

Turboflex Plus High Performance Disc Coupling







# ALTRA HIGH PERFORMANCE DISC COUPLINGS

Two leading international flexible coupling manufacturers, Ameridrives® International and Bibby Turboflex introduce a new series of high performance disc couplings designed to meet the stringent requirements of today's turbomachinery market. The Turboflex Plus combines the proven Turboflex and Ameridisc disc couplings together with the experience of the Ameriflex diaphragm producing a coupling as ideally suited to sensitive high speed turbocompressors as it is to low speed load couplings whilst offering an economical solution and being fully compliant API-671/ISO10441 for critical oil and gas, energy, and petrochemical applications. Altra Couplings are selected where quality and reliability are essential to the operation of a plant.



# **COMPANY HISTORY**

Ameridrives Couplings, originally established in 1928 as the Mechanical Drives Division of Zurn Industries, has pioneered many coupling designs throughout the years. Introduced in 1972, the Ameriflex multiple, convoluted, diaphragm couplings is still considered the world's best high performance flexible coupling.

Bibby Turboflex was originally established in 1917 under the direction of Dr. James Bibby, inventor of the resilient grid coupling, and has since been a market leader in flexible couplings. The Turboflex profiled disc coupling was first introduced to the high performance market in 1958 and today has tens of thousands of couplings in operation.

www.Ameridrives.com www.BibbyTurboflex.com

# Turboflex Plus FEATURES AND ADVANTAGES:

- Scalloped profile disc pack optimized for high speed compressor applications
- Cost reduced, economical solution for today's turbomachinery market
- Fully compliant to API-671/ISO10441
- Disc material 300 series stainless, Inconel option
- Coated or uncoated discs
- Phosphate coating standard on components
- Shrouded fasteners for reduced windage

www.ameridrives.com | www.bibbyturboflex.com



# Turboflex Plus COUPLING DESIGNS



# **Series MS**

### Marine Style

- Largest bore capacity
- Integral flange designs available
- High torque design
- Factory assembled center section simplifies installation
- Standard anti-flail system for increased safety
- Optional windage designs available

# **Typical Applications**

- Marine drives
- Power Generation
- Turbine to Gearbox/Compressor



# **Series RH**

# **Reduced Moment**

- Reverse Hub
- Low overhung moment
- Large bore capacity
- High torque design
- Standard reduced windage design

# **Typical Applications**

- High speed compressor applications where low overhung mass is required
- Refining / Petrochemical processes



# **Series RM**

### **Reduced Moment**

- Lowest overhung moment
- Large bore capacity
- High torque design
- Standard reduced windage design
- Co-planar design for increased momentary torque overload protection

### **Typical Applications**

- Critical high speed compressor applications where minimal overhung moment is the primary design driver
- Refining / Petrochemical processes

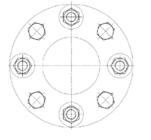
# **Turboflex Plus** IS DESIGNED WITH OVERLOAD PROTECTION FEATURES TO LIMIT SECONDARY DAMAGE IN THE EVENT OF A DISC PACK FAILURE

In either design, machinery vibration will increase but the drive will be maintained sufficiently for the unit to be shut down.

# Marine Style



Standard on the MS series, the interlocking flange arrangement utilizes the fasteners in clearance holes to allow components to shift slightly in the event of a disc pack failure and act as a simple pin & bush coupling.



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Series RM Reduced Moment



An optional coplanar design is used as a back-up drive to prevent steam turbine "runaway" and as a temporary fail-safe device to limit secondary damage. This design also offers the lowest overhung moment for laterally sensitive compressors.

Ameridrives & Bibby Turboflex

### **Altra Industrial Motion**

### **Belted Drives and Sheaves**

TB Wood's Belted Drives Chambersburg, PA - USA 1-888-829-6637 – Press #5 For application assistance: 1-888-829-6637 – Press #7

# Couplings

Ameridrives Mill Spindles, Ameriflex, Ameridisc

Erie, PA - USA **1-814-480-5000** 

*Gear Couplings* San Marcos, TX - USA **1 -800-458-0887** 

Universal Joints, Drive Shafts, Mill Gear Couplings Erie, PA - USA 1-920-593-2444

**Bibby Turboflex**  *Disc, Gear, Grid Couplings, Overload Clutches* Dewsbury, England +44 (0) 1924 460801 Boksburg, South Africa +27(0) 11 918 4270

Guardian Couplings Engineered Flywheel Couplings, Engine Housings and Pump Mounts, Flexible Shaft Couplings Michigan City, IN - USA 1-219-874-5248

Huco Precision Couplings and Air Motors Hertford, England +44 (0) 1992 501900 Chambersburg, PA - USA 1-888-829-6637

Lamiflex Couplings Flexible Couplings, Bearing Isolators, and Coupling Guards Cotia, SP - Brasil +55 (11) 4615-6300

### Couplings Cont.

TB Wood's

Elastomeric Couplings Chambersburg, PA - USA 1-888-829-6637 - Press #5 For application assistance: 1-888-829-6637 - Press #7

All Customer Service phone numbers shown in bold

*General Purpose Disc Couplings* San Marcos, TX - USA

1-888-449-9439 Electromagnetic Clutches and Brakes

Inertia Dynamics Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes New Hartford, CT - USA 1-800-800-6445

#### Matrix

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes

Brechin, Scotland +44 (0) 1356 602000 New Hartford, CT - USA 1-800-825-6544

### Warner Electric

*Electromagnetic Clutches and Brakes* New Hartford, CT - USA

**1-800-825-6544** For application assistance: 1-800-825-9050

Saint Barthélémy d'Anjou, France +33 (0)2 41 21 24 24

Precision Electric Coils and Electromagnetic Clutches and Brakes Columbia City, IN - USA 1-260-244-6183

### Engineered Bearing Assemblies

Kilian Engineered Bearing Assemblies Syracuse, NY - USA 1-315-432-0700

### Gearing

**Bauer Gear Motor** 

Geared Motors Esslingen, Germany +49 (711) 3518-0 Middlesex, NJ - USA 1-732-469-8770

Boston Gear Enclosed and Open Gearing, Electrical and Mechanical P.T. Components Charlotte, NC - USA 1-800-825-6544

For application assistance: 1-800-816-5608

### Nuttall Gear and

Delroyd Worm Gear Worm Gear and Helical Speed Reducers Niagara Falls, NY - USA 1-716-298-4100

#### Heavy Duty Clutches and Brakes

Industrial Clutch Pneumatic and Oil Immersed Clutches and Brakes Waukesha, WI - USA 1-262-547-3357

### Svendborg Brakes

Industrial Brakes and Brake Systems Vejstrup, Denmark +45 63 255 255

### Twiflex

Caliper Brakes and Thrusters Wichita Falls, TX - USA 1-844-723-3483 Twickenham, England +44 (0) 20 8894 1161

Wichita Clutch Pneumatic Clutches and Brakes

Wichita Falls, TX - USA 1-800-964-3262 Bedford, England +44 (0) 1234 350311

### Linear Products

Warner Linear Linear Actuators

New Hartford, CT - USA 1-800-825-6544 For application assistance: 1-800-825-9050 Saint Barthélémy d'Anjou, France +33 (0)2 41 21 24 24

# Overrunning Clutches

#### **Formsprag Clutch**

Overrunning Clutches and Holdbacks Warren, MI - USA 1-800-348-0881– Press #1 For application assistance: 1-800-348-0881– Press #2

#### **Marland Clutch**

Roller Ramp and Sprag Type Overrunning Clutches and Backstops Warren, MI - USA 1-800-216-3515

### **Stieber Clutch**

Overrunning Clutches and Holdbacks Heidelberg, Germany +49 (0) 6221-30470

For information concerning our sales offices in Asia Pacific check our website www.altramotion.com.cn



www.ameridrives.com 1802 Pittsburgh Ave. Erie, PA 16502 - USA 814-480-5000



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