

PUMPS

MARKET LEADING HIGH PRESSURE POWER UNITS FOR A WIDE ARRAY OF APPLICATIONS AND USES.

Every power unit goes through a rigorous assembly and test process to ensure the highest level of performance:

- Power units are available in manual or powered configurations. Powered options include electric, air, and gas.
- A wide array of reservoir sizes from under 0.25 to 55 gallons
- Variety of valve configurations, such as dump, 2-way, 3-way and 4-way in manual and solenoid configurations,
- Whether you are seeking a manual, electrical or an air power pump, Power Team pumps can generate flows up to 420 cu. in. / @ 10,000 PSI.



Worry Free
Ownership



Section / Series	Power Source	Flow Stages	Flow @ Max Pressure	Page(s)
Introduction	All	All	All	45-48
P	Manual	Single & Two-Speed	12-55 cu. in.	49-51
RPS	Manual	Single & Two-Speed	—	52
PA6	Air	Single-Acting	105 cu. in.	53-54
PA6D	Air	Single-Speed	6 cu. in.	55-56
PA9	Air	Single-Speed	9 cu. in.	57-58
PA60	Air	Two-Speed	6 cu. in.	59-60
PA50	Air	Single-Speed	28 cu. in.	61-62
PA17	Air	Two-Speed	17 cu. in.	63-64
PA46/55	Air	Two-Speed	46-55 cu. in.	65-66
PB	Battery	Two-Speed	6 cu. in.	71-72
PE10	Electric	Two-Speed	10 cu. in.	73-74
PE17	Electric	Two-Speed	17 cu. in.	75-76
PE18	Electric	Two-Speed	18 cu. in.	77-78
PE21	Electric	Two-Speed	22 cu. in.	79-80
PED	Electric	Two-Speed	25 cu. in.	81-82
PE30	Electric	Two-Speed	30 cu. in.	83-84
PE46	Electric	Two-Speed	46 cu. in.	85-86
PE55	Electric	Two-Speed	55 cu. in.	87-88
PE60	Electric	Two-Speed	56 cu. in.	89-90
PQ60	Electric	Two-Speed	60 cu. in.	91-92
PQ120	Electric	Two-Speed	120 cu. in.	93-94
PE400	Electric	Two-Speed	420 cu. in.	95-96
PE-NUT	Electric	Two-Speed	30 cu. in.	97
PG120_CP	Gas	Two-Speed	130 cu. in.	98
PG30/55	Gas	Two-Speed	30-55 cu. in.	99-100
PG120-PG400	Gas	Two-Speed	130-420 cu. in.	101-102
MCS	Electric	Two-Speed	55-120 cu. in.	103-106
ATO	Air, Elec., Gas	Custom Built	-	107-110



SELECTING THE RIGHT PUMP:

Step 1 Select the hydraulic pump that best suits the application.

Step 2 Select the series of pump with adequate oil output and reservoir capacity to power tool.

Step 3 Select pump within series with the valve option that is best suited to the tool and application.

PUMP SIZING CONSIDERATIONS:

1. What maximum system operating pressure (psi) is required?
2. 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).
3. Is a single or two-speed pump required? (Two-speed pumps deliver high oil volume at low pressure for rapid cylinder piston advance, then shift to high pressure, low volume stage under load).
4. What is the preferred source of power?
 - a. Manual (hand or foot operated): Provides portability, can be used where electricity or shop air are not available.
 - b. Air/Hydraulic: Uses shop air or a portable air compressor.
 - c. Electric/Hydraulic: What voltage is available? Is a battery operated pump preferred?
 - d. Gasoline Engine/Hydraulic: Powers high-output pumps at remote job sites where air or electricity are unavailable.
5. Is portability of the pump a factor to consider?
6. 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?
7. Is fluid heat build-up a factor in your application? High-cycle applications may require a larger capacity oil reservoir for cooling.
8. Will the application require large displacement or multiple cylinders? Reservoir size and pump output levels will be factors to consider.
9. Does the working environment require a pump having a low operating noise (dBA) level?
10. 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.
- **P19/P19L, P59/P59L, P59F, P157, P159, P300, P460** – These two-speed pumps are used with single-acting cylinders. The two-speed feature provides high oil volume for fast cylinder piston approach to the work, then the pump automatically shifts to the high pressure stage. This reduces the number of pump handle strokes required.
- **P157D, P159D, P300D, P460D** – These two-speed pumps are used with double-acting cylinders.

▶ AIR / HYDRAULIC PUMPS:

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



- **PA6 Series** – These single-speed pumps drive single or double-acting cylinders.
- **PA9 Series** – These new single-speed pumps drive single-acting cylinders and are ideal for powering portable hydraulic tools.
- **PA50 Series** – These single-speed pumps drive single or double-acting low pressure (3,200 psi) cylinders.
- **PA60** – This two-speed pump is equipped with a manifold to operate multiple cylinders, and provides a 2-gallon reservoir.
- **PA64** – Similar to PA60, this two-speed pump drives single or double-acting cylinders.
- **PA172 and PA174** – These “economy” two-speed pumps drive single or double-acting cylinders, depending on the model chosen. Provide a low weight-to-output ratio.
- **PA462 and PA464 Series** – These two-speed pumps drive single or double-acting cylinders, depending on the model selected. They offer high speed cylinder piston advance.
- **PA554** – This two-speed pump drives single or double-acting cylinders, delivering a high volume of oil.

▶ ELECTRIC / HYDRAULIC PUMPS:

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



- **PE/PB10 Series “Quarter Horse” Series** – These pumps feature a 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.
- **PE17 Series** – CSA rated for intermittent duty, these feature a 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.
- **PE46 Series** – Powered by a 1-1/2 hp, single-phase induction motor, operates at a moderate noise level of 77-81 dBA. CSA rated for intermittent duty.
- **PE18 Series** – CSA rated for intermittent duty, these feature a 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.
- **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 requires a relatively low voltage. Ideal for use in general construction applications. Roll cage/handle protects the motor and controls.
- **PE55 and PED25 Series** – Equipped with a 1-1/8 hp, single-phase universal motor, have a 90-95 dBA noise level. 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 1-1/2 hp induction motor.



▶ ELECTRIC / HYDRAULIC PUMPS: (CONT.)



- **PE60 Series** – These Vanguard® Supreme® pumps provide trouble-free service in the most severe working environments. Powered by a 1-1/8 hp, single-phase motor, has a moderate noise level of 80-85 dBA. Starts 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.
- **“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.
- **PE21 Series** – Ideal for heavy-duty, extended-cycle applications. Powered by a 1 hp, single-phase motor, pump operates at a very low noise level of 70 dBA. Pump automatically shuts down in the event of a power failure. CSA rated for intermittent duty.
- **“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 (three-phase) motor. These pumps are designed for heavy-duty, extended cycle operations. CSA rated for intermittent duty.
- **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, three-phase motor. Low noise rating of 73-80 dBA.

▶ 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 Honda engine, these have an integral, protective “roll cage” and adequate reservoir capacity for cylinders up to 100 tons capacity or more. Readily portable, and popular in the railroad, rescue and construction markets.
- **PG55 Series** – With a 4-cycle, 4 hp Briggs & Stratton engine, this pump is based on our popular Vanguard® Series hydraulic system. It has a generous five gallon reservoir capacity.
- **PG120 Series** – Powered by a 4-cycle, 5.5 hp Honda engine. Has a five gallon reservoir, and is capable of handling multiple-cylinder lifting tasks. Ideal for the structure moving, pier setting, bridge lifting and concrete contracting industries.
- **PG4004** – Featuring a 4-cycle, 18 hp Honda 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.

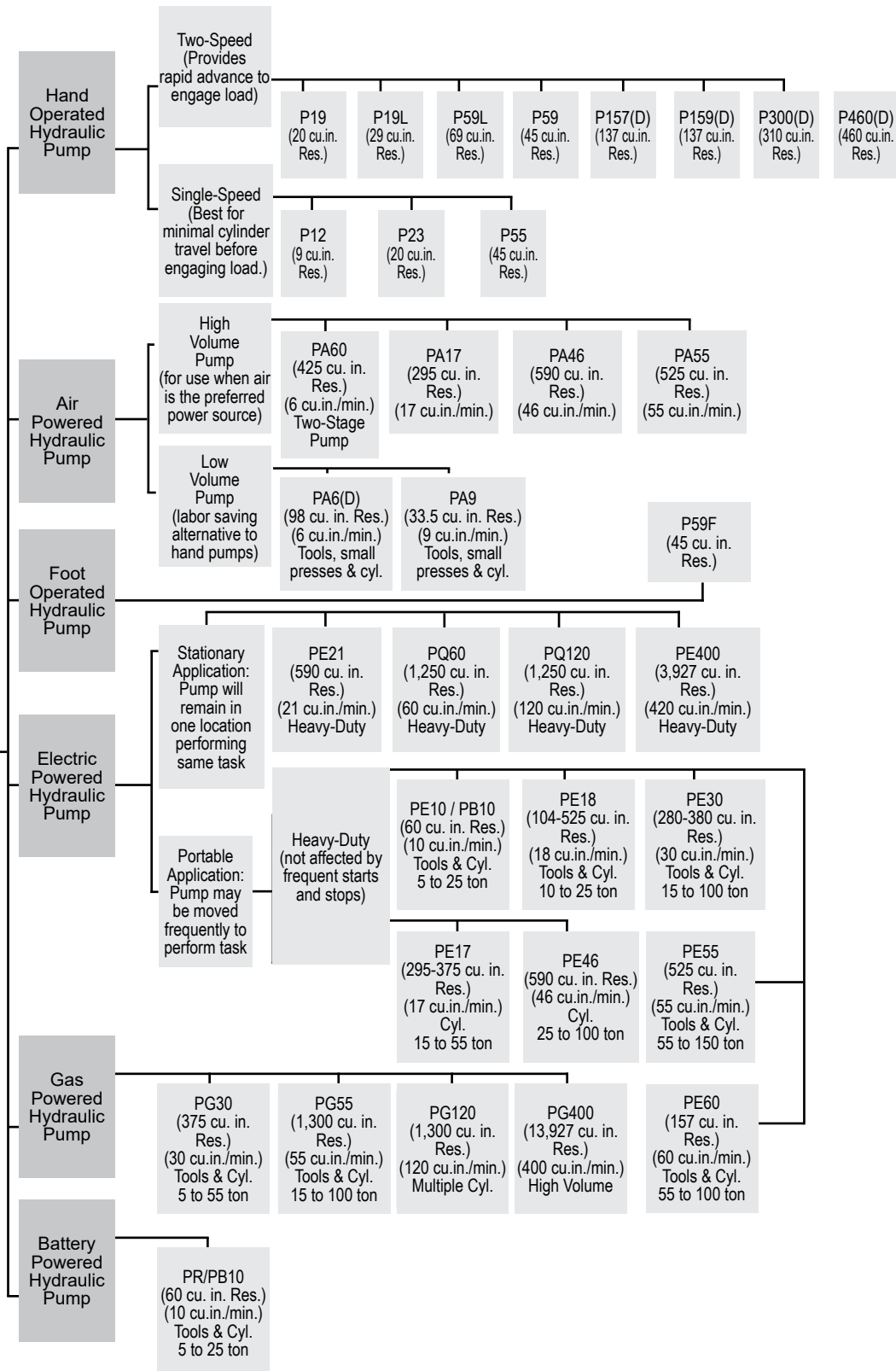
▶ HYDRAULIC INTENSIFIER:



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



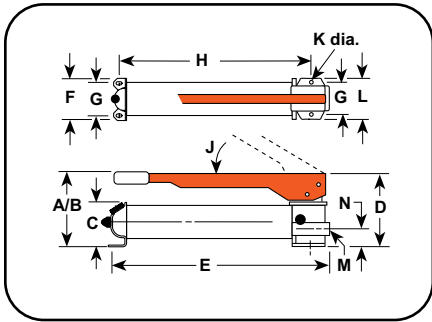
**HYDRAULIC
PUMP
OPTIONS**



Model Shown:

P55, P12, P23

Pumps



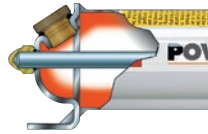
Features

STEEL HAND PUMPS BEST SUITED FOR MRO APPLICATIONS.

- All metal construction won't burn through in welding environments.
- Formed metal handle provides rigidity, and reduces operator fatigue with grip.
- Convenient fill port enables pumps to be filled in a horizontal or vertical position, excluding P12.
- Fill cap seal acts as safety valve preventing over-pressurizing of reservoir.
- Large valve knob gives added control for slowly metering loads down.



Pump Protection System



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 only fill to bottom of threads.



Foot Pump Conversion Kit



For Use With:	Kit Order No.	Wt. (lbs.)
P55, P59	FK59	6.0

Technical Dimensions

Order 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.)
P12	4.00	13.00	2.06	4.00	13.50	3.38	2.19	11.50	45°	0.19	3.38	3/8 NPTF	1.13
P19	5.50	14.63	2.88	4.56	13.69	4.00	3.25	11.06	53°	0.31	4.00	3/8 NPTF	1.41
P23*	6.25	13.00	3.50	5.56	13.63	4.25	3.25	10.31	38°	0.31	4.75	3/8 NPTF	1.63
P55	6.50	21.00	3.50	5.56	23.00	4.25	3.25	19.75	38°	0.31	4.75	3/8 NPTF	1.63
P59	7.00	21.00	3.50	5.00	23.00	4.25	3.25	19.75	38°	0.31	4.75	3/8 NPTF	1.63
P59F	3.50	16.75	3.50	6.00	23.25	4.25	3.25	20.25	—	0.31	4.50	3/8 NPTF	1.69

*The P23 pump maximum pressure is 3000 psi only.

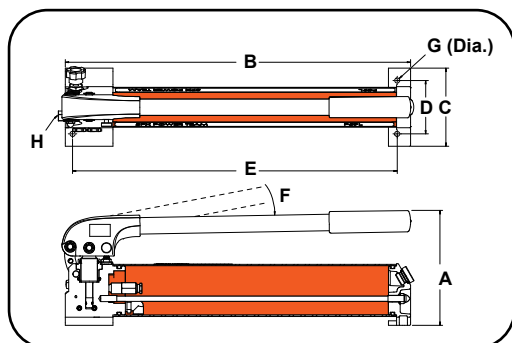
For Use With	Speed	Order No.	Volume per Stroke		Max. Pressure		Handle Effort	Reservoir		Oil Port	Prod. Wt.
			LP	HP	LP	HP		Oil Cap.	Usable Oil Cap.		
			(cu. in.)	(cu. in.)	(psi)	(psi)	(lbs.)	(cu. in.)	(cu. in.)	(in.)	(lbs.)
Single-Acting Cylinders	1	P12	—	0.069	—	10,000	75	12.00	9.00	3/8 NPTF	5.70
	2	P19	0.305	0.076	325	10,000	99	24.40	20.00	3/8 NPTF	6.60
	1	P23	—	0.160	—	3,000	70	23.80	20.30	3/8 NPTF	12.00
	1	P55	—	0.160	—	10,000	145	55.00	45.00	3/8 NPTF	15.80
	2	P59	0.662	0.160	325	10,000	145	55.00	45.00	3/8 NPTF	17.20
	2	P59F	0.550	0.130	325	10,000	120	55.00	45.00	3/8 NPTF	14.00

LP = Low Pressure

HP = High Pressure

Model Shown:

P19L, P59L, P59L-1500, P59L-1500G



Technical Dimensions

Order No.	A	B	C	D	E	F	G	H
	(in.)	(in.)	(in.)	(in.)	(in.)	(deg.)	(in.)	(in.)
P19L	5.50	13.69	4.13	3.25	11.06	40°	5/16	3/8 NPTF
P59L	7.00	21.00	5.00	3.25	19.75	50°	5/16	3/8 NPTF
P59L-1500	7.17	21.91	5.47	3.25	19.75	47°	5/16	9/16-18 UNF-2B **
P59L-1500G*	7.17	21.91	5.47	3.25	19.75	47°	5/16	9/16-18 UNF-2B **

* Overall length, with the skid plate, is 28.30 in. (718.8 mm.).

** High pressure 60° cone port.

Ordering Information

For Use With	Speed	Order No.	Volume per Stroke		Max. Pressure		Handle Effort	Reservoir		Oil Port	Prod. Wt.
			LP	HP	LP	HP		Oil Cap.	Usable Oil Cap.		
			(cu. in.)	(cu. in.)	(psi)	(psi)		(cu. in.)	(cu. in.)		
Single-Acting Cylinders	2	P19L	0.250	0.050	850	10,000	78	29.00	27.00	3/8 NPTF	5.10
	2	P59L	0.720	0.150	850	10,000	104	69.00	66.00	3/8 NPTF	8.90
	2	P59L-1500	0.68	0.05	300	21,750	72	67.1	44.5	9/16 High Press.	10.4
	2	P59L-1500G*	0.68	0.05	300	21,750	72	67.1	44.5	9/16 High Press.	14.4

* Equipped with a skid plate and a digital gauge.

LP = Low Pressure

HP = High Pressure

CAUTION: P59L-1500 pumps are not recommended for use with 10,000 psi tools.

Features

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

- Two-speed reduces handle strokes so you work faster and easier.
- More usable oil volume allows for use with larger or longer stroke cylinders.
- True unloading valve 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.
- Aluminum design reduces weight.

The P59L hand pump is able to quickly advance the cylinder to the load with it's two speed operation.



Model Shown:

P300, P157, P159D, P460

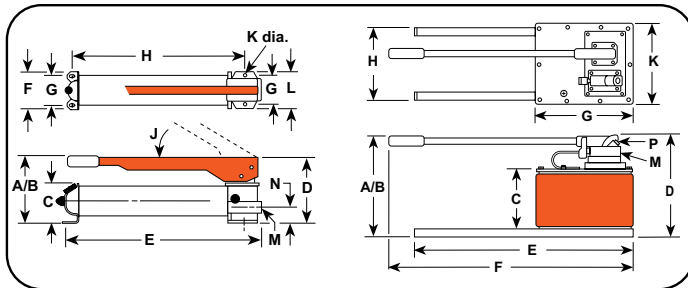
Pumps



Features

HEAVY-DUTY STEEL HAND PUMPS HOLD UP TO THE MOST DEMANDING APPLICATIONS.

- Rugged all metal construction for strength and durability that won't burn through in welding environments.
- Heavy-duty, formed metal handle provides rigidity, and reduces operator fatigue with grip.
- Convenient oil fill ports.
- 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.



Foot Pump Conversion Kit

For Use With:	Kit Order No.	Wt. (lbs.)
P157, P159, P300, P300D	FK159B	6.00

Technical Dimensions

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(deg.)	(in.)	(in.)	(in.)	(in.)	(in.)
P157 / P159	7.75	20.50	4.88	6.88	22.75	3.88	3.00	19.75	39	0.31	3.75	3/8 NPTF	2.25	—
P300	8.25	21.00	4.50	6.88	22.63	8.50	7.50	20.72	39	0.31	3.75	3/8 NPTF	2.25	—
P460	11.13	31.00	6.75	11.38	24.00	29.25	11.00	9.00	80	9.50	—	3/8 NPTF	—	1/4 NPTF

Ordering Information

For Use With	Speed	Order No.	Volume per Stroke		Max. Pressure		Handle Effort	Reservoir		Oil Port	Prod. Wt.
			LP	HP	LP	HP		Oil Cap.	Usable Oil Cap.		
			(cu. in.)	(cu. in.)	(psi)	(psi)		(cu. in.)	(cu. in.)		
Single-Acting Cylinders	2	P157	0.65	0.160	1,400	10,000	140	152	137	3/8 NPTF	26.70
	2	P159	2.60	0.160	325	10,000	140	152	137	3/8 NPTF	26.20
	2	P300	2.60	0.160	325	10,000	140	1.5 gal.	310	3/8 NPTF	55.30
	2	P460	7.35	0.294	325	10,000	90	2.5 gal.	460	3/8 NPTF	54.90
Double-Acting Cylinders*	2	P157D	0.65	0.160	1,400	10,000	140	152	137	3/8 NPTF	28.80
	2	P159D	2.60	0.160	325	10,000	140	152	137	3/8 NPTF	27.90
	2	P300D	2.60	0.160	325	10,000	140	1.5 gal.	310	3/8 NPTF	57.00
	2	P460D	7.35	0.294	325	10,000	90	2.5 gal.	460	3/8 NPTF	57.90

LP = Low Pressure

HP = High Pressure

* Pump includes 4-Way Valve

Model Shown:

RPS1006, RPS203H



Features

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.

Pumps



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.

Order No.	Dimensions	Wt. (lbs.)
350722	35" L x 14" H x 13.5" W	23.00

Ordering Information

Style of Cylinder	Cyl. Cap. (tons.)	Stroke (in.)	Order No.	Re-tracted Height (in.)	Handle Strokes Required to Fully Extend Cylinders	Cylinder No.	Pump No.	Hose No.	Coupler No.	Pump Speed	Prod. Wt. (lbs.)
"C" Series	5	5.25	RPS55	8.50	75	C55C	P12	9756	9798	Single	12.00
	10	2.13	RPS102**	4.75	32	C102C	P55	9756	9798	Single	26.00
	10	6.13	RPS106**	9.75	93	C106C	P55	9756	9798	Single	32.10
	10	10.13	RPS1010**	13.75	154	C1010C	P55	9756	9798	Single	35.60
	15	4.13	RPS154**	7.88	81	C154C	P55	9756	9798	Single	29.00
	15	6.13	RPS156**	10.69	118	C156C	P55	9756	9798	Single	34.00
	25	6.25	RPS256**	10.75	219	C256C	P55	9756	9798	Single	42.70
	25	14.25	RPS2514**	18.75	285*	C2514C	P159	9756	9798	Two	62.70
	55	6.25	RPS556**	11.13	268*	C556C	P159	9756	9798	Two	82.70
	100	6.63	RPS1006	13.25	428*	C1006C	P460	9756	9798	Two	128.70
"Shorty"	30	2.44	RPS302**	4.63	61*	RSS302	P59	9756	9798	Two	40.00
	50	2.38	RPS552**	5.00	89*	RSS502	P59	9756	9798	Two	50.00
	100	2.25	RPS1002**	5.50	172*	RSS1002	P59	9756	9798	Two	81.00
"Center-Hole"	20	3.00	RPS203H**	6.06	80	RH203	P55	9756	9798	Single	40.50
Alum.	55	6.13	RPS556A**	10.75	262*	RA556	P159	9756	9798	Two	47.00

* Based on 50% of 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.

Model Shown:

PA6, PA6M-1, PA6-2

Pumps



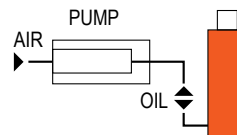
Features

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 shop equipment.
- Operate at 40-100 psi shop air pressure at the pump.
- Quiet operation that is suitable for indoor applications, 85 dBA 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.

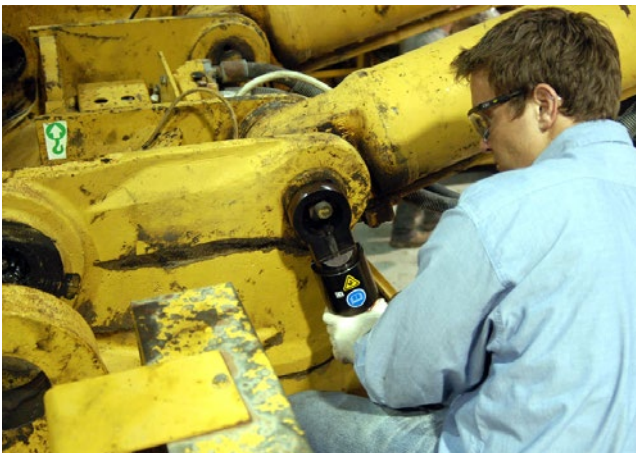


Typical Set-Up

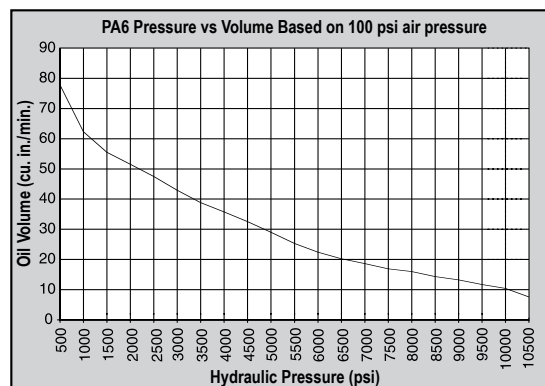


Hook-up for single-acting cylinders

▶ PA6 is the perfect choice for driving this nut splitter in this heavy truck shop.

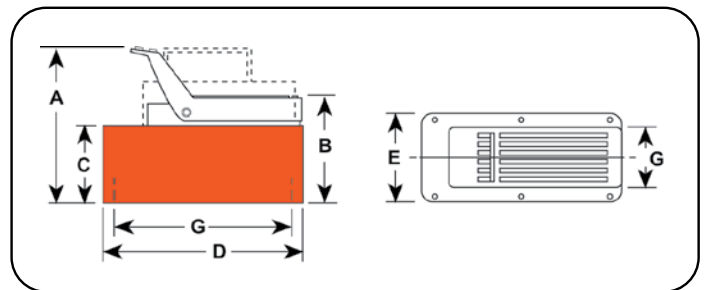


Performance Specifications



Two Point Lifting System Example


Pumps


Technical Dimensions

Order No.	A	B	C	D	E	G
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)
PA6	7.75	5.88	4.38	9.50	5.00	4 x 9.00
PA6A	7.75	5.88	4.38	9.50	5.00	4 x 9.00
PA6AM	7.75	5.88	4.38	9.50	5.00	4 x 9.00
PA6M	7.75	5.88	4.38	9.50	5.00	4 x 9.00
PA6R	7.75	5.88	4.38	9.50	5.00	4 x 9.00
PA6RM	7.75	5.88	4.38	9.50	5.00	4 x 9.00
PA6M-1	7.88	6.00	4.38	12.63	7.38	—
PA6-2	10.25	8.00	7.00	11.50	9.50	5 1/8 x 7.13
PA6M-2	10.00	7.75	6.75	11.50	9.50	8 x 10.00

Ordering Information

Description	Order No.	Air Supply Req'd (psi)	Reservoir		Oil Port (in.)	Prod. Wt. (lbs.)
			Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)		
Base model pump with high density polyethylene reservoir.	PA6	40-120	105	98	3/8 NPTF	14.00
PA6 pump with externally adjustable relief valve and polyethylene reservoir	PA6A	40-120	105	98	3/8 NPTF	15.00
PA6 pump with externally adjustable relief valve and metal reservoir.	PA6AM	40-120	105	98	3/8 NPTF	17.00
PA6 pump with metal reservoir.	PA6M	40-120	105	98	3/8 NPTF	18.00
PA6 pump with 12 foot remote control and polyethylene reservoir	PA6R	40-120	105	98	3/8 NPTF	20.58
PA6 pump with 12 foot remote control and metal reservoir.	PA6RM	40-120	105	98	3/8 NPTF	21.58
PA6 pump with 1 gallon metal reservoir.	PA6M-1	40-120	1 gal.	185	3/8 NPTF	23.70
PA6 pump with 2 gallon high density polyethylene reservoir.	PA6-2	40-120	2 gal.	454	3/8 NPTF	24.50
PA6 pump with 2.5 gallon metal reservoir.	PA6M-2	40-120	2.5 gal.	570	3/8 NPTF	32.10

Model Shown:

PA6D

Pumps



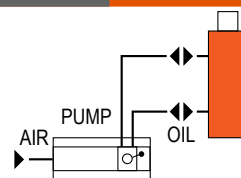
Features

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 while the air inlet filter protects motor.
- Serviceable pump allows for economical repairs.
- Permanently vented reservoir cap.
- 85 dBA at 10,000 psi for all PA6 pumps.



Typical Set-Up

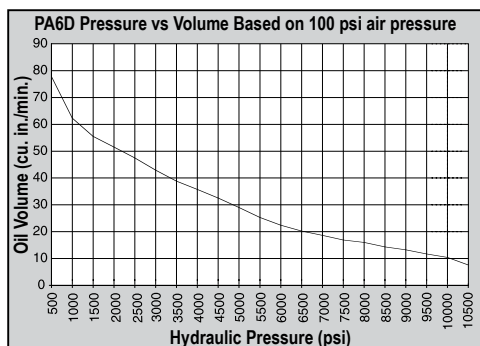


Hook-up for double-acting cylinders

- PA6D pump, 9052 analog and 25 ton cylinder used in a test fixture.



Performance Specifications

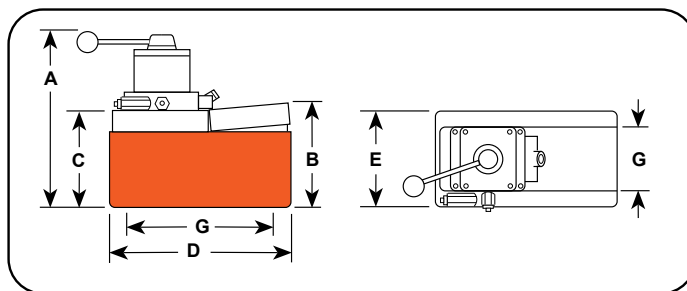


Model Shown:

PA6D2, PA6DM-1



Pumps



► **Technical Dimensions**

Order No.	A	B	C	D	E	G
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)
PA6D	10.38	5.88	4.38	9.50	5.00	4 x 9.00
PA6DM	10.38	5.88	4.38	9.50	5.00	4 x 9.00
PA6DM-1	11.00	5.75	4.38	12.63	7.38	n/a
PA6D2	12.75	8.00	7.00	11.31	9.25	5 1/8 x 7.13
PA6DM-2	12.50	7.75	6.75	11.50	9.50	8 x 10.00

► **Technical Specifications**

Description	Order No.	Valve No.	Air Supply Req'd (psi)	Reservoir		Oil Port (in.)	Prod. Wt. (lbs.)
				Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)		
Base model pump with high density polyethylene reservoir.	PA6D	9504 3-way/4-way	40-120	105	98	3/8 NPTF	18.40
PA6D pump with metal reservoir.	PA6DM	9504 3-way/4-way	40-120	105	98	3/8 NPTF	20.40
PA6D pump with 1 gallon metal reservoir.	PA6DM-1	9504 3-way/4-way	40-120	1 gal.	185	3/8 NPTF	28.10
PA6D pump with 2 gallon high density polyethylene reservoir.	PA6D2	9504 3-way/4-way	40-120	2 gal.	454	3/8 NPTF	28.60
PA6D pump with 2.5 gallon metal reservoir.	PA6DM-2	9504 3-way/4-way	40-120	2.5 gal.	570	3/8 NPTF	36.20

Model Shown:

PA9 Foot Control, PA9H Hand Control

Pumps



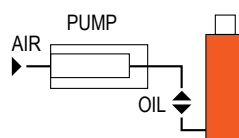
Features

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.
- Serviceable pump allows for economical repairs.
- 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.



Typical Set-Up

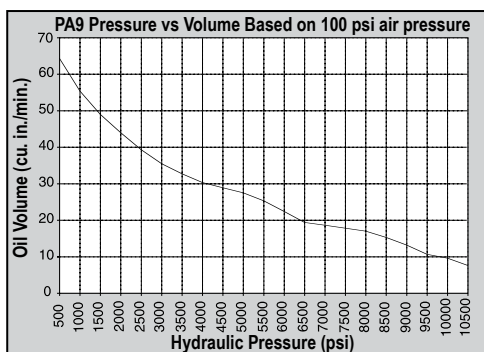


Hook-up for
single-acting cylinders

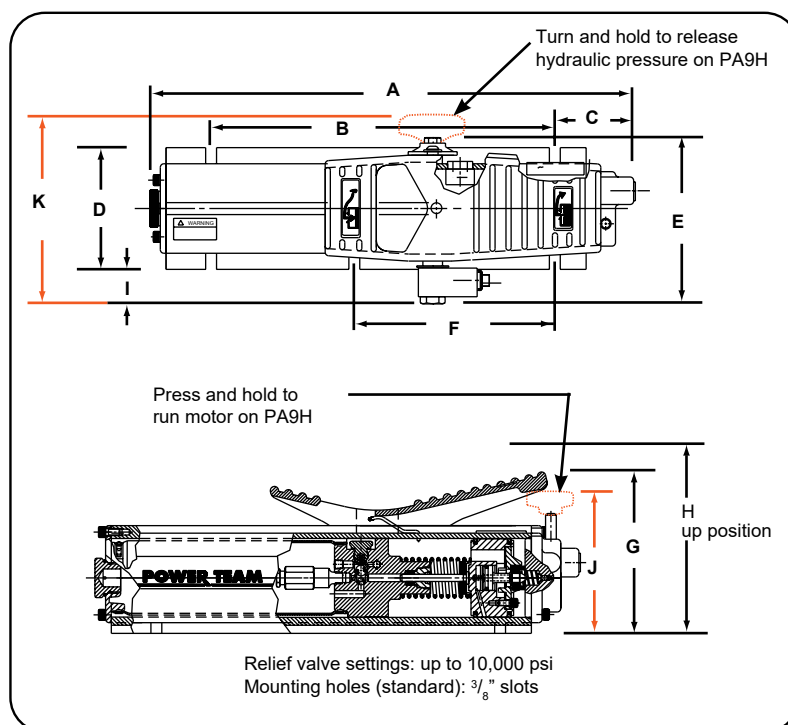
- ▶ **PA9H Hand Control Pump used in a straightening press.**



Performance Specifications



► **PA9 Foot Control**



► **Technical Dimensions**

Order No.	A	B	C	D	E	F	G	H	I	J	K
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)
PA9	16.94	12.00	2.81	4.25	5.31	7.00	5.83	7.00	1.13	—	—
PA9H	16.94	12.00	2.81	4.25	—	7.00	—	7.00	1.13	4.81	6.69

► **Ordering Information**

For Use With Cyl. Type	Order No.	Air Supply Req'd (psi)	Reservoir		Oil Port (in.)	Max. Pressure Output (psi)	Prod. Wt. (lbs.)
			Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)			
Single-Acting	PA9	40-120	35.00	33.50	3/8 NPTF	10,000	15.00
Single-Acting	PA9H	40-120	35.00	33.50	3/8 NPTF	10,000	15.00

Model Shown:

PA64

Pumps



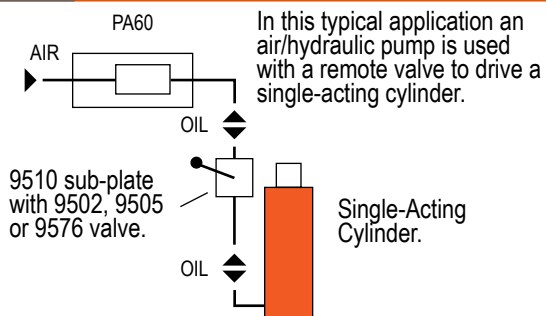
Features

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.



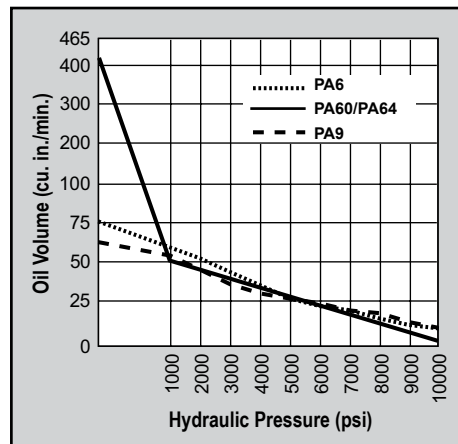
Typical Set-Up



The PA60 used in a work-holding environment



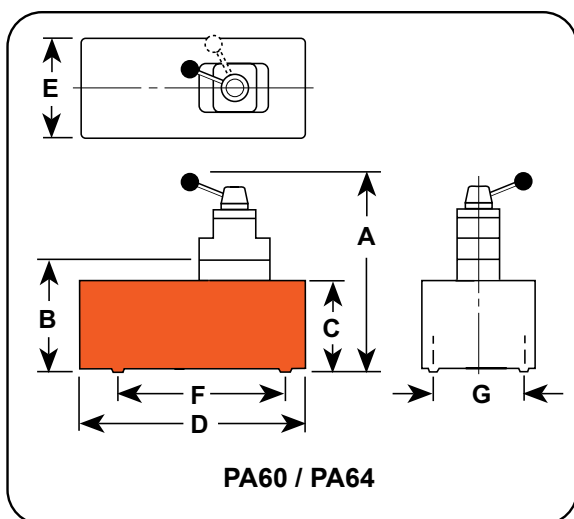
Performance Specifications



Model Shown:
PA60



Pumps



Technical Dimensions

Order No.	A	B	C	D	E	F	G	Max. Pressure Output (psi)	Oil Del. (cu. in./min. @) *				
									0	100	1,000	5,000	10,000
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
PA60	—	9.44	8.13	14.25	9.63	7.13	5.13	10,000	360	350	50	12	6
PA64	14.25	—	8.13	14.25	9.63	7.13	5.13	10,000	390	350	50	12	6

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

Technical Specifications

Description	Order No.	Valve No.	Valve Function	Air Supply Req'd (psi)	Reservoir		Oil Port (in.)	Prod. Wt. (lbs.)
					Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)		
For use with remote valves.	PA60	9626 Manifold	—	40-120	2.00	425.00	3/8 NPTF	54.00
For use with single or double-acting cylinders	PA64	9507 3/4-Way	Advanced Hold Return	40-120	2.00	425.00	3/8 NPTF	56.00

Model Shown:

PA50D, PA50M, PA50R2

Pumps



► The PA50 used in a work-holding environment

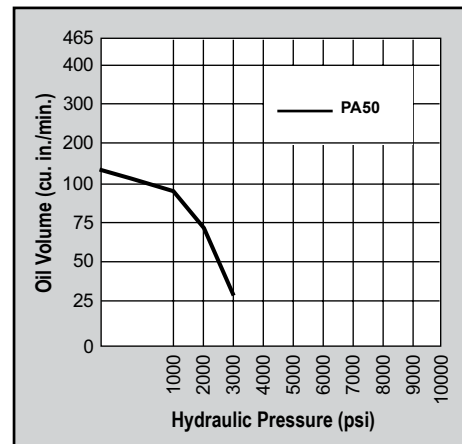


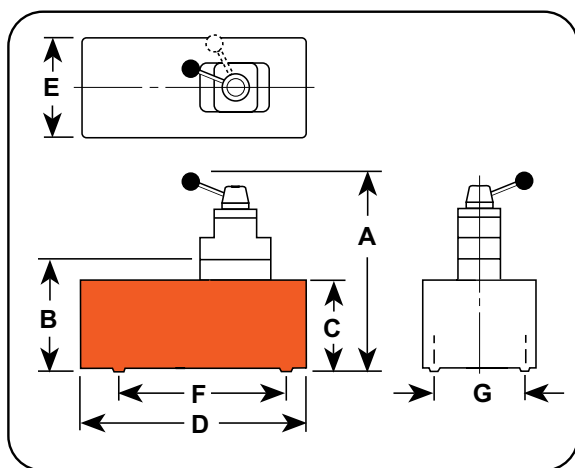
► Features

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

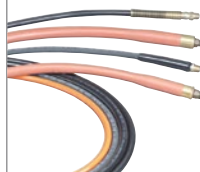
- Serviceable air motor for economical repair.
- Air inlet filter protects air motor.
- Filter in outlet port protects against contaminated systems.
- Assorted reservoirs to suit your application's requirements.

► Performance Specifications





Hydraulic Hoses



Heavy-duty and thermo plastic hydraulic hoses to meet your requirements and safety factor.

Refer to the accessories section for details.



Analog Gauges



Improve your system visibility and safety by adding an inline hydraulic gauge to your circuit.

9440 (2.5 in.), **9052** (4 in.), and **9089** (6 in.)

Technical Dimensions

Order No.	A	B	C	D	E	F	G	Max. Pressure Output (psi)	Oil Del. (cu. in./min. @) *			
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)		0	100	1,000	3,200
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)		(psi)	(psi)	(psi)	(psi)
PA50, PA50R	7.75	5.88	4.38	9.50	5.00	—	4 x 9.00	3,200	128	110	88	28
PA50R2	10.25	8.00	7.00	11.50	9.50	—	5 1/8 x 7.13	3,200	128	110	88	28
PA50D	10.38	5.88	4.38	9.50	5.00	9.00	4.00	3,200	128	110	88	28

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

Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve No.	Air Supply Req'd (psi)	Reservoir		Oil Port (in.)	Prod. Wt. (lbs.)
					Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)		
Single-Acting	Base model pump with high density polyethylene reservoir.	PA50	—	40-120	105	98	3/8 NPTF	14.20
Single-Acting	PA50 pump with 12 foot remote control and polyethylene reservoir.	PA50R	—	40-120	105	98	3/8 NPTF	18.50
Single-Acting	PA50R with 2 gallon polyethylene reservoir.	PA50R2	—	40-120	2 gal.	454	3/8 NPTF	28.50
Single and Double-Acting	PA50 pump with valve and polyethylene reservoir.	PA50D	9504 3-way / 4-way	40-120	105	98	3/8 NPTF	18.40

Notes: Air inlet port 1/4" NPTF. Requires 20 cfm at 100 psi shop air pressure at the pump to achieve 3,200 psi.

Model Shown:

PA172, PA174

Pumps



Features

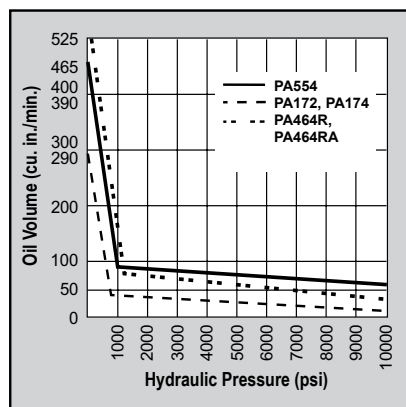
ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS THE PREFERRED SOURCE OF ENERGY.

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

The PA17 used with a flange spreader

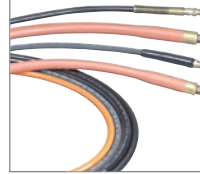


Performance Specifications





Hydraulic Hoses



Heavy-duty and thermo plastic hydraulic hoses to meet your requirements and safety factor.

Refer to the accessories section for details.



Hydraulic Fluids



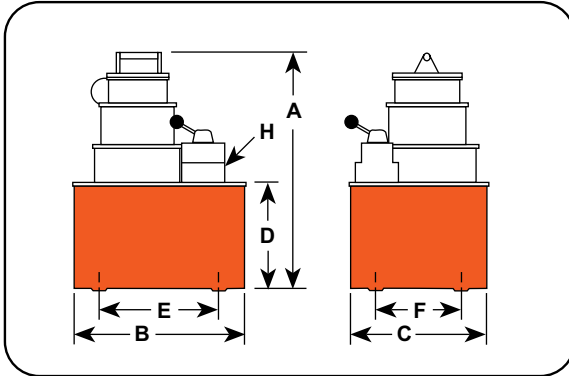
For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete details



Learn More - About Hydraulic Safety Insight



Looking for great safety suggestions? Visit our Resource Section to get a better understanding of hydraulic and mechanical safety insights on what to look for when working around hydraulics



Technical Dimensions

Order No.	A	B	C	D	E	F	H	Max. Pressure Output	Oil Del. (cu. in./min. @) *				
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)		0	100	1,000	5,000	10,000
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)		(psi)	(psi)	(psi)	(psi)	(psi)
PA172	14.13	11.38	9.25	7.00	7.13	5.13	3/8 NPTF	10,000	290	240	24	23	17
PA174	14.13	11.38	9.25	7.00	7.13	5.13	3/8 NPTF	10,000	290	240	24	23	17

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

Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve No.	Valve Function	Air Supply Req'd (psi)	Reservoir		Prod. Wt. (lbs.)
						Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)	
Single-Acting	Base model pump with 2 gallon thermoplastic reservoir.	PA172	9517, 2-way	Advance Return*	40-120	2	295	40.00
Single and Double-Acting	PA172 pump with 2 gallon thermoplastic reservoir, 9500 valve for use with single or double-acting cylinders	PA174	9500, 4-way	Advance Hold Return*	40-120	2	295	41.00

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

Notes: Requires 40 cfm at 100 psi shop air pressure at the pump. 85/90 dBA at 10,000 psi.

Model Shown:

PA462, PA464R, PA554

Pumps



Features

ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS THE PREFERRED SOURCE OF ENERGY.

- 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.



Torque Wrench Pumps

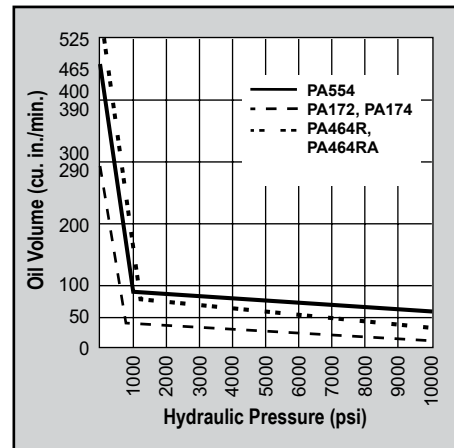


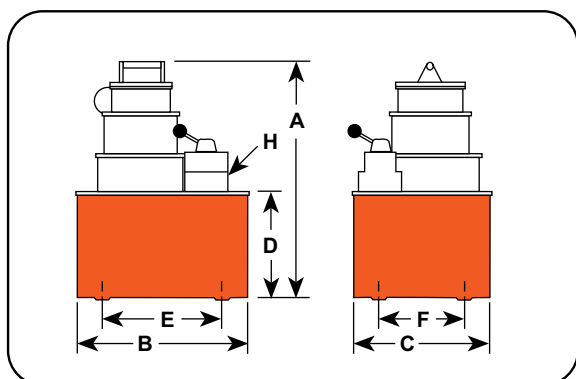
For Torque Wrench Pump Configurations, refer to the Tools Section.

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



Performance Specifications





Analog Gauges



Improve your system visibility and safety by adding an inline hydraulic gauge to your circuit.

9440 (2.5 in.), **9052** (4 in.), and **9089** (6 in.)

Technical Dimensions

Order No.	A	B	C	D	E	F	H	Max. Pressure Output (psi)	Oil Del. (cu. in./min. @) *				
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)		0 (psi)	100 (psi)	1,000 (psi)	5,000 (psi)	10,000 (psi)
PA462	15.00	11.50	9.50	7.00	10.00	8.00	3/8 NPTF	10,000	465	450	53	51	46
PA464	15.00	11.50	9.50	7.00	10.00	8.00	3/8 NPTF	10,000	465	450	53	51	46
PA464R	15.00	11.50	9.50	7.00	10.00	8.00	3/8 NPTF	10,000	465	450	53	51	46
PA464RA	15.00	11.50	9.50	7.00	10.00	8.00	3/8 NPTF	10,000	465	450	53	51	46
PA554	19.00	11.50	9.50	7.00	10.00	8.00	3/8 NPTF	10,000	465	450	80	70	55

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

Note: Reservoir has four 1/2" - 20 mounting holes.

Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Number	Valve Function	Air Supply Req'd (psi)	Reservoir		Prod. Wt. (lbs.)
						Oil Cap. (cu. in.)	Usable Oil Cap. (cu. in.)	
Single-Acting	Base model pump with 2.5 gallon steel reservoir.	PA462	9584, 2-way	Advance/ Hold/ Return	40-120	2.5	590	60.00
Single and Double-Acting	PA462 pump with 9500 valve capable of running 2 single-acting cylinders or one double-acting cylinder.	PA464	9500, 4-way	Advance/ Hold/ Return*	40-120	2.5	590	61.00
Single and Double-Acting	PA462 pump 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	2.5	590	78.00
Single and Double-Acting	PA464R pump with automatic dump feature. Includes 25 ft. remote control.	PA464RA**†	9594, 4-way	Advance/ Hold/ Return*	40-120	2.5	590	79.00
Single and Double-Acting	High-performance pump with 2.5 gallon steel reservoir.	PA554	9500, 4-way	Advance/ Hold/ Return*	40-120	2.5	525	72.00

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

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

** Not to be used for lifting.

† 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.