen. Provide a low weight to output ratio. See pages 60-61.

PA462 and PA464 Series – These 2-speed pumps drive single or double-acting cylinders, depending on the model selected. They offer high speed cylinder piston advance. See pages 62-63.

PA554 – This 2-speed pump drives single- or double-acting cylinders, delivering a high volume of oil. See pages 60-62.

ELECTRIC/HYDRAULIC PUMPS

All of the following pumps are 2-speed models, and can be used to drive single- or double-acting cylinders.

“Quarter Horse” Series – As their name implies, these pumps feature a $\frac{1}{4}$ hp electric motor. A battery-powered version is available. Having a low noise level and weighing just 20 lbs., they are ideal for powering portable hydraulic spreaders, nut splitters, pipe flange spreaders and other tools. See pages 68-69.

PE17 Series – CSA rated for intermittent duty, these feature a $\frac{1}{2}$ hp, single phase induction motor with a low noise level (67-81 dBA). Smaller generators and low amperage circuits can be used as a power source. See pages 70-71.

PE46 Series – Powered by a $1\frac{1}{2}$ hp, single phase induction motor, operate at a moderate noise level of 77-81 dBA. CSA rated for intermittent duty. See pages 80-81.

PE18 Series – CSA rated for intermittent duty, these feature a $\frac{1}{2}$ hp, single phase universal motor with a noise level of 85-90 dBA. Provide high performance at a low price. Has low amperage draw. See pages 72-73.

PE30 Series – Equipped with a 1 hp, single phase permanent magnet motor, have a noise level of only 82-87 dBA. CSA rated for intermittent duty, and require a relatively low voltage; ideal for use in general construction applications. Roll cage/handle protects the motor and controls. See pages 78-79.

PE55 and PED25 Series – The famous Vanguard® pumps have been continually upgraded for 40 years; some of the originals are still in service! Equipped with a $1\frac{1}{8}$ hp, single phase universal motor, have a high noise level (90-95 dBA). Offer the best weight to performance ratio of any Power Team electric/hydraulic pump. CSA rated for intermittent duty. The PED25 versions are “dual flow” pumps which deliver the same low and high pressures to both valves, and have a noise level of 80-85 dBA. They have a $1\frac{1}{2}$ hp induction motor. See pages 76-77, 82-83.

PUMP SELECTION

Choose the
Right Pump



PE60 Series – The Vanguard® Supreme® pumps provide trouble-free service in the most severe working environments. Powered by a $1\frac{1}{8}$ hp, single phase motor, has a moderate noise level of 80-85 dBA. Start well under load even at the reduced voltages encountered on construction sites. High-output pumps, ideal for use with post-tensioning/pre-stressing jacks and other high-pressure hydraulic tools. See pages 84-85.

“Custom-built” pumps – Power Team offers you “assemble to order” electric/hydraulic pumps to suit unique applications. You can choose from pre-engineered, off the-shelf components to customize your pump. See pages 100-103.

PE21 Series – Ideal for heavy-duty, extended-cycle applications. Powered by a 1 hp, single phase motor, pump operates a very low noise level of 70 dBA. Pump automatically shuts down in the event of a power failure. CSA rated for intermittent duty. See pages 86-87. “Quiet” Pumps. Our PQ60 and PQ120 series operate at a very low noise level of between 73-78 dBA. The PQ60 has a 2 hp (single phase) motor; the PQ120 has a 3 hp (3-phase) motor. These pumps are designed for heavy-duty, extended cycle operations. CSA rated for intermittent duty. See page 74.

PE400 Series – High-flow units deliver a large volume of high pressure oil for heavy construction and maintenance operations employing high tonnage cylinders. The PE400 is powered by a 10 hp, 3-phase motor. Low noise rating of 73-80 dBA. See pages 90-91.

GASOLINE-DRIVEN HYDRAULIC PUMPS

These two-speed pumps are ideal for use in remote applications, such as construction sites. May be used with single- or double-acting cylinders.

PG30 Series – Powered by a 2-cycle, 2 hp Tecumseh engine, these have an integral, protective “roll cage” and adequate reservoir capacity for cylinders up to 100 tons capacity or more. Readily portable; popular in the railroad, rescue and construction markets. See pages 94-95.

PG55 Series – With a 4-cycle, 4 hp Briggs & Stratton engine, this pump is based on our popular Vanguard® Series. It has a generous five gallon reservoir capacity. See pages 94-95.

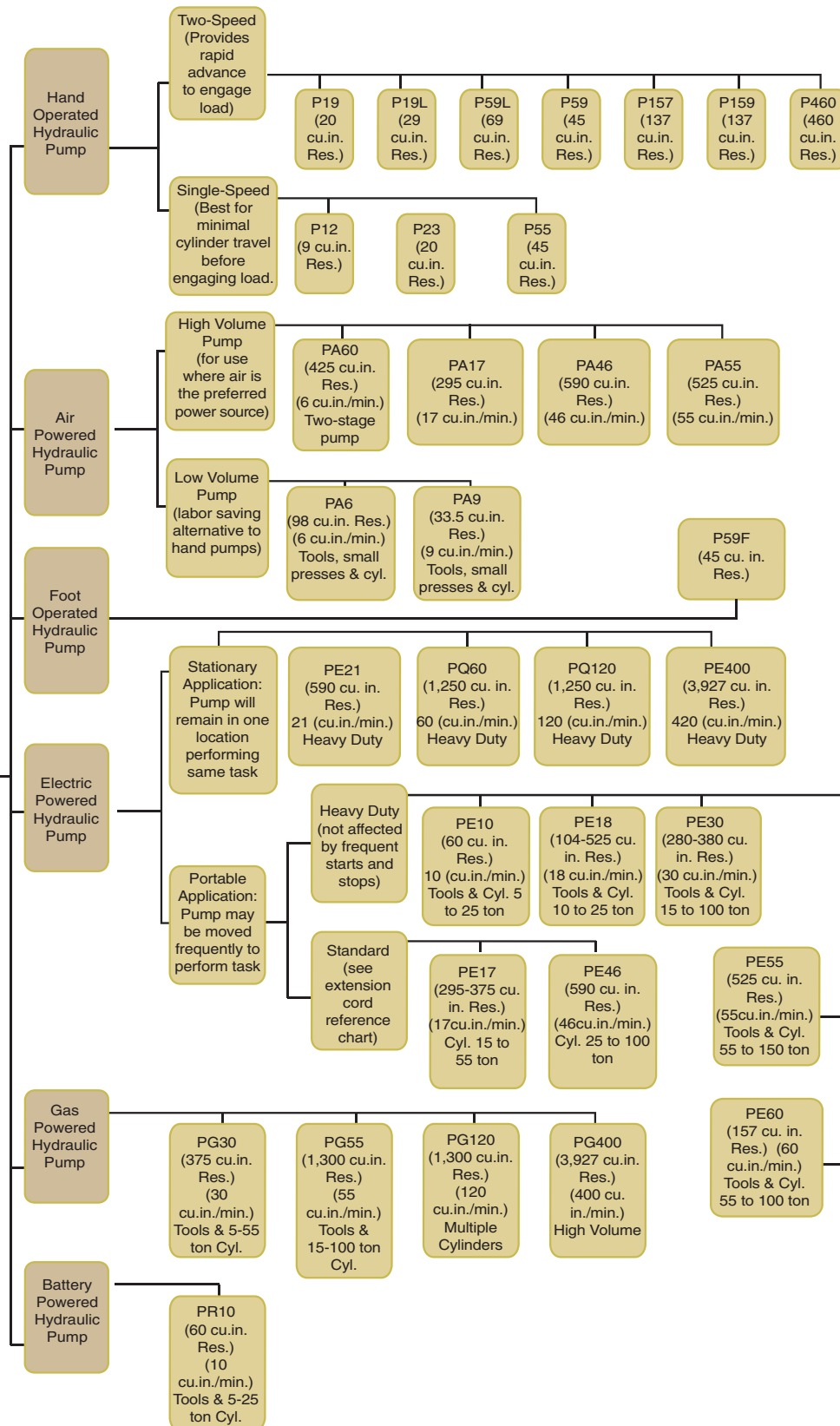
PG120 Series – Powered by a 4-cycle, 5.5 hp Honda engine. Has a five gallon reservoir; capable of handling multiple-cylinder lifting tasks. Ideal for the structure moving, pier setting, bridge lifting and concrete contracting industries. See pages 96-97.

PG4004 – Featuring a 4-cycle, 18 hp Briggs & Stratton engine, this unit has a big 20 gallon reservoir. Rugged steel “roll cage” has a hook on top and swivel casters for ease of mobility. Popular for concrete stressing applications. See pages 96-97.

HYDRAULIC INTENSIFIER

HB Series – Turns low pressure hydraulic pumps into high pressure power sources to operate single-acting or double-acting cylinders and tools such as crimpers, spreaders, cutters, etc. Compact and portable for use inside a utility vehicle aerial bucket or stowing in a vehicle. See page 98.

HYDRAULIC PUMP OPTIONS



HAND PUMP

Hydraulic P Series

12 to 55 cu. in.

Single-Speed Single-Acting

BEST SUITED FOR APPLICATIONS WHERE THERE IS LITTLE OR NO FREE TRAVEL.

- All metal construction, won't burn through in welding environments.
- Formed metal handle provides less flex, and reduces operator fatigue.
- Convenient fill port on P23 and P55 allows pumps to be filled in a horizontal or vertical position.
- Fill cap seal acts as safety valve preventing over-pressurizing of reservoir.
- Relief valve inboard of check valve prevents loads from drifting down.
- Large valve knob gives added control for slowly metering loads down.



P23

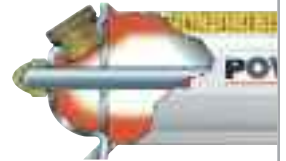
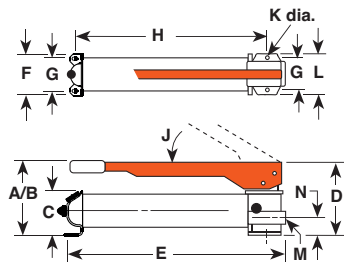
10,000 psi



P12



P55



Power Team hand pumps, with the angled fill port, have a built in "relief valve" protection system. This system is designed to protect over-pressurization of the reservoir from sudden back pressure. This system also works as a seal to prevent oil leaks.

Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (deg.)	K (in.)	L (in.)	M (in.)	N (in.)	P (in.)
P12	4	—	—	4	13 ¹ / ₂	3 ³ / ₈	2 ³ / ₁₆	—	45	3 ¹ / ₁₆	3 ³ / ₈	3 ¹ / ₈ NPTF	1 ¹ / ₈	—
* P23	6 ¹ / ₄	13	3 ¹ / ₂	5 ⁹ / ₁₆	13 ⁵ / ₈	4 ¹ / ₄	3 ¹ / ₄	10 ⁵ / ₁₆	38	5 ¹ / ₁₆	4 ³ / ₄	3 ¹ / ₈ NPTF	1 ⁵ / ₈	—
*The P23 pump maximum pressure is 3000 psi only.														
P55	6 ¹ / ₂	21	3 ¹ / ₂	5 ⁹ / ₁₆	23	4 ¹ / ₄	3 ¹ / ₄	19 ³ / ₄	38	5 ¹ / ₁₆	4 ³ / ₄	3 ¹ / ₈ NPTF	1 ⁵ / ₈	—

For Use With	Order No.	Volume & Pressure					Handle Effort (lbs.)	Reservoir		Oil Port (in.)	Product Weight (lbs.)
		Volume per Stroke (cu. in.)			Maximum Pressure (psi)			Oil Capacity (cu.in.)	Usable Oil Capacity (cu. in.)		
		Speed	LP	HP	LP	HP					
Single Acting Cylinders*	P12	1	—	.069	—	10,000	75	12	9	3/8 NPTF	5.7
	P23	1	—	.160	—	3,000	70	23.8	20.3	3/8 NPTF	12
	P55	1	—	.160	—	10,000	145	55	45	3/8 NPTF	15.8

LP = Low Pressure
HP = High Pressure

* Pump includes 2-Way Valve



HAND PUMP

Hydraulic P Series

24.4 to 55 cu. in.

Two-Speed Single-Acting

10,000 psi

PUMP AUTOMATICALLY SHIFTS INTO THE HIGH PRESSURE LIFT STAGE UPON CONTACT WITH THE LOAD.

- All metal construction won't burn through in welding environments.
- Two-speed reduces handle strokes so you work faster and easier.
- Formed metal handle provides less flex, and reduces operator fatigue.
- Convenient fill port allows pumps to be filled in a horizontal or vertical position.
- Relief valve inboard of check valve prevents loads from drifting down.
- Large valve knob gives added control for slowly metering loads down.

P19L/P59L

- More usable oil volume — use with larger or longer stroke cylinders.
- True unloading valve set for 850 PSI (59 Bar) provides more efficiency and lower handle force.
- Link design reduces handle effort by 40%.

- Durable aluminum reservoir, manifold, and end cap.
- Ergonomic non-slip handle grip provides more comfort.
- Spring loaded handle lock incorporated into handle.

P59F

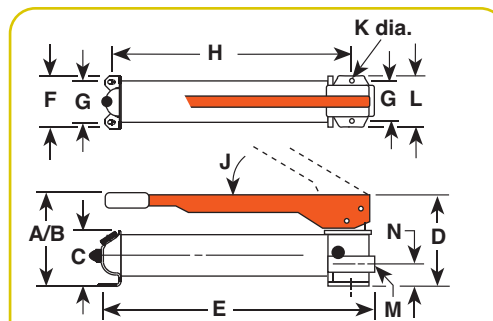
- Replaces hand control with foot control



Foot pump conversion kit

No. FK59 - Foot pump conversion kit for use on P55/P59 pumps. Wt., 6 lbs.

No. FK159B - Foot pump conversion kit for use on P157/P159 and P300/P300D pumps. Wt., 6 lbs.



Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (deg.)	K (in.)	L (in.)	M (in.)	N (in.)	P (in.)
P19	5 1/2	14 5/8	2 7/8	4 9/16	13 11/16	4	3 1/4	11 11/16	53°	5/16	4	3/8 NPTF	1 13/32	—
P19L	5 1/2	—	—	—	13 11/16	4 1/8	3 1/4	11	40°	5/16	—	3/8 NPTF	—	—
P59	7	21	3 1/2	5	23	4 1/4	3 1/4	19 3/4	38°	5/16	4 3/4	3/8 NPTF	1 5/8	—
P59L	7	—	—	—	21	5	3 1/4	19 3/4	50°	5/16	—	3/8 NPTF	—	—
P59F	3 1/2	16 3/4	3 1/2	6	23 1/4	4 1/4	3 1/4	20 1/4	—	5/16	4 1/2	3/8 NPTF	11 11/16	—

For Use With	Order No.	Volume & Pressure					Reservoir Handle Effort (lbs.)	Oil Capacity (cu.in.)	Usable Oil Capacity (cu. in.)	Oil Port (in.)	Product Weight (lbs.)
		Speed	Volume per Stroke (cu. in.)		Maximum Pressure (psi)						
			LP	HP	LP	HP					
Single Acting	P19	2	.305	.076	325	10,000	99	24.4	20	³ / ₈ NPTF	6.6
	P19L	2	.250	.050	850	10,000	78	29	27	³ / ₈ NPTF	5.1
Cylinders*	P59	2	.662	.160	325	10,000	145	55	45	³ / ₈ NPTF	17.2
	P59L	2	.720	.150	850	10,000	104	69	66	³ / ₈ NPTF	8.9
	P59F	2	.550	.130	325	10,000	120	55	45	³ / ₈ NPTF	14

LP = Low Pressure
HP = High Pressure

*Pump includes 2-Way Valve

HAND PUMP

Hydraulic P Series

152 cu. in.

Two-Speed Single-
and Double-Acting



P300 hand pump and 10 ton cylinders used for a vehicle lift.

BEST SUITED FOR APPLICATIONS WHERE THERE IS LITTLE OR NO FREE TRAVEL.

- Rugged all metal construction for strength and durability that won't burn through in welding environments.
- Heavy-duty, formed metal handle provides less flex, and less operator fatigue than round or composite handles.
- Convenient fill port on P23 and P55 allows pumps to be filled in a horizontal or vertical position.
- Fill cap seal acts as safety valve to prevent over-pressurizing of reservoir.
- Relief valve inboard of check valve prevents loads from drifting down.
- Large valve knob gives added control for slowly metering loads down.



P157/P159



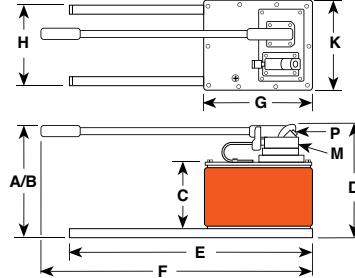
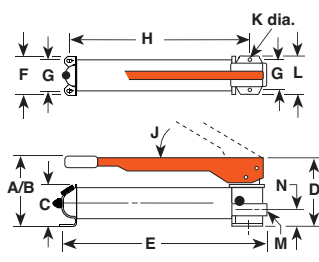
P300



P460



P159D



FK59
FK159B

Foot pump conversion kit

No. FK59 - Foot pump conversion kit for use on P55/P59 pumps. Wt., 6 lbs.

No. FK159B - Foot pump conversion kit for use on P157/P159 and P300/P300D pumps. Wt., 6 lbs.

Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (deg.)	K (in.)	L (in.)	M (in.)	N (in.)	P (in.)
P157/P159	7 ³ / ₄	20 ¹ / ₂	4 ⁷ / ₈	6 ⁷ / ₈	22 ³ / ₄	3 ⁷ / ₈	3	19 ³ / ₄	39	5 ⁵ / ₁₆	3 ³ / ₄	3 ³ / ₈ NPTF	2 ¹ / ₄	—
P300	8 ¹ / ₄	21	4 ¹ / ₂	6 ⁷ / ₈	22 ⁵ / ₈	8 ¹ / ₂	7 ¹ / ₂	3	20 ²³ / ₃₂	39	5 ⁵ / ₁₆	3 ³ / ₄	3 ³ / ₈ NPTF	2 ¹ / ₄
P460	11 ¹ / ₈	31	6 ³ / ₄	11 ³ / ₈	24	29 ¹ / ₄	11	9	80	9 ¹ / ₂	—	3 ³ / ₈ NPTF	—	1 ¹ / ₄

For Use With	Order No.	Speed	Volume & Pressure		Maximum Pressure (psi)		Reservoir Handle Effort (lbs.)	Oil Capacity (cu.in.)	Usable Oil Capacity (cu. in.)	Oil Port (in.)	Product Weight (lbs.)
			Volume per Stroke (cu. in.)	Stroke (cu. in.)	LP	HP					
Single-Acting	P157	2	.650	.160	1,400	10,000	140	152	137	3 ³ / ₈ NPTF	26.7
	P159	2	2.6	.160	325	10,000	140	152	137	3 ³ / ₈ NPTF	26.2
Cylinders*	P300	2	2.6	.160	325	10,000	140	1.5 gal.	310	3 ³ / ₈ NPTF	55.3
	P460	2	7.35	.294	325	10,000	90	2.5 gal.	460	3 ³ / ₈ NPTF	54.9
Double-Acting	P157D	2	.650	.160	1,400	10,000	140	152	137	3 ³ / ₈ NPTF	28.8
	P159D	2	2.6	.160	325	10,000	140	152	137	3 ³ / ₈ NPTF	27.9
Cylinders**	P300D	2	2.6	.160	325	10,000	140	1.5 gal.	310	3 ³ / ₈ NPTF	57.0
	P460D	2	7.35	.294	325	10,000	90	2.5 gal.	460	3 ³ / ₈ NPTF	57.9

LP = Low Pressure
HP = High Pressure

* Pump includes 2-Way Valve

** Pump includes 4-Way Valve

**PRECISION-MATCHED CYLINDER
AND PUMP SET FOR WIDE RANGE
OF APPLICATIONS.**

- Four styles of cylinders to choose from.
- Sets feature single- or two-speed hydraulic hand pumps.
- Cylinders of various tonnages with long, medium or short stroke.
- Includes necessary fittings, couplers and 6 foot hose.
- Gauge and gauge mounting adapter is recommended.
(See pages 110-111)



**10,000 psi
ASMEB30-1**

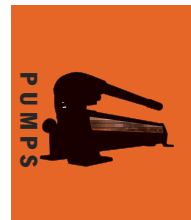
CYLINDER/PUMP

RPS Series

Cylinder and pump Set



Optional Storage Box Storage box for hydraulic cylinder and pump sets. Rugged industrial strength material, strong as steel, never needs painting, won't rust, dent or chip. Weatherproof lid is self sealing and lockable. Molded-in handles, water-tight, one piece bottom and side construction. Strong enough to stand on. **Note:** Actual product may differ from photo.
No. 350722 – 35"L x 14"H x 13½"W, storage box.



Style of Cyl.	Cyl. Cap. (tons)	Stroke (in.)	Order No.	Retracted Height (in.)	Handle Strokes Required to Fully Extended Cylinder	Cyl. No.	Pump No.	Hose No.	Coupler No.	Pump Speed	Prod. Wt. (lbs.)
	5	5¼	RPS55	8½	75	C55C	P12	9756	9798	Single	12
	10	2⅞	RPS102**	4¾	32	C102C	P55	9756	9798	Single	26
	10	6⅞	RPS106**	9¾	93	C106C	P55	9756	9798	Single	32.1
	10	10⅞	RPS1010**	13¾	154	C1010C	P55	9756	9798	Single	35.6
"C"	15	4⅞	RPS154**	7⅞	81	C154C	P55	9756	9798	Single	29
Series	15	6⅞	RPS156**	10 ^{11/16}	118	C156C	P55	9756	9798	Single	34
	25	6¼	RPS256**	10¾	219	C256C	P55	9756	9798	Single	42.7
	25	14¼	RPS2514**	18¾	285*	C2514C	P159	9756	9798	Two	62.7
	55	6¼	RPS556**	11⅞	268*	C556C	P159	9756	9798	Two	82.7
	100	6⅞	RPS1006	13¾	428*	C1006C	P460	9756	9798	Two	128.7
"Shorty"	30	2⅞	RPS302**	4⅞	61*	RSS302	P59	9756	9798	Two	40
	50	2⅞	RPS552**	5	89*	RSS502	P59	9756	9798	Two	50
	100	2¼	RPS1002**	5½	172*	RSS1002	P59	9756	9798	Two	81
"Center-Hole"	20	3	RPS203H**	6 ^{1/16}	80	RH203	P55	9756	9798	Single	40.5
Alum.	55	6⅞	RPS556A**	10¾	262*	RA556	P159	9756	9798	Two	47

* Base on 50% if the stroke being made at low-pressure and 50% of the strokes at high pressure.

** Add suffix "B" (example: RPS102B, RPS203HB, etc.) to order set with optional storage box shown above.

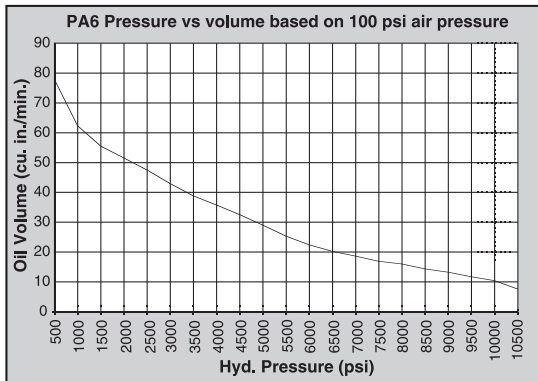
AIR PUMP

Hydraulic PA6 Series

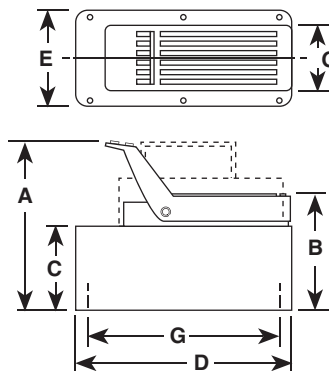
Single-Acting

COMPACT, LIGHTWEIGHT AND PORTABLE. SINGLE-SPEED PUMPS DESIGNED TO DRIVE SINGLE-ACTING CYLINDERS.

- The power unit of choice for major manufacturers of auto body, frame straighteners and other equipment.
- Operate at 40-100 psi shop air pressure at the pump.
- dBA 85 at 10,000 psi.
- Serviceable pump motor is not a “throw away”, providing economical repair.
- Permanently vented reservoir cap.
- Internal relief valve protects circuit components, air inlet filter protects motor.



10,000 psi



Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	G (in.)
PA6	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6A	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6AM	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6M	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6R	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6RM	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6M-1	7 ⁷ / ₈	6	4 ³ / ₈	12 ⁵ / ₈	7 ³ / ₈	—
PA6-2	10 ¹ / ₄	8	7	11 ¹ / ₂	9 ¹ / ₂	5 ¹ / ₈ x 7 ¹ / ₈



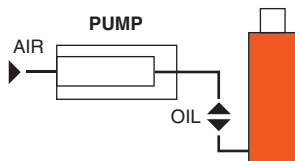
PA6M-1



PA6-2



Typical Set-up
Hook-up for single-acting cylinders



Description	Order No.	Air Supply Req'd (psi)	Reservoir		Oil Port (in)	Prod. Wt. (lbs.)
			Cap. (cu. in.)	Usable (cu. in.)		
Base model pump with high density polyethylene reservoir.	PA6	40-120	105	98	$\frac{3}{8}$ NPTF	14
PA6 with externally adjustable relief valve.	PA6A	40-120	105	98	$\frac{3}{8}$ NPTF	15
PA6A with metal reservoir.	PA6AM	40-120	105	98	$\frac{3}{8}$ NPTF	17
PA6, except has metal reservoir.	PA6M	40-120	105	98	$\frac{3}{8}$ NPTF	18
PA6 with 12 foot remote control.	PA6R	40-120	105	98	$\frac{3}{8}$ NPTF	20.58
PA6R, except has metal reservoir.	PA6RM	40-120	105	98	$\frac{3}{8}$ NPTF	21.58
PA6, except has 1 gallon metal reservoir.	PA6M-1	40-120	1 gal.	185	$\frac{3}{8}$ NPTF	23.7
PA6, except has 2 gallon, high density polyethylene reservoir.	PA6-2	40-120	2 gal.	454	$\frac{3}{8}$ NPTF	24.5
PA6, except has 2½ gallon metal reservoir.	PA6M-2	40-120	2½ gal.	570	$\frac{3}{8}$ NPTF	32.1

AIR PUMP

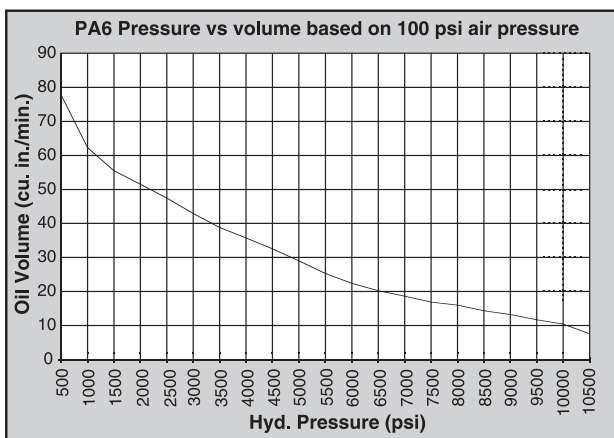
Hydraulic PA6D Series

6 cu. in./min.

Double-Acting

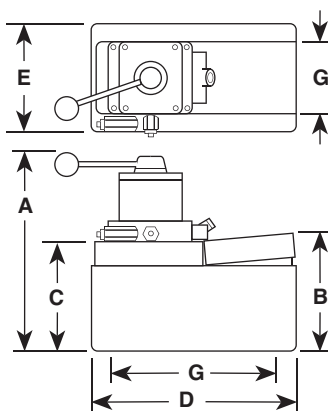
COMPACT, LIGHTWEIGHT AND PORTABLE SINGLE-SPEED PUMP FOR DRIVING DOUBLE-ACTING CYLINDERS.

- Operate at 40-100 psi shop air pressure at the pump.
- Internal relief valve protects circuit components, air inlet filter protects motor.
- Serviceable pump motor is not a “throw away”, providing economical repair.
- Permanently vented reservoir cap.
- dBA 85 at 10,000 psi for all PA6 pumps.

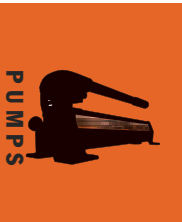


10,000 psi

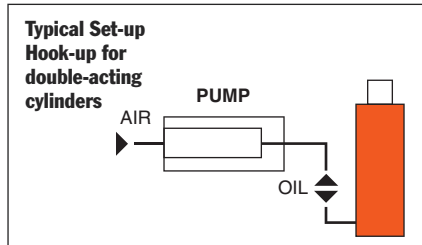
PA6D



Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	G (in.)
PA6D	10 ³ / ₈	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6DM	10 ³ / ₈	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	4 x 9
PA6DM-1	11	5 ³ / ₄	4 ³ / ₈	12 ³ / ₈	7 ³ / ₈	—
PA6D2	12 ³ / ₄	8	7	11 ⁵ / ₁₆	9 ¹ / ₄	5 ¹ / ₈ x 7 ¹ / ₈
PA6DM-2	12 ¹ / ₂	7 ³ / ₄	6 ³ / ₄	11 ¹ / ₂	9 ¹ / ₂	8 x 10



PA6D pump, DG100 digital pressure gauge and 25 ton cylinder used in a test fixture.



Description	Order No.	Valve No.	Air Supply Req'd (psi)	Reservoir Cap. (cu. in.)	Usable (cu. in.)	Oil Port (in.)	Prod. Wt (lbs.)
Base model pump with high density polyethylene reservoir.	PA6D	9504, 3-way/ 4-way	40-120	105	98	3/8 NPTF	18.4
PA6D, except has metal reservoir.	PA6DM	9504, 3-way/ 4-way	40-120	105	98	3/8 NPTF	20.4
PA6D, except has 1 gallon metal reservoir.	PA6DM-1	9504, 3-way/ 4-way	40-120	1 gal.	185	3/8 NPTF	28.1
PA6D, except has 2 gallon, high density polyethylene reservoir.	PA6D2	9504, 3-way/ 4-way	40-120	2 gal.	454	3/8 NPTF	28.6
PA6D, except has 2½ gallon metal reservoir.	PA6DM-2	9504, 3-way/ 4-way	40-120	2½ gal.	570	3/8 NPTF	36.2

AIR PUMP

Hydraulic PA9 Series

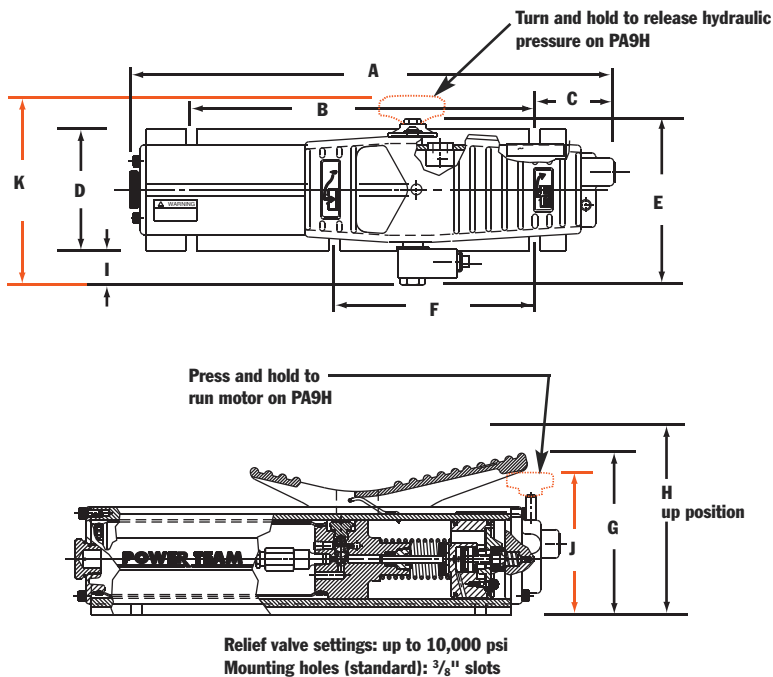
9 cu. in./min.

Single-Acting

**IDEAL FOR POWERING
SINGLE-ACTING
CYLINDERS AND
PORTABLE HYDRAULIC
TOOLS.**

- Easier to operate than a hand pump, giving you the speed you need at an affordable price.
- Easy and economical to service; not a “throw away” unit.
- Unique bladder design for all-position operation and storage.
- Operates on 40-120 psi shop air, at 20 cfm.
- Hard-coat anodized aluminum housing.
- Oil filler with integral safety relief minimizes chance of damage to reservoir bladder if overfilling occurs.

PA9 Foot Control



Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	J (in.)	K (in.)
PA9	16 ¹⁵ / ₁₆	12	2 ¹³ / ₁₆	4 ¹ / ₄	5 ⁵ / ₁₆	7	5 ⁵ / ₈	7	1 ¹ / ₈	—	—
PA9H	16 ¹⁵ / ₁₆	12	2 ¹³ / ₁₆	4 ¹ / ₄	—	7	—	7	1 ¹ / ₈	4 ¹³ / ₁₆	6 ¹¹ / ₁₆



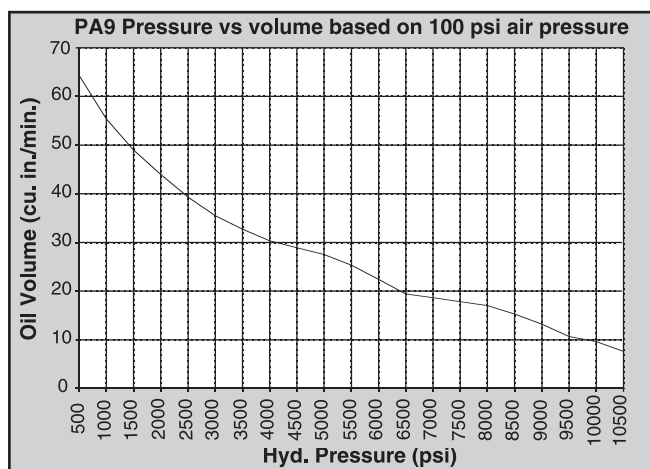
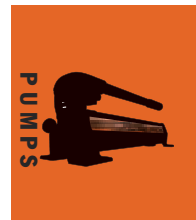
PA9
Foot Control



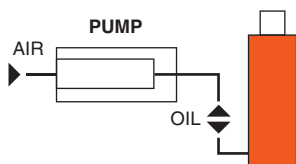
PA9H Hand Control Pump as used in a straightening press.



PA9H
Hand Control



Typical Set-up
Hook-up for single-acting cylinders



For Use with Cyl. Type	Order No.	Air Supply Req'd (psi)	Reservoir Cap. (cu. in.)	Usable (cu. in.)	Oil Port (in.)	Max. Pressure Output (psi)	Prod. Wt. (lbs.)
Single-Acting	PA9	40-120	35	33.5	$\frac{3}{8}$ NPTF	10,000	15
Single-Acting	PA9H	40-120	35	33.5	$\frac{3}{8}$ NPTF	10,000	15

AIR PUMP

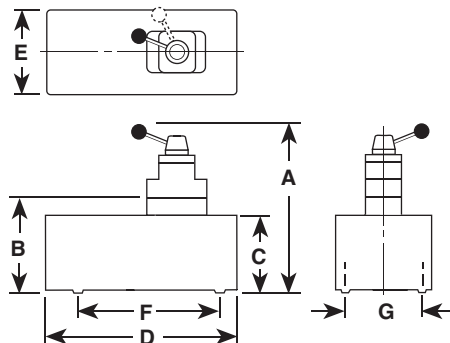
Hydraulic PA60 Series

6 cu. in./min.

Two-Speed

TWO-SPEED PUMP FOR RAPID OIL DELIVERY AT LOW PRESSURE QUICKLY ADVANCES CYLINDER OR TOOL.

- Equipped with air pressure regulator, air filter and lubricator.
- Serviceable air motor for economical repair.
- Internal relief valve protects circuit components.
- Permanently vented reservoir cap.



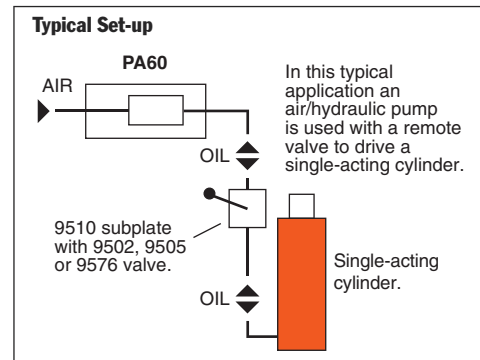
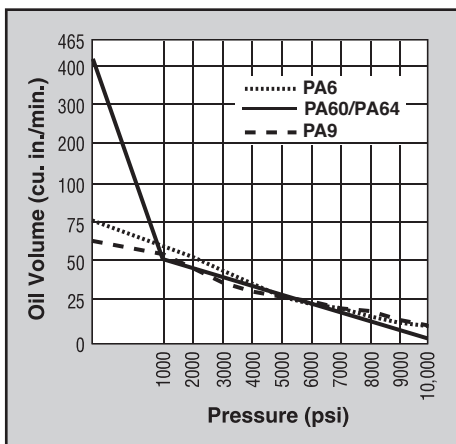
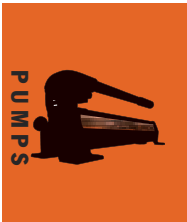
The PA60 used in a workholding environment.

Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	Max. Pressure Output (psi)	Oil Del. * (cu. in./min. @)				
									0 (psi)	100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)
PA60	—	9 ⁷ / ₁₆	8 ⁷ / ₈	14 ¹ / ₄	9 ⁵ / ₈	7 ¹ / ₈	5 ¹ / ₈	10,000	390	350	50	12	6
PA64	14 ¹ / ₄	—	8 ⁷ / ₈	14 ¹ / ₄	9 ⁵ / ₈	7 ¹ / ₈	5 ¹ / ₈	10,000	390	350	50	12	6

* Typical delivery. Actual flow will vary with field conditions.



10,000 psi



Description	Order No.	Valve No.	Valve Function	Air Supply Req'd (psi)	Reservoir Cap. (gal.)	Usable (cu. in.)	Oil Port (in.)	Prod. Wt (lbs.)
For use with remote valves.	PA60	Manifold	—	40-120	2	425	3/8 NPTF	54
For use with single- or double-acting cylinders.	PA64	9507, 3-way/ 4-way	Advance Hold Return	40-120	2	425	3/8 NPTF	56

Notes: Air inlet port 1/4" NPTF. Requires 20 cfm at 100 psi shop air pressure at the pump.

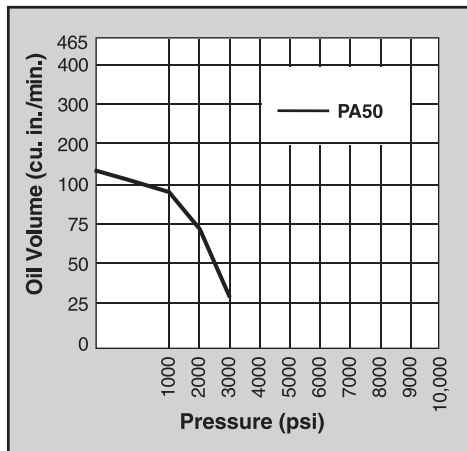
AIR PUMP

Hydraulic PA50 Series

28 cu. in./min.

Low Pressure

**SINGLE-SPEED, LOW PRESSURE
(3,200 PSI) OUTPUT PUMPS.**

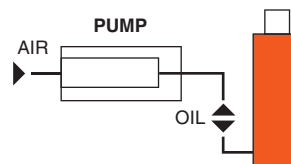
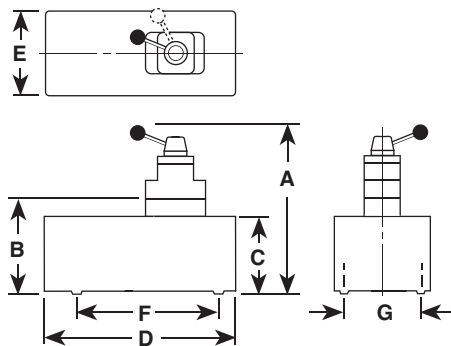


PA50D



PA50M

PA50, PA50M, PA50R, PA50RM,
PA50R2

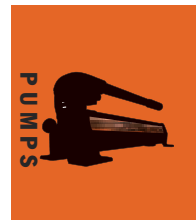
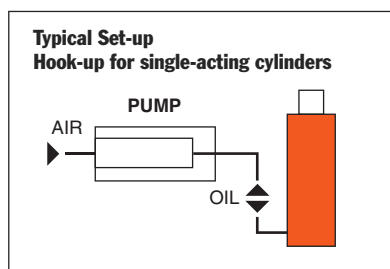


Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	Max. Pressure Output (in.)	Oil Del. * (cu. in./min. @)				
									0 (psi)	100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)
PA50, PS50R													
PA50M, PA50RM	7 ³ / ₄	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	—	4 X 9	3,200	128	110	88	28 †	—
PA50R2	10 ¹ / ₄	8	7	11 ¹ / ₂	9 ¹ / ₂	—	5 ¹ / ₈ X 7 ¹ / ₈	3,200	128	110	88	28 †	—
PA50D	10 ³ / ₈	5 ⁷ / ₈	4 ³ / ₈	9 ¹ / ₂	5	9	4	3,200	128	110	88	28 †	—

* Typical delivery. Actual flow will vary with field conditions.

† PA50 Series measured at 3,200 psi.

- Serviceable air motor for economical repair.
- Air inlet filter protects motor. Filter in outlet port protects against contaminated systems.
- Assorted reservoirs to suit your application's requirements.



For use with Cyl. Type	Description	Order No.	Valve No.	Air Supply Req'd (psi)	Reservoir		Oil Port (in.)	Prod. Wt (lbs.)
					Cap. (cu. in.)	Usable (cu. in.)		
Single-Acting	Base model pump with high density polyethylene reservoir.	PA50	—	40-120	105	98	$\frac{3}{8}$ NPTF	14.2
Single-Acting	PA50, except has metal reservoir.	PA50M	—	40-120	105	98	$\frac{3}{8}$ NPTF	16.2
Single-Acting	PA50, except has 12 foot remote control.	PA50R	—	40-120	105	98	$\frac{3}{8}$ NPTF	18.5
Single-Acting	PA50, except has metal reservoir.	PA50RM	—	40-120	105	98	$\frac{3}{8}$ NPTF	20.5
Single-Acting	PA50R, except has 2 gallon reservoir.	PA50R2	—	40-120	2 gal.	454	$\frac{3}{8}$ NPTF	28.5
Single- and Double Acting	PA50, except designed to operate either single- or double-acting systems. Valve function: Advance / Return.	PA50D	9504, 3-way/ 4-way	40-120	105	98	$\frac{3}{8}$ NPTF	18.4

Notes: Air inlet port $\frac{1}{4}$ " NPTF. Requires 20 cfm at 100 psi shop air pressure at the pump.

AIR PUMP

Hydraulic PA17 Series

17 cu. in./min.

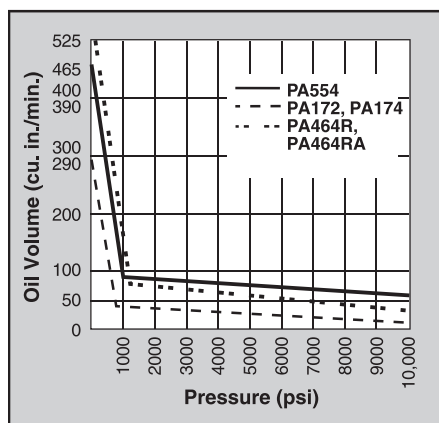
Two Speed

ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS PREFERRED SOURCE OF ENERGY, WHERE ELECTRICITY IS UNAVAILABLE OR SPARKS ARE A CONCERN.

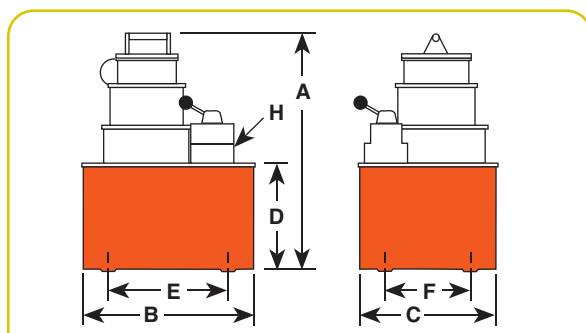
- Two-speed operation for high speed cylinder advance.
- Durable two gallon thermoplastic reservoir. (Metal reservoir conversion kits are available.)
- Features air motor capable of starting under full load.



The PA17 used with a flange spreader

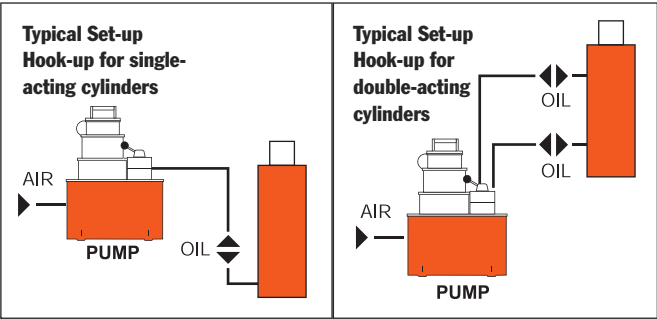


PA172



Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	H (in.)	Max. Pressure Output (psi)	Oil Del. * (cu. in./min. @)				
									0 (psi)	100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)
PA172	14 ¹ / ₈	11 ³ / ₈	9 ¹ / ₄	7	7 ¹ / ₈	5 ¹ / ₈	3/8 NPTF	10,000	290	240	24	23	17
PA174	14 ¹ / ₈	11 ³ / ₈	9 ¹ / ₄	7	7 ¹ / ₈	5 ¹ / ₈	3/8 NPTF	10,000	290	240	24	23	17

* Typical delivery. Actual flow will vary with field conditions.



PA174

10,000 psi



For use with Cyl. Type	Description	Order No.	Valve No.	Valve Function	Air Supply Req'd (psi)	Reservoir Cap. (gal.)	Usable (cu. in.)	Prod. Wt (lbs.)
Single-Acting	Base model pump with 2 gallon thermoplastic reservoir.	PA172	9517, 2-way	Advance/Return*	40-120	2	295	40
Single- and Double Acting	PA172, except has 9500 valve for use with single- or double-acting cylinders.	PA174	9500, 4-way	Advance Hold Return*	40-120	2	295	41

Note: Requires 20 cfm at 80 psi shop air pressure at the pump. dBA 85/90 at 10,000 psi.

* Holds pressure in advance position when valve motor is shut off, in return position with motor running. Pump will build pressure when motor is shut off, oil returns to reservoir.

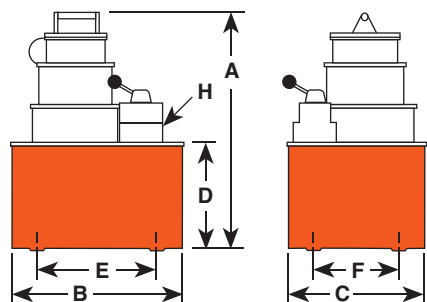
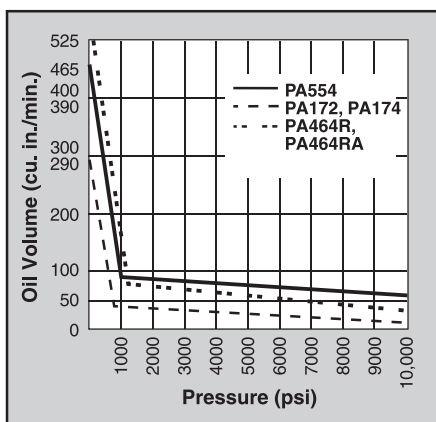
AIR PUMP

PA46/55 Series

Up to 150 ton
46-55 cu. in./min.
Two Speed

ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS THE PRE- ferred SOURCE OF EN- ERGY.

- 3 hp motor starting under full load.
- Two-speed operation for rapid cylinder advance.
- Models available with full remote control over advance and return, (except PA554).
- Tandem center valve holds the load when pump is shut off.



PA554 pump and RH2008 Center Hole cylinder used to tension cables.

Pump No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	H (in.)	Max. Pressure Output (psi)	Oil Del. * (cu. in./min. @)				
									0 (psi)	100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)
PA462	15	11½	9½	7	10	8	⅜ NPTF	10,000	465	450	53	51	46
PA464	15	11½	9½	7	10	8	⅜ NPTF	10,000	465	450	53	51	46
PA464R	15	11½	9½	7	10	8	⅜ NPTF	10,000	465	450	53	51	46
PA464RA	15	11½	9½	7	10	8	⅜ NPTF	10,000	465	450	53	51	46
PA554	19	11½	9½	7	10	8	⅜ NPTF	10,000	465	450	80	70	55

* Typical delivery. Actual flow will vary with field conditions.

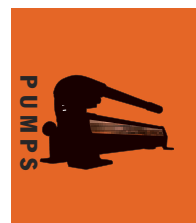
Note: Four mounting holes ½" - 20



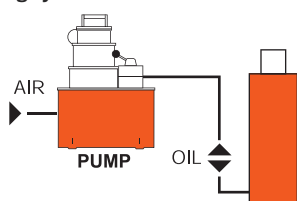
PA464R



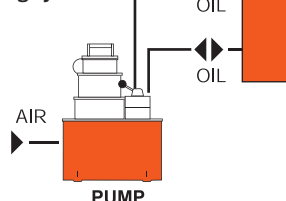
PA554



**Typical Set-up
Hook-up for single-
acting cylinders**



**Typical Set-up
Hook-up for double-
acting cylinders**



For use with Cyl. Type	Description	Order No.	Valve No.	Valve Function	Air Supply Req'd (psi)	Reservoir Cap. (gal.)	Usable (cu. in.)	Prod. Wt (lbs.)
Single-Acting	Base model pump with 2½ gallon steel reservoir.	PA462	9584, 2-way	Advance/ Hold/Return	40-120	2½	590	60
Single- and Double Acting	PA462, except has 9500 valve capable of running 2 single-acting cylinders or one double-acting cylinder.	PA464	9500, 4-way	Advance/ Hold/Return*	40-120	2½	590	61
Single- and Double Acting	PA462 with air actuated valve for full remote control over advance and return. Includes 12 ft. remote control.	PA464R†	9594, 4-way	Advance/ Hold/Return	40-120	2½	590	78
Single- and Double Acting	PA464R except, has automatic dump feature. 25 ft. remote control.	PA464RA**†	9594, 4-way	Advance/ Hold/Return*	40-120	2½	590	79
Single- and Double Acting	High performance pump with 2½ gallon steel reservoir.	PA554	9500, 4-way	Advance/ Hold/Return*	40-120	2½	525	72

Note: Requires 50 cfm at 80 psi shop air pressure at the pump. dBA 85/90 at 10,000 psi.

* Holds when motor is shut-off and valve is in "advance" position.

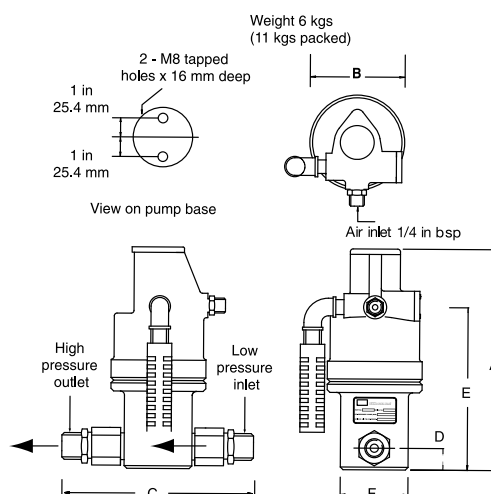
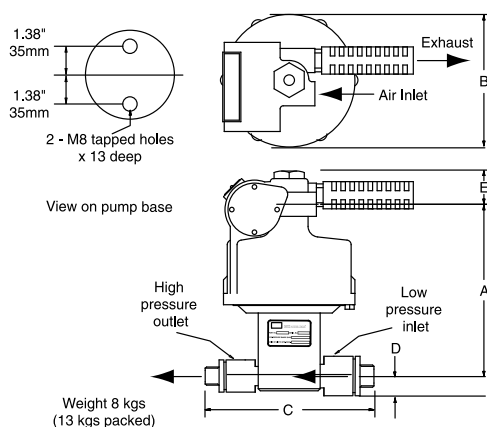
† The PA464RA has an "automatic dump" feature. Pressure is not held when operator releases "advance" or "return" button. PA464R will "hold" only in the "advance" position with the motor shut off.

** Not to be used for lifting.

AIR OPERATED

PUA & PMA Series

35,000 psi



RAM/DIAMETER								
CAT #	(mm) (in)	A	B	C	D	E	F	
PUA26(B/U)	31.75 1 1/4	in 9.17 mm 233	4.02 102	6.61 168	.87 22.2	6.69 170	2.87 73	
PUA70(B/U)	19 3/4	in 8.74 mm 222	4.02 102	6.61 168	.87 22.2	6.22 158	2.87 73	
PUA157(B/U)	12.7 1/2	in 8.74 mm 222	4.02 102	6.61 168	.87 22.2	6.22 158	2.87 73	
PUA275(B/U)	9.53 3/8	in 8.74 mm 222	4.02 102	6.61 168	.87 22.2	6.22 158	2.87 73	
PUA430(B/U)	7.94 5/16	in 8.74 mm 222	4.02 102	6.61 168	.87 22.2	6.22 158	2.87 73	
PUA655(B/U)	6.35 1/4	in 8.74 mm 222	4.02 102	6.61 168	.87 22.2	6.22 158	2.87 73	
PUA982(B/U)	5.13 .202	in 8.74 mm 222	4.02 102	6.61 168	.87 22.2	6.22 158	2.87 73	
PMA27(B/U)	76.2 3	in 8.66 mm 220	7.01 178	9.06 230	1.5 38	1.89 48		
PMA60(B/U)	50.8 2	in 8.27 mm 210	7.01 178	9.06 230	1.5 38	1.89 48		
PMA90(B/U)	41.3 1 5/8	in 8.27 mm 210	7.01 178	9.06 230	1.5 38	1.89 48		

RAM/DIAMETER								
CAT #	(mm) (in)	A	B	C	D	E	F	
PMA130(B/U)	35 1 3/8	in 7.99 mm 203	7.01 178	7.68 195	.87 22	1.89 48		
PMA190(B/U)	28.5 1 1/8	in 7.99 mm 203	7.01 178	7.68 195	.87 22	1.89 48		
PMA240(B/U)	25.4 1	in 7.99 mm 203	7.01 178	7.68 195	.87 22	1.89 48		
PMA370(B/U)	20.6 13/16	in 7.99 mm 203	7.01 178	7.01 178	.87 22	1.89 48		
PMA520(B/U)	17.5 11/16	in 7.99 mm 203	7.01 178	7.01 178	.87 22	1.89 48		
PMA770(B/U)	14.3 9/16	in 7.99 mm 203	7.01 178	7.01 178	.87 22	1.89 48		
PMA980(B/U)	12.7 1/2	in 7.99 mm 203	7.01 178	7.01 178	.87 22	1.89 48		
PMA1740(B/U)	9.5 3/8	in 7.99 mm 203	7.01 178	10.08 256	.87 22	1.89 48		
PMA2410(B/U)	8 5/16	in 7.99 mm 203	7.01 178	10.08 256	.87 22	1.89 48		

- Provides infinitely variable capacity and discharge pressure
- Suitable for continuous start/stop applications
- Pumps oil, water, and other fluids
- Stainless steel pump and check valves standard
- Maintains pressure with minimal power consumption (Non-load holding)
- Usable in hazardous areas: per ATEX II, CAT. 2 GDcT5
- Quiet operation
- Can operate on gases other than air
- Simple to install and maintain
- Compact, rugged design
- Only 15psi (1bar) air pressure required to start pump
- Requires flooded inlet
- Vertical mount

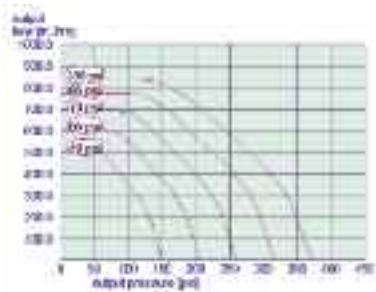


BSP FITTINGS	NPT FITTINGS	RATIO 1:	OUTLET PRESSURE		OUTPUT PER CYCLE		MAXIMUM FLOW AT ZERO PRESSURE		INLET	OUTLET
			(BAR)	(PSI)	(LITERS)	(IN ³)	(LITRES/MIN)	(IN ³ /MIN)		
PUA26B	PUA26U	4.3	26	380	0.028	1.68	14	850	1/2" BSP/NPT	1/2" BSP/NPT
PUA70B	PUA70U	11.9	70	1,010	0.01	0.607	5	305	1/2" BSP/NPT	1/2" BSP/NPT
PUA157B	PUA157U	26.7	157	2,280	0.004	5.269	2.4	146	1/2" BSP/NPT	1/2" BSP/NPT
PUA275B	PUA275U	47.5	275	3,990	0.0025	0.151	1.4	85	1/2" BSP/NPT	1/2" BSP/NPT
PUA430B	PUA430U	68.4	430	6,230	0.0017	0.105	0.9	55	1/2" BSP/NPT	1/2" BSP/NPT
PUA655B	PUA655U	107	655	9,500	0.0011	0.67	0.6	36	1/2" BSP/NPT	1/2" BSP/NPT
PUA982B	PUA982U	163.8	982	14,250	0.0007	0.044	0.4	24	1/2" BSP/NPT	1/2" BSP/NPT
PMA27B	PMA27U	4	27	390	0.16	9.72	37	2260	1" BSP/NPT	3/4" BSP/NPT
PMA60B	PMA60U	9	60	870	0.07	4.32	23	1400	1" BSP/NPT	3/4" BSP/NPT
PMA90B	PMA90U	13.6	90	1,300	0.05	2.85	15	915	1" BSP/NPT	3/4" BSP/NPT
PMA130B	PMA130U	19	130	1,880	0.034	2.04	11	670	3/4" BSP/NPT	1/2" BSP/NPT
PMA190B	PMA190U	28.4	190	2,750	0.023	1.37	7.3	455	3/4" BSP/NPT	1/2" BSP/NPT
PMA240B	PMA240U	36	240	3,480	0.018	1.08	5.8	354	3/4" BSP/NPT	1/2" BSP/NPT
PMA370B	PMA370U	54.5	370	5,360	0.012	0.71	3.8	230	1/2" BSP/NPT	1/2" BSP/NPT
PMA520B	PMA520U	76.5	520	7,540	0.008	.51	2.8	170	1/2" BSP/NPT	1/2" BSP/NPT
PMA770B	PMA770U	113	770	11,160	0.006	0.34	1.8	110	1/2" BSP/NPT	1/2" BSP/NPT
PMA980B	PMA980U	145	980	14,210	0.004	0.27	1.5	91	1/2" BSP/NPT	1/2" BSP/NPT
PMA1740B	PMA1740U	256	1,740	25,230	0.0025	0.15	0.84	51	1/2" BSP/NPT	3/8" HP
PMA2410B	PMA2410U	368	2,410	35,000	0.0017	0.104	0.58	35	1/2" BSP/NPT	3/8" HP

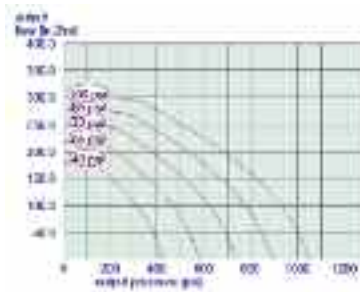
AIR OPERATED

PUA & PMA Series

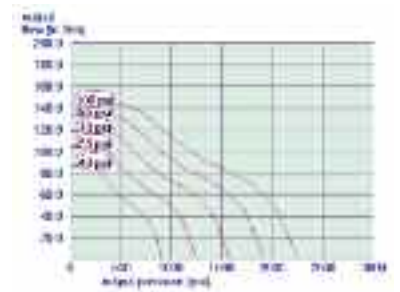
Performance charts



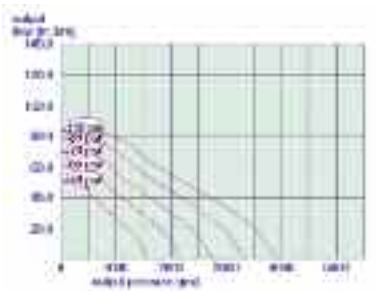
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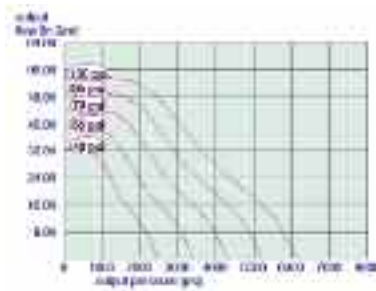
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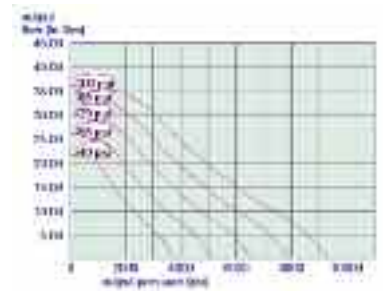
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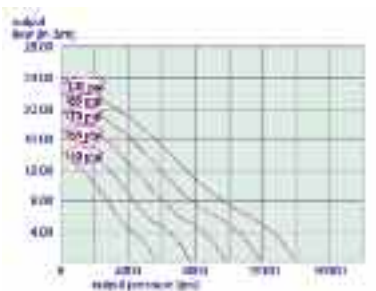
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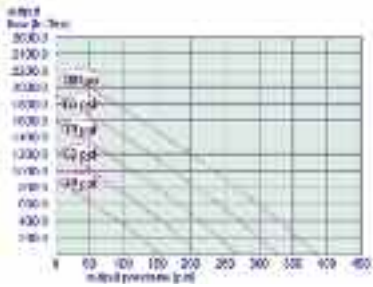
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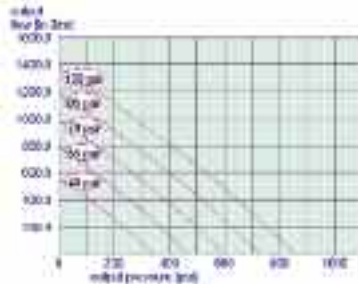
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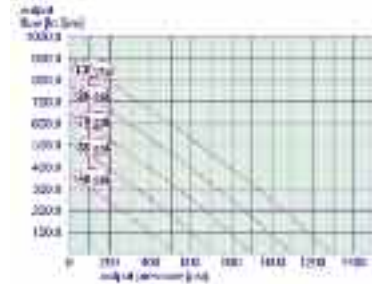
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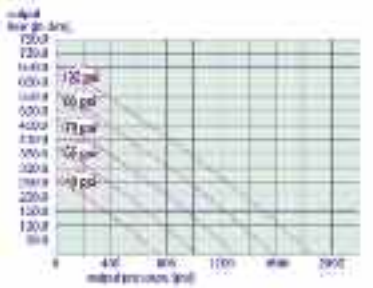
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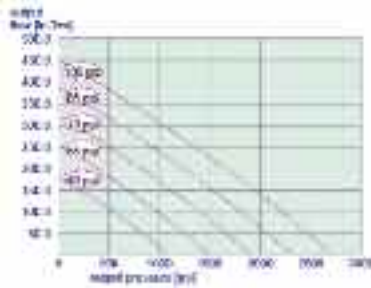
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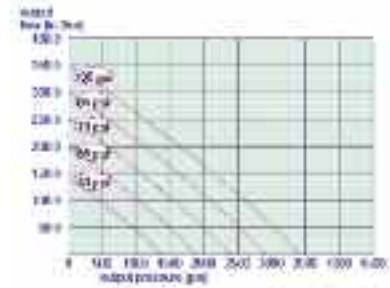
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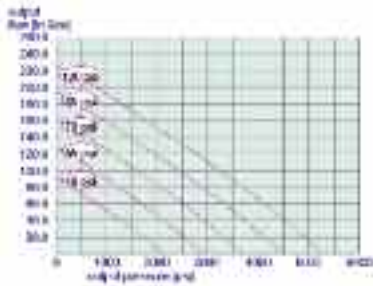
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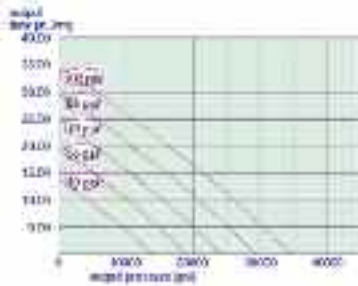
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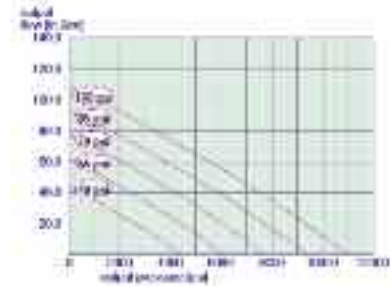
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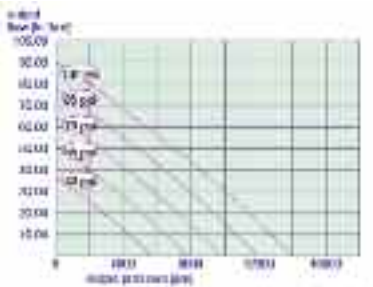
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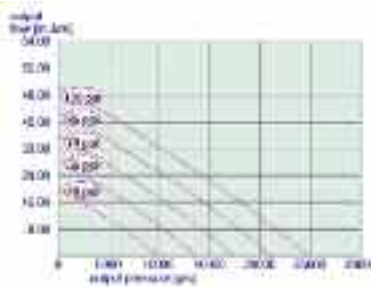
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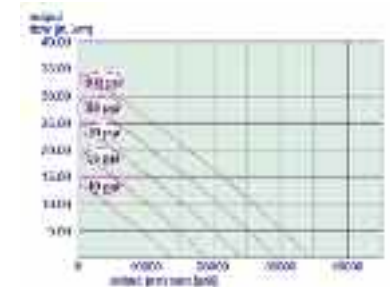
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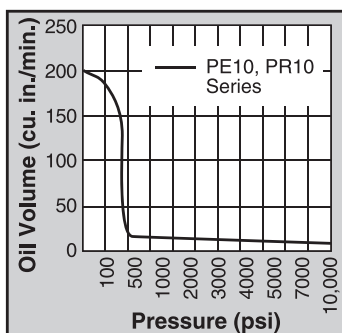


ELEC- TRIC/BATTERY

PE10 Series Pump

Up to 25 Ton Quarter Horse®

Two Speed



HIGH PERFORMANCE IN COMPACT PACKAGE. ELECTRIC AND BATTERY POWERED MODELS FOR POWERING TOOLS AND CYLINDERS UP TO 25 TON.

- Portable power source for hydraulic cylinders, and tools.
- Permanent magnet motor starts easily under load, even with reduced voltage conditions.
- Battery-operated models have 8 foot power cord with alligator clips to connect to any 12 volt battery.

- Optional rechargeable battery pack with shoulder strap for maximum portability.
- Pump typically delivers 15 minutes of continuous operation at 10,000 psi on a single battery.
- Pump can be operated in any position.
- 24 volt hand and foot switches available for all AC powered models.
- High-impact housing with flame-retardant construction.
- Base mounting holes for fixed installations.

For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable Cap. (cu. in.)
Single-Acting	Base model pump with 1/4 hp motor. Bladder type reservoir, 110 volt power required.	PE102	2-Way/ Auto. Dump	9561	Advance Return (Auto.)*	Rocker Type off, Momentary on	1/4 hp, 110/115V 50/60 Hz, Single Phase	60
Single-Acting	PE102, except has automatic dump valve.	PE102A	Auto. Dump	9562	Advance Return**	Rocker Type off, Momentary on	1/4 hp, 110/115V 50/60 Hz, Single Phase	60
Single-Acting	PE102, except requires 220 volt.	PE102-220	2-Way/ Auto. Dump	9561	Advance Return (Auto.)*	Rocker Type off, Momentary on	1/4 hp, 110/115V 50/60 Hz, Single Phase	60
Single-Acting	PE102A, except requires 220 volt.	PE102A-220	Auto. Dump	9562	Advance Return	Rocker Type off, Momentary on	1/4 hp, 220/230V 50/60 Hz, Single Phase	60
Single-Acting	PE102, except requires 12 volt DC.	PR102	2-Way/ Auto. Dump	9561	Advance Return (Auto.)*	Rocker Type off, Momentary on	1/4 hp, 12V†	60
Single-Acting	PE102A, except requires 12 volt DC.	PR102A	Auto. Dump	9562	Advance Return**	Rocker Type off, Momentary on	1/4 hp, 12V†	60
Single-Acting/ Double-Acting	Base model pump has 4-way valve for operating double-acting systems. 110 volt power required.	PE104	4-Way	9563	Advance Hold Return	Rocker Type off, Momentary on	1/4 hp, 110/115V 50/60 Hz, Single Phase	60
Single-Acting/ Double-Acting	PE104, except requires 220 volt.	PE104-220	4-Way	9563	Advance Hold Return	Rocker Type off, Momentary on	1/4 hp, 220/230V 50/60 Hz, Single Phase	60
Single-Acting/ Double-Acting	PE104, except requires 12 volt DC.	PR104	4-Way	9563	Advance Hold Return	Rocker Type off, Momentary on	1/4 hp, 12V†	60

* "Advance" position holds pressure with motor shut off. "Return" position advances cylinder with motor running and returns cylinder with motor shut off.

** Cylinder advances with motor running and automatically returns with motor shut off.

† Comes with an 8 ft. alligator clip cord for 12 volt DC use.



PE104

10,000 psi



The Quarter Horse pump has a maximum operating pressure of 10,000 psi, which handles a wide variety of handheld hydraulic tools.

Accessories

BP212VQ



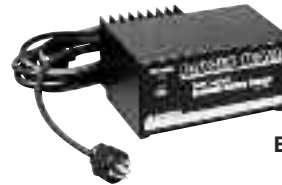
BP212VQ – Optional 12 volt battery pack. Includes sealed lead acid battery, 115V charger, 4 ft. cord, carrying case and shoulder strap. Wt., 17.7 lbs.

RB12V – Battery only.

BP12INT – Battery with cord and carrying case. Wt., 11.1 lbs.

RC12V – Replacement 4 ft. battery cord only. Wt., .5 lbs.

BC 212



BC212 – Battery charger for U.S.A. Wt., 6.6 lbs.

BC212EUR – Battery charger for Europe. Wt., 6.6 lbs.

25017 – Remote hand control with 10 ft. cord. Wt., 0.8 lb.

Max. Pump No.	dBa @ Pressure Output (psi)	Idle and 10,000 (psi)	Oil Del. (cu. in./min. @)		Overall Dimensions	Prod. Wt. with Oil (lbs.)
			0-40 (psi)	10,000 (psi)		
PE10 Series PR10 Series	10,000	68-74*	120	10	13"L x 7 ³ / ₄ "W x 8"H	20

* Measured at 3 ft. distance, all sides.

NOTE: PR10 rechargeable model is equipped with 8 ft. cord with alligator clips. Order optional battery pack (No. BP212VQ) or use with any 12 volt battery.

NOTE: Amp draw at 10,000 psi; 6 amp at 115 volt, 3 amp at 230 volt, and 35 amp at 12 volt.



9560 – Pressure regulator. Adjustable from 1,000 to 10,000 psi. All mounting hardware included. Wt., 3 lbs.



251660 – Foot switch with 10 ft. cord. Single pole, double throw, 15 amp @ 125-250 VAC. Wt., 1 lb.

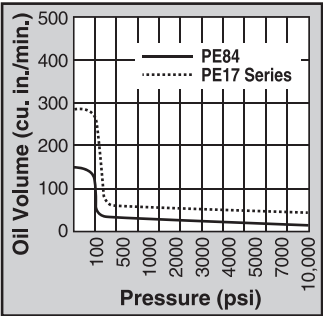


ELECTRIC PUMP

Hydraulic PE17 Series

Up to 55 Ton

17 cu. in./min. 2 Speed

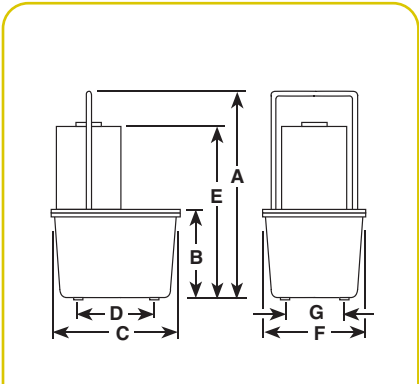


FOR MAINTENANCE AND CONSTRUCTION APPLICATIONS.

- For use with single-acting or double-acting cylinders at operating pressures to 10,000 psi.
- For intermittent duty; starts under full load.
- Equipped with ½ hp, 3,450 rpm, single-phase, thermal protected induction motor; 10 ft. remote control cord (PE172S has 25 ft. cord)
- Low amperage draw; small generators and low amperage circuits can be used as power source.
- Extremely quiet noise level (67-81 dBA).

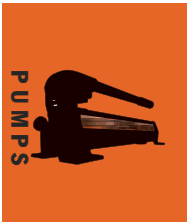


10,000 psi



Pump No.	Max. Pressure Output		dBa at Idle and 10,000 (psi)	Amp Draw 115 V - at 10,000 (psi)	Oil Del. (cu. in./min. @) †											Prod. Wt. with Oil (lbs.)
	(psi)	rpm			0 (psi)	100 (psi)	5,000 (psi)	10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	
PE17 Series	10,000	3,450	67/81*	10	290	190	20	16	18½	7	11⅜	7⅞	14⅞	9¼	5⅞	45
PE17M Series	10,000	3,450	67/81*	10	290	190	20	16	18⅞	6⅝	11½	—	14½	9½	—	53

* Measured at 3 ft. distance, all sides.
† Typical delivery. Actual flow will vary with field conditions.



For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch ††	Motor	Reservoir Usable (cu. in.)
Single-Acting	Base model pump with 1/2 hp pump with 2 gal. thermoplastic reservoir.	PE172	2-Way	9517	Advance Return (Auto†)	Remote Motor Control (10ft.) on/off	1/2 hp, 110/115V* 50/60 Hz, Single Phase	295
Single-Acting	PE172, except has 2 1/2 gal. aluminum reservoir.	PE172M	2-Way	9517	Advance Return (Auto†)	Remote Motor Control (10ft.) on/off	1/2 hp, 110/115V* 50/60 Hz, Single Phase	375
Single-Acting	PE172, has solenoid operated valve.	PE172S	3-Way	9579	Advance Hold Return	Remote Motor & Valve (25 ft.)	1/2 hp, 110/115 VAC 50/60 Hz, Single Phase	295
Single-Acting	PE172S, except has aluminum reservoir.	PE172SM	3-Way	9579	Advance Hold Return	Remote Motor & Valve (25 ft.)	1/2 hp, 110/115 VAC 50/60 Hz, Single Phase	375
Single-Acting	Best suited for crimping, punching, pressing. Not for lifting. Thermoplastic reservoir.	PE172A ∞	Auto./Dump Manifold	45554	Advance Return	Remote Motor Control (10ft.) on/off	1/2 hp, 110/115V* 50/60 Hz, Single Phase	295
Single-Acting	PE172A, except has aluminum reservoir.	PE172AM ∞	Auto./Dump Manifold	45554	Advance Return	Remote Motor Control (10ft.) on/off	1/2 hp, 110/115V* 50/60 Hz, Single Phase	375
Single/ Double-Acting	PE172, except has 9500 double-acting valve.	PE174	4-Way	9500	Advance Hold Return**	Remote Motor Control (10ft.) on/off	1/2 hp, 110/115V* 50/60 Hz, Single Phase	295
Single/ Double-Acting	Same as PE174, except has aluminum reservoir.	PE174M	4-Way	9500	Advance Hold Return**	Remote Motor Control (10ft.) on/off	1/2 hp, 110/115V* 50/60 Hz, Single Phase	375

* Available with 220 V., 50 Hz motor (to order, place suffix "50-220" behind pump order number).

** "Advance" position holds pressure with motor shut off.

† "Advance" position holds pressure with motor shut off. "Return" position advances cylinder with motor running and returns cylinder with motor shut off.

†† Control switch on PE17 series wired with line voltage.

∞ Not to be used for lifting.

NOTE: The remote motor control switch on 220V., 50 cycle PE17 series pumps is 24 volt.

NOTE: Usable oil is calculated with the oil fill at the recommended level of 1 1/2" below reservoir cover plate.

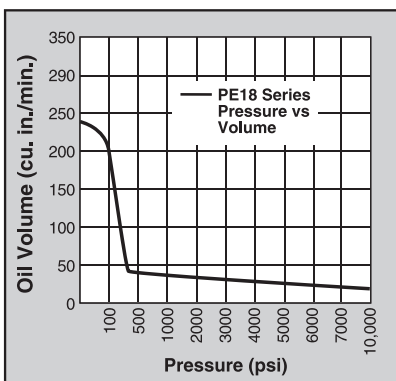
‡Some Power Team pumps are available in special configurations not listed in this catalog. Power Team can "Assemble to Order" pumps with special seals, voltages, valves, relief valve settings, etc. For your special requirements please consult your local distributor or the Power Team factory.

ELECTRIC PUMP

Hydraulic PE18 Series

Up to 55 Ton 18 cu. in./min.

Vanguard Jr. Series®



IDEAL FOR USE WITH SMALL HYDRAULICALLY POWERED TOOLS.

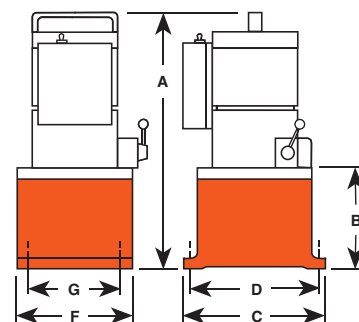
- Vanguard Jr.® pumps provide two-speed high performance in a light-weight, compact package.
- Gauge port provided on pump. Metal reservoir on all models.
- Equipped with a ½ hp, 115 volt, 60/50 Hz single phase motor that starts under load, even at reduced voltage.
- Low amperage draw permits use with smaller generators and low amperage circuits.
- All pumps have a 10 foot remote control (PE183C has 25 foot remote control).
- CSA rated for intermittent duty. Noise level of 85-90 dBA.

PE182



For operating hydraulic crimping, cutting or other tools:

- **No. PE183C** - For crimping or pressing applications. Has special electrical circuitry to pulse/advance, hold at full pressure, build to a predetermined pressure, release and reset circuit. Features separate emergency return switch.
- **No. PE184C** - Allows you to alternately operate a spring-return cutting and/or crimping tool without disconnecting either tool. Select port connection with manual 4-way valve, start pump with remote control hand switch and extend connected tool. When hand switch is switched to off, pump stops and automatic valve opens, allowing tool to return. In center (neutral) position, manual control valve holds tool in position at time valve is shifted.



10,000 psi



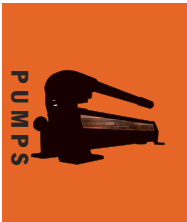
Pump No.	Max. Pressure Output (psi)	rpm	dBa at Idle and 10,000 (psi)	Amp Draw 115 V at 10,000 (psi)	Oil Del. (cu. in./min. @)†				A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	G (in.)	Prod. Wt. with Oil (lbs.)
					0 (psi)	100 (psi)	5,000 (psi)	10,000 (psi)							
PE182	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	16	4 ³ / ₄	8	7 ¹ / ₈	6	5 ¹ / ₈	30
PE183	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	16	4 ³ / ₄	8	7 ¹ / ₈	6	5 ¹ / ₈	30
PE183A	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	16	4 ³ / ₄	8	7 ¹ / ₈	6	5 ¹ / ₈	30
PE184	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	16	4 ³ / ₄	8	7 ¹ / ₈	6	5 ¹ / ₈	30
PE183-2*	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	18 ¹ / ₂	7 ¹ / ₄	11 ¹ / ₂	10	9 ¹ / ₂	8	42
PE184-2*	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	18 ¹ / ₂	7 ¹ / ₄	11 ¹ / ₂	10	9 ¹ / ₂	8	42
PE183C ††	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	16	4 ³ / ₄	8	7 ¹ / ₈	6	5 ¹ / ₈	30
PE184C ††	10,000	12,000	85/90**	10.2 Amps	230	190	25	18	16	4 ³ / ₄	8	7 ¹ / ₈	6	5 ¹ / ₈	30

* 2¹/₂ gal. reservoir.

** Measured at 3 ft. distance, all sides.

† Typical delivery. Actual flow will vary with field conditions.

†† Special application pumps for cutting, crimping or pressing.



For use with Cyl. Type	Description	Order No.	Valve Type	Valve Function	Control Switch ^{††}	Motor	Reservoir Usable (cu. in.)
Single-Acting	Base model pump has 1/2 hp pump with 2-Way valve and 1/2 gal. reservoir.	PE182	2-Way	Advance Return [†]	Remote Motor Control (10 ft.) on/off	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	104
Single-Acting	PE182, except has 3-way valve.	PE183	3-Way	Advance Hold Return	Remote Motor Control (10 ft.) on/off	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	104
Single-Acting	PE183, except has 2 gal. reservoir.	PE183-2	3-Way	Advance Hold Return	Remote Control (10 ft.)	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	525 ^{††}
Single-Acting	PE183, except has "dump valve".	PE183A[∞]	Auto./Dump Pump	Advance Return	Remote (10 ft.)	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	104
Single-Acting	Special crimping pump.	PE183C[∞]	Special, for crimping only	Advance Hold Return	Remote Motor Control (25 ft.) on/off	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	104
Single-Acting/ Double-Acting	Base model pump has 1/2 hp pump for double-acting systems with 1/2 gal. reservoir.	PE184	4-Way	Advance Hold Return [†]	Remote Motor Control (10 ft.) on/off	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	104
Single-Acting/ Double-Acting	PE184, except with 2 gal. reservoir.	PE184-2	4-Way	Advance Hold Return [†]	Remote Motor Control (10 ft.) on/off	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	525 ^{††}
Single-Acting/ Double-Acting	Special crimping pump.	PE184C*	4-Way	Advance Return	Remote Control (10 ft.) on/off	1/2 hp, 110/115VAC** 50/60 Hz, A.C., Single Phase	104

* Also for use with special single-acting cylinder applications.

** Available with 220 Volt, 60/50 Hz motor (to order, place suffix "50-220" behind pump order number). Specify voltage when ordering.

[†] Holds when motor is shut off and valve is in "advance" position.

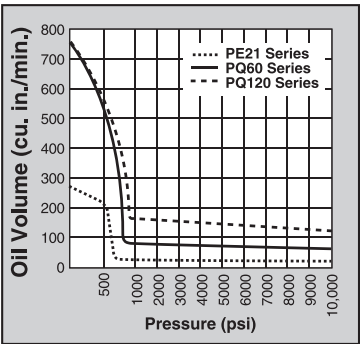
^{††} Pumps supplied with 2 gal. oil (usable oil is 355 cu. in.), will hold 2 1/2 gal. when filled to within 1/2" below reservoir cover plate.

[∞] Not to be used for lifting.

ELECTRIC PUMP

PE21 Series

Up to 75 Ton 22 cu. in./min.
Two-Speed



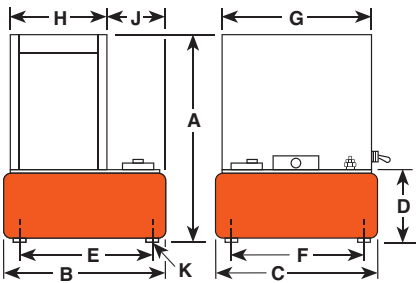
- Totally enclosed, fan cooled induction motor: 1 hp, 1,725 rpm, 60 Hz, single phase. Thermal overload protection.
- Remote control, with 10 foot cord is standard on pumps with solenoid valves. Manual valve pumps have “Stop”, “Start” and “Run/Off/Pulse” switches. Pump controls are moisture and dust resistant.
- Motor drip cover with carrying handles and lifting lug.
- Low noise level of 70 dBA® 10,000 psi.
- In the event of electrical interruption, pump shuts off and will not start up until operator presses the pump start button.
- 24 volt control circuits on units with remote controls provide additional user/operator safety.



PE213



PE21 series pump and RD5513 cylinder used in a special press that produces pharmaceutical-grade extracts for herbal medicines.



Pump No.	Max. Pressure Output		dBA at Idle and 10,000 (psi)	Oil Del. (cu. in./min. @)†														Prod. Wt. w/Oil (lbs.)
	(psi)	rpm		100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K*** (in.)	
PE21 Series	10,000	1,725	70*	270	29	27	22	21 ³ / ₈	11 ¹ / ₂	9 ¹ / ₂	6 ¹ / ₂	10	8	14 ¹ / ₈	9 ¹ / ₂	3 ¹ / ₄	1 ¹ / ₂ -20 UNF	98†

* Measured at a 3 ft. distance, all sides.
*** For 2" dia. swivel casters, order (4) No. 10494.

† Shipping weight with manual valve; add 14 lbs. for pump with solenoid valve.

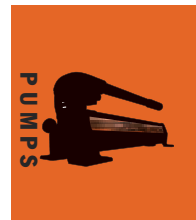


PE214

10,000 psi



PE214S



For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 10,000 (psi)	Motor	Reservoir Usable (cu. in.)
Single-Acting	1 h.p. pump with 2½ gal. reservoir and manual valve.	PE213	3-Way	9520*	Advance Hold Return	115V - 15 amps 230 V - 7.5 amps	1 hp, 115/230 Volt 60 Hz††, Single Phase	590
Single-Acting	PE213, except has solenoid operated remote valve.	PE213S	3-Way	9599†	Advance Hold Return	115V - 15 amps 230 V - 7.5 amps	1 hp, 115/230 Volt 60 Hz††, Single Phase	590
Double-Acting	1 h.p. pump with 2½ gal. reservoir and manual valve.	PE214	4-Way	9506*	Advance Hold Return	115V - 15 amps 230 V - 7.5 amps	1 hp, 115/230 Volt 60 Hz††, Single Phase	590
Double-Acting	PE214, except has solenoid operated remote valve.	PE214S	4-Way	9512†	Advance Hold Return	115V - 15 amps 230 V - 7.5 amps	1 hp, 115/230 Volt 60 Hz††, Single Phase	590

* Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

† Solenoid valve. Pump is equipped with a remote control switch with 10 ft. cord.

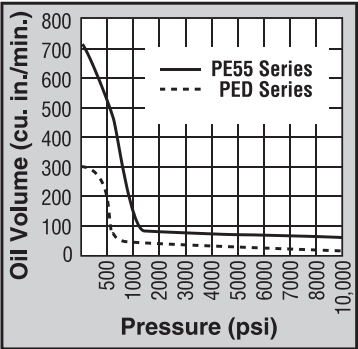
†† Prewired at factory for this voltage. PE21 series available in 230V 60Hz or 220V 50Hz. Please specify when ordering. Example: for 60Hz order PE213-230; for 50Hz order PE213-50-220.

Some Power Team pumps are available in special configurations not listed in this catalog. Power Team can “Assemble to Order” pumps with special seals, voltages, valves, relief valve settings, etc. For your special requirements please consult your local distributor or the Power Team factory.

ELECTRIC PUMP

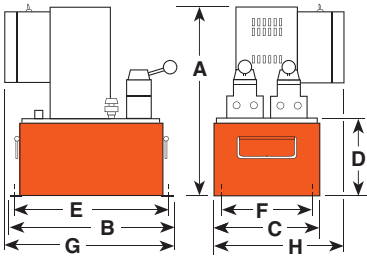
Hydraulic PED Series

25 cu. in./min. Two-Speed



IDEAL FOR RUNNING MULTIPLE TOOLS OR CYLINDERS FROM ONE POWER UNIT. RECOMMENDED FOR CYLINDERS UP TO 75 TONS.

- Two-speed pumps have the same low pressure and high pressure flows from both valves.
- Flows and pressures of each pump are independent.
- Delivers 300 cu. in./min. of oil @ 100 psi and 25 cu. in./min. @ 10,000 psi from each pump.
- 1½ hp, 110/115 volt, 60 Hz induction motor, 10 foot remote control and 5 gallon steel reservoir.
- Models available for operating single-acting or double-acting cylinders.
- Each power unit contains two separate pumps and two separate valves allowing operator to control multiple processes with one power unit.
- Both pumps on each power unit are equipped with an externally adjustable pressure relief valve.
- Not recommended for frequent starting and stopping.



Pump No.	Max. Pressure Output		dBa at 10,000	(115v)** Amp Draw at 10,000 (psi)	Oil Del. (cu. in./min. @)												Prod. Wt. w/Oil (lbs.)
	(psi)	rpm			100 (psi)	700 (psi)	5,000 (psi)	10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	
PED Series	10,000	3,450	87/85*	22	300	40	35	25	20¾	18	11½	8½	16½	9	18	13	170

* Noise level reading (dBA) measured at a 3 ft. distance, all sides. ** Amp draw at 10,000 psi, 230 Volts 50/60 Hz is 15 Amps.

10,000 psi



PED254



PED254S



For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch††	Motor	Reservoir Usable (cu. in.)
Single-Acting	1½ hp pump with 5 gal. reservoir. Valve has "Posi-Check"™ feature.	PED253	3-Way	9520	Advance Hold Return	Remote Motor	1½ hp, 115/230 VAC 60 Hz, Single Phase	1,000
Double-Acting	1½ hp pump with 5 gal. reservoir. Valve has "Posi-Check"™ feature.	PED254	4-Way	9506	Advance Hold Return	Remote Motor	1½ hp, 115/230 VAC 60 Hz, Single Phase	1,000
Double-Acting	PED254, except has solenoid operated remote valve.	PED254S	4-Way	9513	Advance Hold Return	Remote Valve	1½ hp, 115/230 VAC 60 Hz, Single Phase	1,000

†† Control switch wired with line voltage. All remotes are 10 ft. long.

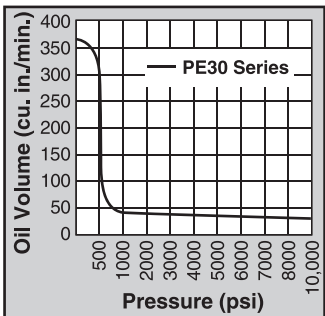
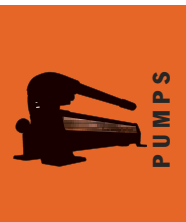
ELECTRIC PUMP

PE30 Series

30 cu. in./min. Two-Speed
Vanguard® Series

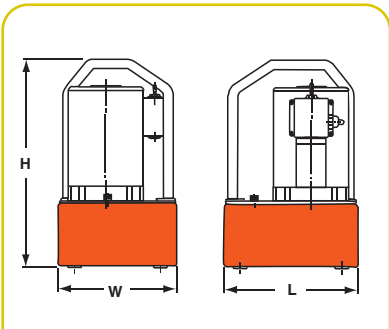
IDEAL FOR MAINTENANCE AND CONSTRUCTION APPLI- CATIONS

- Deliver a powerful punch to operate single-acting or double-acting cylinders.
- Integral roll cage protects pump from abuse.
- 1 hp, single phase, permanent magnet motor.



PE302S

PE30TWP
Torque Wrench
Applications
See page 174



Pump No.	Max. Pressure Output (psi)	dBA at Idle & 10,000 (psi)	Amp Draw 115V at 10,000 (psi)	Oil Del. (cu. in./min. @)					Overall Dimensions	Prod. Wt. With Oil (lbs.)
				100 (psi)	500 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)		
PE30 Series w/1¼ gal. res.	10,000	87/82	13	300	200	44	38	30	10"L x 9"W x 16"H	41
PE30 Series w/1¾ gal. res.	10,000	87/82	13	300	200	44	38	30	13½"L x 9½"W x 16½"H	49



10,000 psi



PE302

See current price list for shipping weights.

For Use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor (4,000 rpm)	Reservoir Usable (cu. in.)
Single-Acting	Base model 1 hp pump with 1¼ gal. reservoir & 2 position valve.	PE302	3-Way, 2 Pos.	9584	Hold Advance Return	On/Off/Pulse Switch	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Single-Acting	PE302, except has 1¼ gal. reservoir.	PE302-2	3-Way, 2 Pos.	9584	Hold Advance Return	On/Off/Pulse Switch	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***
Single-Acting	PE302, except has remote motor control.	PE302R	3-Way, 2 Pos.	9584	Hold Advance Return	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Single-Acting	PE302R, except has 1¼ gal. reservoir.	PE302R-2	3-Way, 2 Pos.	9584	Hold Advance Return	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***
Single-Acting	PE302R, except also has solenoid operated remote valve.	PE302S†	3-Way, 2 Pos.	9579	Hold Advance Return	Remote Motor & Valve (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Single-Acting	PE302S, except has 1¼ gal. reservoir.	PE302S-2†	3-Way, 2 Pos.	9579	Hold Advance Return	Remote Motor & Valve (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***
Single-Acting	PE302, except has "Auto Dump" valve	PE302A∞	Auto Dump	9610	Automatic Pilot Operation	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Single-Acting	Base model 1 hp pump with 1¼ gal. reservoir & 3 position valve.	PE303	3-Way, 3 Pos.	9520*	Advance Hold Return	On/Off/Pulse Switch	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Single-Acting	PE303, except has 1¼ gal. reservoir.	PE303-2	3-Way, 3 Pos.	9520*	Advance Hold Return	On/Off/Pulse Switch	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***
Single-Acting	PE303, except has remote motor control.	PE303R	3-Way, 3 Pos.	9520*	Advance Hold Return	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Single-Acting	PE303R, except has 1¼ gal. reservoir.	PE303R-2	3-Way, 3 Pos.	9520*	Advance Hold Return	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***
Double-Acting	Base model 1 hp pump with 1¼ gal. reservoir & 4-way valve for double-acting systems	PE304	4-Way, 3 Pos. Tandem Ctr.	9506*	Advance Hold Return	On/Off/Pulse Switch	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Double-Acting	PE304, except has 1¼ gal. reservoir.	PE304-2	4-Way, 3 Pos. Tandem Ctr.	9506*	Advance Hold Return	On/Off/Pulse Switch	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***
Double-Acting	PE304, except has remote motor control.	PE304R	4-Way, 3 Pos. Tandem Ctr.	9506*	Advance Hold Return	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	280**
Double-Acting	PE304R, except has 1¼ gal. reservoir.	PE304R-2	4-Way, 3 Pos. Tandem Ctr.	9506*	Advance Hold Return	Remote Motor Control (10 ft.)	1 hp 110/115 VAC, 50/60 Hz, Single Phase	380***

* "Posi-Check" valve design, "Posi-Check" guards against pressure loss when valve is shifted from "advance" to "hold" position.

** Shipped with 1 gal. of oil (231 cu. in., 210 usable).

*** Shipped with 2 gal. of oil.

∞ Not to be used for lifting applications. Best suited for crimping, pressing & punching applications.

† 115 volt, 60 Hz.

†† For 220/230 volt, 50/60 Hz. add suffix "- 220" (example PE302-220).

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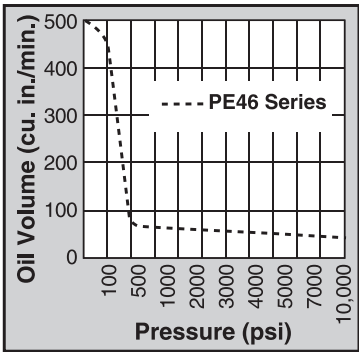


ELECTRIC PUMP

PE46 Series

46 cu. in./min.

Two-speed



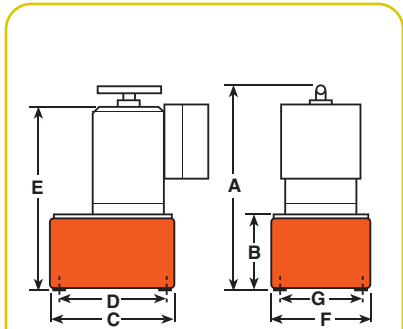
BEST SUITED FOR UNDER-THE-ROOF MAINTENANCE AND PRODUCTION APPLICATIONS.

- Two-speed high performance pump.
- For use with single- or double-acting cylinders at operating pressures to 10,000 psi.
- Equipped with a 1½ hp, 3,450 rpm single-phase, 60 Hz thermal protected induction motor that starts under full load. Noise level of 77-81 dBA.
- All equipped with a 10 foot remote control except PE462S which has a 25 foot remote control.
- 24 volt control circuit on all units with remote control.
- CSA rated for intermittent duty.



PE462A

10,000 psi



Pump No.	Max. Pressure Output (psi)	rpm	dBa at Idle and 10,000 (psi)	Amp Draw 115 V - at 10,000 (psi)	Oil Del. (cu. in./min. @)†				A	B	C	D	E	F	G	Prod. Wt. w/Oil (lbs.)
					0 (psi)	100 (psi)	5,000 (psi)	10,000 (psi)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	
PE46 Series	10,000	3,450	77/81*	25**	500	450	51	46	19 ⁵ / ₈	6 ¹³ / ₁₆	11 ¹ / ₂	10	18 ¹ / ₂	9 ¹ / ₂	8	79

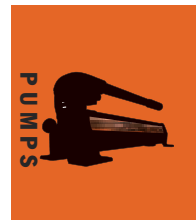
* Measured at 3 ft. distance, all sides.
** Requires 20 amp circuit.
† Typical delivery. Actual flow will vary with field conditions.



PE462S



PE464



For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable (cu. in.)
Single-Acting	Base model 1½ hp pump with 2½ gal. metal reservoir.	PE462	3-Way	9584	Advance Return†	Remote Motor Control (10 ft.) on/off	1½ hp, 115/230 VAC* 60 Hz, Single Phase	590
Single-Acting	PE462, except has solenoid valve.	PE462S††	3-Way	9579	Advance Return**	Remote Motor Valve (25 ft.)	1½ hp, 115/230 VAC* 60 Hz, Single Phase	590
Single-Acting	PE462, except has "dump valve"	PE462A∞	Auto/Dump 3-Way	9610	Advance Return	Remote Motor Control (10 ft.) on/off	1½ hp, 115/230 VAC* 60 Hz, Single Phase	590
Double-Acting/ Multi-Single Acting	PE462, except has 9500 double-acting valve.	PE464	4-Way	9500	Advance Hold Return†	Remote Motor Control (10 ft.) on/off	1½ hp, 115/230 VAC* 60 Hz, Single Phase	590
Double-Acting/ Multi-Single Acting	PE462S, except has 9592 double-acting valve.	PE464S††	3/4-Way	9592	Advance Return**	Remote Motor/Valve (10 ft.)	1½ hp, 115/230 VAC* 60 Hz, Single Phase	590

* Available with 220 V., 50 Hz motor (to order, place suffix "50-220" behind pump order number). Specify voltage when ordering.

** "Advance" position holds pressure with motor shut off.

*** Usable oil is calculated with the oil fill at the recommended level of ½" below reservoir cover plate.

† "Advance" position holds pressure with motor shut off. "Return" position returns cylinder.

†† 115 volt, 60 Hz.

††† The remote motor control switch on PE46 series pumps is 24 volt.

∞ Not to be used for lifting. When pump is shut off, oil returns to reservoir.

Contact Factory for special 12VDC version for service vehicles

ELECTRIC PUMP

PE55 Vanguard®

55 cu. in./min.

For cylinders up to 200 tons.

HEAVY DUTY MULTIPLE-APPLICATIONS PUMP. HEAVY CONSTRUCTION AND CONCRETE STRESSING. LOW VOLTAGE STARTING POSSIBLE.

- 1½ hp, 12,000 rpm, 110/115 volt, 50/60 Hz universal motor; draws 25 amps at full load, starts at reduced voltage. CSA rated for intermittent duty.
- 10 foot remote motor control (except PE552S which has a 25 foot remote motor and valve control).
- True unloading valve achieves greater pump efficiency, allowing higher flows at maximum pressure.
- Reservoirs available in sizes up to 10

gallons. See accessories page 133.

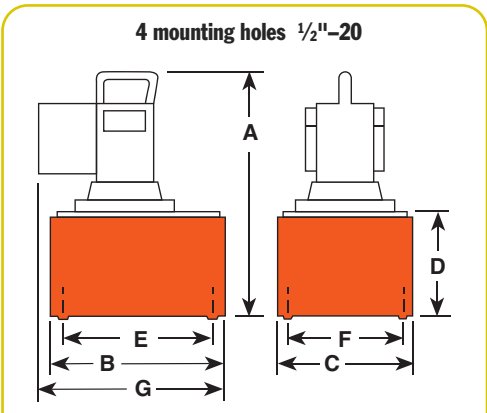
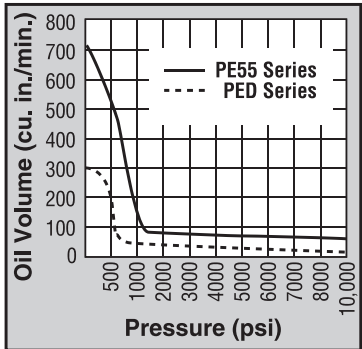
- Light weight and portable. Best weight to performance ratio of all Power Team pumps.
- “Assemble to Order” System: There are times when a custom pump is required. Power Team’s “Assemble to Order” system allows you to choose from a wide range of pre-engineered, off-the-shelf components to build a customized pump to fit specific requirements. By selecting standard components you get a “customized” pump without “customized” prices. All pumps come fully assembled, less oil and ready for work. See pages 100-103.



PE55TWP
Torque Wrench
Applications
See page 175



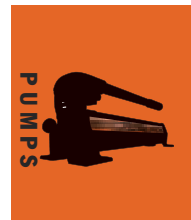
PE554W
Weather-resistant model



Pump No.	Max. Pressure Output		dBa at Idle and 10,000 (psi)	Amp Draw at 10,000 psi (115 V.)**		Oil Del. (cu. in./min. @)				Dimensions (in.)								Prod. Wt. w/Oil (lbs.)
	(psi)	rpm				0 (psi)	700 (psi)	5,000 (psi)	10,000 (psi)	A	B	C	D	E	F	G	H	
PE55 Series	10,000	12,000	90/89*	25	704	440	74	56		18 1/4	11 1/2	9 1/2	7	10	8	14	-	65

*Noise level reading (dBA) measured at a 3 ft. distance, all sides.

** Amp draw at 10,000 psi, 230 Volts 50/60 Hz is 15 Amps.



For use with Cyl. Type	Description	Order No.***	Valve Type	Valve No.	Valve Function	Control Switch††	Motor	Reservoir Usable (cu. in.)
Single-Acting	Base model 1 $\frac{1}{8}$ hp pump with 2 $\frac{1}{2}$ gal. reservoir, remote motor control & 3-way valve.	PE552	3-Way	9582	Advance Return**	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Single-Acting	PE552, except also has solenoid operated remote valve.	PE552S	3-Way	9579	Advance Hold Return	Remote Motor & Valve	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Single-Acting	PE552, except has "Auto Dump" valve.	PE552A∞	Auto/Dump	9610	Advance Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Single-Acting	1 $\frac{1}{8}$ hp pump with 2 $\frac{1}{2}$ gal. reservoir. Valve has "Posi-check" feature.	PE553	3-Way†	9520	Advance Hold Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	Base model 1 $\frac{1}{8}$ hp pump with 2 $\frac{1}{2}$ gal. res. and 4-way valve for double-acting systems.	PE554	4-Way†	9506	Advance Hold Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	Weather-resistant model 1 $\frac{1}{8}$ hp pump with 2 $\frac{1}{2}$ gal. res. and 4-way valve for double-acting systems.	PE554W	4-Way†	9506	Advance Hold Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	PE554, except has 9500 tandem center valve.	PE554T	4-Way	9500	Advance Hold Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	For use with single-acting Spring Seat, Stressing Jack or double-acting cylinder.	PE554P	4-Way	9500	Advance Hold Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	For use with single-acting or double-acting Power Seat, Stressing Jacks ONLY.	PE554PT	4-Way	9628	Advance Hold Sequenced Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	Pump suitable to run multiple spring return tools.	PE554C	4-Way	9511†††	Advance Hold Return	Remote Motor	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525
Double-Acting	Pump equipped with 3/4-way solenoid valve.	PE554S	3/4-Way	9592	Advance Hold Return**	Remote Motor & Valve	1 $\frac{1}{8}$ hp*, 110/115 VAC 50/60 Hz, Single Phase	525

* Pumps available with 230 volt, 60/50 Hz motors. Specify voltage when ordering. See "Assemble to Order" pump options on pp 100-103.

** Holds with motor shut off.

***To order PE55 series pumps with CSA approval, add "-C" to the Order No.

† Valves have "Posi-Check" feature.

†† All remotes are 10 ft. long except for PE552S which is 25 ft. long.

†††Valving allows alternate and independent operation of two different spring return tools. Valve holds pressure only while valve is in "A" or "B" port position with pump motor shut off.

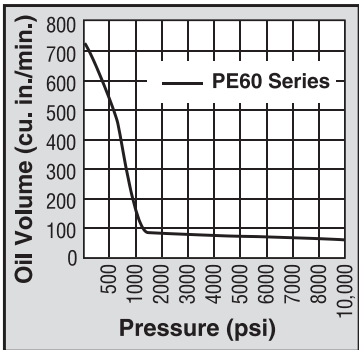
∞ Not to be used for lifting applications.

ELECTRIC PUMP

PE60 Series

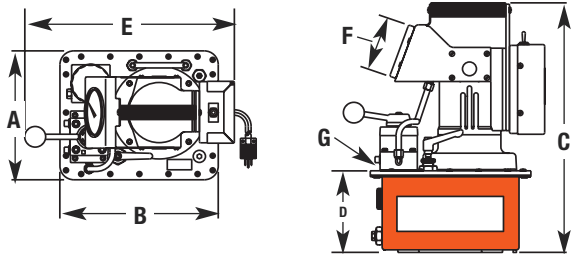
Post Tensioning

56 cu. in./min. Two-Speed



COMPACT, LIGHT WEIGHT PUMP. EXCELLENT CHOICE FOR RUGGED APPLICATIONS AND LOW VOLTAGE STARTING.

- Long, trouble free life in the most demanding work environments. For operating single- or double-acting cylinders, or stressing jacks.
- Powered by 1½ hp, 115 volt, 60/50 Hz single phase motor. Starts under load, even at the reduced voltages at construction sites.
- Optional fan-driven external oil cooler includes rollover guard.
- Insulated carrying handle.
- Integral 4" dia. fluid-filled pressure gauge with steel bezel complies with ASME B40.1 Grade A. With 0 to 10,000 psi pressure range in 100 psi increments.
- Sealed ¾ gallon (usable) reservoir. Reservoir drain port is standard.
- Standard oil level sight gauge for accurate oil level monitoring.
- External spin-on filter removes contaminants from circulating oil to maximize pump, valve and cylinder/tool life.



Pump No.	Max. Pressure Output		dBa at 10,000 (psi)	Amp Draw at 10,000 (psi)	Oil Del. (cu. in./min. @)				A	B	C	D	E	F	G	Prod. Wt. w/Oil (lbs.)
	(psi)	rpm			100 (psi)	700 (psi)	5,000 (psi)	10,000 (psi)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	
PE604T	10,000	12,000	80/85*	25	704	440	74	56	9 ⁵ / ₁₆	11 ¹ / ₂	18 ¹ / ₄	6	15	4	3/8 NPTF	50
PE604PT	10,000	12,000	80/85*	25	704	440	74	56	9 ⁵ / ₁₆	11 ¹ / ₂	18 ¹ / ₄	6	15	4	3/8 NPTF	51

NOTE: Unloading pressure is 1,000 psi.

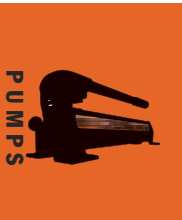
For 220/230 volt, 50/60 Hz, single-phase models, add -220 suffix.

Consult factory for PE60 pump models with other control and valve options.



PE604T

10,000 psi



The PE60 used for pre-stressing.

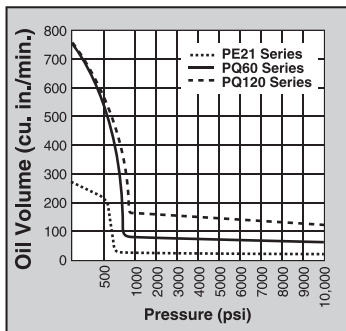


For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable (cu. in.)
Single-Acting, Spring Seat, Stressing Jack or Double-Acting	1 $\frac{1}{8}$ hp pump with $\frac{3}{4}$ gal. reservoir & valve for double-acting systems.	PE604T	4-Way 3-position	9500	Advance Hold Return	On/Off/Pulse	1 $\frac{1}{8}$ hp, 115 VAC 60/50 Hz, Single Phase	157
Single-Acting or Double-Acting Power Seat, Stressing Jacks Only	PE604T, except has special valve for post tensioning application only.	PE604PT	4-Way 3-position	9628 Model C	Advance Hold Sequenced Return	On/Off/Pulse	1 $\frac{1}{8}$ hp, 115 VAC 60/50 Hz, Single Phase	157
OPTIONAL								
252511: Oil cooler kit for PE604T or PE604PT, 115 VAC. Weight 5 lbs. 252512: Oil cooler kit for PE604T or PE604PT, 220 VAC. Weight 5 lbs.								

ELECTRIC PUMP

Hydraulic PQ60 Series

Up to 200 ton
60 cu. in./min.

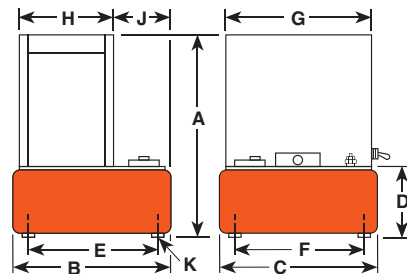


PUMP DESIGNED SPECIFICALLY FOR HEAVY DUTY, EXTENDED CYCLE OPERATION.

- For operating single- or double-acting cylinders.
- Metal shroud keeps dirt and moisture out of motor and electrical components.
- Electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption.
- Internal relief valve limits pressure to 10,000 psi. External relief valve is adjustable from 1,000 to 10,000 psi.
- Pumps operate below maximum OSHA noise limitation (74-76 dBA).
- Start and operate under full load, even with voltage reduced 10%.



PQ603



Pump No.	Max. Pressure		dBa at		Amp Draw at		Oil Del. (cu. in./min. @)												Prod. Wt. w/Oil (lbs.)
	Output (psi)	rpm	Idle and 10,000 (psi)	10,000 psi (115 V.)**	100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	
PQ60 Series	10,000	1,725	74/76*	See Chart (following page)	730	70	65	60	25 ¹ / ₈	14 ¹ / ₄	15 ¹ / ₂	7 ¹ / ₄	12 ¹ / ₈	13 ⁵ / ₁₆	14 ¹¹ / ₁₆	9 ⁵ / ₁₆	4 ¹³ / ₁₆	1/2-20 UNF	169**

* Measured at a 3 ft. distance, all sides.

** Total weight with oil and 3-way solenoid valve. Subtract 10 lbs. to obtain weight of pump with manual valve.

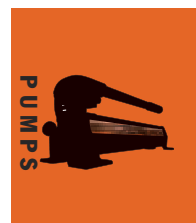
*** For 2" dia. swivel casters, order (4) No. 10494.



PQ604



PQ604S



Hydraulic Machine Press Operation.

For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 10,000 (psi)	Motor	Reservoir Usable (cu. in.)
Single-Acting	2 hp pump with 5.7 gal. reservoir and manual valve,	PQ603	3-Way	9520*	Advance Hold Return	115V - 22 amps 230V - 11 amps	2 hp, 230 Volt 60 Hz††, Single Phase	1,250
Single-Acting	PQ603, except has solenoid operated remote valve.	PQ603S	3-Way	9599†	Advance Hold Return	115V - 22 amps 230V - 11 amps	2 hp, 230 Volt 60 Hz††, Single Phase	1,250
Double-Acting	2 hp pump with 5.7 gal. reservoir and manual valve.	PQ604	4-Way	9506*	Advance Hold Return	115V - 22 amps 230V - 11 amps	2 hp, 230 Volt 60 Hz††, Single Phase	1,250
Double-Acting	PQ604, except has solenoid operated remote valve.	PQ604S	4-Way	9512†	Advance Hold Return	115V - 22 amps 230V - 11 amps	2 hp, 230 Volt 60 Hz††, Single Phase	1,250

* Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

† Solenoid valve. Pump is equipped with a remote control switch with 10 ft. cord.

†† PQ60 series also available in 115V, 60 Hz or 220V, 50 Hz. Please specify when ordering. Example: for 60 Hz order PQ603-115; for 50 Hz order PQ603-50-220.

‡ **Some Power Team pumps are available in special configurations not listed in this catalog. Power Team can “Assemble to Order” pumps with special seals, voltages, valves, relief valve settings, etc. For your special requirements please consult your local distributor or the Power Team factory.**

ELECTRIC PUMP

PQ120 Series

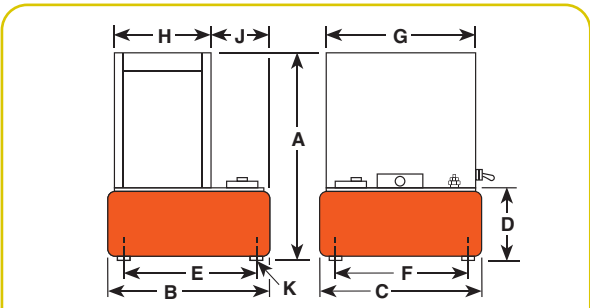
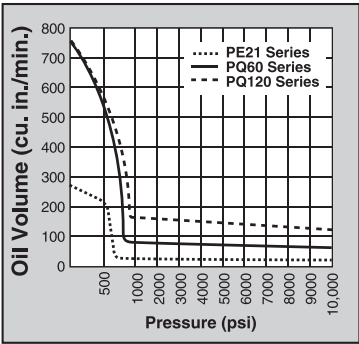
Up to 400 Ton
120 cu. in./min.



- Start and operate under full load, even with voltage reduced 10%.
- Electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption.
- Internal relief valve limits pressure to 10,000 psi. External relief valve is adjustable from 1,000 to 10,000 psi.
- Pump prewired at factory with a 3hp, 460 volt, 60 Hz. 3 Phase motor. Other electrical configurations are available. See ordering information on the following page.
- 24 volt control circuits on units with remote controls for added user/operator safety.
- 3 hp (3 phase) motor with thermal overload protection. Motor starter and heater element supplied as standard equipment; no hidden charges!
- Metal shroud keeps dirt and moisture out of motor and electrical components.
- Pumps operate below maximum OSHA noise limitation.



PQ1203



Pump No.	Max. Pressure Output		dBa at Idle and 10,000 (psi)	Amp Draw at 10,000 (psi)	Oil Del. (cu. in./min. @)														Prod. Wt. w/Oil (lbs.)
	(psi)	rpm			100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	
PQ120 Series	10,000	1,725	73/78*	See Chart On page 89	730	160	130	120	25 ¹ / ₈	14 ¹ / ₄	15 ¹ / ₂	7 ¹ / ₄	12 ¹ / ₈	13 ⁵ / ₁₆	14 ¹¹ / ₁₆	9 ⁵ / ₁₆	4 ¹³ / ₁₆	1/2-20 UNF	164**



PQ1204

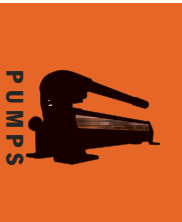


PQ1204S

10,000 psi



LR19814



PQ- series pump used to drive piers to lift and stabilize building foundation.

For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 10,000 (psi)	Motor	Reservoir Usable (cu. in.)
Single-Acting	3 hp pump with 5.7 gal. reservoir and manual valve.	PQ1203	3-Way	9520*	Advance Hold Return	230V - 10.5 amps 460V - 5.3 amps	3 hp, 460 Volt 60 Hz††, 3 Phase	1,250
Single-Acting	PQ1203, except has solenoid operated remote valve.	PQ1203S	3-Way	9599†	Advance Hold Return	230V - 10.5 amps 460V - 5.3 amps	3 hp, 460 Volt 60 Hz††, 3 Phase	1,250
Double-Acting	3 hp pump with 5.7 gal. reservoir and manual valve.	PQ1204	4-Way	9506*	Advance Hold Return	230V - 10.5 amps 460V - 5.3 amps	3 hp, 460 Volt 60 Hz††, 3 Phase	1,250
Double-Acting	PQ1204, except has solenoid operated remote valve.	PQ1204S	4-Way	9512†	Advance Hold Return	230V - 10.5 amps 460V - 5.3 amps	3 hp, 460 Volt 60 Hz††, 3 Phase	1,250

* Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

† Solenoid valve. Pump is equipped with a remote control switch with 10 ft. cord.

†† PQ120 series also available in 230V 60 Hz or 220/380V 50 Hz. Please specify when ordering. Example: for 60 Hz order PQ1204S-230; for 50 Hz. order PQ1204S-50-220 or PQ1204S-50-380. PQ120 Series also available in 575V 60 Hz. Consult the factory.

‡ Some Power Team pumps are available in special configurations not listed in this catalog. Power Team can "Assemble to Order" pumps with special seals, voltages, valves, relief valve settings, etc. For your special requirements please consult your local distributor or the Power Team factory.

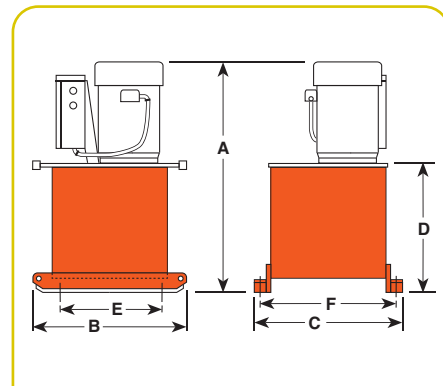
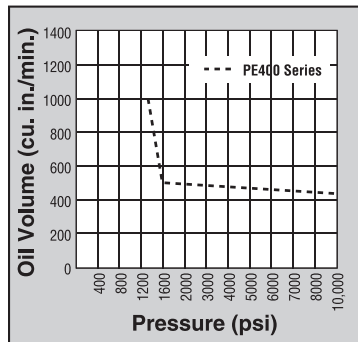
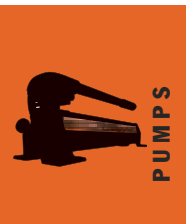
ELECTRIC PUMP

PE400 Series

Up to 1,000 Ton
420 cu. in./min.

HIGH TONNAGE DOUBLE-ACTING CYLINDERS, SINGLE OR MULTIPLE CYLINDER APPLICATIONS. UP TO 1,000 TONS

- Two-speed high output pump delivers up to 5 gpm of oil.
- Low noise level of 73-80 dBA.
- Integral electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption. Over-current protection prevents damage to motor as a result of overheating.
- "Stop" and "Start" control buttons are 24 volt. PE4004 has a 4-way/3-position manual valve. The PE4004S has a 4-way/3-position solenoid valve with a 24 volt remote hand switch.
- External pressure relief valve is adjustable from 1,500 to 10,000 psi.
- Heavy duty 4" dia. casters assure easy maneuvering.
- 20 gallon (3,927 cu. in. usable) reservoir has a low oil level sight gauge.
- Powered by a dual voltage 10 hp, 3 phase, 1,725 rpm motor.
- 3 phase motor has all the electrical components necessary to operate the pump. The customer has no hidden charges when making purchase.
- Deliver 1,200 cu. in./min. of oil @ 200 psi, 420 cu. in./min. of oil @ 10,000 psi.



Pump No.	Max. Pressure Output		dBA at Idle and 10,000 (psi)	Amp Draw at 10,000 (psi)	Oil Del. (cu. in./min. @)				Dimensions				Caster Mfg.		Prod. Wt. w/Oil (lbs.)
	(psi)	rpm			200 (psi)	1,200 (psi)	5,000 (psi)	10,000 (psi)	A* (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	
PE4004	10,000	1,725	73/80	34 @230 V.	1,200	1,050	450	420	36 ³ / ₈	25	24	21 ¹ / ₄	15 ¹ / ₂	21 ¹ / ₂	492
PE4004S	10,000	1,725	73/80	17 @460 V.	1,200	1,050	450	420	36 ³ / ₈	25	24	21 ¹ / ₄	15 ¹ / ₂	21 ¹ / ₂	506

* Add 5" and 8 lbs. when casters are mounted. (Units are supplied with four 4" dia. swivel casters.)

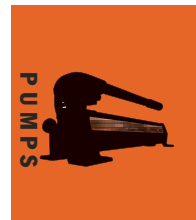


PE4004S pump and RD3006 cylinder used in a special press which repairs damaged chain links for the shipping industry.



PE4004S

10,000 psi



For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Motor††	Reservoir Usable (cu. in.)
Double-Acting	10 hp pump with 20 gal. reservoir and manual valve.	PE4004	4-Way	9506	Advance Hold Return	10 hp, 208/230/460 volt* 60 Hz, 3 Phase	3,927†
Double-Acting	PE4004, except has solenoid operated remote valve.	PE4004S	4-Way	9512*	Advance Hold Return	10 hp, 208/230/460 volt* 60 Hz, 3 Phase	3,927†

* Factory wired for this voltage. For 230V, 60Hz order PE4004S-230.

** Solenoid valve with remote control.

† Usable oil is calculated with oil fill at recommended level at 2 1/4" below cover plate.

†† PE400 series available in 220/380V, 50Hz and 575V, 60Hz. Please specify when ordering. Example: PE4004-50-380 or PE4004-575.

NOTE: Valves for spring return cylinders are available upon request. Consult the factory.

CRIMPING PUMP

Electric PE-Nut

30 cu. in./min Two-Speed

**EXTREMELY DURABLE YET
LIGHTWEIGHT AND OPERATE
UNDER LOW-LINE VOLTAGE
CONDITIONS.**

PE-NUT PUMP — 115V

- 5/8 hp universal electric motor (50/60 cycle)
 - Two-stage pump for rapid ram advance
 - Operational under low-line voltage conditions
 - Optional operating pressures available;
- consult Power Team for details
- Designed for use with spring-returned remote tools
 - High-pressure safety relief valve
 - Remote hand control with 10-foot cord
 - Carrying handle
 - Factory filled oil reservoir
 - Pressure matched quick-coupler supplied
 - Optional carrying case
 - Unique, intermittent duty pump,
 - Piston-type high-pressure pump super-charged by a low-pressure pump.



⚠ CAUTION: DESIGNED FOR CRIMPING APPLICATIONS ONLY! This system should not be used for lifting.

Order No.	Oil Delivery per min.	Oil Reservoir	Usable Oil	Overall Width in.	Overall Length in.	Overall Depth in.	Pump Weight w/Oil lbs.
PE-NUT PE-NUTC*	(160 in ³ @ 100 psi 30 in ³ @ 10,000 psi)	93 in ³	43 in ³	6.5	14.38	8.25	28
*Includes Case				Electrical Data			
				Electric Motor		Electrical Control	
				5/8 hp, 10,000 rpm 115V AC, 50/60 Hz 11 amp current draw (115V @ 10,000 PSI)		Remote control with 10-foot cord	

CRIMPING PUMP

Gas Hydraulic PG120

Crimping Pump

1303 cu. in./min Two-Speed

TWO-STAGE PUMP FOR RAPID ADVANCE GASOLINE POWER PUMPS

PG1203-CP

- 6 hp Briggs & Stratton engine
- Manual control valve
- High-pressure safety relief valve
- Protective roll cage
- For use with single acting tools

PG1203/4S-CP

- 5.5 hp Honda OHV-type engine
- Remote hand control with 10' cord
- Two-stage pump for rapid advance
- High-pressure safety relief valve
- Protective roll cage
- For use with either single or double acting tools



⚠ CAUTION: DESIGNED FOR CRIMPING APPLICATIONS ONLY! This system should not be used for lifting.



Order No.	Oil Delivery per min.	Oil Reservoir gal.	Usable Oil in.3	Overall Width in.	Overall Length in.	Overall Height in.	Pump Weight w/Oil lbs.
PG1203-CP	480 in ³ @ 100 psi	3	700	19.75	21.75	24.5	154
PG1203/4S-CP	130 in ³ @ 10,000 psi						

GASOLINE PUMP

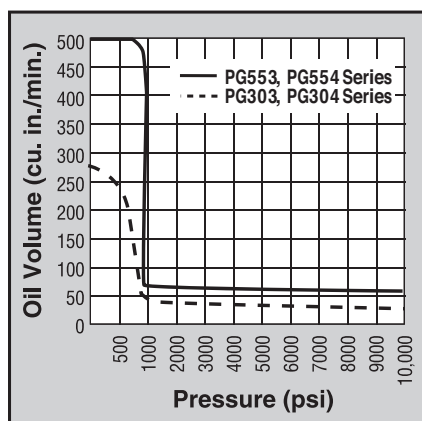
PG30/55 Series

30-55 cu. in./min.

Gasoline driven



**GASOLINE POWER
SUPPLY IDEAL FOR
REMOTE LOCATIONS.
PG30 SERIES FOR TO
75 TON CYLINDERS.
PG55 SERIES FOR UP TO
150 TON CYLINDERS.**



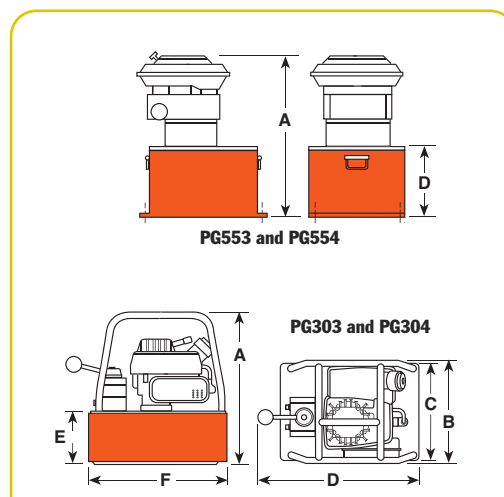
- A logical choice at work sites where electricity or compressed air are unavailable. For single- or double-acting cylinders at operating pressures to 10,000 psi.
- All gasoline engine/hydraulic pumps feature "Posi-Check" valve to guard against pressure loss when valve is shifted from "advance" to "hold".



PG303

PG303 and PG304

- Powered by a 2-cycle, 2 hp Tecumseh engine giving it the lowest weight to horsepower ratio of all gasoline driven pumps. Has an aluminum reservoir with 375 cu. in. of usable oil.
- Has same basic pump as PE30 series electric operated pumps.
- PG30 series pumps are equipped with roll cages to protect pump from damage.
- PG30 series pumps weigh in at only 32 lbs. with oil.
- PG303 is for single-acting cylinders, has a 9520 valve with separate internal return line; allows oil from running pump to return to reservoir, independently of cylinder return oil, when valve is in "return" position.
- PG304 is for double-acting cylinders, has a 9506 4-way (tandem center) valve.



Pump No.	Max. Pressure Output (psi)	rpm	Oil Del. (cu. in./min. @)				A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Prod. Wt. w/Oil (lbs.)
			100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)							
PG303, PG304	10,000	6,000	275*	40	35	30	14 ⁷ / ₈	10 ³ / ₈	9 ¹ / ₂	16	5 ¹ / ₈	13 ¹ / ₂	32
PG553, PG554	10,000	3,600	480	75	70	55	22	18	12 ¹ / ₂	8 ⁵ / ₈	16 ⁵ / ₈	20 ¹ / ₄	120

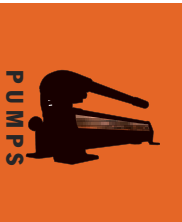
* First stage oil delivery from 0-400 psi @ 230 cu. in. per minute minimum.

PG553 and PG554

- 6 hp Intek “Diamond Edge” 4-cycle, by Briggs & Stratton. 5 gallon reservoir.
- Same basic pump as PE55 series electrical Vanguard® pumps.
- PG553 has a 9520 3-way valve for single-acting cylinders.
- PG554 has a 9506 4-way valve for double-acting cylinders.

PG554

10,000 psi



Gasoline Powered Hydraulic Pumps like this PG303 help provide hydraulic force at remote locations.



For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Reservoir Usable (cu. in.)	Horsepower	Cycle
Single-Acting	2 hp pump with 2 gal. reservoir and single-acting valve.	PG303	3-Way	9520	Advance Hold Return	375	2	2
Single-Acting	6 hp pump with 5.7 gal. reservoir and single-acting valve.	PG553	3-Way	9520	Advance Hold Return	1,300**	6	4
Double-Acting	PG303, except has double-acting valve.	PG304	4-Way	9506	Advance Hold Return	375	2	2
Double-Acting	PG553, except has double-acting valve.	PG554	4-Way	9506	Advance Hold Return	1,300**	6	4

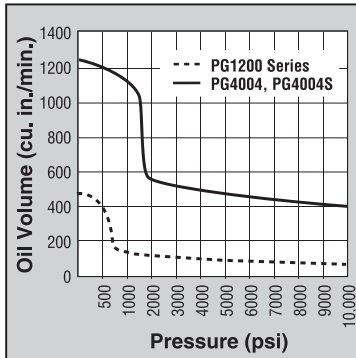
** Usable oil is calculated with oil fill at recommended level at 1/2" below cover plate

GASOLINE PUMP

PG120-PG400 Series

130-400 cu. in./min.

Max.output gas powered pumps.



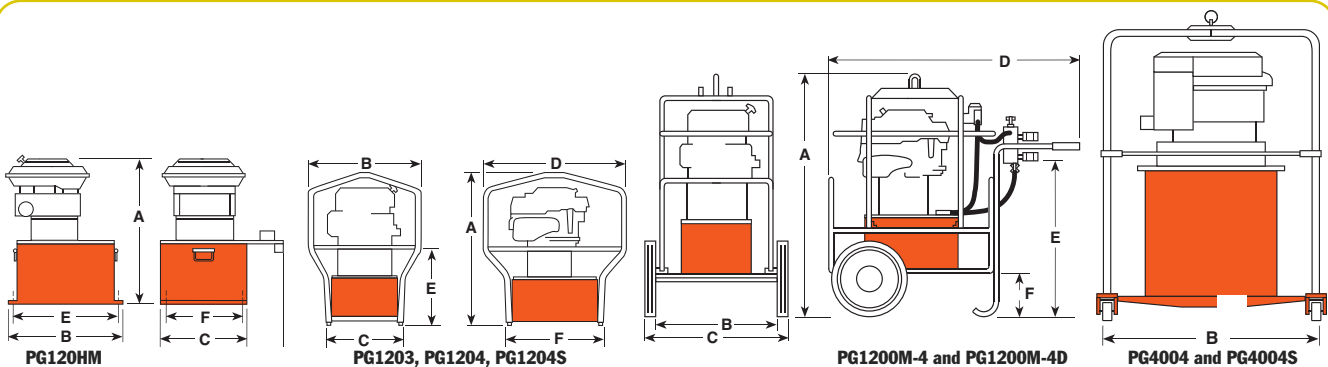
10,000 psi



PG4004S

- Two-speed high performance pumps ideal for construction, structure moving and rigging applications.
- A logical choice at work sites where electricity or compressed air are unavailable. For single- or double-acting cylinders at operating pressures to 10,000 psi.
- All gasoline engine/hydraulic pumps feature "Posi-Check®" valve to guard against pressure loss when valve is shifted from "advance" to "hold".
- PG1200 Series pumps powered by a Honda 4-cycle, 5.5 hp engine with automatic decompression and electronic ignition. Deliver over ½ gallon (130 cu. in.) of oil per minute at 10,000 psi.
- A 5 gallon reservoir means adequate capacity for multi-cylinder applications. Dual element air cleaner protects engine from dusty environments.

- Heavy duty "roll cage" provides pick-up points for lifting. Horizontal bars on PG1203, PG1204 and PG1204S protect unit, provide hand holds for carrying.
- Rubber anti-skid insulation on bottom of reservoir resists skidding and dampens vibration. PG1200M-4 and PG1200M-4D include a pump cart with 12" wheels.
- Adjustable external pressure regulator.

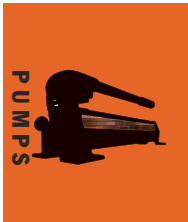


Pump No.	Max. Pressure Output (psi)	rpm	Oil Del. (cu. in./min. @)										Prod. Wt. w/Oil (lbs.)
			100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	
PG120HM	10,000	3,600	480	175	150	130	23	15½	14¼	19	13⅝	12⅛	150
PG1203	10,000	3,600	480	175	150	130	27⅞	20¾	14¼	26¼	13½	18¼	154
PG1204	10,000	3,600	480	175	150	130	27⅞	20¾	14¼	26¼	13½	18¼	154
PG1204S	10,000	3,600	480	175	150	130	27⅞	20¾	14¼	26¼	13½	18¼	161
PG1200M-4	10,000	3,600	480	175	150	130	42⅛	18	25	42½	26¼	7¼	260
PG1200M-4D	10,000	3,600	480	175	150	130	42⅛	18	25	42½	26¼	7¼	280
PG4004	10,000	3,600	1,240	1,120	475	400	50¾	52	52	—	—	—	435
PG4004S	10,000	3,600	1,240	1,120	475	400	50¾	52	52	—	—	—	440

PG1204S



PG1200M-4D



PG1200M-4

- For single-acting cylinders. Has 9520 3-way/3-position (tandem center) valve, 9596 load lowering valve and 9644 4-port manifold with individual needle valves at each port.
- Has a 9796 coupler and 9797 dust cap at each port. Valving permits precise individual control of up to four cylinders.
- A 9052 heavy duty, fluid filled pressure gauge (0-10,000 psi) is included.

PG1200M-4D

- For single- or double-acting cylinders with precise individual control of up to four cylinders possible.
- Equipped same as PG1200M-4, except has 9506 4-way/3-position

(tandem center) valve, and second 4-port manifold without needle valves mounted beneath 9644 manifold for operating double-acting cylinders.

PG400 Series Maximum output Hydraulic Power Package

- Ideal for single or multiple cylinder applications. Has a 4-cycle, 20 hp Honda engine and 20 gallon reservoir (17 gallons usable) with low oil level sight gauge.
- Steel "roll cage" protects pump, has a lifting hook; 4" dia. swivel casters provide mobility.

- Delivers 400 cu. in. of oil at maximum operating pressure.
- Has a 9506 4-way valve. On/off switch and speed control are protected by a panel. Sturdy molded case protects battery (not included).

For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Usable (cu. in.)	Reservoir Horsepower	Cycle
Single-Acting	Base model 5½ hp gasoline pump with 5.7 gal. reservoir.	PG1203	3-Way	9520	Advance Hold Return	1,300	5.5	4
Single-Acting	PG1203 with cart, rollcage, load lowering valve, 4 port manifold & gauge.	PG1200M-4	3-Way Manifold	9520 9644	Advance Hold Return**	1,300	5.5	4
Single-Acting/ Double-Acting	PG1200M-4D, except without "Roll Cage" and cart. Ideal for house moving industry.	PG120HM	4-Way Manifold	9506 9642	Advance Hold Return**	1,300	5.5	4
Double-Acting	Base model 5½ hp gasoline pump, with 5.7 gal. reservoir, roll cage and double-acting valve.	PG1204	4-Way	9506	Advance Hold Return	1,300	5.5	4
Double-Acting	PG1204, except has roll cage, solenoid valve and 25 ft. cord.	PG1204S	4-Way Solenoid***	9516	Advance Hold Return	1,300	5.5	4
Double-Acting	PG1200M-4, except for double-acting systems.	PG1200M-4D	4-Way Manifold	9506 9644	Advance Hold Return**	1,300	5.5	4
Double-Acting	Base model 20 hp pump with 20 gal. reservoir.	PG4004	4-Way	9506	Advance Hold Return	3,927	20	4
Double-Acting	PG4004, except has solenoid operated remote valve.	PG4004S	4-Way Solenoid***	9516	Advance Hold Return	3,927	20	4

* Usable oil is calculated with oil fill at recommended level at 2¼" below cover plate.

** Control up to 4 cylinders independently.

*** Has 25 ft. remote control cord.

INTENSIFIER

Hydraulic

Pressure ratio 5:1

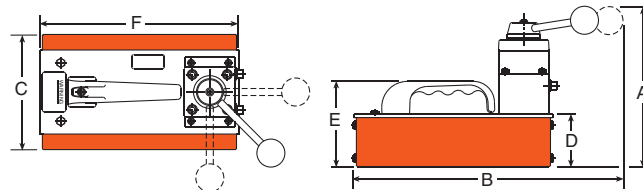
HB443



10,000 psi

CONVERTS LOW-PRESSURE PORTABLE HYDRAULIC PUMPS OR ON-BOARD HYDRAULIC SYSTEMS, INTO HIGH PRESSURE POWER SOURCES.

- Applications include utilities, railroads, construction, riggers and others.
- Operates single- or double-acting cylinders, jacks, and tools such as crimpers, spreaders, cable cutters, or tire tools. Version for use with double-acting torque wrenches available.
- May be used to operate two separate, single-acting tools (with integral valves) independently, without need for additional manifold.
- Control valve included. Other Power Team valves available as an option to suit your specific application, if needed; consult factory.
- Compact and rugged for use inside a utility vehicle aerial bucket or stowing in a vehicle.
- No reservoir level to maintain; uses low pressure system as oil supply.
- Has $\frac{3}{8}$ " NPTF ports; compatible with standard fittings for low and high pressure systems.



Pump No.	Output Flow @ 10,000 (psi)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Prod. Wt. (lbs.)
HB44 Series	44 cu. in./min.	8 $\frac{5}{8}$	14 $\frac{1}{2}$	6 $\frac{1}{8}$	2 $\frac{3}{4}$	4 $\frac{1}{2}$	10 $\frac{1}{2}$	16

For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Output Flow Valve Function	Input Flow Range (gpm)	Input Flow Pressure (psi)	Output Flow Range (gpm)
Single-Acting	Hydraulic intensifier for single-acting systems	HB443	3-Way 3-Position	9520*	Advance Hold Return	0 -10	300 - 2,000	0 - 2.5
Single-Acting/ Double-Acting	Hydraulic intensifier for double-acting systems	HB444	4-Way 3-Position	9506*	Advance Hold Return	0 -10	300 - 2,000	0 - 2.5
Double-Acting	Hydraulic intensifier for double-acting torque wrench tools	HB445-RR	4-Way 3-Position	—	Advance Hold Return	0 -10	300 - 2,000	0 - 2.5

† For maximum efficiency, recommended input flow is 5 gpm at a maximum pressure of 2,000 psi. Higher flows and/or pressures must be compensated for at the system pump (e.g., relief valve, variable flow devices, etc.).

* "Posi-Check*" valve design, "Posi-Check*" guards against pressure loss when valve is shifted from "advance" position to "hold" position.

ELECTRIC PUMPS

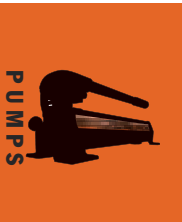
Torque Wrench Pumps

PREDATOR Series

700 bar



CONSTANT HORSEPOWER PUMP OR HORSEPOWER LIMITING PUMP. QUALITY-ENGINEERED AND PRECISION-MACHINED USING STRONG LIGHTWEIGHT ALLOYS.



PREDATOR SERIES HYDRAULIC ELECTRIC PUMPS

The new Predator Series electric pumps are the first constant horsepower pump or horsepower limiting pump in the portable hydraulic pump market.

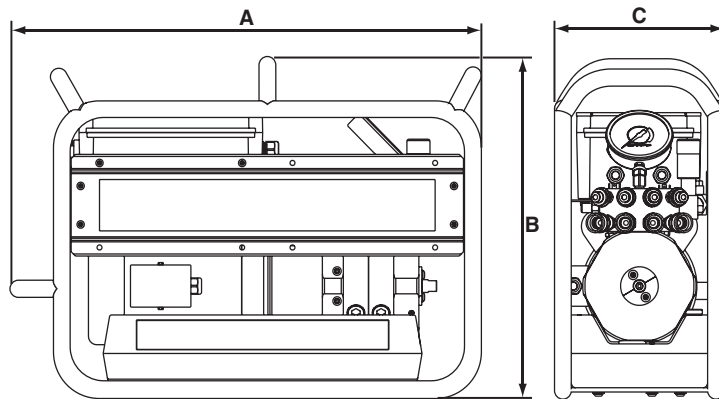
What can torque wrench users expect? In a word... SPEED.

A few advantages of the Predator Series Pumps:

- Up to twice the tool speed of typical 2-speed pumps
- Continuous Duty Operation
- External Pressure Adjustment
- Four Tool Manifold (Optional)
- Calibratable Gauge
- Roll Bar (Optional)
- Vented Hydraulic Reservoir
- Modular Pumping Cartridges
- 1,500 psi/103 Bar Return Side Relief Protection
- Marathon Lifetime Warranty

CAUTION: THIS SYSTEM IS NOT DESIGNED FOR LIFTING. Valving not set up for load-holding.

Patent Pending



Tool Model.	Voltage Freq.	Max. Pressure Output	RPM	dBa at Idle & @10,000 psi & 700 bar	Amp Draw @ @10,000 psi 700 bar	OIL DELIVERY					A	B	C	Product Weight (w/oil)
						@10,000 psi 350 bar	700 bar	48 bar	172 bar	Reservoir Usable	Height	Width	Length	
PCHE60A1BA-4	110-120V 60 Hz	10,000psi 700 bar	3,450	75	15	620 in. ³ /min. 9.9 L/min.	237 in. ³ /min. 3.8 L/min.	110 in. ³ /min. 1.8 L/min.	60 in. ³ /min. 1 L/min.	231 in. ³ 3.8L	19.88" 505mm	10.13" 257mm	28.00" 711mm	99lbs. 45kg
PCHE60A1BB-4	110-120V 50 Hz	10,000psi 700 bar	2,850	75	15	620 in. ³ /min. 9.9 L/min.	237 in. ³ /min. 3.8 L/min.	110 in. ³ /min. 1.8 L/min.	60 in. ³ /min. 1 L/min.	231 in. ³ 3.8L	19.88" 505mm	10.13" 257mm	28.00" 711mm	99lbs. 45kg
PCHE60A1BC-4	110-120V 60 Hz	10,000psi 700 bar	3,450	75	7.5	620 in. ³ /min. 9.9 L/min.	237 in. ³ /min. 3.8 L/min.	110 in. ³ /min. 1.8 L/min.	60 in. ³ /min. 1 L/min.	231 in. ³ 3.8L	19.88" 505mm	10.13" 257mm	28.00" 711mm	99lbs. 45kg
PCHE60A1BD-4	110-120V 50 Hz	10,000psi 700 bar	2,850	75	7.5	620 in. ³ /min. 9.9 L/min.	237 in. ³ /min. 3.8 L/min.	110 in. ³ /min. 1.8 L/min.	60 in. ³ /min. 1 L/min.	231 in. ³ 3.8L	19.88" 505mm	10.13" 257mm	28.00" 711mm	99lbs. 45kg

ASSEMBLE TO ORDER PUMPS

Custom built
hydraulic pump

**CHOOSE YOUR BASIC PUMP,
SELECT YOUR ACCESSORIES,
AND WE WILL ASSEMBLE, TEST
AND SHIP YOUR PUMP.**



1
PE55A
PE55B
PE90A
PE90B



2
PE55C
PE55D
PE55F
PE90C
PE90D
PE90F



3
PE120M



4
PA55A
PA90A



5
PG55A

10,000 psi

ORDER A "CUSTOM BUILT" HYDRAULIC PUMP

"Assemble to Order" means you can choose a basic pump with gas, air or electric motor. Then select the proper valve, gauge, pressure control, motor control and reservoir. You get a two-stage pump that gives high oil volume for fast cylinder approach (and return with double-acting cylinders) in the first stage and high pressure in the second stage.

1 1½ HP UNIVERSAL MOTOR

These motors start under full load and are suitable for operation up to 5,000 or 10,000 psi. The motor is 1½ hp, 12,000 rpm, 115 or 230 volt (specify), 50/60 cycle A.C. single phase (25 amp draw at 115V.). With proper valve they can be used with single- or double-acting cylinders. Remote control available.

2 1½ HP JET MOTOR, SINGLE & THREE-PHASE

Feature low noise level, moderate speed for long service and are ideal for fixed applications. Motor is 1½ hp, 3,450 rpm, 115 or 230 volt, 50 or 60 cycle (specify), A.C. single phase with thermal overload switch. Can be used with single- or double-acting cylinders and equipped with remote control. Also available in 230/460 volt, three-phase (specify).

NOTE: These do not start under full load unless valve is in "neutral" (requires open or tandem center valve) and are not recommended for frequent starting and stopping.

3 3 HP JET MOTOR, THREE-PHASE

Gives low noise level and long life due to its moderate operating speed. Ideal for fixed installations. Consists of basic 10,000 psi pump, jet pump motor: 3 hp, 3,450 rpm, 230/460 volt, 60 or 50 cycle (specify). A.C. three-phase, with thermal overload switch. Equipped with internal and external relief valve. Will start under load.

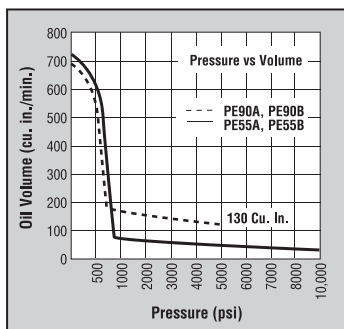
4 3 HP AIR MOTOR

This pump is ideal for use where electricity is unavailable or cannot be used. The 5,000 or 10,000 psi pump has a 3 hp air driven motor at 3,000 rpm (optimum performance based on 80 psi air pressure and 50 cfm at the pump). You can drive single- or double- acting cylinders with the correct valve.

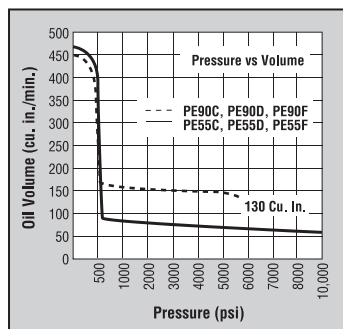
NOTE: 80 psi air supply required to start under full load.

5 GASOLINE ENGINE

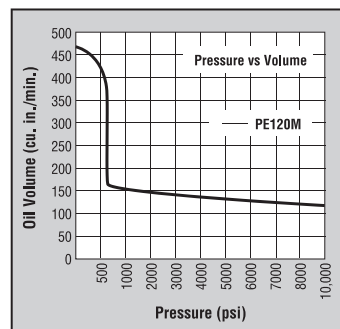
This version is perfect when electricity and air are unavailable. It is capable of continuous operation at full pressure. Consists of basic 10,000 psi pump, 4-cycle Briggs & Stratton "Diamond Edge" gasoline engine, developing 6 hp. As with all these pumps, this unit can be valved for use with either single- or double-acting cylinders.



dBA @ idle and 10,000 psi – 90/95
dBA @ idle and 5,000 psi – 90/95

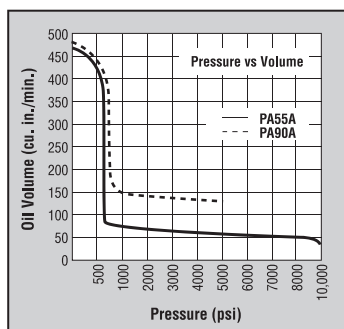


dBA @ idle and 10,000 psi – 80/85



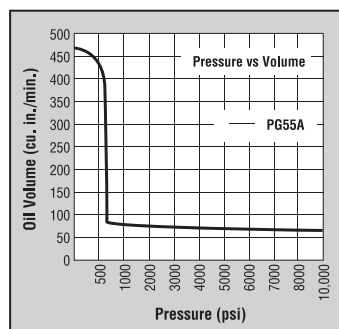
dBA @ idle and 10,000 psi – 80/85

4



dBA @ idle and 10,000 psi – 83/88
dBA @ idle and 5,000 psi – 83/88

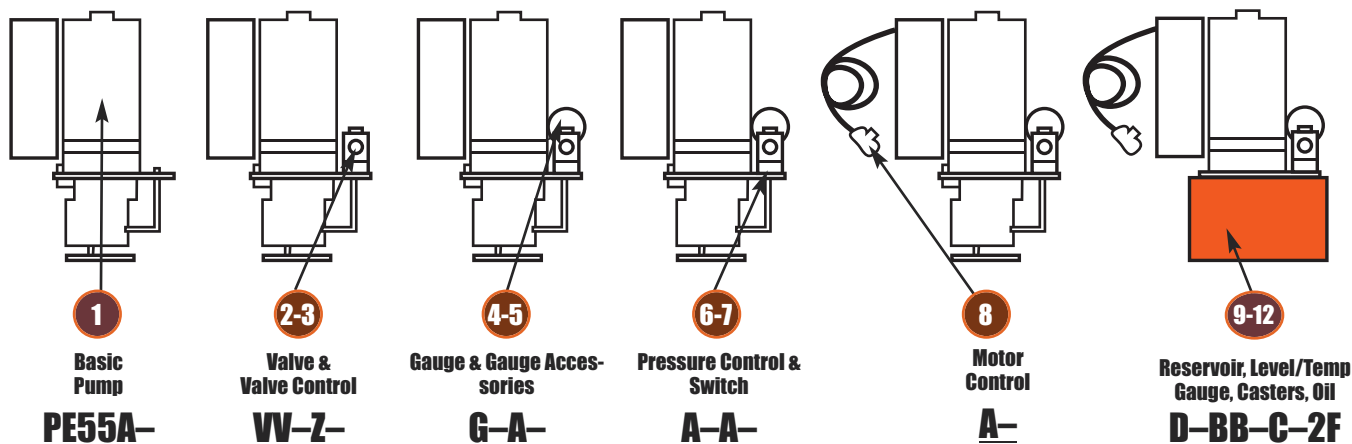
5



“ASSEMBLE TO ORDER” PUMP HOW TO ORDER YOUR “CUSTOM” HYDRAULIC PUMP...

You can choose from pre-engineered, off-the-shelf components to customize your pump. All the components are listed in table form, with key letters or numbers on pages 102-103. Complete instructions guide you through so you

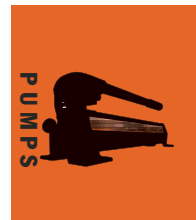
can determine what is needed to complete a pump assembly. Shown below is an example of a custom-built pump.



Pump No. PE55A-VV-Z-G-A-A-A-D-BB-C-2F is a 10,000 psi two-speed pump with a 115 volt, 50-60Hz, single phase, 1½ hp, 12,000 rpm motor; a 9512 4-way solenoid valve with a 202778 remote hand control, a 9041 pressure

gauge, no gauge accessories, standard pressure control, standard On-Off-Pulse motor control, 400630R9 2-gallon reservoir, a 350431 oil level/temperature gauge, 10494 casters, and 2 gallons of standard hydraulic oil.

See next two pages for pump components



ASSEMBLE TO ORDER PUMPS

Component Specification Chart

TO BUILD YOUR PUMP, FILL IN KEY LETTERS FROM CHARTS

1 Basic Pump	2 Select Valve	3 Select Valve Control	4 Select Gauge	5 Select Gauge Accessories	6 Pressure Control
7 Pressure Switch	8 Motor Control	9 Reservoir	10 Level/Temp Gauge	11 Choose Casters	12 Select Oil

Use the charts numbered from 1-12 below to select the pump, valve, gauge and other accessories to suit your needs. For the pump, fill in the basic number plus key letter in block 1 above and the key letter only in the blocks 2-12 above for any of the other items. Refer to the appropriate pages in this catalog for more specific information on the products you need.

1 BASIC PUMP (See pages 82-94)

BASIC PUMP NUMBERS						SPECIFICATIONS		
PE55 (10,000 psi)	PE90 (5,000 psi)	PE120 (10,000 psi)	PA55 (10,000 psi)	PA90 (5,000 psi)	PG55 (10,000 psi)	NOTE: Customer must specify voltage required.		
						Power Source	rpm	hp
A or AC*	A or AC*					115V-60 Hz, 1Ø	12,000	1½
						110V-50 Hz, 1Ø	12,000	1½
B or BC*	B or BC*					230V-60 Hz, 1Ø	12,000	1½
						220V-50 Hz, 1Ø	12,000	1½
† C or CC*	† C or CC*					115V-60 Hz, 1Ø	3,450	1½
† C50	† C50					110V-50 Hz, 1Ø	2,850	1½
† D or DC*	† D or DC*					230V-60 Hz, 1Ø	3,450	1½
† D50	† D50					220V-50 Hz, 1Ø	2,850	1½
† F60 **	† F60**					208, 230/460V-60 Hz, 3Ø	3,450	1½
† F50 **	† F50**					220/380V-50 Hz, 3Ø	2,850	1½
		M60 **				208, 230/460V-60 Hz, 3Ø	3,450	3
		M50 **				220/380V-50 Hz, 3Ø	2,850	3
			A	A		Air Motor	3,000	3
					A	Gas Engine	3,600	6

*Suffixes AC, BC, CC & DC indicate pumps for Canadian orders only.

NOTE: All electric units have 24 volt secondary circuit.

**Specify voltage required.

† These pumps do not start under full load unless valve is in "neutral" position (requires open or tandem center valve) and are not recommended for frequent starting and stopping.

2 VALVE (See pages 122-129)

Manifold/Manual/Air Operated Directional Valves		Function	Manifold/Manual/Air Operated Directional Valves		Function
AB	9628 manual, tandem center	4-way, 3 pos. valves	O	9609 manual, pressure compensated flow control	3-way, 4 pos.
AC	9632 manual "twin" tandem and open center		R	9506 manual, tandem center "Posi-Check"	4-way, 3 pos. valves
A	None		RR	9511 manual, open center	
B	9626 manifold	Manifold	S	9500 manual, tandem center	
C	9584 manual		T	9507 manual, closed center "Posi-Check"	
D	9582 manual		U	9501 manual, closed center	
E	9610 automatic, pilot operated	3/4-way, 2 pos. valves	Solenoid Operated Directional Valves		Function
G	9504 manual		FF	9569 solenoid operated - 24 volt	3-way, 2 pos.
JJ	9594 air operated		HH	9572 solenoid operated - 24 volt	3/4-way, 2 pos.
L	9502 manual, closed center "non-interflow"	3-way, 3 pos. valves	PP	9599 solenoid operated - 24 volt	3-way, 3 pos.
M	9520 manual, tandem center "Posi-Check"		VV	9512 solenoid operated - 24 volt	4-way,
N	9576 manual, metering tandem center		WW	9615 solenoid operated - 24 volt	3 pos. valves

3 VALVE CONTROL (See page 130)

Valve Remote Control		Use with Valve	Valve Remote Control		Use with Valve
A	None	—	Z	202778 remote hand control, 10 ft.	9512 or 9615
X	304718 remote hand control, 10 ft.	9572	ZF	309653 remote foot control, 10 ft.	9512, 9615,
XF	309652 remote foot control, 10 ft.	9572			9569 or 9599
Y	202777 remote hand control, 10 ft.	9569 or 9599	ZZ	209593 remote hand control, 12 ft.	9594

4 GAUGE (See page 110-111)

Pressure Gauges	
A	None
B	Other – Specify
G	9041 0-10,000 psi – 0-689 Bar (2½" dia.)
H	9040 0-10,000 psi – 0-689 Bar (Liquid) (2½" dia.)
J	9051 0-10,000 psi – 0-689 Bar (4" dia.)
M	9052 0-10,000 psi – 0-689 Bar (Liquid) (4" dia.)

6 PRESSURE CONTROL (See page 119)

Pressure Controls	
A	With standard external pressure regulator
C	Other – specify
D	350199 premium external pressure regulator. See Power Team Catalog product No. 9633 for details.

NOTE: Pressure controls are factory pre-set at 10,000 psi unless otherwise specified.

8 MOTOR CONTROL (See page 130)

Electric Motor Controls	
A	Standard On/Off/Pulse control (does not include remote switch) for A, B, C, D, F and M electric pumps. Also used for remote controlled solenoid valves.
B	None
C	25017 remote motor hand switch, 10 ft.
D	203225 remote motor hand switch, 10 ft. (heavy duty)
E	10461 remote motor foot switch, 10 ft.
Air Motor Controls	
AA	Other
B	None
P	27876 hand motor control (for PA55 & PA90 series)
Q	27877 foot motor control (for PA55 & PA90 series)

10 OIL LEVEL/TEMP. GAUGE (SEE PAGE 132)

Oil Level/Temperature Gauge	
A	None
BB	350431 oil level/temperature gauge

11 CASTERS (See page 110)

Casters	
A	None
C	10494 caster for use with 400630R9 reservoir (Specify quantity of four)

5 GAUGE ACCESSORY (See page 53)

Gauge Accessories	
A	None
N	9049 pulsation dampener – All dry gauges

7 PRESSURE SWITCH (See page 131)

Pressure Switch	
A	None
B	9625 electric pressure switch (500-10,000 psi) NOTE: Pressure switch is factory pre-set at 10,000 psi unless otherwise specified.
C	9641 pilot operated air control valve – N.C.
D	9643 pilot operated air control valve – N.O.

9 RESERVOIR (See page 133)

Reservoirs	Capacity
A	None
B	Other – Specify
D	400630R9 – PE55, PE90, PE120, PA55 and PA90 series 2½ gal.
E	61165† – PE55, PE90, PE120, PA55 and PA90 series 2 gal. (Oil temperatures in excess of 150° F. may cause permanent failure of the thermoplastic reservoir)
F	RP22‡ – PE55, PE90, PE120, PA55 and PA90 series 2½ gal.
H	617990R9 Same as D except with drain port 2½ gal.
J	RP50 – PE55, PE90, PE120, PA55 and PA90 series 5 gal.
K	401370R9 – PG55 series 5 gal.
P	209124 – PE55, PE90, PE120, PA55 and PA90 series 7 gal.
V	RP100 – PE55, PE90, PE120, PA55 and PA90 series 10 gal.
W	RP101 – PG55 series 10 gal.

NOTE: Includes cover adapter and misc. accessories when applicable.

†High density polyethylene.

‡Aluminum.

12 OIL (See page 112)

Oil	
E	Ship pump without oil
F	9637 1 gal. standard hydraulic oil
G	9638 2½ gal. standard hydraulic oil
Q	9639 1 gal. Flame-Out hydraulic oil
R	9640 2½ gal. Flame-Out hydraulic oil
U	9645 1 gal. biodegradable hydraulic oil
V	9646 2½ gal. biodegradable hydraulic oil

NOTE: Select type of hydraulic oil and specify quantity.

