

Model Shown:

**PA6, PA6M-1, PA6-2**

Pumps



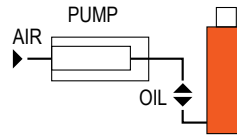
**Features**

**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**

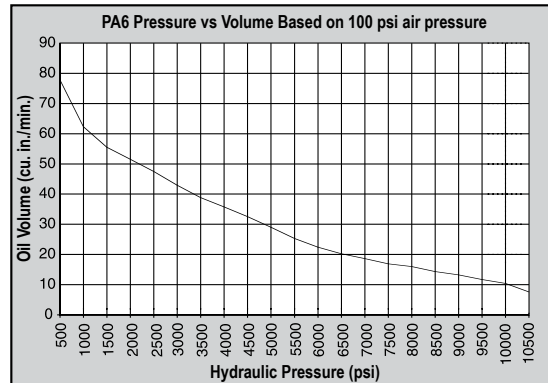


Hook-up for single-acting cylinders

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



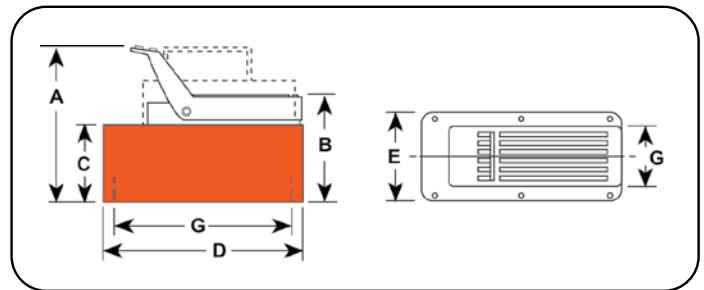
▶ **Performance Specifications**



Two Point Lifting System Example



Pumps



Technical Dimensions

Order No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	G (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



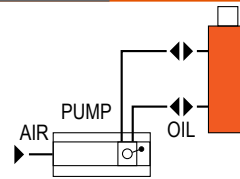
**Features**

**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**

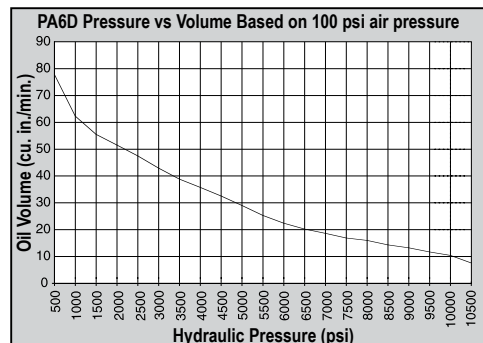


Hook-up for double-acting cylinders

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



**Performance Specifications**

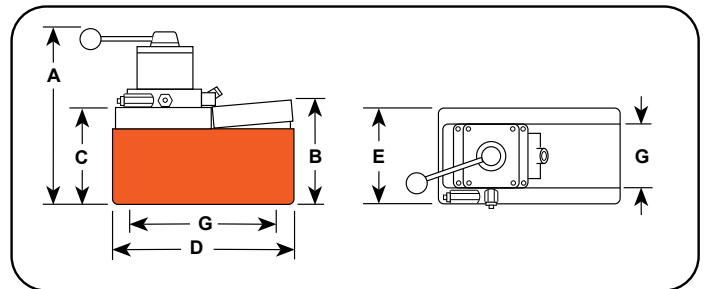


Model Shown:

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



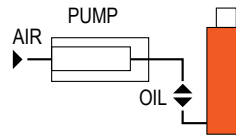
**>Features**

**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**

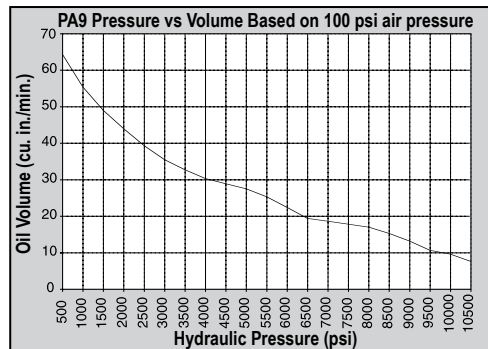


Hook-up for single-acting cylinders

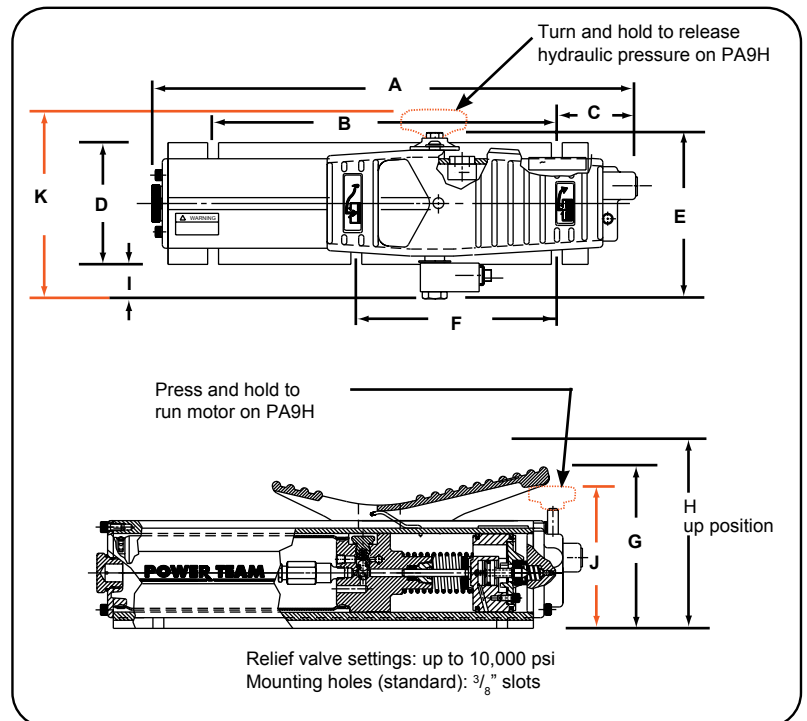
▶ **PA9H Hand Control Pump used in a straightening press.**



▶ **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



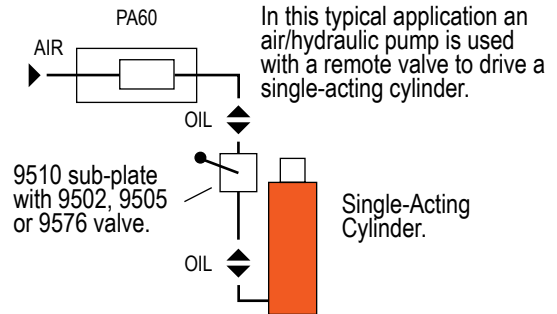
**Features**

**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.



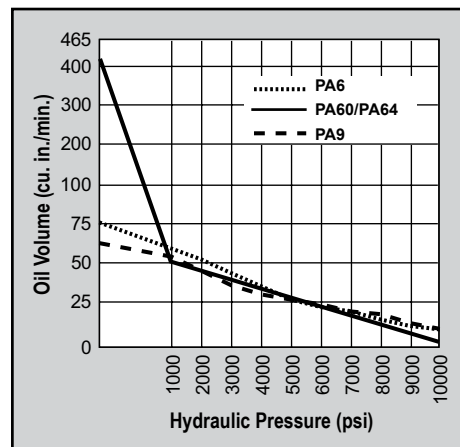
**Typical Set-Up**



▶ The PA60 used in a work-holding environment



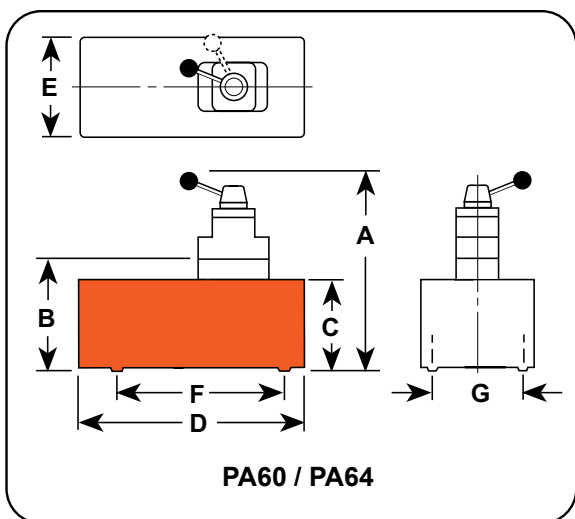
▶ **Performance Specifications**



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
									(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

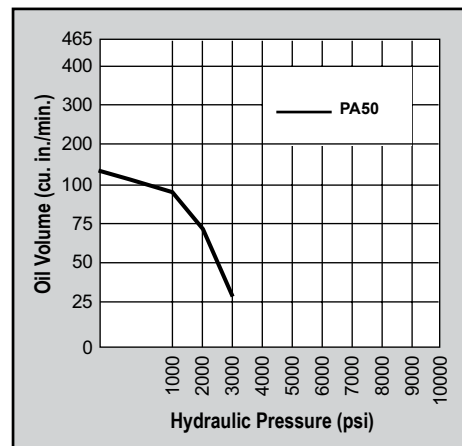


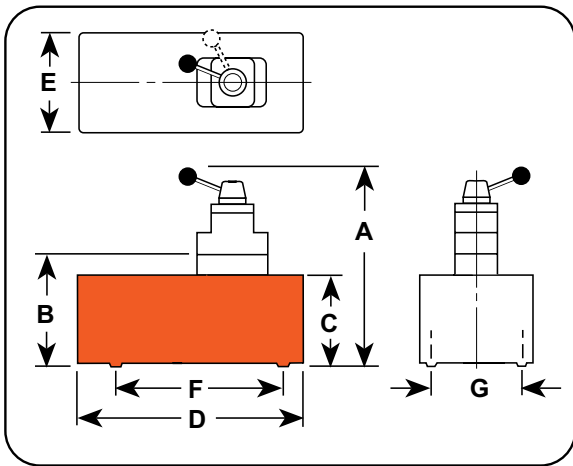
▶ Features

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

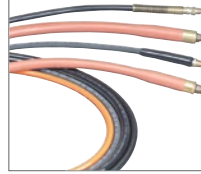
- Serviceable air motor for economical repair.
- Air inlet filter protects air motor.
- Filter in outlet port protects against contaminated systems.
- Assorted reservoirs to suit your application's requirements.

▶ 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. @) *			
									0	100	1,000	3,200
									(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

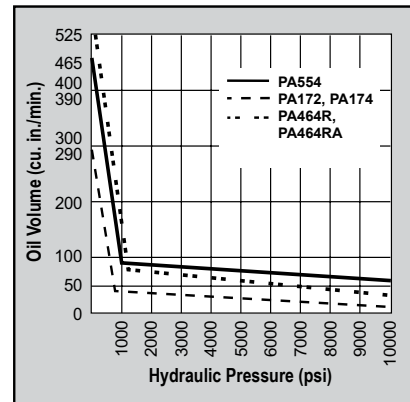
**ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS THE PREFERRED SOURCE OF ENERGY.**

- 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

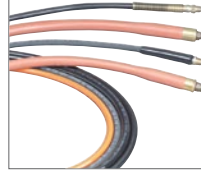


### Performance Specifications





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



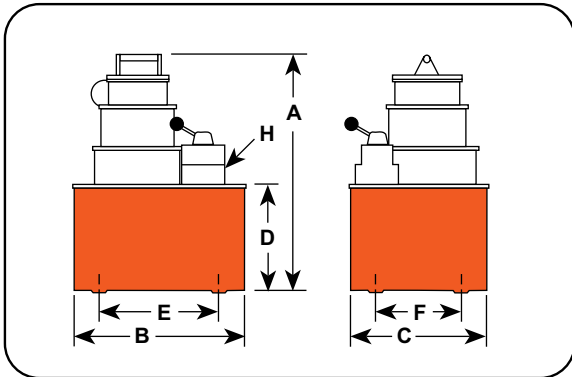
For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete details



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 (psi)	Oil Del. (cu. in./min. @) *				
									0	100	1,000	5,000	10,000
									(psi)	(psi)	(psi)	(psi)	(psi)
PA172	14.13 (in.)	11.38 (in.)	9.25 (in.)	7.00 (in.)	7.13 (in.)	5.13 (in.)	3/8 NPTF (in.)	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**

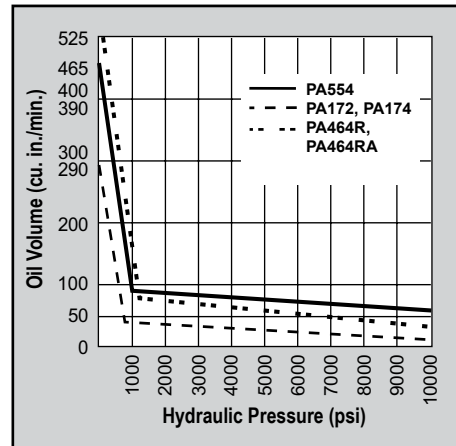


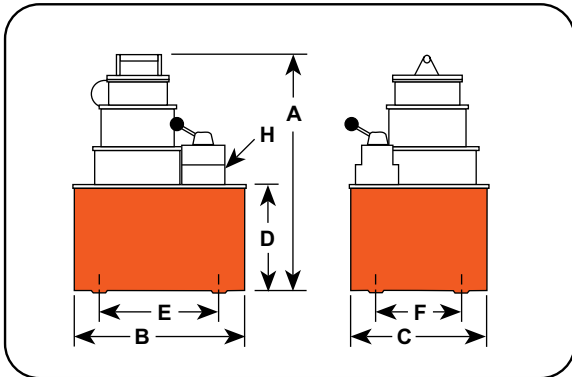
For Torque Wrench Pump Configurations, refer to the Tools Section.

▶ **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. @) *				
									0	100	1,000	5,000	10,000
									(psi)	(psi)	(psi)	(psi)	(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.

Model Shown:

**PUA70U, PMA190U**

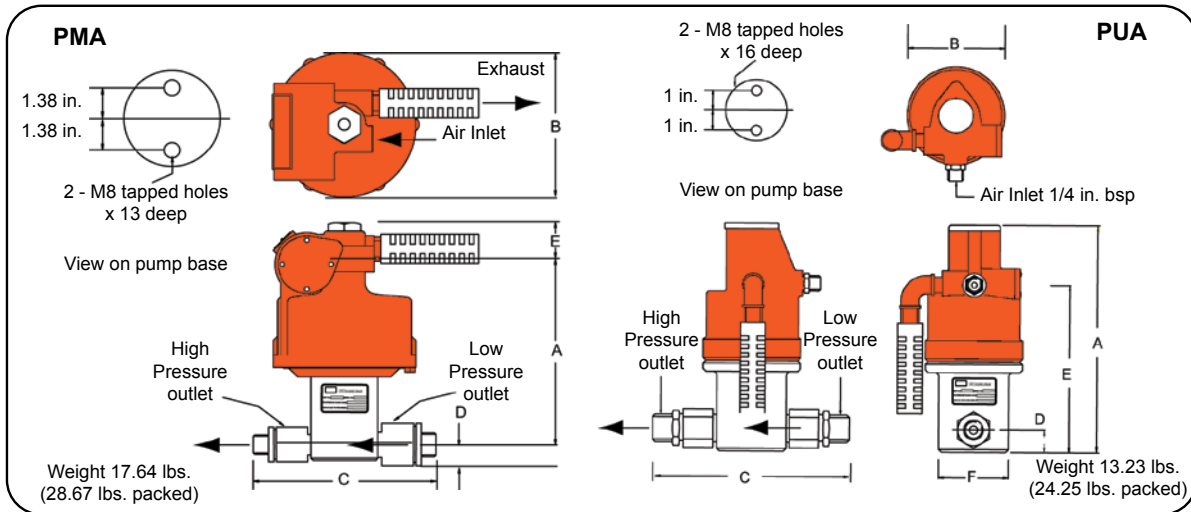
Pumps



**>Features**

**PROVIDES INFINITELY VARIABLE CAPACITY AND DISCHARGE PRESSURE**

- Suitable for continuous and 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).
- Quiet operation
- Simple to install and maintain with a compact, rugged design.
- Only 15 psi air pressure required to start pump.
- Requires flooded inlet. vertical mount.
- Can operate on gases other than air.



Technical Dimensions

Order No.	RAM/ Dia. (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)
PUA26U	1.25	9.17	4.02	6.61	0.87	6.69	2.87
PUA70U	0.75	8.74	4.02	6.61	0.87	6.22	2.87
PUA157U	0.50	8.74	4.02	6.61	0.87	6.22	2.87
PUA275U	0.38	8.74	4.02	6.61	0.87	6.22	2.87
PUA430U	0.31	8.74	4.02	6.61	0.87	6.22	2.87
PUA655U	0.25	8.74	4.02	6.61	0.87	6.22	2.87
PUA982U	0.20	8.74	4.02	6.61	0.87	6.22	2.87
PMA27U	3.00	8.66	7.01	9.06	1.50	1.89	-
PMA60U	2.00	8.27	7.01	9.06	1.50	1.89	-
PMA90U	1.63	8.27	7.01	9.06	1.50	1.89	-

Order No.	RAM/ Dia. (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)
PMA130U	1.38	7.99	7.01	7.68	0.87	1.89	-
PMA190U	1.13	7.99	7.01	7.68	0.87	1.89	-
PMA240U	1.00	7.99	7.01	7.68	0.87	1.89	-
PMA370U	0.81	7.99	7.01	7.01	0.87	1.89	-
PMA520U	0.69	7.99	7.01	7.01	0.87	1.89	-
PMA770U	0.56	7.99	7.01	7.01	0.87	1.89	-
PMA980U	0.50	7.99	7.01	7.01	0.87	1.89	-
PMA1740U	0.38	7.99	7.01	10.08	0.87	1.89	-
PMA2410U	0.31	7.99	7.01	10.08	0.87	1.89	-

Ordering Information

NPT Fittings	Ratio	Outlet Pres.	Outlet Per Cycle	Max. Flow at 0 Press.	Inlet	Outlet
	1:	(psi)	(cu. in.)	(cu. in./min.)	(NPT)	(NPT)
PUA26U	4.3	380	1.680	850	1/2" NPT	1/2" NPT
PUA70U	11.9	1,010	0.607	305	1/2" NPT	1/2" NPT
PUA157U	26.7	2,280	0.270	146	1/2" NPT	1/2" NPT
PUA275U	47.5	3,990	0.151	85	1/2" NPT	1/2" NPT
PUA430U	68.4	6,230	0.105	55	1/2" NPT	1/2" NPT
PUA655U	107.0	9,500	0.670	36	1/2" NPT	1/2" NPT
PUA982U	163.8	14,250	0.044	24	1/2" NPT	1/2" NPT
PMA27U	4.0	390	9.720	2260	1" NPT	3/4" NPT
PMA60U	9.0	870	4.320	1400	1" NPT	3/4" NPT
PMA90U	13.6	1,300	2.850	915	1" NPT	3/4" NPT

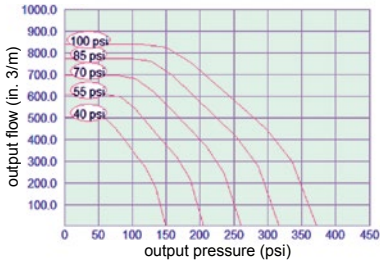
NPT Fittings	Ratio	Outlet Pres.	Outlet Per Cycle	Max. Flow at 0 Press.	Inlet	Outlet
	1:	(psi)	(cu. in.)	(cu. in./min.)	(NPT)	(NPT)
PMA130U	19.0	1,880	2.040	670	3/4" NPT	1/2" NPT
PMA190U	28.4	2,750	1.370	455	3/4" NPT	1/2" NPT
PMA240U	36.0	3,480	1.080	354	3/4" NPT	1/2" NPT
PMA370U	54.5	5,360	0.710	230	1/2" NPT	1/2" NPT
PMA520U	76.5	7,540	0.510	170	1/2" NPT	1/2" NPT
PMA770U	113.0	11,160	0.340	110	1/2" NPT	1/2" NPT
PMA980U	145.0	14,210	0.270	91	1/2" NPT	1/2" NPT
PMA1740U	256.0	25,230	0.150	51	1/2" NPT	3/8" HP
PMA2410U	368.0	35,000	0.104	35	1/2" NPT	3/8" HP



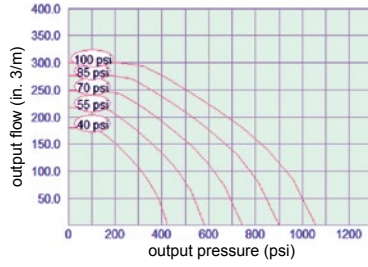
**PUA:**

Pumps

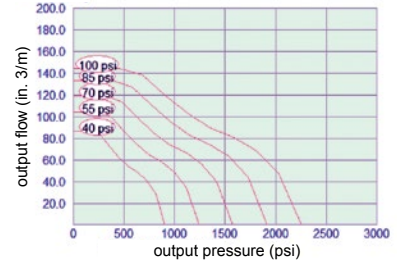
**PUA - 4.3:1**



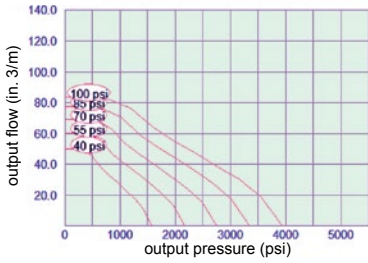
**PUA - 11.9:1**



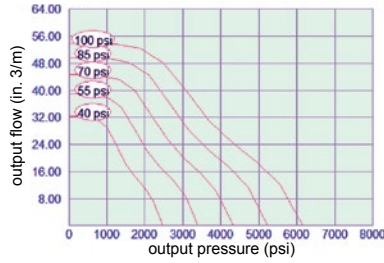
**PUA - 26.7:1**



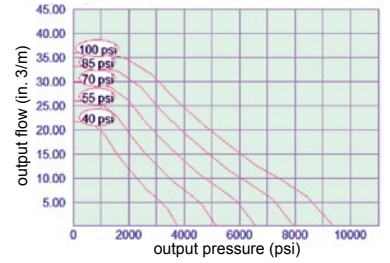
**PUA - 47.5:1**



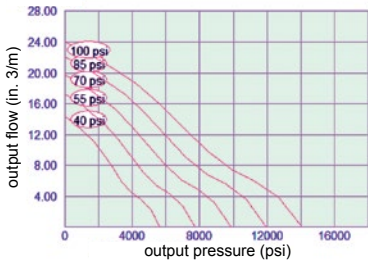
**PUA - 68.4:1**



**PUA - 107:1**



**PUA - 163.8:1**



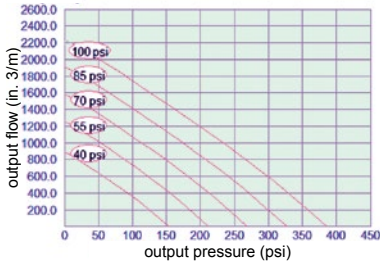
Model Shown:

**PUA70U, PMA190U**

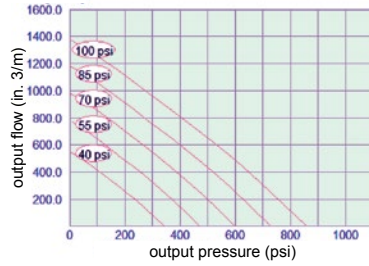


PMA:

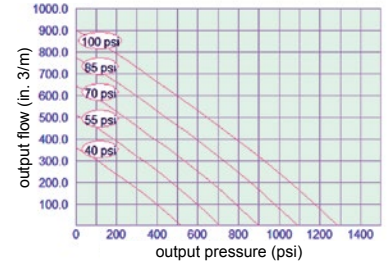
PMA - 4:1



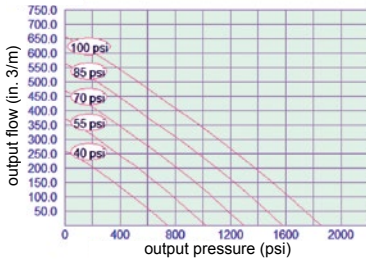
PMA - 9:1



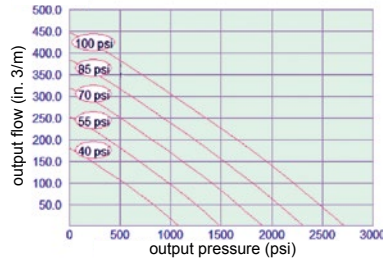
PMA - 13.6:1



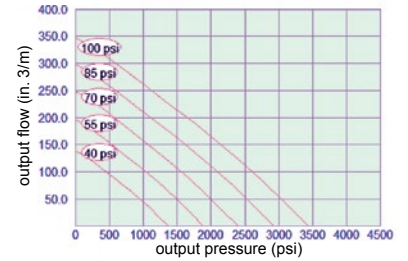
PMA - 19:1



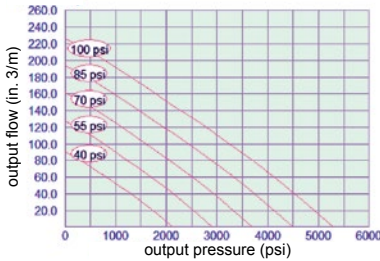
PMA - 28.4:1



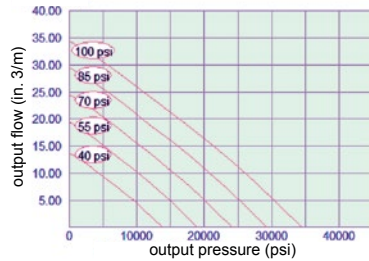
PMA - 36:1



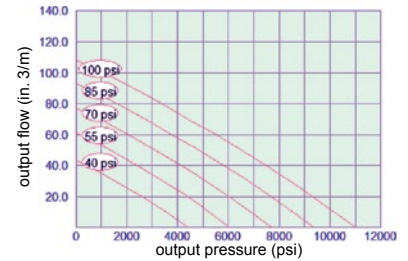
PMA - 54.5:1



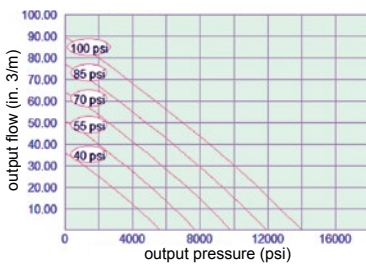
PMA - 76.5:1



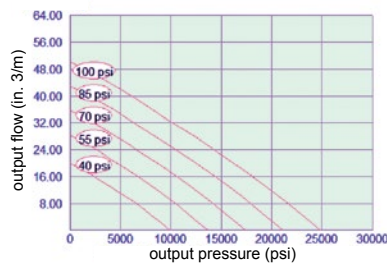
PMA - 113:1



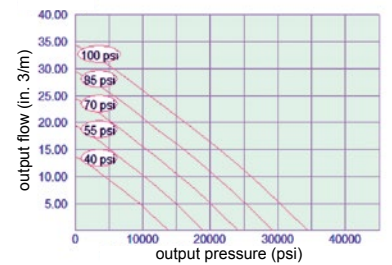
PMA - 145:1



PMA - 256:1



PMA - 368:1



Pumps