# NovaGlide™

## *Magnetic Bearings*

NovaGlide™ represents a clean, reliable and efficient bearing solution for critical processes. The incredibly compact controller can be mounted on or near the rotating machine. NovaGlide™ is the state of the art in magnetic bearing technology with an advanced control architecture that improves performance, reliability and stability.

NovaGlide™ magnetic bearings are available in a wide range of standard sizes in Radial and Thrust configurations.

### Features

- Operates in process gas to a temperature of 350°F
- Compact controller can be mounted on or near the machine
- Standard Ethernet port for communications
- Available in standard frame sizes
- Health monitoring of coils and amplifiers
- Vibration and position monitoring
- Rotordynamic condition monitoring and protection
- MTBF > 110,000 hours
- Synchrony's advanced control algorithms:
  - Dynamic Force Compensation™
  - Flux Command™
  - Inertial Balance™
  - Magnetic Balance™
- Communications protocol: Modbus TCP/IP

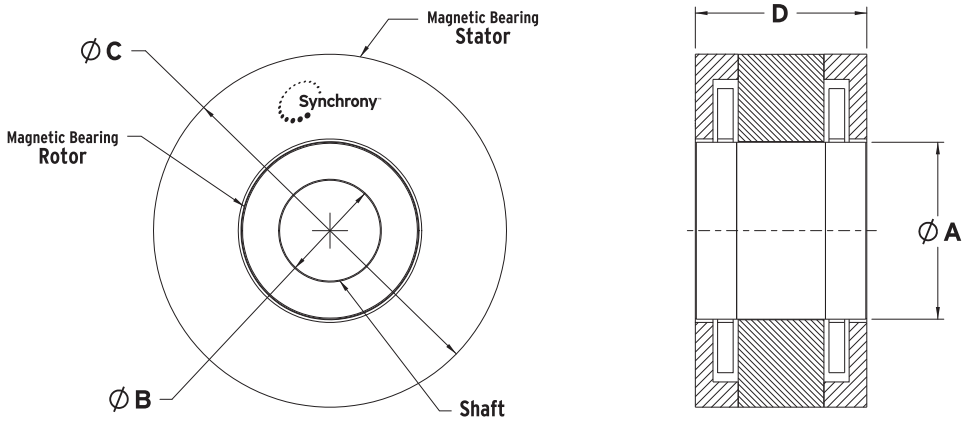
### Benefits

- Elimination of mechanical friction and wear
- Improved machine reliability – reduced downtime
- Cost reduction through simplification
- Reduced machine vibration
- Virtually maintenance-free operation
- Elimination of oil lubrication systems
- No toxic or flammable lubricants
- Ease of integration
- Eliminates long cable runs, reducing EMI
- Reduced time for field startup

# NovaGlide™ Radial Magnetic Bearings

## General Specifications

Max. Temperature: 350°F (176°C)



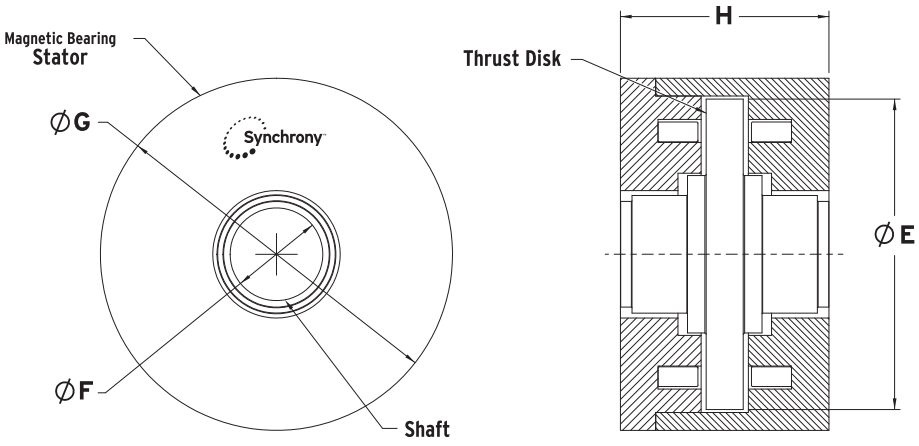

| NovaGlide™ Radial Bearing Size Chart | | | | | | |
|---|---|---|---|---|---|---|
| | Dimensions | A | B | C | D | |
| Model Number | Load Capacity (lb) | Rotor OD (in) | Max. Shaft OD (in) | Stator OD (in) | Overall Length (in) | Max. Operating Speed (rpm) |
| NR 18-10 | 50 | 1.8 | 1.2 | 4.0 | 1.8 | 66,000 |
| NR 18-20 | 99 | 1.8 | 1.2 | 4.0 | 2.4 | 66,000 |
| NR 35-10 | 424 | 3.5 | 2.2 | 7.0 | 3.4 | 34,000 |
| NR 35-20 | 849 | 3.5 | 2.2 | 7.0 | 5.1 | 34,000 |
| NR 50-10 | 778 | 5.0 | 3.3 | 9.0 | 4.2 | 24,000 |
| NR 50-20 | 1,556 | 5.0 | 3.3 | 9.0 | 6.7 | 24,000 |
| NR 60-10 | 1,167 | 6.0 | 3.9 | 10.5 | 4.6 | 20,000 |
| NR 60-20 | 2,334 | 6.0 | 3.9 | 10.5 | 7.5 | 20,000 |
| NR 70-10 | 1,584 | 7.0 | 4.6 | 12.0 | 5.1 | 17,000 |
| NR 70-20 | 3,168 | 7.0 | 4.6 | 12.0 | 8.5 | 17,000 |
| NR 80-10 | 2,206 | 8.0 | 5.2 | 13.5 | 5.7 | 15,000 |
| NR 80-20 | 4,412 | 8.0 | 5.2 | 13.5 | 9.6 | 15,000 |
| NR 90-10 | 3,026 | 9.0 | 5.8 | 15.0 | 6.5 | 13,000 |
| NR 90-20 | 6,053 | 9.0 | 5.8 | 15.0 | 11.2 | 13,000 |

***Magnetic bearings listed above are examples of standard radial bearings.**
For more information on NovaGlide radial specifications or for application assistance, please contact us or visit our web site at www.synchrony.com

# NovaGlide™ Thrust Magnetic Bearings

## General Specifications

Max. Temperature: 350°F (176°C)




| NovaGlide™ Thrust Bearing Size Chart | | | | | | |
|---|---|---|---|---|---|---|
| | Dimensions | E | F | G | H | |
| Model Number | Load Capacity (lb) | Thrust Disk OD (in) | Max. Shaft OD (in) | Stator OD (in) | Overall Length (in) | Max. Operating Speed (rpm) |
| NT 35-10 | 290 | 3.5 | 1.0 | 3.9 | 3.2 | 46,000 |
| NT 45-10 | 525 | 4.5 | 1.5 | 5.0 | 3.3 | 36,000 |
| NT 54-10 | 730 | 5.4 | 2.0 | 6.0 | 3.4 | 30,000 |
| NT 86-10 | 2,350 | 8.6 | 3.0 | 9.4 | 5.2 | 19,000 |
| NT 109-10 | 3,950 | 10.9 | 4.0 | 11.9 | 6.3 | 15,000 |
| NT 144-10 | 8,100 | 14.4 | 5.0 | 15.7 | 8.5 | 11,000 |
| NT 179-10 | 13,600 | 17.9 | 6.0 | 19.4 | 10.6 | 9,000 |

***Magnetic bearings listed above are examples of standard thrust bearings.**
For more information on NovaGlide thrust specifications or for application assistance, please contact us or visit our web site at www.synchrony.com


### NovaGlide™ system includes:

- 2 radial bearings and 1 thrust bearing (1 radial bearing shown)
- 2 auxiliary bearings
- Compact controller (20 in x 12 in x 9 in)
- Communication interface: Modbus TCP/IP


NovaGlide™ radial magnetic bearing with
5-axis, compact controller.

# Synchrony®

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

Synchrony™

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SI-NovaGlide-BH-SP-0909