

▼ Shown left to right: PAMG-1402N, PATG-1102N, PARG-1102N, PATG-1105N



- High efficiency cast aluminum air motor for increased life and reduced air consumption
- Fully serviceable air motor assembly
- Reinforced heavy-duty reservoir for applications in tough environments
- New generation air saver piston with rugged one-piece design reduces air consumption and operating costs
- Return-to-tank port for use in remote valve applications
- Quiet – only 76 dBA with low air consumption of 12 scfm
- Operating air pressure: 25-125 psi, enables pump to start at extremely low pressure
- Internal pressure relief valve provides overload protection

▼ Easily operated by hand or by foot.



## Setting New Standards



### RFL-102 Regulator-Filter-Lubricator

Recommended for use with all air pumps. Provides clean, lubricated air and allows for air pressure adjustment. Steel bowl guards are standard.



### Large Reservoir Models

The Turbo II Air Pump is also available with a larger reservoir: PATG-1105N, PAMG-1405N, and PARG-1105N.



### Hoses

Enerpac offers a complete line of high-quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.

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Used with Cylinder	Usable Oil Capacity (in <sup>3</sup> )	Model Number
Single-acting	127	PATG-1102N*
	230	PATG-1105N
	127	PARG-1102N
	230	PARG-1105N
Double-acting	127	PAMG-1402N
	230	PAMG-1405N

\* Available as set. See note on next page.

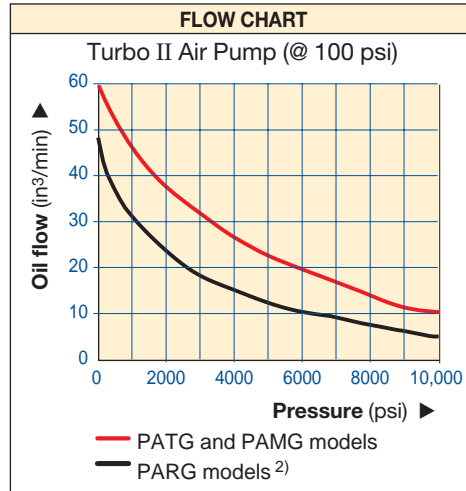
# Turbo II Air Hydraulic Pumps



The PATG-models use a foot or hand operated treadle to control air and valve functions.

The PAMG-models use a treadle with a locking feature and a 4-way manual valve.

The PARG-models use a 15 ft. pendant hose for convenient one man operation.



## PA Series

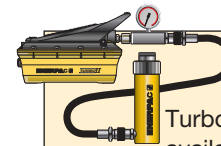


Reservoir Capacity:  
**150-305 in<sup>3</sup>**

Flow at Rated Pressure:  
**10 in<sup>3</sup>/min.**

Maximum Operating Pressure:  
**10,000 psi**

Pressure Rating (psi)	Output Flow Rate (in <sup>3</sup> /min)		Model Number	Valve Function	Air Pressure Range (psi)	Air Consumption (scfm)	Sound Level (dBA)
	No load	Load					
10,000	60	10	PATG & PAMG	Advance/	25-125	12	76
10,000	51 <sup>1)</sup>	6 <sup>1)</sup>			25-125	12	76
10,000	48 <sup>2)</sup>	5 <sup>2)</sup>	PARG	Hold/ Retract	25-125	8	76



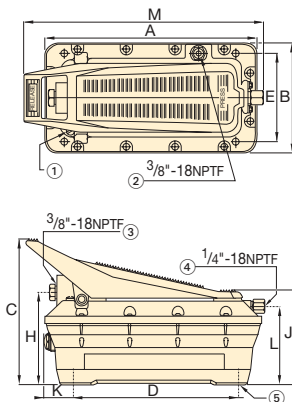
### Pump and Cylinder Sets

Turbo II pumps are also available as sets (Turbo II pump, cylinder, gauge, couplers and hose) for your ordering convenience.

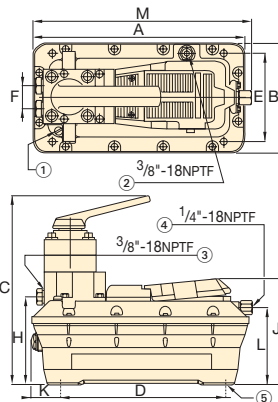
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<sup>1)</sup> Air supply connected at pendant.

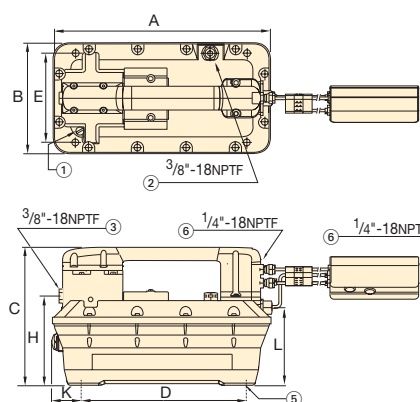
<sup>2)</sup> Air supply connected at pump shown on flow curve.



**PATG-1102N and  
PATG-1105N**



**PAMG-1402N and  
PAMG-1405N**



**PARG-1102N and  
PARG-1105N**

- ① Filtered "Permanent" Tank Vent
- ② Return-to-Tank/Auxiliary Vent/Fill Tank Port
- ③ Hydraulic Output
- ④ Swivel Air Input with Filter
- ⑤ 4 Mounting Holes for #10 thread forming screw. Max. depth into reservoir = .75"
- ⑥ Air Input Options

Dimensions (in)											Weight (lbs)	Model Number
A	B	C	D	E	F	H	J	K	L	M		
12.33	6.49	8.29	9.04	4.00	—	5.15	5.75	1.65	4.43	13.62	18	PATG-1102N*
15.60	7.92	8.22	9.04	4.00	—	5.08	5.75	3.28	4.41	17.20	22	PATG-1105N
12.33	6.49	7.88	9.04	4.00	—	5.15	—	1.65	4.43	—	22	PARG-1102N
15.60	7.92	7.88	9.04	4.00	—	5.08	—	3.28	4.41	—	26	PARG-1105N
12.33	6.49	10.50	9.04	4.00	1.42	5.23	6.00	1.65	4.43	12.60	24	PAMG-1402N
15.60	7.92	10.50	9.04	4.00	1.42	5.19	6.00	3.28	4.41	15.94	28	PAMG-1405N

▼ Shown from top to bottom: PA-1150, PA-133



## PA Series

Reservoir Capacity:

**36-80 in<sup>3</sup>**

Flow at Rated Pressure:

**8 in<sup>3</sup>/min.**

Maximum Operating Pressure:

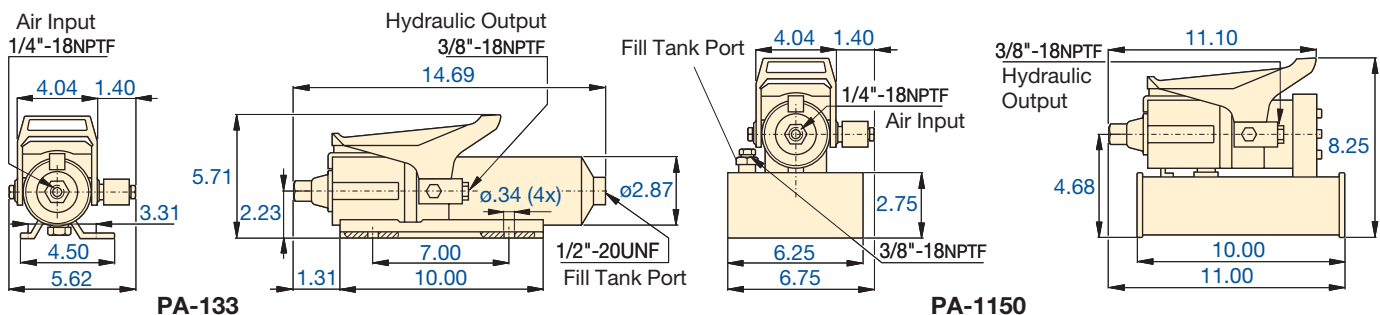
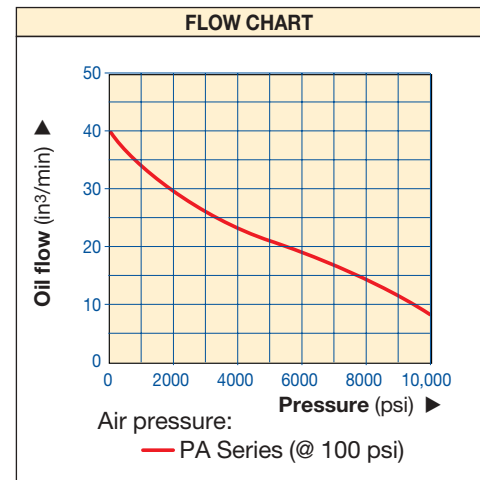
**10,000 psi**



### PC-66 Reservoir Conversion Kit

Double the reservoir capacity of your existing PA-133 with this easy to install conversion kit.

- Rugged construction – built for long life and easy service
- Swivel coupling simplifies hydraulic connection and pump operation
- Three-position treadle provides cylinder advance, hold and retract operation
- PA-133 operates in all positions for increased versatility in use and mounting
- Base mounting slots provided on PA-133



Dimensions shown in inches

Used with Cylinder	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating (psi)	Output Flow Rate (in <sup>3</sup> /min)		Valve Function	Air Pressure Range* (psi)	Air Consumption (scfm)	Sound Level (dBA)	Weight (lbs)
				No load	Load					
Single-acting	36	PA-133	10,000	40	8	Advance/Hold/Retract	60-120	9	85	12
	80	PA-1150	10,000	40	8	Advance/Hold/Retract	60-120	9	85	18

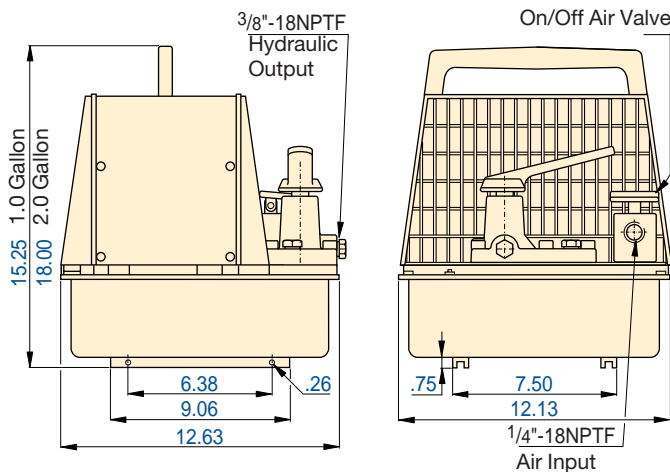
\* Recommended Regulator-Filter-Lubricator: RFL-102

# Air Hydraulic Pumps

▼ Shown: **PAM-1041**



- Twin air motor configuration delivers high-flow performance in first stage, up to 200 psi, for rapid cylinder advance
- 1 and 2 gallon reservoirs for use with a wide range of cylinders
- Integral shroud protects air motors and provides easy portability



**PAM-1022**

Used with Cylinder	Usable Oil Capacity (gal)	Model Number (with Shroud)	Pressure Rating (psi)	Output Flow Rate (in <sup>3</sup> /min)		Valve Function	Valve Model	Air Pressure Range* (psi)	Air Consumption (scfm)	Sound Level (dBA)	Weight (lbs)
				1 <sup>st</sup> stage	2 <sup>nd</sup> stage						
Single-acting	0.7	PAM-1021	10,000	650	9	Adv/Hold/Ret	VM-2	60-120	18	87	50
	2.0	PAM-1022	10,000	650	9	Adv/Hold/Ret	VM-2	60-120	18	87	60
Double-acting	0.7	PAM-1041	10,000	650	9	Adv/Hold/Ret	VM-4	60-120	18	87	50
	2.0	PAM-1042	10,000	650	9	Adv/Hold/Ret	VM-4	60-120	18	87	60

\* Recommended Regulator-Filter-Lubricator: RFL-102

## PAM Series

Reservoir Capacity:  
**1.0-2.0 gal.**

Flow at Rated Pressure:  
**9 in<sup>3</sup>/min.**

Maximum Operating Pressure:  
**10,000 psi**



### Locking Valves

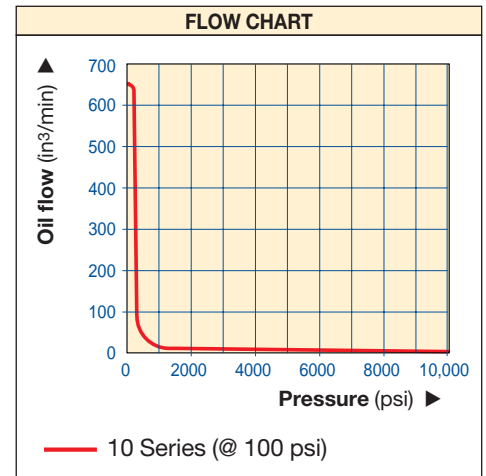
Pumps with VM-4 manual valves are available with VM-4L manual locking valves instead. Add suffix "L" to pump model number.

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### VA-2 Remote Valve

For remote operation of PAM-10 series air pumps. Permits either hand or foot operation.



▼ Shown: ZA4208MX, ZA4420MX



## Z Tough. Dependable. Innovative. Z-CLASS

**i ATEX Certified**  
See explanation of ATEX certification in the “Yellow Pages”.

**Ex II 2 GD ck T4**

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**i Speed Chart**  
To determine how a ZA Series pump will operate your cylinder, see the Pump/Cylinder Speed Chart in the “Yellow Pages”.

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**Hoses**  
Enerpac offers a complete line of high-quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.

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- Features Z-Class high efficiency pump design, higher oil flow and bypass pressure
- Two-speed operation and high by-pass pressure reduces cycle time for improved productivity
- Internal relief valves. One is factory set for overload protection while the second is user adjustable for pre-setting maximum system pressure
- Sight gauge on 1 and 2 gallon and level gauge on 2.5, 5 and 10 gallon reservoirs allow quick and easy oil level monitoring
- Optional heat exchanger warms exhaust air to prevent freezing and cools the oil

ZA4 Performance		
Dynamic Air Pressure Range	Air Consumption	Sound Level
(psi)	(scfm)	(dBA)
60-100	20-100	85-90

Used with Cylinder	Usable Oil Capacity (gal)	Valve Model Number <sup>2)</sup>	Valve Function	Model Number	Output Flow Rate <sup>1)</sup>			
					(in <sup>3</sup> /min)			
					100 psi	700 psi	5,000 psi	10,000 psi
Single-acting	1.0	Manual VM32	Advance/Retract	ZA4204MX	850	675	110	80
	2.0			ZA4208MX	850	675	110	80
	5.0			ZA4220MX	850	675	110	80
Double-acting	1.0	Manual VM43	Advance/Hold/Retract	ZA4404MX	850	675	110	80
	2.0			ZA4408MX	850	675	110	80
	2.5			ZA4410MX	850	675	110	80
	5.0			ZA4420MX	850	675	110	80
	10.0			ZA4440MX	850	675	110	80

1) Actual flow will vary with air supply  
2) See valve section for hydraulic symbols and details

# ZA-Series Air Hydraulic Pump Ordering Matrix

## CUSTOM BUILD YOUR ZA4 AIR PUMP

▼ This is how a ZA-Series Pump model number is built up:



1	2	3	4	5	6	7	8	8	8	8
Product Type	Motor Type	Flow Group	Valve Type	Usable oil capacity	Valve Operation	Voltage	Options	Options	Options	Options

### 1 Product Type

Z = Pump class

### 2 Motor Type

A = Air motor

### 3 Flow Group

4 = 80 in<sup>3</sup>/min@10,000 psi

### 4 Valve Type

- 0 = No valve with coverplate
- 2 = 3-way, 2-position (VM32)
- 3 = 3-way, 3-position (VM33)
- 4 = 4-way, 3-position (VM43)
- 6 = 3-way, 3-position, locking (VM33L)
- 8 = 4-way, 3-position, locking (VM43L)

### 5 Usable Oil Capacity

- 04 = 1.0 gallon
- 08 = 2.0 gallon
- 10 = 2.5 gallon
- 20 = 5.0 gallon
- 40 = 10.0 gallon

### 6 Valve Operation

- M = Manual valve
- N = No valve

### 7 Voltage

- X = Not applicable

### 8 Options

(Specify in alphabetical order)

- F = Filter
- G = 0-15,000 psi gauge (2 1/2")
- H = Heat exchanger
- K = Skidbar (1 and 2 gallon reservoirs only)
- N = No reservoir handles (includes lifting eyes; 2.5, 5, 10 gallon only)
- R = Roll bars

### Ordering Example

#### Model Number: ZA4208MX-FHK

ZA4208MX-FHK is an air operated pump with a 3-way, 2-position manual valve, a 2.0 gallon reservoir, filter, heat exchanger and skid bar.

## ZA4 Series



Reservoir Capacity:

**1.0-10.0 gal.**

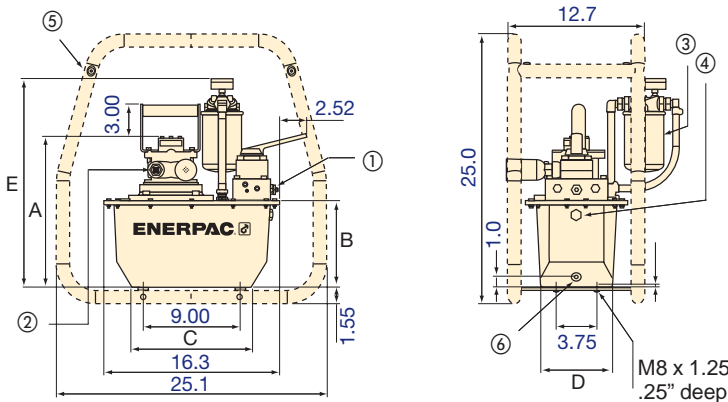
Flow at Rated Pressure:

**80 in<sup>3</sup>/min.**

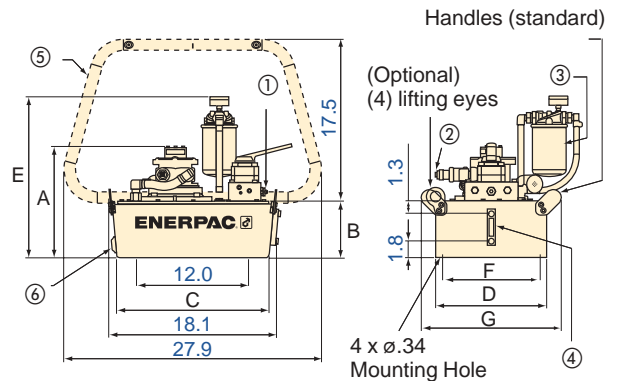
Maximum Operating Pressure:

**10,000 psi**

- ① User adjustable relief valve on all manual valves
- ② Air inlet 1/2" NPTF
- ③ Return Line Filter (optional)
- ④ Oil Sight Gauge
- ⑤ Roll Bar (optional)
- ⑥ Oil Drain
- ⑦ Skid Bar (model no. SBZ-4) (optional)



1 and 2 gallon reservoirs



2.5, 5, 10 gallon reservoirs

Dimensions (in)							Weight (incl. oil) (lbs)
A	B	C	D	E	F	G	
11.6	5.6	11.0	6.0	16.9	-	-	65.5
14.0	8.0	11.3	6.6	19.3	-	-	75.7
13.0	7.1	16.3	16.6	15.6	15.6	18.4	112.7
11.6	5.6	11.0	6.0	16.9	-	-	66.7
14.0	8.0	11.3	6.6	19.3	-	-	76.9
12.0	6.1	16.5	12.0	17.4	11.0	15.1	87.1
13.0	7.1	16.3	16.6	15.6	15.6	18.4	113.9
16.5	10.6	15.7	19.9	21.9	18.9	23.0	164.6

