

Eaton PVM Series open circuit piston pumps

**More guts.  
More glory.**  
(Less noise.)

**EATON**

*Powering Business Worldwide*

# Downsize your pumps. Upsize your expectations.

Requirements are changing in industries everywhere. Government regulators are mandating quieter, more energy-efficient machinery. And design engineers are looking for equipment and components that can generate more power from smaller footprints. These increased expectations require a new generation of hydraulic pumps that are compact, quiet and energy efficient, yet can handle some of your most demanding applications.

With their variable-speed-ready range, enhanced 315-bar nominal pressure ratings, quiet operation and “Power Control” option, Eaton PVM Series open circuit piston pumps can help you design machinery that conforms to a new era of performance demands.



## The quiet pumps that are making a big noise

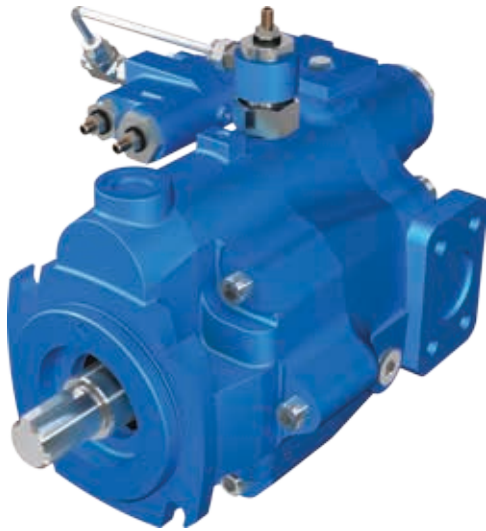
The noisy workplace environments of the past are rapidly going out of fashion. Government regulators and workers alike are demanding job conditions that are quieter and safer. Eaton PVM Series open circuit piston pumps can help you address these concerns. With the lowest operating noise of any pumps in their class—a full 50 percent quieter than our previous generation of pumps—Eaton PVM Series pumps can help you build quieter functioning machinery.



## Power control: Flexibility at your fingertips

Flexibility is the name of the game with Eaton’s optional Power Control for PVM Series pumps. By reducing the displacement as pressure increases, Power Control allows you to limit the power rating at a given speed so the set power is not exceeded. The result? Now you can cut your costs by operating larger pumps with the same size motors. In addition, you can adjust the power setting in the field without changing components or springs, allowing you to quickly and easily fine tune machine performance.





# Save energy, reduce noise and cut costs with variable speed drive technology

Variable speed drive pump solution generates power far more efficiently than conventional, fixed-speed pump systems. They also allow quieter operation, require less cooling and help extend the life of seals and hydraulic oil. Eaton PVM Series pumps are ready to work with variable speed drive technology across the full speed spectrum.\* Now you can immediately begin transforming your machinery to next-generation standards of energy efficiency and noise.

\*Full speed operation performance data, across full speed range, is available for variable speed applications.

- Proven rotating group can produce up to 315 bar of continuous pressure
- Displacement range from 18ccm up to 141ccm
- High load bearings are rated at 14,000 hours at corner horsepower
- Saddle-type swash plate features a steel-backed polymer bearing to extend life
- Unique, tapered design reduces vibration
- Robust shaft and bearings help maximize reliability



Experience the quiet, compact power of Eaton PVM Series open circuit piston pumps. Visit [eaton.com/PVMseries](http://eaton.com/PVMseries) for more information.

## Reliable and durable: What you expect from Eaton technology

Reliability and long life are simply expected in your pump requirements. Featuring a robust, noise cancelling three-piece design, high load bearings and other high-quality design considerations, Eaton PVM Series pumps are built to function dependably for years.

## Engineered for a world of demanding applications

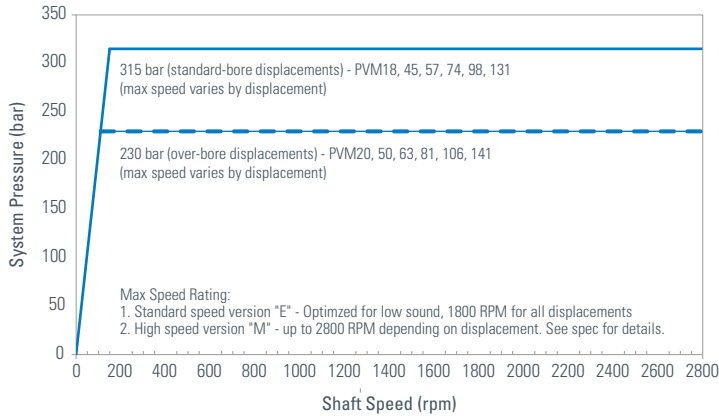
Tap the quiet, compact power of Eaton PVM Series open circuit piston pumps anywhere you need greater hydraulic power and energy efficiency from a smaller displacement pump.

- Discrete manufacturing, including press, machine tools, test and simulation machinery
- Primary metal, food and wood processing applications
- Energy generation, such as wind, steam and hydroelectric turbines
- Oil & gas and marine applications
- General industrial applications of all kinds



# Eaton PVM Series open circuit piston pumps

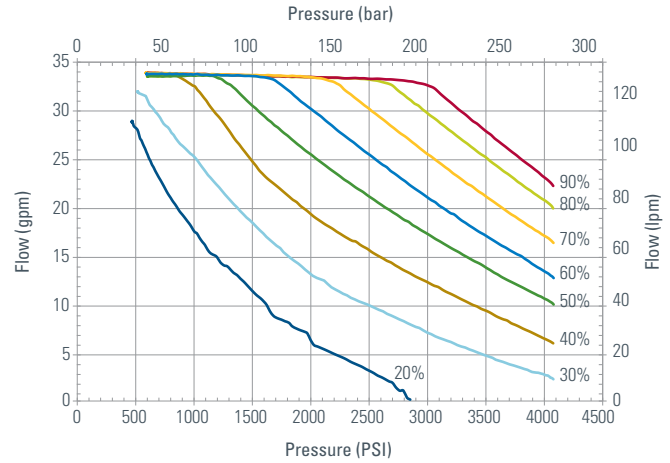
## PVM System Pressure vs. Shaft Speed



Test condition: Mineral oil SAE 10W, oil temperature 49° C (120° F), 1 bar absolute inlet pressure.

Eaton PVM Series open circuit piston pumps have been tested and qualified for improved pressure ratings as shown in the chart above.

## Flow vs Pressure - 74cc



The Power Control option for Eaton PVM Series open circuit piston pumps provides precise control characteristics for optimal power utilization.

Eaton  
Hydraulics Group USA  
14615 Lone Oak Road  
Eden Prairie, MN 55344  
USA  
Tel: 952-937-9800  
Fax: 952-294-7722  
[www.eaton.com/hydraulics](http://www.eaton.com/hydraulics)

Eaton  
Hydraulics Group Europe  
Route de la Longeraie 7  
1110 Morges  
Switzerland  
Tel: +41 (0) 21 811 4600  
Fax: +41 (0) 21 811 4601

Eaton  
Hydraulics Group Asia Pacific  
Eaton Building  
4th Floor, No.7 Lane280 Linhong Rd.  
Changning District  
Shanghai 200335  
China  
Tel: (+86 21) 5200 0099  
Fax: (+86 21) 2230 7240