

Ameridrives High Performance Couplings





AMERIDRIVES COUPLINGS

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, Ameridrives Couplings is able to offer increased diaphragm coupling performance without compromising this outstanding reliability.

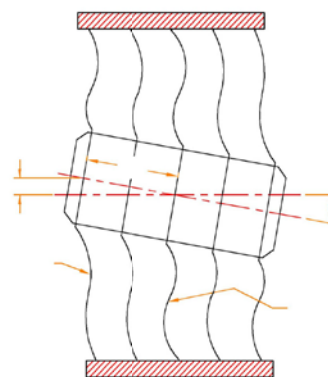
Advanced analysis and manufacturing processes have produced increased ratings without reducing safety factors. The use of the latest finite element analysis methods verified by strain gage and dynamic testing has allowed for a more precise calculation of the Ameriflex diaphragm stresses.

Features

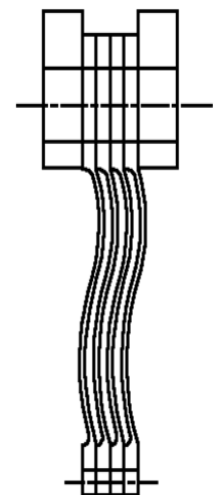
- High torque to weight and diameter ratio.
- Flex element sub-assemblies are field replaceable.
- Diaphragms are 15-5 PH stainless steel.
- Diaphragms are designed for infinite life using FEA verified testing.
- Customized designs are available for unique applications.
- Multiple separated diaphragms 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 oxidized, 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

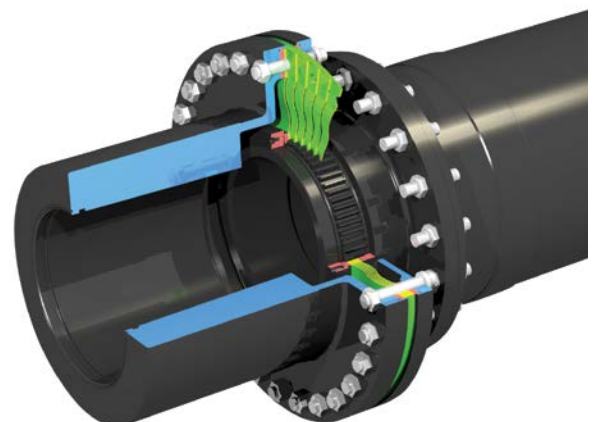
- Gas and Steam Turbines
- Compressors
- Generators
- Pumps
- Marine/Offshore Platform
- Pipelines



Thin Convoluted Diaphragm



15-5 PH Stainless Diaphragm Pack





AMERIDRIVES COUPLINGS

Ameridisc High Performance Disc Coupling

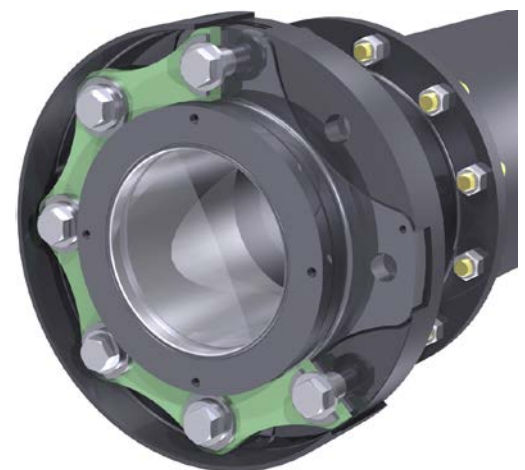
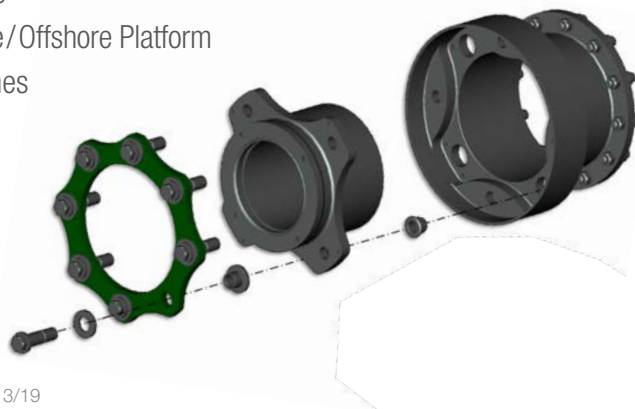
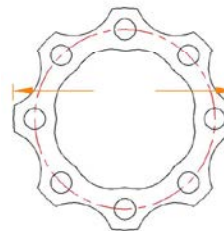
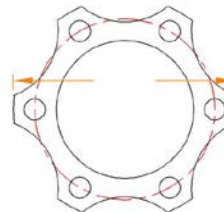
Introduced in 2005, the Ameridisc coupling was developed using advanced FEA with strain gage verification. Considered the most technically advanced disc coupling offered, it provides reliable performance for critical turbomachinery applications. It is particularly suited for high speed, turbocompressor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

Features

- 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 Platform
- Pipelines



Ameridrives Facilities

North America

USA

1802 Pittsburgh Avenue
Erie, PA 16502 - USA
814-480-5000

*Mill Spindles, Ameriflex, Ameridisc,
Universal Joints, Driveshafts,
Mill Gear Couplings*

2000 Clovis Barker Road
San Marcos, TX 78666 - USA
888-449-9439

*Gear Couplings, Small Industrial
Driveshafts*

300 Indiana Highway 212
Michigan City, IN 46360
219-874-5248

Irrigation Universal Driveshafts

The Brands of Altra Motion

Couplings

Ameridrives
www.ameridrives.com

Bibby Turboflex
www.bibbyturboflex.com

Guardian Couplings
www.guardiancouplings.com

Huco
www.huco.com

Lamiflex Couplings
www.lamiflexcouplings.com

Stromag
www.stromag.com

TB Wood's
www.tbwoods.com

Linear Systems

Thomson
www.thomsonlinear.com

Warner Linear
www.warnerlinear.com

Geared Cam Limit Switches

Stromag
www.stromag.com

Engineered Bearing Assemblies

Kilian
www.kilianbearings.com

Electric Clutches & Brakes

Matrix
www.matrix-international.com

Stromag
www.stromag.com

Warner Electric
www.warnerelectric.com

Deltran
www.thomsonlinear.com

Belted Drives

TB Wood's
www.tbwoods.com

Heavy Duty Clutches & Brakes

Twiflex
www.twiflex.com

Stromag
www.stromag.com

Svendborg Brakes
www.svendborg-brakes.com

Wichita Clutch
www.wichitaclutch.com

Gearing & Specialty Components

Bauer Gear Motor
www.bauergears.com

Boston Gear
www.bostongear.com

Delevan
www.delevan.com

Delroyd Worm Gear
www.delroyd.com

Nuttall Gear
www.nuttallgear.com

Engine Braking Systems

Jacobs Vehicle Systems
www.jacobsvehiclesystems.com

Precision Motors & Automation

Kollmorgen
www.kollmorgen.com

Miniature Motors

Portescap
www.portescap.com

Overrunning Clutches

Formsprag Clutch
www.formsprag.com

Marland Clutch
www.marland.com

Stieber
www.stieberclutch.com

Neither the accuracy nor completeness of the information contained in this publication is guaranteed by the company and may be subject to change in its sole discretion. The operating and performance characteristics of these products may vary depending on the application, installation, operating conditions and environmental factors. The company's terms and conditions of sale can be viewed at <http://www.altramotion.com/terms-and-conditions/sales-terms-and-conditions>. These terms and conditions apply to any person who may buy, acquire or use a product referred to herein, including any person who buys from a licensed distributor of these branded products.

©2019 by Ameridrives LLC. All rights reserved. All trademarks in this publication are the sole and exclusive property of Ameridrives LLC or one of its affiliated companies.



www.ameridrives.com

P-8094-AC 3/19