RELIABILITY

THROUGH

**INNOVATION** 

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2 to 185 Hp - Up to 6,800 RPM

### MagnaGuard Economizer

### **Benefits:**

- ✓ Lowest Total Cost of Ownership
- ✓ Accepts Greater Misalignment
- Eliminates Vibration Transfer Between Motor and Load
- ✓ Low Maintenance
- ✓ Increases Seal and Bearing Life
- ✓ Simple Installation
- ✓ Efficient Torque Transfer
- Permits Shock Loading
- Meets ANSI B73 Standards
- ✓ Meets API 610 Standards

### Ideal for Applications Subject to:

- Vibration
- Periodic Load Seizure
- Pulsating Loads
- Thermal Expansion
- Shock Loading
- Tight Space Constraints

# Magna Drive

### MagnaGuard Economizer Coupling

Standard Hub Specification Data

	Coupling Specification Data							
	Power Rating Max. (1)	Power Rating Min. (1)	Peak Torque		Weight	Dimensions (Inches) (2) (3)		
Model	Hp per 100 RPM	Hp per 100 RPM	In-Lbs	Max. RPM	Lbs.	А	В	С
MGE-07	0.85	0.10	800	6,800	19	9.50	6.06	2.50
MGE-11	4.10	0.55	3,850	4,500	43	13.75	6.60	2.50

(1) Based on a Service Factor of 1.5 and a Minimum Operating Efficiency of 95%.

(2) Based on a Standard DBSE from 0.25" to 3.50".

(3) Meets ANSI B73 Standards and API 610 Standards.

Note: For higher horsepower applications call MagnaDrive Applications Engineering.

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	Approx.	Shaft Diameters (Inches)							
MGE-07	Weight	0.875	1.125	1.375	1.625	1.875	2.125	2.375	
Load Side	5 lbs.	HEL-01	HEL-02		HEL-03				
Motor Side	6 lbs.	HEM-01	HEM-02		HEM-03				
MGE-11									
Load Side	9 lbs.		HEL-11		HEL-12				
Motor Side	11 lbs.		HEM-11	HEM-12	HEM-13	HEM-14	HEM-15	HEM-16	

Notes: Bored in accordance with AGMA Standard 9002-A86 Class 1 clearance fit. Standard hub material is alloy steel. Custom hubs may be ordered through MagnaDrive Applications Engineering.

#### How Does it Work

An MGE consists of two separate components that have no physical contact. A precision machined aluminum rotor containing powerful permanent rare earth magnets is mounted on one shaft. A conductor consisting of a steel housing with copper rings mounts on the other shaft. The coupling's ability to transmit torque is created by the relative motion between the copper conductor and the magnets. This motion creates a magnetic field in the copper that interacts with the permanent magnets, thus transmitting torque across the air gap. MagnaDrive products are designed to minimize Electro Magnetic Interference (EMI). The flux level from each coupling is lower than the EMI emitted by the associated motor.





Note: The above torque curve is a generalization of various sizes of magnetic couplings. Coupling selection is based on each application's speed, horsepower, and desired efficiency. Please consult MagnaDrive for proper selection based on your application's requirements

MagnaDrive offers a family of products to accomplish a broad range of operating objectives:

Speed Control, Torque Management, Cushioned Start, Reliability, Vibration Control and Misalignment Tolerance.

## MagnaDrive Corporation 600 108th Avenue NE, Suite 1014, Bellevue, Washington 98004 Tel. (425) 463-4700 Fax (425) 463-4747 www.magnadrive.com MagnaDrive is a trademark of MagnaDrive Corporation. © MagnaDrive Corp. All rights reserved.