

Vickers® by Danfoss PVMX Series Axial Piston Pump

Xtra pressure - Xtra speed - Xtra quiet



Smarter **power**, higher **efficiency**, superior **control**

Engineered for a new level of efficiency and performance, the PVMX is our most advanced Vickers® medium-pressure axial piston pump, delivering high dynamic response with low energy consumption. It offers class-leading specifications—including a continuous operating pressure of 350 bar for greater power density and a rated speed of 3,800 rpm—making it ideal for high-speed servo-motor applications. With noise levels as low as 72 dB(A), it's also well suited for acoustically sensitive environments.

These high-performance capabilities, combined with its two-quadrant operating mode, broaden the range of suitable applications. Designed for bidirectional flow without complex valving, the pump easily reverses flow direction by reversing the servo-motor rotation or using its over-center design. By eliminating idle losses, enabling higher motor speeds, capturing regenerative energy, and reducing cooling requirements, this servo-driven pump can achieve up to 80% energy savings compared to fixed-speed systems—lowering operating costs and reducing environmental impact.

Send inquiries to industrialpumpsmotorsupport@danfoss.com

Features

Class-leading power density - delivering continuous operating pressure up to 350 bar (5000psi)

Optimized for high-speed servo-motor architectures - rated rotational speed of 3,800 rpm—35% faster than previous models—for rapid response and frequent cycling

Ultra-low noise performance - Operating as quietly as 72 dB(A) (at 280 bar and 3,000 rpm)

Two-quadrant operating capability - Enables bidirectional flow without complex valving, simplifying system architecture and enabling advanced motion control

Energy savings up to 80% - Versus fixed-speed systems through on-demand operation, higher motor speeds, regenerative energy capture, and reduced cooling needs

Smart control architecture - Multiple control options—pressure compensation, load sensing, and dual displacement

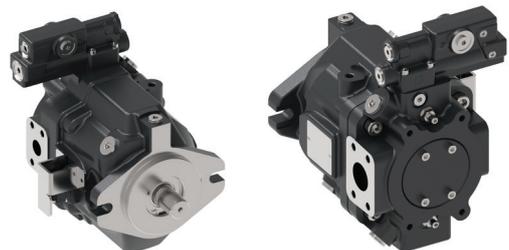
Flexible integration - ISO/SAE interfaces, multiple shaft and through-drive options, and versatile mounting/porting

Specifications

- Technology - Axial piston
- Displacement - 28 cc (1.7in³)
- Continuous pressure rating - 350 bar (5,000 psi)

Markets/Applications

- Injection molding
- Drilling machines
- Punch shear
- Woodworking
- Roller systems
- Metal forming
- Presses
- Test stands



PVMX Open circuit piston pump