



HPX-Mag Magnetic Drive Process Pump

Balancing sustainability, reliability and efficiency

The HPX-Mag sealless pump from Flowserve sets a new industry benchmark for magnetic drive pump performance, efficiency and value. It fully complies with API 685 standards and provides a zero-emissions solution for environmentally critical applications.

The HPX-Mag pump represents the most comprehensive range of hydraulic coverage available to the industry, so users can select the correct pump to meet their efficiency desires and application needs.



Typical applications

- Petroleum refining, production and distribution
- Petrochemical and chemical processing
- Difficult-to-seal liquids
- Toxic, aggressive or flammable liquids
- High-temperature applications
- Gas industry services
- Biofuels
- Boiler circulation
- Power plants
- General industrial

Operating parameters

- Rated flows to 1000 m³/h (4400 gpm)
- Heads to 300 m (985 ft)
- Standard pressures to 42 bar (600 psi)*
- Temperatures from -29°C to 300°C (-20°F to 570°F)*

* Higher pressures or temperatures on request



Features and benefits

Leakage-free containment shell made from alloy C4 material delivers high-efficiency performance and high corrosion resistance. The robust construction meets or exceeds API 685 requirements, ensuring zero emissions in difficult-to-seal, toxic, aggressive and flammable liquids.

Hermetically sealed internal flushing system cools the magnet area and lubricates the sleeve bearings, eliminating the need for mechanical seals and external flushing systems.

Dynamic thrust balancing system eliminates the need for mechanical thrust bearings and increases pump reliability, longevity and efficiency while reducing operating costs.

Back pullout design simplifies maintenance activities, as neither the motor nor the piping is disturbed.

High-torque magnets made of rare earth samarium-cobalt eliminate slippage and enable high-temperature resistance.

Centerline-supported pump casing withstands nozzle loads beyond API 685 design requirements. The suction nozzle guide vane reduces inlet vortexing and ensures uniform flow into the impeller to achieve a reliable NPSH margin.

Precision cast impeller is dynamically balanced to limit vibration and assure smooth operation over a wide flow range. The impeller is secured by a set screw and a locknut, which are not exposed to the fluid.

Renewable casing and impeller wear rings, which are secured by set screws or tack welds, reduce replacement parts costs.

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