

# Bibby Turboflex Overview



 **BIBBY TURBOFLEX™**  
A REGAL REXNORD BRAND



## TORSIFLEX PUMP COUPLINGS

Up to 120 kNm; 685 in.lbs.



Torsiflex couplings are specifically designed for the process pump and general industrial markets. Torsiflex is an all-metal disc coupling requiring no lubrication which incorporates a plug-in feature to allow installation and removal without disturbing the pump alignment. Standard units are compliant with API 610 (American Petroleum Institute) and the more demanding API 671 standard can be achieved. In addition, the coupling is certified to meet ATEX 2014/34/EU.

- No maintenance
- Zero backlash
- Custom designs including close coupled and long spacer arrangements are available
- Easy interchangeability
- Standard sizes available from stock

### Typical Applications

- Pumps
- Compressors
- Engine Driven Equipment
- Machine Tools
- Food Processing Equipment
- Blowers
- Ventilating Fans
- Test Equipment

## CARBON FIBER COUPLINGS

Up to 100 kNm; 571 in.lbs.



These floating shaft couplings are specifically designed for long span applications. Incorporating composite tubes, which can be specified for spans of 10+ meters, they weigh up to 80% less than steel and eliminate the cost of bearing supports and other structures.

- Horizontal or vertical applications
- Custom designed to specification

### Typical Applications

- Cooling Tower Fans
- Vertical Pumping Systems
- Mine Ventilation Fans
- Fans/Blowers
- Test Equipment



## TURBOFLEX HIGH PERFORMANCE COUPLINGS

Up to 600 kNm; 3420 in.lbs.



These torsionally stiff, light weight couplings are capable of transmitting high torques at high speeds while accepting significant levels of angular, radial, and axial misalignment. They are easy to install, suitable for hostile environments, require no lubrication and feature a high torque to weight ratio. Specific designs are available which meet the customer's exact requirements. Standard units are compliant with API 671 (American Petroleum Institute) and ATEX 2014/34/EU.

- No maintenance
- Standard and reduced moment designs available.
- Capable of being torsionally tuned to suit specific machinery requirements

### Typical Applications

- Gas and Steam Turbines
- Compressors
- Generators
- Pumps
- Marine/ Offshore Platforms
- Pipelines
- Test equipment

## TURBOFLEX HIGH SPEED COUPLINGS

Up to 140 kNm; 799 in.lbs.



These torsionally stiff, light weight couplings are specifically designed to meet the ever increasing demands of today's high speed turbo-machinery.

They are capable of transmitting high torques at high speeds while accepting significant levels of angular, radial, and axial misalignment.

Incorporating an optimized disc profile for even stress distribution, standard units are specifically designed to provide extremely low moments on the machinery shaft ends. Or where the applications are even more demanding, ultra low "co-planar" designs are available. Standard units are compliant with API 671 and ATEX 2014/34/EU.

### Typical Applications

- Gas and Steam Turbines
- Compressors
- Generators
- Marine/Offshore Platforms
- Pipelines
- Test Equipment



## AMERIDRIVE DIAPHRAGM COUPLINGS

Over 678 kNm; 3870 in.lbs.



These highly engineered couplings have a unique diaphragm design which permits high-torque density and low weight. They are designed for years of dependable, low maintenance performance.

- Multiple, separated, convoluted diaphragms allow excellent design flexibility for the most demanding applications
- API-671 compliant
- High axial travel capacity

### Typical Applications

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

## ELASTOMERIC COUPLINGS

Up to 8.2 kNm; 46.8 in.lbs.



The elastomeric range of couplings are an economical, proven solution for general purpose applications. Easy to install and require no lubrication or maintenance. Elastomeric couplings are an excellent choice for all light and medium-duty, general purpose industrial applications.

- No maintenance/lubrication
- Part-for-part interchangeable
- Both fail-safe and nonfailsafe coupling designs
- Wide range of in-stock inch and metric bore sizes
- Flexible design accommodates misalignment and protects equipment

### Typical Applications

- Pumps
- Fans/Blowers
- Compressors
- Electric Motors
- Mixers
- Conveyors



## PIN & BUSH COUPLINGS

Up to 96 KNm; 548 in.lbs.



The E-flex pin and bush couplings accept parallel, angular and axial misalignment and can provide considerable torsional flexibility.

- Vertical or horizontal operation
- 80-90 shore hardness removed and replaced by robust buffer material
- Steel or cast iron hubs
- Brake drum or disc available as well as special designs
- Simple assembly
- Parallel or taper bore options

### Typical Applications

- Pumps
- Fan Drives
- Various Steelworks Drives
- Twin Screw Extruder Drives
- Packaging Machinery

## GEAR COUPLINGS

Up to 688 KNm; 3930 in.lbs.



Bibby Transmissions Gear Couplings have been proved over many years of use internationally, in all kinds of industrial environments. This reliability has been achieved by our attention to detail in design, applications expertise and stringent quality control.

- Fully-crowned gear teeth provide maximum contact at the strongest part of the tooth
- Models available for use on vertical and/or horizontal shafts
- Bore capacity up to 645 mm (25.4")
- High torque to weight ratio
- Half per half interchangeability with other gear couplings manufactured to AGMA standards
- Single, double and rigid designs available

### Typical Applications

- Cranes and Hoists
- Elevators
- Draglines and Shovels
- Textile Machinery
- Fans/Blowers
- Air Compressors
- Centrifugal Pumps



## GRID COUPLINGS

Up to 442 kNm; 2520 in.lbs.



State-of-the-art design from Bibby Transmissions, the original grid coupling manufacturer. 54 Series/Bibby 2000 Series is an all-metal coupling that provides positive protection against the damaging effects of shock loads and vibration. Both horizontal cover (H), and vertical cover (V) designs are available. Grid couplings are an excellent choice where torsional flexibility/ vibration damping are primary concerns.

- Easy to assemble/replace
- Part-for-part interchangeable with industry standard grid coupling designs
- Coupling sizes 2020 through 2140 in-stock in a range of standard bore sizes
- Shot-peened tapered grid flex element for long life

### Typical Applications

- Pumps
- Gear Boxes
- Electric Motors
- Fans/Blowers
- Conveyors
- Compressors

## TORQUE LIMITERS

Up to 382 kNm; 2180 in.lbs.



Bibbigard safety element torque limiters incorporate a number of safety element modules of a specific size mounted between two flanges and preset to release at a specified torque value in order to protect the drive system from expensive damage and lost production. They can be used with various types of drive mediums, many of which are available from Regal Rexnord. Bibbigard has been successfully utilized in many different industries where, subject to space availability, the release torque capacity is virtually unlimited.

- Accurate release torque repeatability
- Simple fast manual re-engagement
- Low-cost maintenance
- Versatile mounting capability

### Typical Applications

- Steel Mill Equipment
- Conveyor Drives
- Twin Screw Extruders
- Wood Grinding Machinery
- Ball Mill Drives
- Water Treatment Equipment
- Tunnel Boring Machines



## **BIBBY TURBOFLEX PROVIDES A COMPREHENSIVE RANGE OF INDUSTRIAL AND ENGINEERED COUPLINGS AND TORQUE LIMITING PRODUCTS AVAILABLE FROM A SINGLE SOURCE.**

### **About Us**

Bibby Transmissions has remained a leading innovator in high performance flexible couplings and engineering solutions for rotating equipment for over 80 years. Now part of Regal Rexnord, with a reach covering more than 70 countries, our vision continually grows without compromising the values which led to such unrivalled success.

With roots dating back to Dr. James Bibby, inventor of the resilient grid coupling in 1917, and the development of the profile disc coupling in 1958, Bibby Transmissions has continued in the pioneering footsteps of these revolutionary leading lights.

### **Our Focus**

Reliability, safety and accuracy are vital in both new and established models. We strive to increase your return on investment by virtually eliminating downtime and optimizing efficiency.

Our policy of recruiting engineers with excellent customer focus and innovative talent continuously advances our development using proven, state-of-the-art hardware and software to deliver excellence. Firmly committed to remaining ahead of market needs, we listen to customer feedback and pre-empt requirements, a focus that has consistently held Bibby Transmissions head and shoulders above our competitors.

### **Access Real Expertise**

Providing in-depth expertise is of the utmost importance in serving our customers. Our professionals are available to advise on all aspects of disc coupling safety and design from general-purpose, to specialized applications; there is virtually no limit in torque or speed. Simply contact us with your ideal requirements and be assured that you will receive the optimal solution, tailored to your requirements.

Through Bibby Transmissions, customers access world-class engineering solutions, designed for the power transmission industry including:

- Products suitable for adverse environments which require extremely high resilience through to cost-effective, general-purpose applications
- Models adjusted for long-span or critical applications
- All types of couplings, with thousands of operational units
- Torque limiters, safety elements and backstop units

## Bibby Turboflex Facilities

### Europe

**United Kingdom**  
Bibby Turboflex, Unit 16  
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*Disc, Gear, Grid Couplings,  
Overload Clutches*



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the brands of  
Regal Rexnord**

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