



Ameridrives™ High Performance Couplings



AMERIDRIVES







AMERIFLEX™ DIAPHRAGM COUPLING

Since its introduction in 1971, the Ameriflex multiple convoluted diaphragm coupling has continued to set new standards for life and reliability in high performance machinery applications. Today, by using the latest design and manufacturing technology, AmeridrivesTM couplings is able to offer increased diaphragm coupling performance without compromising this outstanding reliability.



Advanced analysis and manufacturing processes have produced increased ratings without reducing safety factors. The use of the latest finite element analysis methods verified by strain gage and dynamic testing has allowed for a more precise calculation of the Ameriflex diaphragm stresses.

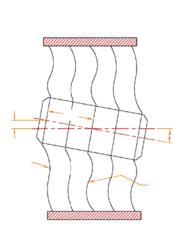
Features

- High torque to weight and diameter ratio
- Flex element sub-assemblies are field replaceable
- Diaphragms are 15-5 PH stainless steel
- Diaphragms are designed for infinite life using FEA verified testing
- Customized designs are available for unique applications
- Multiple separated diaphragms provide a built-in, fail-safe feature
- Diaphragms are shot-peened for improved fatigue strength and stress corrosion resistance
- Diaphragms capable of operating in extreme environments without protective coatings
- All Ameriflex couplings are manufactured to API-671 requirements
- Maintenance free for years of dependable performance
- Black oxided, heat treated, alloy steel torque transmitting components are standard
- Low bending moment and axial force while maintaining high torque capacity, resulting in lower bearing loads

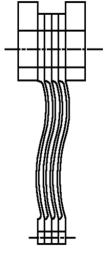
Typical Applications

- Gas and Steam Turbines
- Compressors
- Generators

- Pumps
- Marine/Offshore Platforms
- Pipelines



Thin Convoluted Diaphragm



15-5 PH Stainless Diaphragm Pack





AMERIDISC™ HIGH PERFORMANCE DISC COUPLING

Introduced in 2005, the Ameridisc coupling was developed using advanced FEA with strain gage verification. Considered the most technically advanced disc coupling offered, it provides reliable performance for critical turbomachinery applications. It is particularly suited for high speed, turbocompressor trains where a lightweight, reduced moment design is required to meet rotor dynamic issues.



- Multi-scalloped, optimized disc profile results in even stress distribution
- Proprietary disc coating to prevent fretting and corrosion
- Custom pack fasteners allow for an optimized bolted connection
- Finite Element Analysis (FEA) on all components including discs
- Complete static and dynamic strain gage verification of FEA Ameridrives Research & Development Laboratory
- Designed for API-671 & ISO 10441 compliance
- No lubrication for maintenance free operation
- Discs available in Inconel and 301 Stainless Steel
- Improved dynamic balance
- Low bending and axial reaction loads
- Designed to operate at full ratings simultaneously
- Industry leader in power density and bore capacity

Typical Applications

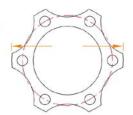
- Gas and Steam Turbines
- Compressors
- Generators

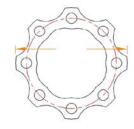
- Pumps
- Marine/Offshore Platforms
- Pipelines















AMERIDRIVES

Regal Rexnord

ameridrives.com

North America Ameridrives Facilities

Mill Spindles, Ameriflex, Ameridisc, Universal Joints, Driveshafts, Mill Gear Couplings 1802 Pittsburgh Avenue Erie, PA 16502 - USA 814-480-5000 Gear Couplings, Small Industrial Driveshafts 2000 Clovis Barker Road San Marcos, TX 78666 - USA 888-449-9439 Irrigation Universal Driveshafts 300 Indiana Highway 212 Michigan City, IN 46360 219-874-5248

regalrexnord.com

The proper selection and application of products and components, including assuring that the product is safe for its intended use, are the responsibility of the customer. To view our Application Considerations, please visit https://www.regalrexnord.com/Application-Considerations.

To view our Standard Terms and Conditions of Sale, please visit https://www.regalrexnord.com/Terms-and-Conditions-of-Sale (which may redirect to other website locations based on product family).

"Regal Rexnord" is not indicative of legal entity. Refer to product purchase documentation for the applicable legal entity. Regal Rexnord and Ameridrives are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

© 2019, 2025 Regal Rexnord Corporation, All Rights Reserved. MCB-P-8094-AC-EN-US 03/25

