

▼ Shown: PEJ-1401E



- Two-speed operation reduces cycle times for improved productivity
- Powerful 0,37 kW induction motor is submerged in the oil reservoir to run cooler, protect the motor, simplify the pump interface, save space and reduce noise
- Large 5,5 litres reservoir allows operation of a wide range of cylinders
- 24 VDC remote pendant control on certain models for improved safety
- 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 (PEJ-Series) of the Submerged Pump simplifies maintenance on this machine.

## Best Performance for Mid-Range Cylinders and Tools

### ▼ SELECTION CHART

For more technical information see next page.

<p><b>5 BASIC PUMP TYPES</b></p> <p>Select the model that suits your application. For special requirements see page 89 or contact your Enerpac office.</p>	
<p><b>PEM Series: with Manual Valve</b></p> <ul style="list-style-type: none"> <li>• Ideal choice for most applications</li> <li>• Manual valve control, for both single-acting and double-acting applications</li> <li>• Manual motor control.</li> </ul>	
<p><b>PER Series: with Solenoid Valve</b></p> <ul style="list-style-type: none"> <li>• Ideal for production and lifting</li> <li>• All valves are 3 position for Advance-Hold-Retract</li> <li>• Control pendant with 3 m cord for remote valve operation.</li> </ul>	
<p><b>PEJ Series: with Remote Jog</b></p> <ul style="list-style-type: none"> <li>• For light production and lifting applications</li> <li>• Manual valve control for single-acting or double-acting cylinders</li> <li>• Control pendant with 3 m cord for remote motor operation.</li> </ul>	
<p><b>PES Series: with Pressure Switch</b></p> <ul style="list-style-type: none"> <li>• Designed for continuous pressure applications, such as clamping, workholding and testing</li> <li>• All versions include manual valves for directional control.</li> </ul>	

# Submerged Electric Pumps



## PE-Series Submerged Pump Application

The Submerged pump is best suited to power small to medium size cylinders or hydraulic tools, or whenever 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.

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## PE Series



Reservoir Capacity:

**5,5 litres**

Flow at Rated Pressure:

**0,27 l/min**

Motor Size:

**0,37 kW**

Maximum Operating Pressure:

**700 bar**

Pump Type	Used with Cylinder	Valve Function	Valve Type	Usable Oil Capacity (litres)	Model Number 230 VAC, 1 ph *	(kg)
	Single-Acting	Advance/Retract	Manual, 3-way, 2-position	5,5	<b>PEM-1201E</b>	24,0
	Single-Acting	Advance/Hold/Retract	Manual, 3-way, 3-position	5,5	<b>PEM-1301E</b>	24,0
	Double-Acting	Advance/Hold/Retract	Manual, 4-way, 3-position	5,5	<b>PEM-1401E</b>	24,0
	Single-Acting	Advance/Hold/Retract	Solenoid, 3-way, 3-position	5,5	<b>PER-1301E</b>	29,5
	Double-Acting	Advance/Hold/Retract	Solenoid, 4-way, 3-position	5,5	<b>PER-1401E</b>	29,5
	Single-Acting	Advance/Retract	Manual, 3-way, 2-position	5,5	<b>PEJ-1201E</b>	24,9
	Single-Acting	Advance/Hold/Retract	Manual, 3-way, 3-position	5,5	<b>PEJ-1301E</b>	24,9
	Double-Acting	Advance/Hold/Retract	Manual, 4-way, 3-position	5,5	<b>PEJ-1401E</b>	24,9
	Single-Acting	Advance/Retract	Manual, 3-way, 2-position	5,5	<b>PES-1201E</b>	28,1
	Double-Acting	Advance/Hold/Retract	Manual, 4-way, 3-position	5,5	<b>PES-1401E</b>	28,1

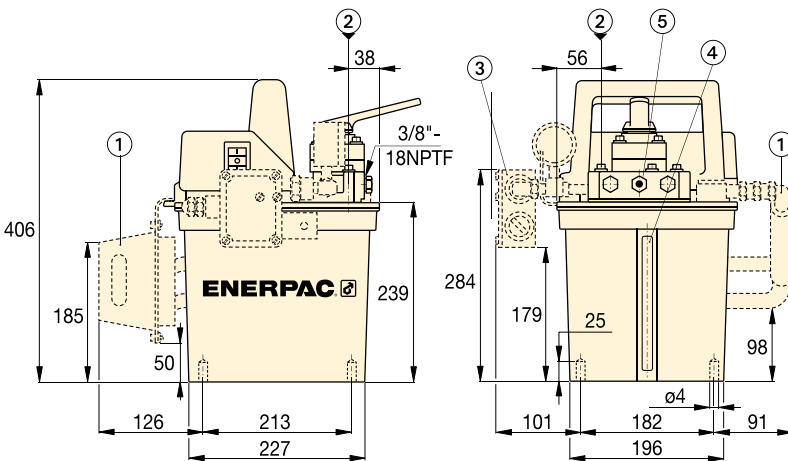
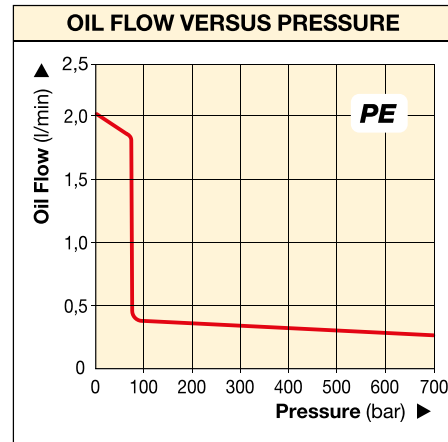
\* For 115V replace suffix "E" with "B" in the model number.

# PE-Series, Submerged Electric Pumps

◀ For full features see previous page.

SUBMERGED PUMP PERFORMANCE							
Motor Size (kW)	Pressure Rating (bar)		Output Flow Rate at 50 Hz (l/min)		Motor Electrical Specifications * (Amps @ Volts-Ph-Hz)	Sound Level (dBA)	Relief Valve Adjustment Range (bar)
	1 <sup>st</sup> stage	2 <sup>nd</sup> stage	1 <sup>st</sup> stage	2 <sup>nd</sup> stage			
0,37	70	700	2,0	0,27	13 @ 115-1-50/60 6,75 @ 230-1-50/60	62-70	70-700

\* At full load. See ordering matrix footnote for frequency notations.



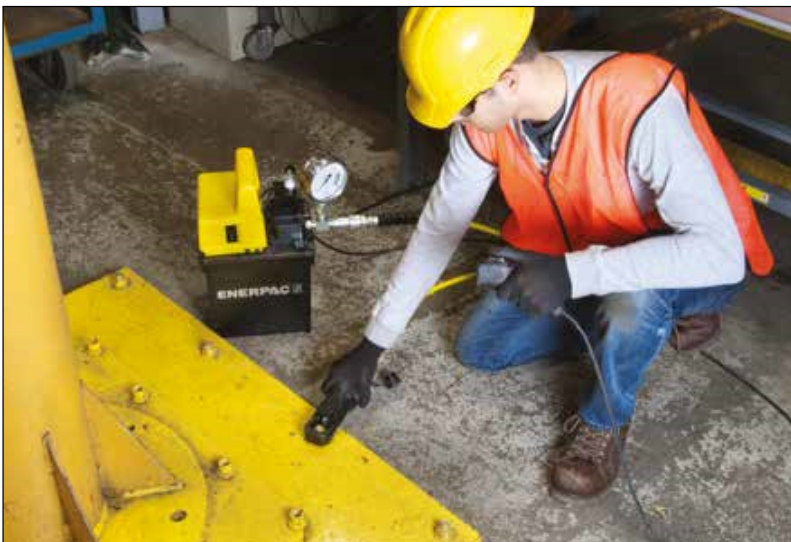
- ① Heat Exchanger (optional for all models)
- ② Fill Port
- ③ Pressure Switch (PES-series, optional for other models)
- ④ Oil Level Indicator
- ⑤ Adjustable relief valve



### Speed Chart

To determine how a specific pump will operate your cylinder, see the Pump-Cylinder Speed Chart in the 'Yellow Pages'.

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◀ This Submerged pump quickly and quietly powers a hydraulic nut cutter in this maintenance application.

# Submerged Electric Pumps

## CUSTOM BUILD YOUR SUBMERGED PUMP

If the Submerged Pump that would best fit your application cannot be found in the chart on page 87, here you can easily build your custom submerged pump.

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

<b>P</b>	<b>E</b>	<b>M</b>	<b>-</b>	<b>1</b>	<b>3</b>	<b>01</b>	<b>E</b>
1	2	3		4	5	6	7
Product Type	Motor Type	Pump Type		Pump Series	Valve Type	Reservoir Size	Motor Voltage

### 1 Product Type

**P** = Pump

### 2 Motor Type

**E** = Electric Motor

### 3 Pump Type

**J** = Jog  
**M** = Manual  
**R** = Remote (Solenoid) <sup>1)2)</sup>  
**S** = Pressure Switch

### 4 Pump Series

**1** = 0,37 kW, 700 bar

### 5 Valve Type

**0** = No valve (PER only)  
**2** = 3-way, 2-position, normally open  
**3** = 3-way, 3-position, tandem center  
**4** = 4-way, 3-position, tandem center  
**5** = Modular solenoid valve (PER only)

### 6 Reservoir Capacity

**01** = 5,5 litres

### 7 Motor Voltage and Heat Exchanger

**B** = 115 V, 1 Ph, 50/60 Hz <sup>1)</sup>  
**D** = 115 V, 1 Ph, 50/60 Hz <sup>1)</sup> with Heat Exchanger  
**E** = 230 V, 1 Ph, 50/60 Hz <sup>2)</sup>  
**F** = 230 V, 1 Ph, 50/60 Hz <sup>2)</sup> with Heat Exchanger  
**I** = 230 V, 1 Ph, 60 Hz

<sup>1)</sup> Solenoid valves operate only at 60 Hz. Can run on 50 Hz with manual valves.

<sup>2)</sup> Solenoid valves operate only at 50 Hz. Can run on 60 Hz with manual valves.

The following submerged pump models include a modular solenoid valve and pilot operated check valve:

PER-1301B  
 PER-1301D  
 PER-1301E  
 PER-1401B  
 PER-1401D  
 PER-1401E

## Ordering Example

### Model Number: PER-1301E

The PER-1301E is a 0,37 kW, 700 bar, submerged electric pump, with 5,5 litres usable oil capacity, a 3-way, 3-position, remote solenoid valve and a 230 V, 1 Phase, 50/60 Hz motor.

## PE Series



Reservoir Capacity:

**5,5 litres**

Flow at Rated Pressure:

**0,27 l/min**

Motor Size:

**0,37 kW**

Maximum Operating Pressure:

**700 bar**



### 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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### 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.

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