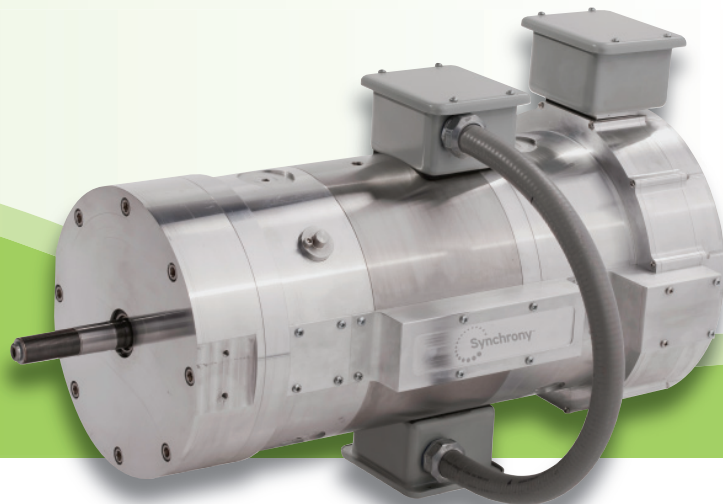


NovaDrive™ 100 NovaGen™ 100

Oil-less Drive Train

These oil-less drive trains offer high performance without a gearbox at rotational speeds up to 60,000 rpm. The NovaDrive™ motors and NovaGen™ generators use permanent magnet rotors supported on magnetic bearings to achieve increased efficiency and high torque density. To simplify integration into a system, the control electronics for the magnetic bearings are seamlessly incorporated into the drive train, greatly reducing the field wiring. These design innovations decrease the size and complexity, improve the dynamic performance, and increase the economic value of the system.

- 100 kW
- 60,000 rpm
- 480 VAC



Features

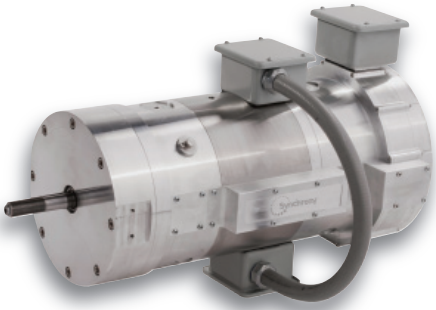
- Applications include gas compression and power generation
- Two configurations:
 - NovaDrive™ 100 as a motor
 - NovaGen™ 100 as a generator
- Permanent magnet rotor with low-loss, steel retention band (patent pending)
- Shaft supported on magnetic bearings with controls incorporated into the machine housing
- Compact length (23 in) and lightweight aluminum housing
- Rated at 100 kW at 60,000 rpm
- Compressor or turbine can be mounted on shaft
- Can be directly coupled to a high speed machine
- Remote health monitoring via Ethernet port
- Peak efficiency: > 97%
- MTBF: > 110,000 hrs
- Cooled with air or process gas
- Can be supplied with power conversion electronics

Benefits

- Elimination of gearbox
- Mechanically durable rotor with no composite materials
- Elimination of oil lubrication system
- Elimination of hazardous, flammable, and contaminating lubricants
- Reduced integration and installation costs
- Improved electrical-mechanical conversion efficiency
- Improved reliability and reduced maintenance
- Reduced life cycle cost
- Quiet, vibration-free operation

Industries

- Oil and Gas
- Air Separation
- HVAC
- Power Generation
- Renewable Energy
- Aerospace and Defense

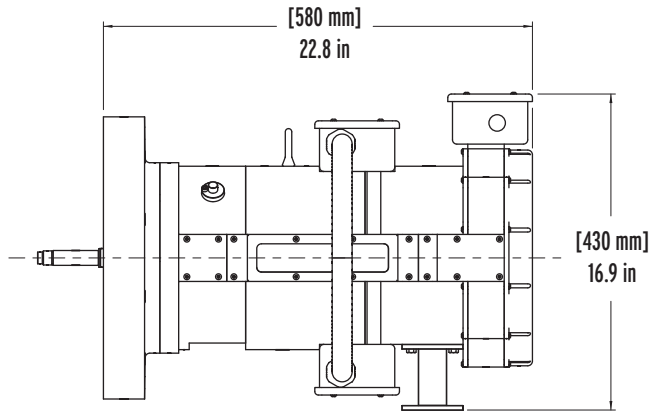
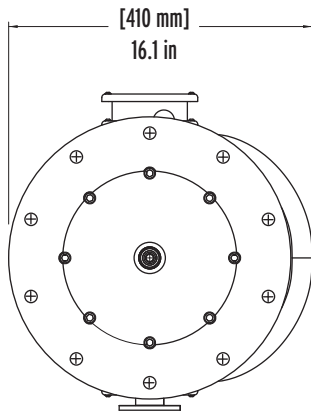


NovaDrive™ 100 oil-less drive train
with integrated magnetic bearing controls

Synchrony®

Setting the standard for performance, size, simplicity and value.

NovaDrive™ 100 and NovaGen™ 100 Dimensions



*Dimensions are for reference only



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