# PE-Series, Submerged Electric Pumps

▼ Shown: **PEJ-1401B** 



- Two-speed operation reduces cycle times for improved productivity
- Powerful .5 hp induction motor is submerged in the oil reservoir to run cooler, protect the motor, simplify the pump interface, save space and reduce noise
- Large 1.5 gallon reservoir allows operation of a wide range of cylinders
- 24 VDC remote pendant control on certain models for safer operation
- Externally adjustable relief valve allows control of operating pressure without opening the pump
- 40-micron internal return line filter keeps oil clean, promoting longer pump life
- Full-length side tube for easy monitoring of oil level



■ The Remote Jog model of the Submerged Pump simplifies maintenance on this machine.



#### **▼ SELECTION CHART**

For more technical information see next page.

#### **5 BASIC PUMP TYPES**

Select the model that suits your application. For special requirements see page 87 or contact your Enerpac office.

#### PED-Series: with Dump Valve

- Ideal for punching, crimping and cutting
- For use when load holding is not required
- Control pendant with 10 ft. cord controls valve and motor

# PEM-Series: with Manual Valve

- Ideal choice for most applications
- Manual valve control, for both singleacting and double-acting applications
- Manual motor control

# PER-Series: with Solenoid Valve

- Ideal for production and lifting
- All valves are 3-position for Advance/Hold/Retract
- Control pendant with 10 ft. cord for remote valve operation

### **PEJ-Series: with Remote Jog**

- For light production and lifting applications
- Manual valve control for single-acting or double-acting cylinders
- Control pendant with 10 ft. cord for remote motor operation

## **PES-Series: with Pressure Switch**

- Designed for maintaining pressure applications, such as clamping, workholding and testing
- All versions include manual valves for directional control
- Contact Enerpac for details on VM style valves.

www.appliedtorque.co.uk

# **Submerged Electric Pumps**

# Submerged Pump Application

The Submerged pump is best suited to power small to medium size cylinders or hydraulic tools, or whenever a quiet, intermittent duty cycle is needed. With its low sound level and the addition of the optional oil cooler, the Submerged pump is suited to light production work as well.

Its lightweight and compact design also make it ideal for applications which require some transport of the pump.

For further application assistance see the "Yellow Pages" or contact your local Enerpac office.



\* NOTE: CE conformity marking only applies to pumps with an "E" suffix.

# PE Series



Reservoir Capacity:

1.5 gal.

Flow at Rated Pressure:

20 in<sup>3</sup>/min.

Motor Size:

.5 hp

Maximum Operating Pressure:

10,000 psi

Pump Type	Used with Cylinder	Valve Function	Valve Type*	Usable Oil Capacity	Model Number* 115 VAC, 1 ph	Weight
				(gal)		(lbs)
	Single-acting	Advance/Retract	Dump	1.5	PED-1101B	55
	Single-acting	Advance/Retract	Manual VMP 10000D	1.5	PEM-1201B	53
	Single-acting	Advance/Hold/Retract	Manual VMF 10000D	1.5	PEM-1301B	53
1000	Double-acting	Advance/Hold/Retract	Manual VMC 10000D	1.5	PEM-1401B	53
	Single-acting	Advance/Hold/Retract	Solenoid (VEF-15500D)	1.5	PER-1301B	65
	Double-acting	Advance/Hold/Retract	Solenoid (VEC-15600D)	1.5	PER-1401B	65
	Single-acting	Advance/Retract	Manual VMP 10000D	1.5	PEJ-1201B	55
	Single-acting	Advance/Hold/Retract	Manual VMF 10000D	1.5	PEJ-1301B	55
	Double-acting	Advance/Hold/Retract	Manual VMC 10000D	1.5	PEJ-1401B	55
	Single-acting	Advance/Retract	Manual VMP 10000D	1.5	PES-1201B	62
Cont	Double-acting	Advance/Hold/Retract	Manual VMC 10000D	1.5	PES-1401B	62

For 230 volt applications replace "B" suffix with "E". (CE conformity marking only applies to pumps with an "E" suffix.)

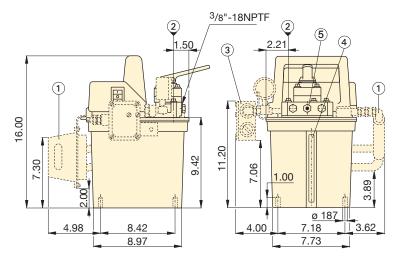
# **PE-Series, Submerged Electric Pumps**



■ For full features see page 84.

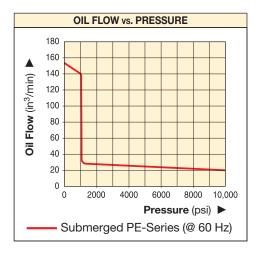
Submerged Pump Performance												
Motor Size	Rating		Output Flow Rate**		Motor Electrical Specifications*	Sound Level	Relief Valve Adjustment Range					
	(psi)		(in³/min)									
(hp)	1 <sup>st</sup> stage	2 <sup>nd</sup> stage	1st stage	2 <sup>nd</sup> stage	(Amps @ Volts-Ph-Hz)	(dBA)	(psi)					
0.5	1,000	10,000	150	20	13 @ 115-1-50/60	62-70	1,000-					
					6.75 @ 230-1-50/60		10,000					

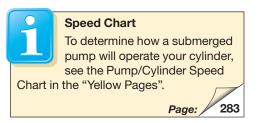
- At bypass and maximum pressure. See matrix footnotes on next page for Hz limitations.
- \*\* All flow data at 60 Hz, 50 Hz data will be 5/6th this number.





- ① Heat Exchanger (optional for all models)
- ② Fill Port
- 3 Pressure Switch (PES-Series, optional for other models)
- 4 Oil Level Indicator
- S Adjustable Relief Valve







This PED-1101B Submerged pump quickly and quietly powers Enerpac's hydraulic Nut Cutter in this maintenance application.

# **Submerged Electric Pumps Ordering Matrix**

# **CUSTOM BUILD YOUR SUBMERGED PUMP**

If the Submerged Pump that would best fit your application cannot be found in the chart on page 84, you can easily build your custom submerged pump here.

# ▼ This is how a Submerged Pump Model Number is built up:



### 1 Product Type

 $\mathbf{P}$  = Pump

### 2 Motor Type

**E** = Electric motor

#### 3 Pump Type

D = Dump

J = Joq

**M** = Manual

R = Remote (Solenoid)<sup>1) 2)</sup>

**S** = Pressure switch

### 4 Pump Series

1 = .5 hp, 10,000 psi

# 5 Valve Type

0 = No valve (PER only)

1 = Dump

2 = 3-way, 2-position, normally open

3 = 3-way, 3-position, tandem center

4 = 4-way, 3-position, tandem center

5 = Modular valve (PER only)

# 6 Reservoir Size

**01** = 1.5 gallon

## 7 Motor Voltage and Heat Exchanger

 $B = 115 \text{ V}, 1 \text{ Ph}, 60 \text{ Hz}^{-1}$ 

**D** = 115 V, 1 Ph, 60 Hz <sup>1)</sup> with heat exchanger

 $E = 230 \text{ V}, 1 \text{ Ph}, 50 \text{ Hz}^{2}$ 

 $\mathbf{F} = 230 \, \text{V}, \, 1 \, \text{Ph}, \, 50 \, \text{Hz}^{\, 2)}$ 

with heat exchanger

I = 230 V, 1 Ph, 60 Hz

# PE Series



Reservoir Capacity:

1.5 gal.

Flow at Rated Pressure:

20 in<sup>3</sup>/min.

Motor Size:

.5 hp

Maximum Operating Pressure:

10,000 psi



#### Hoses

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

genuine Enerpac hydraulic hoses.

Page:

132



### Gauges

Minimize the risk of overloading and ensure long, dependable service from your equipment. Refer to the

System Components section for a full range of gauges.

Page:

131



The PER-1301B, PER-1401B, PER-1301D and PER-1401D include a Modular (solenoid) Valve and pilot operating check.

Page:

146

#### **Ordering Example**

#### Model Number: PER-1301B

The PER-1301B is a .5 hp, 10,000 psi, submerged electric pump, with 1.5 gallon usable oil capacity, a 3-way, 3-position modular, remote solenoid valve and a 115 V, 1 Phase, 60 Hz motor.

<sup>&</sup>lt;sup>1)</sup> Solenoid valves operate only at 60 Hz. Can also run at 50 Hz with manual valve

<sup>&</sup>lt;sup>2)</sup> Solenoid valves operate only at 50 Hz. Can also run at 60 Hz with manual valve