



# Thomas Flexible Disc Couplings

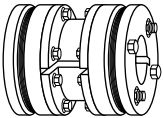
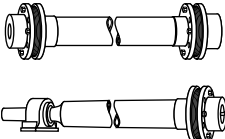
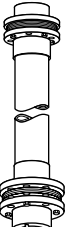
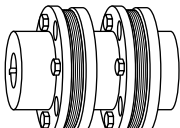
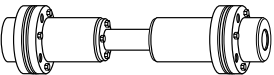
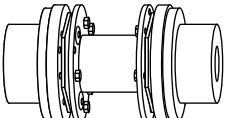
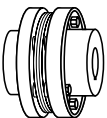
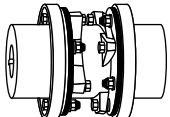
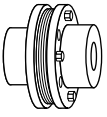
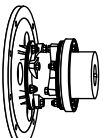
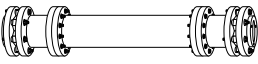
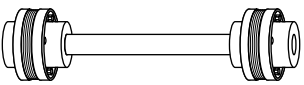
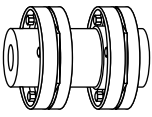
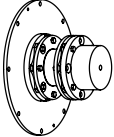
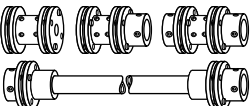
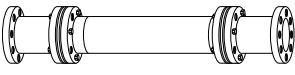
(Metric)



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# Rexnord Thomas Coupling Application Guide

| Coupling Type                                                                                                     | Typical Applications                                                                                                                                                                   | Coupling Type                                                                                                          | Typical Applications                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>Series 54RDG</b></p>      | Close-coupled applications. Suitable as replacement for gear and grid couplings.                                                                                                       |  <p><b>SN</b><br/><b>SF</b></p>      | Turbines, pumps, compressors, test stands, generators, speed increasers, fans (cooling tower, mine ventilating, forced and induced draft), paper mill drives, line shafts, printing machines, pumps. Available as a standard in corrosion-resistant materials. |
|  <p><b>DBZ, DBZ-A, DBZ-B</b></p> | Mixers, compressors, agitators, blowers and fans, centrifugal pumps, conveyors.                                                                                                        |  <p><b>SV</b></p>                    | Vertical drives such as sewage pumps, printing machines, marine pumps. Available as a standard in corrosion-resistant materials.                                                                                                                               |
|  <p><b>Series XTSR52</b></p>     | Pumps and compressors (centrifugal, rotary, lobe and axial), speed increasers, fans, dynamometers.                                                                                     |  <p><b>Adjustable Length SN</b></p>  | Same applications as SN but where axial and/or angular adjustment is desired.                                                                                                                                                                                  |
|  <p><b>Series XTSR71</b></p>     | Pumps and compressors with popular shaft separation standards, blowers, fans, speed increasers.                                                                                        |  <p><b>ST</b></p>                  | Accommodates angular misalignment only. Three-bearing applications where radial load is supported by the coupling, such as single-bearing generators, V-belt sheaves, etc.                                                                                     |
|  <p><b>AMR</b></p>             | Reciprocating pumps and compressors, fan drives, blowers, heavy-duty industrial drives, crushers, extruders, hoists, dredges, generators, chippers, calenders, mill drives, conveyors. |  <p><b>SN Single</b></p>           | Accommodates angular misalignment only. May be used with intermediate solid shaft for applications similar to BMR, but with high speed capacity. Available in corrosion-resistant materials.                                                                   |
|  <p><b>CMR</b></p>             | Engine drivers, reciprocating pumps and compressors, heavy-duty industrial drives where flywheel mounting is required.                                                                 |  <p><b>THP</b></p>                 | Turbines, pumps, compressors, speed increasers, test stands.                                                                                                                                                                                                   |
|  <p><b>BMR</b></p>             | Blowers, fans, crushers, marine drives, dredge pumps, hoists, heavy-duty industrial drives, reciprocating pumps and compressors, paper mill drives, conveyors                          |  <p><b>Series 63</b></p>           | Turbines, pumps, compressors, test stands, generators, speed increasers.                                                                                                                                                                                       |
|  <p><b>Series 44</b></p>       | Engine drivers, reciprocating pumps and compressors, heavy-duty industrial drives where flywheel mounting is required.                                                                 |  <p><b>Miniature Couplings</b></p> | Tachometers, encoders, switches, ball screws, test stands, pumps, compressors, centrifuges, theodolites, sonar, radar, scales, carburetors.                                                                                                                    |
|  <p><b>SN-GA</b></p>           | Pulp and paper machines, line shafts, pelletizers, crushers and mill drives. Replacing long span gear couplings, bolting to existing rigid hubs.                                       |                                                                                                                        |                                                                                                                                                                                                                                                                |

# Rexnord Thomas Flexible Couplings

## Flexible Coupling Overview

A flexible coupling is a device used to connect the ends of two shafts, transmit torque, and at the same time, accommodate slight misalignments which develop in service.

The primary functions of all flexible couplings are:

1. To transmit power from one shaft to another, efficiently and effectively.
2. To accommodate slight shaft misalignments which develop in service.

The secondary functions of flexible couplings are:

1. Protect connected equipment:
  - a. Absorb shock, vibration and pulsations.
  - b. Decrease cross load on bearings.
  - c. Accept load reversals.
  - d. Minimize backlash.

2. Minimize "installation" and "maintenance" difficulties. Shafts become misaligned during operation because of settling foundations, the effects of heat, vibration, etc. These misalignments take place in the form of angular misalignment, parallel misalignment or axial movement of the shafts; therefore, to get full service life from any flexible coupling, it is necessary to:
  - a. Assure proper shaft alignment during initial installation.
  - b. Occasionally check for and correct shaft misalignments during operation.

## Misalignment Overview

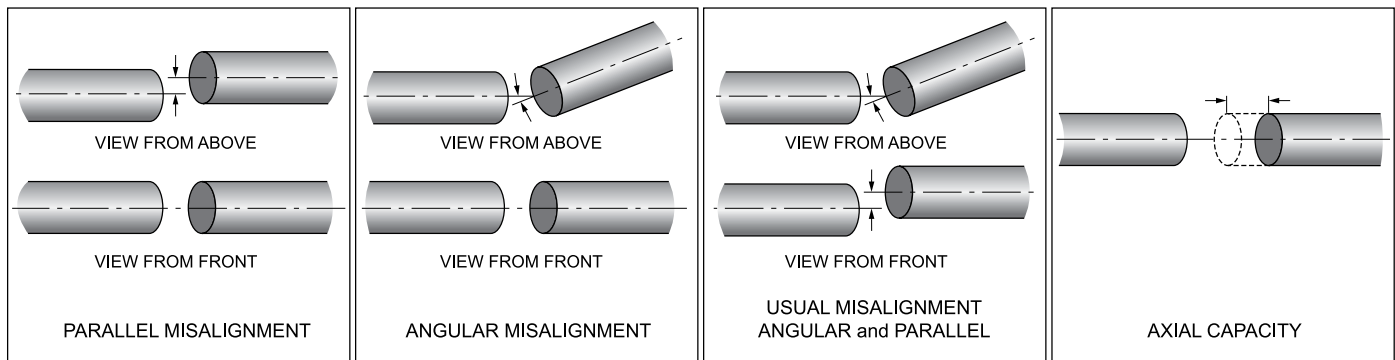
Misaligned shafts not properly coupled are subject to severe stresses that damage bearings and seals. Any or all of the misalignments shown in the above diagrams are present in all connected drives; therefore, it is imperative that flexible couplings be used to avoid costly damage to your equipment.

Initial alignment of machinery is one of the most critical factors affecting coupling performance and reliability. Each particular style of coupling has its own misalignment capabilities. The installation and alignment instructions outline the initial alignment requirements. These initial values are approximately one-third of the total coupling misalignment capacity. This means that the coupling has ample reserve to compensate for operational misalignments which develop as a result of bearing wear, foundation settling, thermal growth, pipe strain, etc. However, the closer the initial alignment, the

more reserve margin a coupling has to compensate for misalignments during the life of the machine. A coupling that operates with large amounts of misalignment will have a limited life, while a coupling operating within capacity will have infinite life.

The customer and coupling manufacturer must mutually select the correct size and type coupling for the application. Good service life will then become a reality if proper installation and alignment procedures are followed.

The following pages show basic coupling arrangements and load classifications based on years of experience in coupling applications in all phases of power transmission. Any unusual operating or misalignment conditions should be referred to Rexnord to assure proper selection of size and type of coupling.



## Maximum RPM and Balance Recommendations

Rexnord has developed recommendations for coupling balancing based on AGMA 9000-D11 and the inherent balance level of the various couplings shown in this catalog. These are shown on the data sheets as follows:

### Max. RPM Not Balanced

This is the maximum operating speed where the coupling will operate under normal conditions, and not create unacceptable vibration due to coupling unbalance. This is based on many years of operating experience on a wide variety of drive systems.

### Max. RPM Balanced

This is the maximum operating speed where the coupling, after balancing, will still be compatible with the typical drive system. Consult Rexnord for speed requirements in excess of this value; special designs or manufacturing procedures may be required.

Certain coupling types are not suitable for dynamic balancing, and should not be used if balancing is required. These types are AMR, CMR, BMR and ST.

Series 63 and THP couplings are always furnished dynamically balanced in accordance with the requirements of the application.

**CAUTION:** All rotating power transmission products are potentially dangerous and must be properly guarded. Never operate coupling without an OSHA-approved guard.

# Rexnord Thomas Coupling Selection

## Quick Coupling Selection Procedure

The following procedure can be used to select disc couplings for most applications.

For applications involving other than normal loading in design, special considerations must be given to coupling selection. Rexnord application engineers are readily available for selection, advice and assistance.

1. Select coupling type.
- Refer to page 3 and select the type of coupling to suit your application. If an application requires a special purpose coupling, refer application details to the local Rexnord Representative.
2. Calculate operating torque of application.
- a. Use the following formula to calculate operating torque of application:

i. 
$$\text{Torque (Nm)} = \frac{\text{Driver Kilowatts} \times 9,550}{\text{Operating Speed}}$$
3. Determine service factor.
- a. Find application in table on page 6; use the service factor value assigned to that application.

b. Note: if application not listed, see Load Classification Table on page 6.

c. Note: The service factor table considers the driven equipment only and assumes a normal electric or turbine driver. For prime movers of the reciprocating type (engines, etc) use the engine drive service factor adder on page 6 to the selected service factor.
4. Multiply operating torque by the selected service factor to determine minimum required torque rating of coupling.
5. Find coupling in the coupling type section of catalog that meets the minimum required torque rating.
6. Verify that the selected coupling will accommodate the shaft sizes or flywheel if engine mount, of driving and driven equipment. Shaft diameters should be equal or less than published maximum bore of selected coupling.
- a. If coupling will not accommodate shaft sizes, select the next largest size that will accommodate shaft sizes.
7. Verify coupling selected can accommodate operating speed of application.
8. Check limiting data.
- a. Other data in coupling type section of catalog can be used to verify that selected coupling will work in application. Additional data can help verify application envelope of space, weight and WR<sup>2</sup> considerations.

### IMPORTANT NOTE:

The coupling selection criteria is intended for the determination of the coupling and style only. It is also recommended that the system be analyzed for torsional and lateral stability using the specific mass elastic data available from Rexnord. The analysis is the responsibility of the user since the coupling is only a single component in the system.

## Rexnord Thomas Coupling Nomenclature

Use the following nomenclature guide to identify and order Thomas Disc Couplings.

| Coupling Size | Type/Series | Modifications                                                                                                    | Distance Between Shaft Ends<br>("C" Length) | Hub Bore       |
|---------------|-------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------|
| 2506          | XTSR71      | B                                                                                                                | 9.00                                        | 3.250 x 2.50   |
|               | XTSR71      | B = Balanced                                                                                                     | 9.00"                                       | 110 mm x Taper |
|               | XTSR52      | ES = Engineered Special                                                                                          | N/A                                         | 1.00 x 2.00    |
|               | DBZ         | L = Long Hub                                                                                                     | 130 mm                                      | Taper x 3.00   |
|               | AMR         | W = Large Hub w/ adapter                                                                                         |                                             | etc.           |
|               | CMR         | C = Special Coating<br>(defined on drawings)                                                                     |                                             |                |
|               | SR54RDG     | D = Special Disc Pack Material<br>(defined on drawings)                                                          |                                             |                |
|               | SN          | R = Retrofit assembly<br>(XTSR71 with special<br>adapters to bolt up to John<br>Crane or Thomas adapter<br>hubs) |                                             |                |
|               | THP         |                                                                                                                  |                                             |                |
|               | SR63        |                                                                                                                  |                                             |                |
|               | SR71        |                                                                                                                  |                                             |                |
|               | SR71-8      |                                                                                                                  |                                             |                |
|               | SR52        |                                                                                                                  |                                             |                |

**NOTE:** Dimensions subject to change. Certified dimensions of ordered material furnished on request.

# Rexnord Thomas Coupling Selection

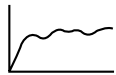
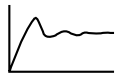
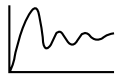
## Typical Service Factors – Motor And Turbine Driven Equipment\*

| Application                                                | Service Factor | Application                               | Service Factor | Application                               | Service Factor |
|------------------------------------------------------------|----------------|-------------------------------------------|----------------|-------------------------------------------|----------------|
| <b>AGITATORS</b>                                           |                | Bottling .....1.5                         |                | Presses .....2.0                          |                |
| Pure Liquids.....1.0                                       |                | <b>GENERATORS</b>                         |                | Reel .....1.5                             |                |
| Variable Density .....1.5                                  |                | Non-Welding.....1.5                       |                | Stock Chests .....1.5                     |                |
| <b>ALTERNATOR</b> .....1.5                                 |                | Welding.....3.0                           |                | Suction Roll .....2.0                     |                |
| <b>BLOWERS</b>                                             |                | <b>HAMMER MILLS</b> .....3.0              |                | Washers and Thickeners.....1.5            |                |
| Centrifugal .....1.0                                       |                | <b>LUMBER INDUSTRY</b>                    |                | Winders.....1.5                           |                |
| Lobe.....1.5                                               |                | Barkers - Drum Type .....2.5              |                | <b>PRINTING PRESSES</b> .....1.5          |                |
| Vane.....1.5                                               |                | Edger Feed .....2.0                       |                | <b>PULLERS</b>                            |                |
| <b>BRIQUETTER MACHINES</b> .....2.0                        |                | Live Rolls .....2.0                       |                | Barge Haul .....2.0                       |                |
| <b>CAN FILLING MACHINES</b> .....1.0                       |                | Log Haul - Incline.....2.0                |                | <b>PUMPS</b>                              |                |
| <b>CANE KNIVES</b> .....2.0                                |                | Log Haul - Well Type.....2.0              |                | Centrifugal                               |                |
| <b>CAR DUMPERS</b> .....2.5                                |                | Off Bearing Rolls.....2.0                 |                | General Duty (Liquid).....1.0             |                |
| <b>CAR PULLERS</b> .....1.5                                |                | Planer Feed Chains.....2.0                |                | Boiler Feed .....1.5                      |                |
| <b>CLAY WORKING MACHINERY</b> .....2.0                     |                | Planer Floor Chains.....2.0               |                | Slurry (Sewage, etc.).....1.5             |                |
| <b>COMPRESSORS</b>                                         |                | Planer Tilting Hoist.....2.0              |                | Dredge .....2.0                           |                |
| Centrifugal .....1.0                                       |                | Slab Conveyor .....1.5                    |                | Reciprocating                             |                |
| Lobe, Vane, Screw.....1.5                                  |                | Sorting Table.....1.5                     |                | Double Acting .....2.0                    |                |
| Reciprocating - Multi-Cylinder.....Consult Rexnord         |                | Trimmer Feed .....2.0                     |                | Single Acting                             |                |
| Axial.....1.0                                              |                | <b>MACHINE TOOLS</b>                      |                | 1 or 2 Cylinders .....2.5                 |                |
| <b>CONVEYORS</b> - uniformly loaded or fed .....1.5        |                | Bending Roll .....2.0                     |                | 3 or more Cylinders .....2.0              |                |
| <b>CONVEYORS</b> - heavy duty - not uniformly fed .....2.5 |                | Plate Planer.....1.5                      |                | Rotary - Gear, Lobe, Vane .....1.5        |                |
| <b>CRANES AND HOISTS</b> .....2.0                          |                | Punch Press - Gear Driven.....2.0         |                | <b>RUBBER INDUSTRY</b>                    |                |
| <b>CRUSHERS</b> .....3.0                                   |                | Tapping Machines.....2.5                  |                | Mixer - Banbury.....3.0                   |                |
| <b>DREDGES</b>                                             |                | Other Machine Tools                       |                | Rubber Calendar .....2.0                  |                |
| Cable Reels .....2.0                                       |                | Main Drives.....1.5                       |                | Rubber Mill (2 or more) .....2.5          |                |
| Conveyors.....1.5                                          |                | Auxiliary Drives.....1.5                  |                | Sheeter.....2.0                           |                |
| Cutter Head Drives .....2.5                                |                | <b>METAL MILLS</b>                        |                | Tire Building Machines .....2.5           |                |
| Jig Drives.....2.5                                         |                | Draw Bench - Carriage .....2.5            |                | Tire & Tube Press Openers.....1.0         |                |
| Maneuvering Winches.....2.0                                |                | Draw Bench - Main Drive .....2.5          |                | Tubers and Strainers .....2.0             |                |
| Pumps.....2.0                                              |                | Forming Machines.....2.5                  |                | <b>SCREENS</b>                            |                |
| Screen Drives.....2.0                                      |                | Slitters.....2.0                          |                | Air Washing .....1.0                      |                |
| Stackers.....2.0                                           |                | Table Conveyors                           |                | Rotary - Stone or Gravel.....1.5          |                |
| Utility Winches.....1.5                                    |                | Non-Reversing.....2.5                     |                | Traveling Water Intake.....1.5            |                |
| <b>ELEVATORS</b>                                           |                | Reversing.....3.0                         |                | Vibratory .....2.5                        |                |
| Bucket.....2.0                                             |                | Wire Drawing & Flattening Machine.....2.0 |                | <b>SEWAGE DISPOSAL EQUIPMENT</b> .....1.5 |                |
| Centrifugal Discharge.....1.5                              |                | Wire Winding Machine.....2.0              |                | <b>SEWAGE TREATMENT PUMPS</b> .....1.5    |                |
| Escalators.....1.5                                         |                | <b>MILLS, ROTARY TYPE</b>                 |                | <b>TEXTILE INDUSTRY</b>                   |                |
| Freight.....2.0                                            |                | Ball.....2.5                              |                | Batchers.....1.5                          |                |
| Gravity Discharge.....1.5                                  |                | Cement Kilns.....2.0                      |                | Calenders.....2.0                         |                |
| <b>EXTRUDERS</b>                                           |                | Dryers & Coolers.....2.0                  |                | Card Machines.....1.5                     |                |
| Plastic.....2.0                                            |                | Kilns.....2.0                             |                | Cloth Finishing Machines                  |                |
| Metal.....2.5                                              |                | Pebble.....2.0                            |                | (washers, pads, tenters)                  |                |
| <b>FANS</b>                                                |                | Rod.....2.0                               |                | (dryers, calenders, etc.).....1.5         |                |
| Centrifugal                                                |                | Tumbling Barrels.....2.0                  |                | Dry Cans.....2.0                          |                |
| Forced Draft (Hostile Environment).....1.5                 |                | <b>MIXERS</b>                             |                | Dryers.....1.5                            |                |
| Induced Draft (Hostile Environment).....1.5                |                | Concrete Mixers.....2.0                   |                | Dyeing Machinery.....1.5                  |                |
| Axial                                                      |                | Drum Type.....2.0                         |                | Looms.....1.5                             |                |
| Forced Draft (Hostile Environment).....1.5                 |                | <b>OIL INDUSTRY</b>                       |                | Mangles.....1.5                           |                |
| Induced Draft (Hostile Environment).....1.5                |                | Chillers.....1.5                          |                | Nappers.....1.5                           |                |
| Mine Ventilation.....2.5                                   |                | Oil Well Pumping.....2.0                  |                | Soapers.....1.5                           |                |
| Cooling Towers.....1.5                                     |                | Paraffin Filter Press.....2.0             |                | Spinners.....1.5                          |                |
| Light Duty Blower & Fans .....1.0                          |                | Rotary Kilns.....2.0                      |                | Tenter Frames.....1.5                     |                |
| <b>FEEDERS</b>                                             |                | <b>PAPER MILLS</b>                        |                | Winders (Other than Batchers) .....1.5    |                |
| Light Duty .....1.5                                        |                | Barker Auxiliaries, Hydraulic.....2.5     |                | <b>WINDLASS</b> .....2.0                  |                |
| Heavy Duty.....2.5                                         |                | Barker, Mechanical.....2.5                |                | <b>WOODWORKING MACHINERY</b> .....1.5     |                |
| <b>FOOD INDUSTRY</b>                                       |                | Barking Drum (Spur Gear Only) .....2.5    |                |                                           |                |
| Beet Slicer.....2.0                                        |                | Beater & Pulper.....2.0                   |                |                                           |                |
| Cereal Cooker.....1.5                                      |                | Bleacher.....1.0                          |                |                                           |                |
| Dough Mixer.....2.0                                        |                | Calenders.....2.0                         |                |                                           |                |
| Meat Grinders.....2.0                                      |                | Converting Machines, except               |                |                                           |                |
| Can Filling Machine.....1.0                                |                | Cutters, Platers.....1.5                  |                |                                           |                |
|                                                            |                | Couch .....2.0                            |                |                                           |                |
|                                                            |                | Cutters, Platers.....2.0                  |                |                                           |                |
|                                                            |                | Cylinders.....2.0                         |                |                                           |                |
|                                                            |                | Dryers.....2.0                            |                |                                           |                |
|                                                            |                | Felt Stretcher.....1.5                    |                |                                           |                |
|                                                            |                | Felt Whipper.....2.0                      |                |                                           |                |
|                                                            |                | Jordans.....2.0                           |                |                                           |                |
|                                                            |                | Log Haul .....2.0                         |                |                                           |                |

\*Service Factors in this table are for driven equipment based on smooth prime movers such as electric motors and turbines. For reciprocating prime movers, such as diesel or gas engines, add the following to the Service Factor:

For 8 or more cylinders, add 0.5.  
For 6 cylinders, add 1.0.  
For 4 cylinders, add 1.5.  
For less than 4 cylinders, consult Rexnord.

**Service Factors** – Service Factors are a means of classifying different equipment and applications into various load classifications. Due to variations in application of equipment, service factors are used to adjust equipment ratings to accommodate for variable loading conditions.

|                                                                                     | Load Classifications                                                                | Service Factors |                                                                                     | Load Classifications                                                                                                                                                           | Service Factors |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|  | Continuous service and running loads vary only slightly.                            | 1.0             |  | For shock loading and substantial torque variations.                                                                                                                           | 2.5             |
|  | Torque loading varies during operation of the equipment.                            | 1.5             |  | For heavy shock loading or light reversing drives.                                                                                                                             | 3.0             |
|  | Torque loading varies during operation, frequent stop/start cycles are encountered. | 2.0             |  | Reversing torque loads do not necessarily mean reversal of rotation. Depending upon severity of torque reversal, such loads must be classified between "medium" and "extreme." | Consult Rexnord |

# Rexnord Thomas Flexible Disc Couplings

## Ordering Instructions

Complete steps 1 through 6 below. See page 37 for types of fits and shaft diameters.

1. Determine quantity.
2. Determine coupling size and type.
3. Determine bore sizes. Couplings will be bored in accordance with ANSI/AGMA 9112-A04. The type of bore fit normally supplied by Rexnord is listed below.

## Bore Specifications

|                                                                                 |                                                                                                                                                |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DBZ</b>                                                                      | Straight Bore – Clearance fit – stocked<br>Straight Bore – Interference fit on bore-to-order sizes ①<br>Taper Bore – To customer specification |
| <b>AMR, BMR, CMR, SN, SF, SV, ST, 52, 54RDG, 54RD, 71, 71-8, XTSR52, XTSR71</b> | Straight Bore – Interference fit on all bores ①<br>Taper Bore – To customer specification                                                      |
| <b>Series 63/THP</b>                                                            | All bores per customer specification                                                                                                           |
| <b>Miniatures</b>                                                               | See pages 30-32.                                                                                                                               |

① Unless specified otherwise by customer.

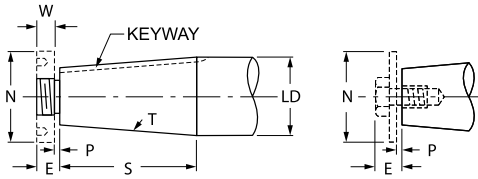
**NOTE:** Rexnord recommends an interference fit be used whenever possible.

4. Determine keyway and set screw sizes (if non-standard).
5. Determine dynamic balancing (if required).
6. Additional data (where applicable).
  - a. Disc pack material (if other than Tomaloy).
  - b. Free or interference fit on shafts (if shaft diameters are given).
  - c. Complete details on tapered bore requirements, see supplemental taper bore information section below.
  - d. On DBZ-A Couplings:
    1. Identify bore of standard hub and bore of extended hub.
  - e. On SN, SF, and SV Couplings:
    1. Corrosion resistance class
    2. "L" dimension
    3. Dynamic balancing if required
    4. Sketch of stub shaft (SF only) if non-standard
    5. On SV, identify bore of upper hub and lower hub
    6. Operating speed required
  - f. On BMR Couplings:
    1. Solid shaft diameter, if ordered
    2. "L" dimension
  - g. On CMR Couplings:
    1. Adapter:
      - (a) Outside diameter
      - (b) Bolt circle diameter
      - (c) Bolt hole diameter
      - (d) Number of bolts and spacing

## Ordering Information – Tapered Bores

Information Required

1. Drawing of hub showing complete bore and keyway details.  
- OR -
2. Drawing of shaft with dimensions shown below, allowing Rexnord to bore hubs to suit.



(LD) Large diameter, specify in decimals.

(S): Length of taper; measure parallel to shaft centerline.

(T): Taper per foot; difference in diameter in one foot length.

(P): Clearance space for drawing hub up on tapered shaft.  
Usually 1/8 in. or 1/4 in., depending on shaft size and taper.

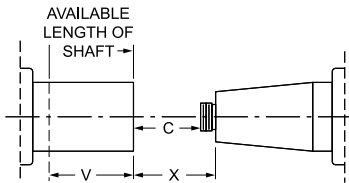
Keyway: Width, depth.

**NOTE:** Specify if keyway is parallel to taper or if parallel to shaft center line. Specify depth at larger diameter of taper if keyway is parallel to shaft center line.

## Supplemental Taper Bore Information

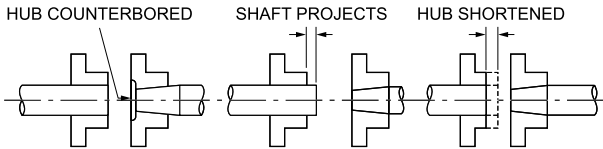
With connected equipment in fixed position, the following additional information is necessary:

Dimensions "V" and "X" must be given when one or both connected machines are fixed on their bases. Advise if dimension "X" is fixed, or if variable between what limits.



A fixed "X" dimension may require altered or special coupling hubs. Often the straight bored hub can be positioned on its shaft allowing the use of a standard coupling. See illustrations below.

Consult AGMA Standard 9002-A86 "Taper Bores for Flexible Couplings" for new applications.



# Rexnord Thomas Flexible Disc Couplings

## Close-Coupled Series 54RDG

Series 54RDG couplings are reduced diameter gear and grid replacement couplings. Applications include any situation where the overall shaft-to-shaft spacing is minimal. The center member of the 54RDG is split axially, which permits maintenance of the couplings without moving the hubs or the connected equipment. Center member is piloted into the adapter providing high-speed potential at high-torque density.

### Construction

Hubs and Center members: Carbon steel

Bolts: Alloy steel

Disc Packs: Stainless steel

Coatings Available: Consult Rexnord

Other disc pack materials such as Tantalum, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/8° per disc pack

When specified, Series 54RDG couplings meet all requirements of API 610 or API 671.

If application requires API specification, please consult Rexnord.



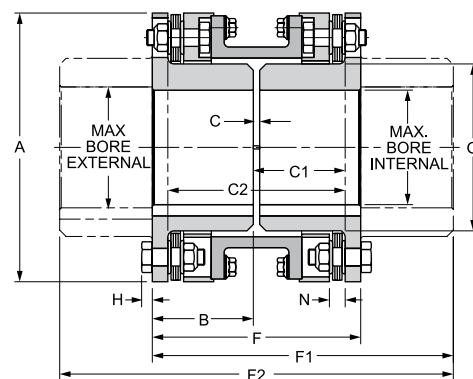
### General Dimensions (mm)

| Coupling Size | Max. Bore* Internal | Max. Bore* External | A   | B     | C    | C1**  | F   | F1** | H    | N    | G   | C2*** | F2*** |
|---------------|---------------------|---------------------|-----|-------|------|-------|-----|------|------|------|-----|-------|-------|
| 125           | 30                  | 34                  | 97  | 47.8  | 3.0  | 44.5  | 98  | 126  | 4.3  | 6.9  | 45  | 85.9  | 152   |
| 162           | 42                  | 50                  | 114 | 47.8  | 3.0  | 45.0  | 98  | 137  | 4.3  | 7.4  | 59  | 86.9  | 176   |
| 200           | 58                  | 58                  | 141 | 53.8  | 3.0  | 49.8  | 111 | 156  | 5.6  | 9.1  | 83  | 96.5  | 201   |
| 225           | 65                  | 70                  | 149 | 55.6  | 3.0  | 51.6  | 114 | 174  | 5.6  | 9.1  | 89  | 100.1 | 233   |
| 262           | 74                  | 84                  | 175 | 65.8  | 4.8  | 61.5  | 136 | 200  | 6.4  | 11.9 | 105 | 118.1 | 264   |
| 312           | 95                  | 97                  | 199 | 72.1  | 4.8  | 66.5  | 149 | 225  | 7.6  | 12.7 | 127 | 128.3 | 300   |
| 350           | 100                 | 110                 | 223 | 83.3  | 6.4  | 77.7  | 173 | 256  | 5.6  | 13.7 | 140 | 149.1 | 340   |
| 375           | 114                 | 120                 | 247 | 90.4  | 6.4  | 82.8  | 187 | 275  | 6.4  | 15.0 | 154 | 159.3 | 363   |
| 425           | 120                 | 130                 | 267 | 100.8 | 6.4  | 91.7  | 208 | 301  | 7.6  | 15.7 | 167 | 177.0 | 393   |
| 450           | 130                 | 140                 | 287 | 114.3 | 7.9  | 105.4 | 236 | 334  | 11.9 | 18.0 | 178 | 202.9 | 432   |
| 500           | 137                 | 146                 | 327 | 121.4 | 7.9  | 109.7 | 251 | 358  | 12.7 | 19.8 | 200 | 211.6 | 466   |
| 550           | 150                 | 166                 | 367 | 136.4 | 9.7  | 123.7 | 282 | 400  | 14.7 | 23.1 | 222 | 237.7 | 517   |
| 600           | 166                 | 176                 | 406 | 152.4 | 9.7  | 137.2 | 314 | 442  | 17.0 | 24.9 | 237 | 264.7 | 570   |
| 700           | 195                 | 205                 | 464 | 177.8 | 9.7  | 158.0 | 365 | 514  | 19.1 | 30.5 | 276 | 306.3 | 662   |
| 750           | 206                 | 224                 | 503 | 196.9 | 12.7 | 177.8 | 406 | 565  | 21.3 | 32.3 | 299 | 342.9 | 724   |
| 800           | 223                 | 241                 | 546 | 209.6 | 12.7 | 187.2 | 432 | 606  | 23.1 | 34.0 | 318 | 361.7 | 781   |
| 850           | 235                 | 250                 | 584 | 225.6 | 14.2 | 202.4 | 465 | 650  | 25.4 | 35.6 | 335 | 390.7 | 835   |
| 925           | 248                 | 267                 | 635 | 251.7 | 15.7 | 226.3 | 519 | 719  | 27.7 | 38.1 | 359 | 436.9 | 920   |

\* Uses Series 52 hubs. Non-bored hubs available upon request.

\*\* Hubs may be reversed for alternate shaft spacing.

\*\*\* Both hubs reversed.



| Coupling Size | Max. Kilowatt Per 100 RPM | Max. RPM       |            | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | ② Weight (kg) | ② WR <sup>2</sup> (kg-m <sup>2</sup> ) | ③ Axial Capacity (mm) |
|---------------|---------------------------|----------------|------------|-----------------------------|---------------------------|---------------|----------------------------------------|-----------------------|
|               | Service Factor 1.0        | ① Not Balanced | ① Balanced |                             |                           |               |                                        |                       |
| 125           | 3.2                       | 4,600          | 10,500     | 305                         | 610                       | 3.1           | 0.0037                                 | ±0.91                 |
| 162           | 6.3                       | 4,200          | 9,700      | 604                         | 1,209                     | 4.2           | 0.0070                                 | ±0.91                 |
| 200           | 12.4                      | 3,800          | 8,600      | 1,185                       | 2,370                     | 7.3           | 0.0196                                 | ±0.91                 |
| 225           | 20.7                      | 3,700          | 8,400      | 1,976                       | 3,952                     | 8.6           | 0.0249                                 | ±0.91                 |
| 262           | 38.8                      | 3,600          | 7,400      | 3,706                       | 7,412                     | 14.1          | 0.0562                                 | ±1.09                 |
| 312           | 60.8                      | 3,000          | 6,700      | 5,803                       | 11,606                    | 20.9          | 0.112                                  | ±1.29                 |
| 350           | 79.2                      | 2,800          | 6,200      | 7,552                       | 15,104                    | 30.0          | 0.202                                  | ±1.42                 |
| 375           | 118.7                     | 2,500          | 5,800      | 11,323                      | 22,646                    | 40.0          | 0.339                                  | ±1.57                 |
| 425           | 158.9                     | 2,300          | 5,400      | 15,161                      | 30,322                    | 53.1          | 0.521                                  | ±1.70                 |
| 450           | 178                       | 2,200          | 5,000      | 16,979                      | 33,958                    | 69.9          | 0.787                                  | ±1.82                 |
| 500           | 291.5                     | 2,000          | 4,600      | 27,817                      | 55,634                    | 101.7         | 1.45                                   | ±2.02                 |
| 550           | 390.9                     | 1,900          | 4,200      | 37,300                      | 74,600                    | 147.1         | 2.62                                   | ±2.33                 |
| 600           | 513.3                     | 1,800          | 3,900      | 48,973                      | 97,946                    | 198.4         | 4.36                                   | ±2.59                 |
| 700           | 798.4                     | 1,700          | 3,600      | 76,242                      | 152,484                   | 298.3         | 8.49                                   | ±2.92                 |
| 750           | 992.5                     | 1,550          | 3,400      | 94,772                      | 189,543                   | 380.9         | 12.70                                  | ±3.17                 |
| 800           | 1276.3                    | 1,450          | 3,200      | 121,877                     | 243,753                   | 472.2         | 18.70                                  | ±3.45                 |
| 850           | 1506.2                    | 1,350          | 3,000      | 143,830                     | 287,659                   | 572.0         | 26.01                                  | ±3.65                 |
| 925           | 2039.9                    | 1,300          | 2,800      | 194,786                     | 389,572                   | 767.3         | 40.96                                  | ±3.96                 |

① See page 4 for explanation of RPM limits and balancing recommendations.

② Weight and WR<sup>2</sup> with standard length hubs, maximum bore and standard "C."

③ All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modifications or the addition of end-float restricting devices.

## Thomas Flexible Disc Couplings

### Close-Coupled Series 54RD

Series 54RD couplings are specifically designed as replacements for close-coupled gear and grid couplings, and where overall shaft-to-shaft spacing is minimal. Materials of construction are identical to the Series 52. Stainless steel disc packs are supplied as standard.

To reduce maintenance costs, the Series 54RD is furnished with an axially split center member. This design permits the removal of the disc packs without moving the connected equipment. When specified, and based on speed requirements, the Series 54RD can be manufactured to meet API 610. If application requires API specification, please consult Rexnord.

#### General Dimensions (mm)

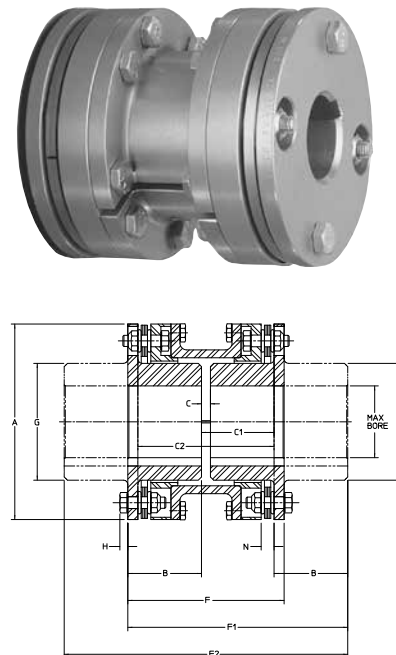
| Coupling Size | Max Bore* Internal (mm) | Max Bore* External (mm) | A   | B   | C    | C1**  | F   | F1** | H    | N    | G   | C2*** | F2*** |
|---------------|-------------------------|-------------------------|-----|-----|------|-------|-----|------|------|------|-----|-------|-------|
| 125           | 20                      | 34                      | 94  | 47  | 3.1  | 43.4  | 97  | 137  | 4.3  | 6.9  | 44  | 83.8  | 177   |
| 162           | 42                      | 50                      | 110 | 48  | 3.1  | 45.0  | 99  | 140  | 4.3  | 7.4  | 59  | 86.9  | 182   |
| 200           | 58                      | 58                      | 138 | 54  | 3.1  | 50.0  | 111 | 158  | 5.6  | 9.1  | 83  | 96.5  | 190   |
| 225           | 65                      | 70                      | 145 | 56  | 3.1  | 51.6  | 114 | 163  | 5.6  | 9.1  | 89  | 100.1 | 211   |
| 262           | 74                      | 84                      | 168 | 66  | 4.8  | 61.5  | 136 | 193  | 6.4  | 11.9 | 105 | 118.1 | 250   |
| 312           | 95                      | 97                      | 198 | 72  | 4.8  | 66.6  | 149 | 211  | 7.6  | 12.7 | 127 | 128.3 | 273   |
| 350           | 100                     | 110                     | 221 | 83  | 6.4  | 77.7  | 173 | 244  | 8.6  | 13.7 | 140 | 149.1 | 316   |
| 375           | 114                     | 120                     | 246 | 90  | 6.4  | 83.1  | 187 | 264  | 9.9  | 15.0 | 154 | 159.3 | 340   |
| 425           | 120                     | 130                     | 267 | 101 | 6.4  | 91.7  | 208 | 293  | 10.7 | 15.8 | 167 | 177.0 | 379   |
| 450           | 130                     | 140                     | 287 | 114 | 7.9  | 105.7 | 236 | 334  | 11.9 | 18.0 | 178 | 203.0 | 432   |
| 500           | 137                     | 146                     | 327 | 120 | 7.9  | 108.5 | 248 | 348  | 12.7 | 19.8 | 200 | 208.5 | 448   |
| 550           | 150                     | 166                     | 367 | 135 | 9.7  | 122.2 | 279 | 392  | 14.7 | 23.1 | 222 | 234.7 | 504   |
| 600           | 166                     | 176                     | 406 | 152 | 9.7  | 136.9 | 314 | 442  | 17.0 | 24.9 | 236 | 264.7 | 569   |
| 700           | 195                     | 205                     | 464 | 178 | 9.7  | 158.0 | 365 | 514  | 19.1 | 30.2 | 276 | 306.3 | 662   |
| 750           | 206                     | 224                     | 503 | 197 | 12.7 | 177.8 | 406 | 572  | 21   | 32.3 | 298 | 342.9 | 737   |
| 800           | 223                     | 241                     | 546 | 210 | 12.7 | 187.2 | 432 | 606  | 23   | 34.0 | 318 | 361.7 | 781   |
| 850           | 235                     | 250                     | 584 | 226 | 14.2 | 202.4 | 465 | 654  | 25   | 35.6 | 335 | 390.7 | 842   |
| 925           | 248                     | 267                     | 635 | 252 | 15.8 | 226.3 | 519 | 730  | 28   | 38.1 | 359 | 436.9 | 940   |
| 1000          | 264                     | 290                     | 699 | 273 | 15.8 | 244.4 | 562 | 790  | 29   | 42.9 | 413 | 465.3 | 1019  |

\* Non-bored hubs available upon request.

\*\* Hubs may be reversed for alternate shaft spacing.

\*\*\* Both hubs reversed.

**NOTE:** When hub is used with barrel positioned outside of spacer, a Series 52 hub is used.



| Coupling Size | Max. Kilowatt Per 100 RPM | Max. RPM     |            | Maximum Continuous Torque (Nm) | Peak Overload Torque (Nm) | ② Weight (kg) | ② WR <sup>2</sup> (kgm <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|---------------------------|--------------|------------|--------------------------------|---------------------------|---------------|---------------------------------------|-----------------------|
|               | Service Factor 1.0        | Not Balanced | ③ Balanced |                                |                           |               |                                       |                       |
| 125           | 2.8                       | 4,600        | 7,200      | 263                            | 526                       | 3.0           | 0.0035                                | ±0.91                 |
| 162           | 5.2                       | 4,200        | 7,000      | 492                            | 984                       | 4.4           | 0.0070                                | ±0.91                 |
| 200           | 10.0                      | 3,800        | 6,300      | 958                            | 1,917                     | 7.3           | 0.0190                                | ±0.91                 |
| 225           | 12.7                      | 3,700        | 6,000      | 1,208                          | 2,416                     | 8.2           | 0.0234                                | ±0.91                 |
| 262           | 20.7                      | 3,600        | 5,500      | 1,976                          | 3,951                     | 14.1          | 0.0524                                | ±1.09                 |
| 312           | 28.7                      | 3,000        | 5,000      | 2,743                          | 5,487                     | 21.5          | 0.117                                 | ±1.29                 |
| 350           | 40.3                      | 2,800        | 4,500      | 3,850                          | 7,699                     | 31.0          | 0.207                                 | ±1.42                 |
| 375           | 60.4                      | 2,500        | 4,000      | 5,769                          | 11,538                    | 42.9          | 0.363                                 | ±1.57                 |
| 425           | 85.5                      | 2,300        | 3,700      | 8,162                          | 16,324                    | 56.8          | 0.562                                 | ±1.70                 |
| 450           | 97.2                      | 2,200        | 3,400      | 9,280                          | 18,559                    | 74.9          | 0.849                                 | ±1.82                 |
| 500           | 147                       | 2,000        | 3,300      | 13,999                         | 27,997                    | 109           | 1.586                                 | ±2.02                 |
| 550           | 254                       | 1,900        | 2,800      | 24,272                         | 48,544                    | 158           | 2.870                                 | ±2.33                 |
| 600           | 318                       | 1,800        | 2,500      | 30,368                         | 60,736                    | 217           | 4.828                                 | ±2.59                 |
| 700           | 409                       | 1,700        | 2500       | 39,061                         | 78,121                    | 324           | 9.334                                 | ±2.92                 |
| 750           | 552                       | 1,550        | 2,200      | 52,721                         | 105,441                   | 402           | 13.489                                | ±3.17                 |
| 800           | 686                       | 1,450        | 2,100      | 65,478                         | 130,955                   | 499           | 19.751                                | ±3.45                 |
| 850           | 838                       | 1,350        | 1,950      | 80,041                         | 160,081                   | 663           | 30.138                                | ±3.65                 |
| 925           | 1120                      | 1,300        | 1,850      | 106,909                        | 213,818                   | 890           | 47.401                                | ±3.96                 |
| 1000          | 1537                      | 1,200        | 1,750      | 146,760                        | 293,520                   | 1,108         | 72.272                                | ±4.36                 |

For larger sizes, consult Rexnord.

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modifications or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> at maximum bore.

③ For higher speeds, consult Rexnord.

**NOTE:** Dimensions subject to change. Certified dimensions of ordered material furnished on request.

(Catalog #2000M) 9

# Rexnord Thomas Flexible Disc Couplings

## Close-Coupled Types DBZ, DBZ-A, DBZ-B

The standard DBZ coupling has two hubs inverted inside the disc pack and is used where overall shaft to shaft spacing is minimal.

DBZ style has both hubs with inverted orientation.

DBZ-A style has one hub extended to permit taper boring.

DBZ-B style has both hubs extended to allow for greater spacing where required.

## Construction

Hubs and Center Assembly: Carbon steel

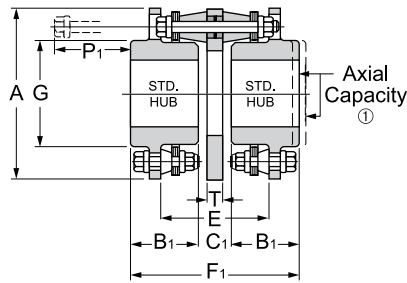
Bolts: Alloy steel

Disc Packs: Tomaloy

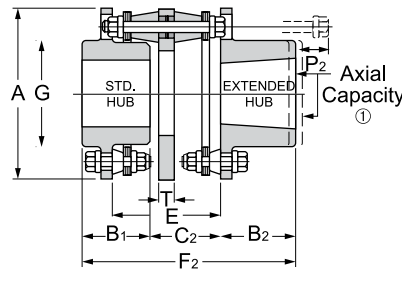
Coatings Available: Consult Rexnord

Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

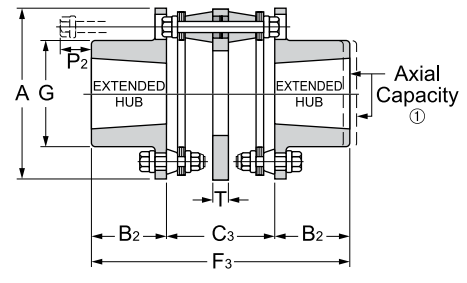
Misalignment: 1/2° per disc pack



DBZ



DBZ-A  
(one standard and one extended hub)\*



DBZ-B  
(two extended hubs)\*

## General Dimensions (mm)

| Coupling Size | Standard Hub Max. Bore | Extended Hub Max. Bore | A   | B <sub>1</sub> | B <sub>2</sub> | C <sub>1</sub> | C <sub>2</sub> | C <sub>3</sub> | E     | F <sub>1</sub> | F <sub>2</sub> | F <sub>3</sub> | G   | P <sub>1</sub> | P <sub>2</sub> | T    |
|---------------|------------------------|------------------------|-----|----------------|----------------|----------------|----------------|----------------|-------|----------------|----------------|----------------|-----|----------------|----------------|------|
| 50            | 15                     | 15                     | 51  | 22             | 22             | 8.1            | 21.3           | 34.5           | 34.5  | 52.8           | 66.0           | 79.2           | 25  | 32             | 20             | 4.8  |
| 62            | 17                     | 17                     | 62  | 28             | 28             | 9.7            | 26.7           | 43.7           | 43.7  | 65.0           | 82.0           | 99.1           | 30  | 40             | 27             | 6.4  |
| 75            | 20                     | 20                     | 68  | 28             | 28             | 9.4            | 26.9           | 44.5           | 44.5  | 66.3           | 83.8           | 101.3          | 37  | 40             | 27             | 6.4  |
| 101           | 27                     | 28                     | 82  | 35             | 35             | 17.5           | 35.3           | 52.8           | 52.8  | 87.6           | 105.4          | 122.9          | 43  | 43             | 25             | 7.9  |
| 126           | 35                     | 35                     | 98  | 38             | 41             | 24.4           | 43.2           | 62.2           | 62.2  | 100.6          | 122.4          | 144.5          | 52  | 51             | 29             | 10.4 |
| 163           | 50                     | 50                     | 116 | 43             | 48             | 24.1           | 43.2           | 62.2           | 62.2  | 110.0          | 133.9          | 157.7          | 70  | 46             | 22             | 10.4 |
| 201           | 55                     | 58                     | 136 | 49             | 54             | 24.4           | 49.8           | 75.2           | 75.2  | 122.9          | 152.9          | 182.9          | 83  | 59             | 29             | 14.2 |
| 226           | 64                     | 70                     | 154 | 60             | 67             | 31.0           | 64.3           | 97.5           | 97.5  | 151.9          | 191.3          | 230.6          | 96  | 68             | 29             | 16.8 |
| 263           | 78                     | 81                     | 178 | 70             | 76             | 33.3           | 71.4           | 109.5          | 109.5 | 173.0          | 217.4          | 261.9          | 113 | 76             | 32             | 19.1 |
| 301           | 84                     | 95                     | 203 | 79             | 87             | 38.1           | 81.0           | 124.0          | 124.0 | 196.6          | 247.7          | 298.7          | 129 | 90             | 40             | 21.3 |
| 351           | 97                     | 110                    | 238 | 94             | 103            | 45.7           | 98.0           | 150.4          | 150.4 | 233.2          | 294.9          | 356.6          | 148 | 114            | 52             | 26.9 |
| 401           | 110                    | 120                    | 272 | 106            | 117            | 49.3           | 109.7          | 170.2          | 170.2 | 262.1          | 333.5          | 404.9          | 168 | 130            | 59             | 30.2 |
| 451           | 130                    | 130                    | 308 | 121            | 133            | 53.8           | 119.9          | 184.9          | 184.9 | 296.2          | 373.9          | 451.6          | 187 | 138            | 60             | 34.0 |

| Coupling Size | Max. Kilowatts Per 100 RPM | Max. RPM     |          | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | ② Weight (kg) |       |       | ② WR <sup>2</sup> (kg-m <sup>2</sup> ) |        |        | ① Axial Capacity (mm) |
|---------------|----------------------------|--------------|----------|-----------------------------|---------------------------|---------------|-------|-------|----------------------------------------|--------|--------|-----------------------|
|               | Service Factor 1.0         | Not Balanced | Balanced |                             |                           | DBZ           | DBZ-A | DBZ-B | DBZ                                    | DBZ-A  | DBZ-B  |                       |
| 50            | 0.2                        | 6,000        | 9,000    | 16                          | 25                        | 0.3           | 0.3   | 0.3   | 0.0001                                 | 0.0001 | 0.0001 | ±0.58                 |
| 62            | 0.3                        | 6,000        | 8,200    | 28                          | 42                        | 0.7           | 0.7   | 0.7   | 0.0002                                 | 0.0002 | 0.0002 | ±0.71                 |
| 75            | 0.4                        | 6,000        | 7,800    | 40                          | 60                        | 0.9           | 0.9   | 0.9   | 0.0004                                 | 0.0004 | 0.0004 | ±0.81                 |
| 101           | 0.8                        | 6,000        | 7,100    | 78                          | 118                       | 1.5           | 1.5   | 1.5   | 0.0013                                 | 0.0013 | 0.0013 | ±0.96                 |
| 126           | 1.5                        | 5,500        | 6,500    | 142                         | 215                       | 2.5           | 2.5   | 2.6   | 0.0029                                 | 0.0030 | 0.0030 | ±1.16                 |
| 163           | 2.0                        | 5,000        | 6,000    | 192                         | 294                       | 3.8           | 3.9   | 4.0   | 0.006                                  | 0.006  | 0.006  | ±1.44                 |
| 201           | 3.6                        | 4,600        | 5,500    | 341                         | 508                       | 6.5           | 6.5   | 7.0   | 0.016                                  | 0.016  | 0.016  | ±1.70                 |
| 226           | 6.5                        | 4,100        | 5,200    | 621                         | 938                       | 9.5           | 10.0  | 10.4  | 0.028                                  | 0.028  | 0.031  | ±1.93                 |
| 263           | 10.2                       | 3,700        | 4,800    | 972                         | 1458                      | 15.0          | 15.4  | 15.9  | 0.058                                  | 0.061  | 0.061  | ±2.26                 |
| 301           | 15.3                       | 3,300        | 4,500    | 1458                        | 2192                      | 22.7          | 23.6  | 24.5  | 0.107                                  | 0.110  | 0.113  | ±2.59                 |
| 351           | 26.7                       | 2,900        | 4,100    | 2553                        | 3830                      | 37.7          | 39.5  | 40.9  | 0.268                                  | 0.274  | 0.282  | ±2.99                 |
| 401           | 39.3                       | 2,700        | 3,900    | 3751                        | 5627                      | 56.8          | 56.8  | 61.3  | 0.499                                  | 0.500  | 0.500  | ±3.45                 |
| 451           | 51.4                       | 2,600        | 3,600    | 4904                        | 7355                      | 77.2          | 81.7  | 81.7  | 0.927                                  | 0.928  | 0.957  | ±3.91                 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modifications or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> at maximum bore.

\* Extended hubs can be supplied with straight bores or taper bores.

[illegible]

# Rexnord Thomas Flexible Disc Couplings

## Thomas XTSR52 Spacer Type Series Coupling with Optional Adapter

Optimized design and construction include stainless disc packs and corrosion protection; additional modifications may be made to reduce coupling weight, or special mountings to make it an economical alternative to high performance styles. Common engineered solutions are available such as torque overload protection, electrically insulated, spark resistant, and alloy construction. An optional one size larger LH hub, two sizes larger XL hub, or three sizes larger XXL hub is available with adapter to increase bore capacity. The XTSR52 couplings are an all-purpose high-speed, high-torque coupling used where minimum coupling weight is desirable. The XTSR52 couplings are API 610, ISO 10441, ISO 14691 compliant, and ATEX II 2GD c T6 certified. Common applications include motor and turbine driven pumps, compressors, fans, synchronized rollers, wire feeders and blowers.

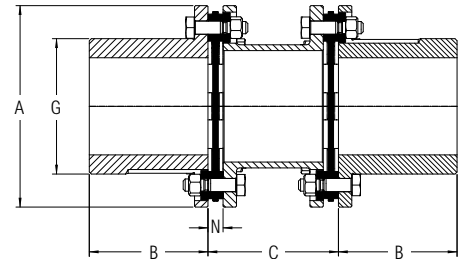
### Construction

Hubs and Center assembly: Carbon steel

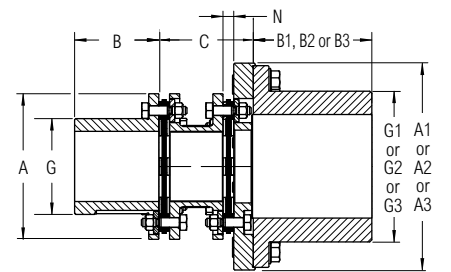
Bolts: Alloy steel

Disc Packs: Stainless steel. Max misalignment is 1/2" per disc pack for sizes 726-996 and 1/3" per disc pack for sizes 1088-5258.

Coatings Available: Manganese Phosphate provided as standard. Other coatings available upon request.



STANDARD HUB (WITHOUT ADAPTER)



WITH ADAPTER AND LARGE HUB

### General Coupling Data

| Size | Max. Cont. Torque (N•m)<br>⑤ | ③ Std Hub Max. Bore | ③ LH Hub Max. Bore | ③ XL Hub Max. Bore | ③ XXL Hub Max. Bore | Min. C (mm) | Min. C with Adapter (mm) | Max. C (mm) | Max. Speed (rpm) |          | ① Axial Capacity (mm) | N (mm) | ② WR <sup>2</sup> (kg•m <sup>2</sup> ) |
|------|------------------------------|---------------------|--------------------|--------------------|---------------------|-------------|--------------------------|-------------|------------------|----------|-----------------------|--------|----------------------------------------|
|      |                              |                     |                    |                    |                     |             |                          |             | ④ Not Balanced   | Balanced |                       |        |                                        |
| 726  | 297                          | 45                  | —                  | 55                 | 65                  | 82          | 95                       | 373         | 12,000           | 20,000   | ±1.3                  | 8.62   | 0.00192                                |
| 826  | 554                          | 50                  | 52                 | 65                 | 76                  | 88          | 103                      | 373         | 10,900           | 18,500   | ±1.5                  | 9.34   | 0.00449                                |
| 996  | 927                          | 60                  | 61                 | 76                 | 95                  | 98          | 117                      | 779         | 9,800            | 15,000   | ±1.8                  | 9.59   | 0.00955                                |
| 1088 | 2,190                        | 65                  | 76                 | 95                 | 110                 | 103         | 122                      | 781         | 9,000            | 14,000   | ±1.3                  | 10.36  | 0.0188                                 |
| 1298 | 3,550                        | 80                  | 90                 | 110                | 125                 | 116         | 139                      | 781         | 8,000            | 12,000   | ±1.6                  | 12.92  | 0.0444                                 |
| 1548 | 5,910                        | 95                  | 105                | 125                | 135                 | 128         | 155                      | 783         | 7,100            | 10,000   | ±1.8                  | 14.79  | 0.0985                                 |
| 1698 | 8,190                        | 105                 | 125                | 135                | 155                 | 152         | 184                      | 788         | 6,600            | 9,100    | ±2.0                  | 15.79  | 0.166                                  |
| 1928 | 11,100                       | 120                 | 135                | 155                | 175                 | 160         | 193                      | 792         | 6,100            | 8,500    | ±2.3                  | 17.08  | 0.283                                  |
| 2068 | 15,400                       | 130                 | 150                | 170                | 185                 | 176         | 215                      | 1302        | 5,800            | 7,800    | ±2.5                  | 18.42  | 0.430                                  |
| 2278 | 19,900                       | 140                 | 155                | 180                | 225                 | 213         | 253                      | 1304        | 5,500            | 7,100    | ±2.7                  | 19.17  | 0.711                                  |
| 2468 | 26,200                       | 150                 | 166                | 220                | 250                 | 222         | 265                      | 1307        | 5,200            | 6,500    | ±3.0                  | 20.49  | 1.04                                   |
| 2698 | 35,900                       | 165                 | 200                | 245                | 270                 | 238         | 286                      | 1308        | 4,800            | 6,000    | ±3.2                  | 23.46  | 1.62                                   |
| 2888 | 47,000                       | 175                 | 220                | 260                | 280                 | 270         | 322                      | 1311        | 4,600            | 5,700    | ±3.5                  | 25.18  | 2.51                                   |
| 3058 | 52,000                       | 185                 | 235                | 280                | 310                 | 270         | 322                      | 1317        | 4,400            | 5,400    | ±3.7                  | 25.18  | 3.24                                   |
| 3358 | 70,200                       | 215                 | 260                | 300                | 330                 | 302         | 361                      | 1320        | 4,200            | 4,700    | ±4.0                  | 27.34  | 5.19                                   |
| 3668 | 94,300                       | 225                 | 285                | 320                | 350                 | 321         | 383                      | 1320        | 3,900            | 4,400    | ±4.4                  | 30.38  | 8.53                                   |
| 3908 | 103,000                      | 240                 | 310                | 350                | 400                 | 321         | 384                      | 1325        | 3,800            | 4,100    | ±4.7                  | 30.38  | 11.0                                   |
| 4178 | 128,000                      | 255                 | 330                | 380                | 450                 | 343         | 413                      | 1331        | 3,600            | 3,900    | ±5.0                  | 32.43  | 15.4                                   |
| 4588 | 189,000                      | 280                 | 360                | 430                | 460                 | 498         | 578                      | 1026        | 3,400            | 3,600    | ±5.5                  | 35.95  | 26.6                                   |
| 4918 | 235,000                      | 300                 | 400                | 450                | —                   | 518         | 601                      | 1030        | 3,200            | 3,300    | ±5.9                  | 38.12  | 37.9                                   |
| 5258 | 283,000                      | 320                 | 430                | —                  | —                   | 540         | 630                      | 1037        | 3,100            | 3,100    | ±6.3                  | 40.29  | 52.4                                   |

### Example Selection:

1. Select coupling size 1088 for 2000 Nm torque and 65mm pump shaft diameter.
  2. Select XXL 2nd hub for 100mm motor shaft diameter.
  3. Therefore, coupling is a 1088 XTSR52 XXL.
- A 1088 XTSR52 XXL has one hub with 65mm max bore and one hub with 110mm max bore.

| Size | Std A (mm) | LH A1 (mm) | XL A2 (mm) | XXL A3 (mm) | Std B (mm) | LH B1 (mm) | XL B2 (mm) | XXL B3 (mm) | Std G (mm) | LH G1 (mm) | XL G2 (mm) | XXL G3 (mm) | ② Std Weight (kg) | Weight Change Per mm of "C" (kg/mm) |
|------|------------|------------|------------|-------------|------------|------------|------------|-------------|------------|------------|------------|-------------|-------------------|-------------------------------------|
| 726  | 95         | —          | 108        | 129         | 30         | —          | 42         | 51          | 63.8       | —          | 73         | 86          | 1.77              | 0.00363                             |
| 826  | 108        | 108        | 129        | 140         | 50         | 42         | 51         | 82          | 71.8       | 73         | 86         | 104         | 3.34              | 0.00562                             |
| 996  | 129        | 129        | 140        | 166         | 50         | 51         | 82         | 95          | 84.4       | 86         | 104        | 123         | 4.78              | 0.00510                             |
| 1088 | 140        | 140        | 166        | 199         | 81         | 82         | 95         | 114         | 92.1       | 104        | 123        | 145         | 8.34              | 0.00983                             |
| 1298 | 166        | 166        | 199        | 220         | 97         | 95         | 114        | 122         | 110.6      | 123        | 145        | 165         | 13.6              | 0.0123                              |
| 1548 | 197        | 199        | 220        | 245         | 97         | 114        | 122        | 135         | 132.4      | 145        | 165        | 182         | 20.8              | 0.0176                              |
| 1698 | 218        | 220        | 245        | 264         | 110        | 122        | 135        | 155         | 146.9      | 165        | 182        | 200         | 29.0              | 0.0219                              |
| 1928 | 245        | 245        | 264        | 291         | 110        | 135        | 155        | 167         | 167.7      | 182        | 200        | 220         | 38.2              | 0.0268                              |
| 2068 | 264        | 264        | 291        | 313         | 125        | 155        | 167        | 190         | 178.6      | 200        | 220        | 236         | 49.9              | 0.0339                              |
| 2278 | 291        | 291        | 313        | 345         | 145        | 167        | 190        | 185         | 196.7      | 220        | 236        | 280         | 69.7              | 0.0395                              |
| 2468 | 313        | 313        | 345        | 381         | 150        | 190        | 185        | 200         | 213.5      | 236        | 280        | 308         | 87.3              | 0.0475                              |
| 2698 | 343        | 345        | 381        | 405         | 150        | 185        | 200        | 191         | 232.1      | 280        | 308        | 332         | 111               | 0.0606                              |
| 2888 | 371        | 381        | 405        | 437         | 175        | 200        | 191        | 225         | 246.0      | 308        | 332        | 355         | 150               | 0.0777                              |
| 3058 | 395        | 405        | 437        | 482         | 185        | 191        | 225        | 257         | 263.0      | 332        | 355        | 398         | 172               | 0.0771                              |
| 3358 | 427        | 437        | 482        | 503         | 245        | 225        | 257        | 249         | 288.1      | 355        | 398        | 419         | 232               | 0.0958                              |
| 3668 | 466        | 482        | 503        | 529         | 281        | 257        | 249        | 266         | 315.2      | 398        | 419        | 444         | 329               | 0.117                               |
| 3908 | 490        | 503        | 529        | 608         | 303        | 249        | 266        | 300         | 339.2      | 419        | 444        | 504         | 381               | 0.115                               |
| 4178 | 524        | 529        | 608        | 648         | 322        | 266        | 300        | 320         | 361.1      | 444        | 504        | 545         | 468               | 0.134                               |
| 4588 | 587        | 608        | 648        | 678         | 350        | 300        | 320        | 346         | 392.1      | 504        | 545        | 575         | 661               | 0.188                               |
| 4918 | 630        | 648        | 678        | —           | 375        | 320        | 346        | —           | 420.3      | 545        | 575        | —           | 817               | 0.222                               |
| 5258 | 672        | 678        | —          | —           | 401        | 346        | —          | —           | 449.5      | 575        | —          | —           | 991               | 0.248                               |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> of couplings without adapters at maximum bore and minimum "C" dimension listed.

③ Consult Rexnord for minimum rough bore sizes.

④ XTSR52 couplings meet AGMA Class 9 balance requirements as manufactured with interference fit bore and close fit keyway. If clearance fit and/or setscrews are required, consult Rexnord.

⑤ Peak Overload Torque (N•m) is twice the Maximum Continuous Torque.

# Rexnord Thomas Flexible Disc Couplings

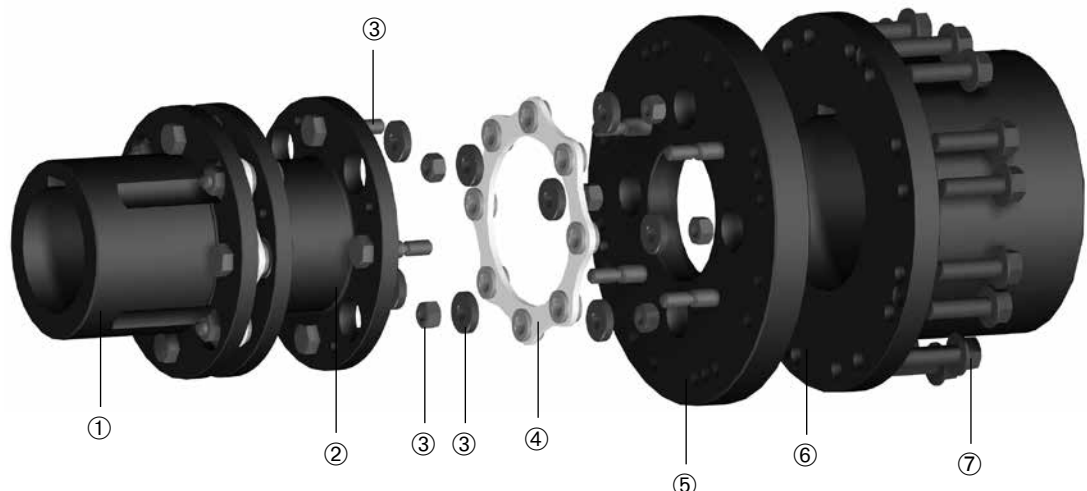
## Thomas XTSR52 Spacer Type Series Coupling with Optional Adapter

### Component Part Numbers

| Size | ①<br>Standard Hub | ⑥<br>LH Hub + Cap Screw Kit | ⑥<br>XL Hub + Cap Screw Kit | ⑥<br>XXL Hub + Cap Screw Kit | Adapters ⑤                                     |             |              | Inch Standard C Dimensions |          |          |          |          |          | Metric Standard C Dimensions |          |          |          |
|------|-------------------|-----------------------------|-----------------------------|------------------------------|------------------------------------------------|-------------|--------------|----------------------------|----------|----------|----------|----------|----------|------------------------------|----------|----------|----------|
|      |                   |                             |                             |                              | LH Part No.                                    | XL Part No. | XXL Part No. | 3.5"                       | 4.375"   | 5.0"     | 7.5"     | 8.0"     | 9.0"     | 100mm                        | 140mm    | 180mm    | 250mm    |
|      |                   |                             |                             |                              | ② Standard Center Member When Adapter Not Used |             |              |                            |          |          |          |          |          |                              |          |          |          |
| 726  | 10001191          | 10001611                    | 10001612                    | 10001613                     | 10000241                                       | 10001161    | 10002621     | 10000921                   | —        | 10000922 | —        | —        | —        | 10000831                     | 10000910 | —        | —        |
| 826  | 10001192          | 10001612                    | 10001613                    | 10001614                     | 10000242                                       | 10001162    | 10002622     | 10000923                   | —        | 10000924 | —        | —        | —        | 10000832                     | 10000911 | —        | —        |
| 996  | 10001193          | 10001613                    | 10001614                    | 10001615                     | 10000243                                       | 10001163    | 10002623     | —                          | 10000925 | 10000926 | —        | —        | —        | 10000912                     | 10000833 | 10000913 | —        |
| 1088 | 10001194          | 10001614                    | 10001615                    | 10001616                     | 10000244                                       | 10001164    | 10002624     | —                          | 10000927 | 10000928 | —        | —        | —        | —                            | 10000834 | 10000914 | —        |
| 1298 | 10001195          | 10001615                    | 10001616                    | 10001617                     | 10000245                                       | 10001165    | 10002625     | —                          | 10000929 | 10000930 | —        | —        | —        | —                            | 10000835 | 10000915 | —        |
| 1548 | 10001196          | 10001616                    | 10001617                    | 10001618                     | 10000246                                       | 10001166    | 10002626     | —                          | —        | 10000931 | 10000932 | 10000933 | —        | —                            | 10000916 | 10000836 | 10000917 |
| 1698 | 10001197          | 10001617                    | 10001618                    | 10001619                     | 10000247                                       | 10001167    | 10002627     | —                          | —        | —        | 10000934 | 10000935 | —        | —                            | —        | 10000837 | 10000918 |
| 1928 | 10001198          | 10001618                    | 10001619                    | 10001620                     | 10000248                                       | 10001168    | 10002628     | —                          | —        | —        | 10000936 | 10000937 | 10000938 | —                            | —        | 10000838 | 10000919 |
| 2068 | 10001199          | 10001619                    | 10001620                    | 10001621                     | 10000249                                       | 10001169    | 10002629     | —                          | —        | —        | 10000939 | 10000940 | 10000941 | —                            | —        | 10000920 | 10000839 |
| 2278 | 10001200          | 10001620                    | 10001621                    | 10001622                     | 10000250                                       | 10001170    | 10002630     | —                          | —        | —        | —        | 10000942 | 10000943 | —                            | —        | —        | 10000840 |
| 2468 | 10001201          | 10001621                    | 10001622                    | 10001623                     | 10000251                                       | 10001171    | 10002631     | —                          | —        | —        | —        | —        | 10000944 | —                            | —        | —        | 10000841 |
| 2698 | 10001202          | 10001622                    | 10001623                    | 10001624                     | 10000252                                       | 10001172    | 10002632     | —                          | —        | —        | —        | —        | 10000945 | —                            | —        | —        | 10000842 |
| 2888 | 10001203          | 10001623                    | 10001624                    | 10001631                     | 10000253                                       | 10001173    | 10002633     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | 10000843 |
| 3058 | 10001204          | 10001624                    | 10001631                    | 10001625                     | 10000254                                       | 10001174    | 10002634     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | 10000844 |
| 3358 | 10001205          | 10001631                    | 10001625                    | 10001626                     | 10000255                                       | 10001175    | 10002635     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | 10000845 |
| 3668 | 10001206          | 10001625                    | 10001626                    | 10001627                     | 10000256                                       | 10001176    | 10002636     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 3908 | 10001207          | 10001626                    | 10001627                    | 10001628                     | 10000257                                       | 10001177    | 10002637     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 4178 | 10001208          | 10001627                    | 10001628                    | 10001629                     | 10000258                                       | 10001178    | 10002638     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 4588 | 10001209          | 10001628                    | 10001629                    | 10001630                     | 10000259                                       | 10001179    | 10002639     | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 4918 | 10001210          | 10001629                    | 10001630                    | —                            | 10000260                                       | 10001180    | —            | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 5258 | 10001211          | 10001630                    | —                           | —                            | 10000261                                       | —           | —            | —                          | —        | —        | —        | —        | —        | —                            | —        | —        | —        |

| Size | Inch Standard C Dimensions When Adapter Used             |          |          |          |          | Metric Standard C Dimensions |          |          |          | ③<br>Disc Pack<br>Hardware<br>Kit | ④<br>Disc<br>Pack |
|------|----------------------------------------------------------|----------|----------|----------|----------|------------------------------|----------|----------|----------|-----------------------------------|-------------------|
|      | 4.375"                                                   | 5.0"     | 7.5"     | 8.0"     | 9.0"     | 100mm                        | 140mm    | 180mm    | 250mm    |                                   |                   |
|      | ② Standard Center Member When Adapter Used (LH, XL, XXL) |          |          |          |          |                              |          |          |          |                                   |                   |
| 726  | —                                                        | 10447053 | —        | —        | —        | 10399144                     | 10447054 | —        | —        | 10001561                          | 10000091          |
| 826  | 10447077                                                 | 10447078 | —        | —        | —        | —                            | 10397202 | —        | —        | 10001562                          | 10000092          |
| 996  | —                                                        | 10447082 | —        | —        | —        | —                            | 10399148 | 10397204 | —        | 10001563                          | 10000093          |
| 1088 | —                                                        | 10404466 | —        | —        | —        | —                            | 10399150 | 10397205 | —        | 10001564                          | 10000094          |
| 1298 | —                                                        | —        | —        | —        | —        | —                            | 10447083 | 10397206 | —        | 10001565                          | 10000095          |
| 1548 | —                                                        | —        | 10447085 | 10447086 | —        | —                            | —        | 10399155 | 10447084 | 10001566                          | 10000096          |
| 1698 | —                                                        | —        | 10447087 | 10447088 | —        | —                            | —        | —        | 10397207 | 10001567                          | 10000097          |
| 1928 | —                                                        | —        | —        | 10447089 | 10447090 | —                            | —        | —        | 10397208 | 10001568                          | 10000098          |
| 2068 | —                                                        | —        | —        | —        | 10447043 | —                            | —        | —        | 10397211 | 10001569                          | 10000099          |
| 2278 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001570                          | 10000100          |
| 2468 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001571                          | 10000101          |
| 2698 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001572                          | 10000102          |
| 2888 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001573                          | 10000103          |
| 3058 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001574                          | 10000104          |
| 3358 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001575                          | 10000105          |
| 3668 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001576                          | 10000106          |
| 3908 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001577                          | 10000107          |
| 4178 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001578                          | 10000108          |
| 4588 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001579                          | 10000109          |
| 4918 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001580                          | 10000110          |
| 5258 | —                                                        | —        | —        | —        | —        | —                            | —        | —        | —        | 10001581                          | 10000111          |

| Size | ⑦<br>Adapter-Hub Capscrew Kit |
|------|-------------------------------|
| 726  | 10001591                      |
| 826  | 10001591                      |
| 996  | 10001592                      |
| 1088 | 10001593                      |
| 1298 | 10001594                      |
| 1548 | 10001595                      |
| 1698 | 10001596                      |
| 1928 | 10001597                      |
| 2068 | 10001598                      |
| 2278 | 10001599                      |
| 2468 | 10001600                      |
| 2698 | 10001601                      |
| 2888 | 10001602                      |
| 3058 | 10001602                      |
| 3358 | 10001603                      |
| 3668 | 10001604                      |
| 3908 | 10001605                      |
| 4178 | 10001605                      |
| 4588 | 10001606                      |
| 4918 | 10001607                      |
| 5258 | 10001608                      |



**NOTE:** Dimensions subject to change. Certified dimensions of ordered material furnished on request.

# Rexnord Thomas Flexible Disc Couplings

## Thomas XTSR71 Spacer Type Series Coupling with Adapter

The optimized 3-piece design allows for the smallest possible package for an application. The hubs are pilot fitted to the factory assembled center member. The design allows for repeatable installations without special tooling. Additional modifications may be made to reduce coupling weight, or special mountings to make it an economical option on various critical and high speed applications. Common engineered solutions are available such as torque overload protection, electrically insulated, spark resistant and alloy construction.

The XTSR71 couplings are designed for spacer type coupling critical applications including API applications. The XTSR71 couplings are API 610 and ISO 14691 compliant, API 671 (ISO 10441) when specified, and ATEX II 2GD c T6 certified. Common applications include motor and turbine driven pumps, compressors, fans, synchronized rollers, wire feeders and blowers.

## Construction

Hubs and Center assembly: Carbon steel

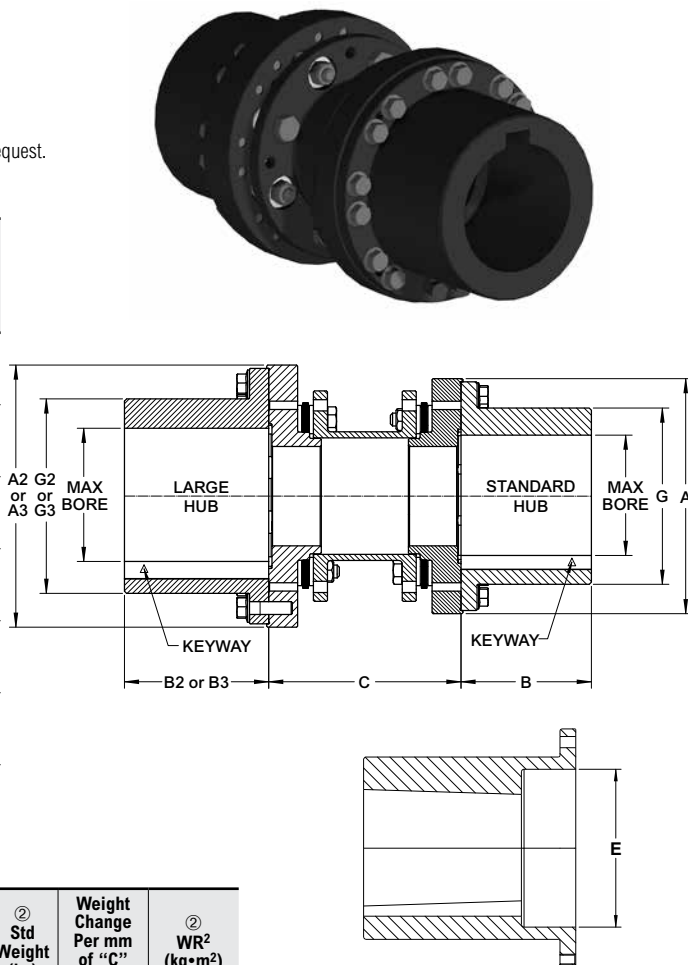
Bolts: Alloy steel

Disc Packs: Stainless steel. Max misalignment is 1/2° per disc pack for sizes 726 to 996 and 1/3° per disc pack for sizes 1088 to 5258.

Coatings Available: Manganese Phosphate provided as standard. Other coatings available upon request.

## General Coupling Data

| Size | Max. Cont. Torque (N·m) ⑤ | ③ Std Hub Max. Bore | ③ XL Hub Max. Bore | ③ XXL Hub Max. Bore | Min. C (mm) | Max. C (mm) | Max. Speed (rpm) |          | ① Axial Capacity (mm) | Max Counter Bore E (mm) |
|------|---------------------------|---------------------|--------------------|---------------------|-------------|-------------|------------------|----------|-----------------------|-------------------------|
|      |                           |                     |                    |                     |             |             | ④ Not Balanced   | Balanced |                       |                         |
| 726  | 297                       | 42                  | 55                 | 65                  | 65          | 398         | 12,000           | 20,000   | ±1.3                  | 52                      |
| 826  | 554                       | 52                  | 65                 | 76                  | 77          | 403         | 10,900           | 18,500   | ±1.5                  | 65                      |
| 996  | 927                       | 61                  | 76                 | 95                  | 92          | 817         | 9,800            | 15,000   | ±1.8                  | 76                      |
| 1088 | 2,190                     | 76                  | 95                 | 110                 | 96          | 818         | 9,000            | 14,000   | ±1.3                  | 88                      |
| 1298 | 3,550                     | 90                  | 110                | 125                 | 115         | 827         | 8,000            | 12,000   | ±1.6                  | 104                     |
| 1548 | 5,910                     | 105                 | 125                | 135                 | 135         | 837         | 7,100            | 10,000   | ±1.8                  | 123                     |
| 1698 | 8,190                     | 125                 | 135                | 155                 | 151         | 850         | 6,600            | 9,100    | ±2.0                  | 142                     |
| 1928 | 11,100                    | 135                 | 155                | 175                 | 161         | 857         | 6,100            | 8,500    | ±2.3                  | 156                     |
| 2068 | 15,400                    | 150                 | 170                | 185                 | 187         | 1380        | 5,800            | 7,800    | ±2.5                  | 170                     |
| 2278 | 19,900                    | 155                 | 180                | 225                 | 196         | 1385        | 5,500            | 7,100    | ±2.7                  | 188                     |
| 2468 | 26,200                    | 166                 | 220                | 250                 | 209         | 1393        | 5,200            | 6,500    | ±3.0                  | 199                     |
| 2698 | 35,900                    | 200                 | 245                | 270                 | 236         | 1405        | 4,800            | 6,000    | ±3.2                  | 246                     |
| 2888 | 47,000                    | 220                 | 260                | 280                 | 255         | 1415        | 4,600            | 5,700    | ±3.5                  | 271                     |
| 3058 | 52,000                    | 235                 | 280                | 310                 | 257         | 1422        | 4,400            | 5,400    | ±3.7                  | 298                     |
| 3358 | 70,200                    | 260                 | 300                | 330                 | 287         | 1439        | 4,200            | 4,700    | ±4.0                  | 314                     |
| 3668 | 94,300                    | 285                 | 320                | 350                 | 310         | 1446        | 3,900            | 4,400    | ±4.4                  | 354                     |
| 3908 | 103,000                   | 310                 | 350                | 400                 | 311         | 1451        | 3,800            | 4,100    | ±4.7                  | 377                     |
| 4178 | 128,000                   | 330                 | 380                | 450                 | 340         | 1471        | 3,600            | 3,900    | ±5.0                  | 397                     |
| 4588 | 189,000                   | 360                 | 430                | 460                 | 386         | 1186        | 3,400            | 3,600    | ±5.5                  | 450                     |
| 4918 | 235,000                   | 400                 | 450                | —                   | 408         | 1198        | 3,200            | 3,300    | ±5.9                  | 487                     |
| 5258 | 283,000                   | 430                 | —                  | —                   | 438         | 1218        | 3,100            | 3,100    | ±6.3                  | 512                     |



| Size | Std A (mm) | XL A2 (mm) | XXL A3 (mm) | Std B (mm) | XL B2 (mm) | XXL B3 (mm) | Std G (mm) | XL G2 (mm) | XXL G3 (mm) | ② Std Weight (kg) | Weight Change Per mm of "C" (kg/mm) | ② WR <sup>2</sup> (kg·m <sup>2</sup> ) |
|------|------------|------------|-------------|------------|------------|-------------|------------|------------|-------------|-------------------|-------------------------------------|----------------------------------------|
| 726  | 95         | 108        | 129         | 35         | 42         | 51          | 59.0       | 73         | 86          | 3.1               | 0.00311                             | 0.00364                                |
| 826  | 108        | 129        | 140         | 42         | 51         | 82          | 73.0       | 86         | 104         | 5.0               | 0.00535                             | 0.00770                                |
| 996  | 129        | 140        | 166         | 51         | 82         | 95          | 86.0       | 104        | 123         | 8.4               | 0.00503                             | 0.01880                                |
| 1088 | 140        | 166        | 199         | 82         | 95         | 114         | 104.0      | 123        | 145         | 12.5              | 0.00966                             | 0.0336                                 |
| 1298 | 166        | 199        | 220         | 95         | 114        | 122         | 123.0      | 145        | 165         | 20.6              | 0.0118                              | 0.0796                                 |
| 1548 | 199        | 220        | 245         | 114        | 122        | 135         | 145.0      | 165        | 182         | 34.6              | 0.0161                              | 0.1890                                 |
| 1698 | 220        | 245        | 264         | 122        | 135        | 155         | 165.0      | 182        | 200         | 47.0              | 0.0214                              | 0.318                                  |
| 1928 | 245        | 264        | 291         | 135        | 155        | 167         | 182.0      | 200        | 220         | 62.7              | 0.0251                              | 0.533                                  |
| 2068 | 264        | 291        | 313         | 155        | 167        | 190         | 200.0      | 220        | 236         | 84.9              | 0.0325                              | 0.840                                  |
| 2278 | 291        | 313        | 345         | 167        | 190        | 185         | 220.0      | 236        | 280         | 110               | 0.0378                              | 1.300                                  |
| 2468 | 313        | 345        | 381         | 190        | 185        | 200         | 236.0      | 280        | 308         | 143               | 0.0451                              | 1.94                                   |
| 2698 | 345        | 381        | 405         | 185        | 200        | 191         | 280.0      | 308        | 332         | 184               | 0.0572                              | 3.30                                   |
| 2888 | 381        | 405        | 437         | 200        | 191        | 225         | 308.0      | 332        | 355         | 257               | 0.0716                              | 5.35                                   |
| 3058 | 405        | 437        | 482         | 191        | 225        | 257         | 332.0      | 355        | 398         | 274               | 0.0723                              | 6.80                                   |
| 3358 | 437        | 482        | 503         | 225        | 257        | 249         | 355.0      | 398        | 419         | 366               | 0.0907                              | 10.40                                  |
| 3668 | 482        | 503        | 529         | 257        | 249        | 266         | 398.0      | 419        | 444         | 521               | 0.111                               | 17.60                                  |
| 3908 | 503        | 529        | 608         | 249        | 266        | 300         | 419.0      | 444        | 504         | 536               | 0.111                               | 20.9                                   |
| 4178 | 529        | 608        | 648         | 266        | 300        | 320         | 444.0      | 504        | 545         | 648               | 0.130                               | 28.1                                   |
| 4588 | 608        | 648        | 678         | 300        | 320        | 346         | 504.0      | 545        | 575         | 993               | 0.179                               | 54.2                                   |
| 4918 | 648        | 678        | —           | 320        | 346        | —           | 545.0      | 575        | —           | 1200              | 0.210                               | 76.0                                   |
| 5258 | 678        | —          | —           | 346        | —          | —           | 575.0      | —          | —           | 1420              | 0.235                               | 99.9                                   |

## Example Selection:

1. Select coupling size 1088 for 2000N·m torque and 65mm pump shaft diameter.
2. Select XXL 2nd hub for 100mm motor shaft diameter.
3. Therefore, coupling is a 1088 XTSR71 XXL.

A 1088 XTSR71 XXL has one hub with 76mm max bore and one hub with 110mm max bore.

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> of couplings with standard adapters at maximum bore and minimum "C" dimension listed.

③ Consult Rexnord for minimum rough bore sizes.

④ XTSR71 couplings meet AGMA Class 9 balance requirements as manufactured with interference fit bore and close fit keyway. If clearance fit and/or setscrews are required, consult Rexnord.

⑤ Peak Overload Torque (N·m) is twice the Maximum Continuous Torque.

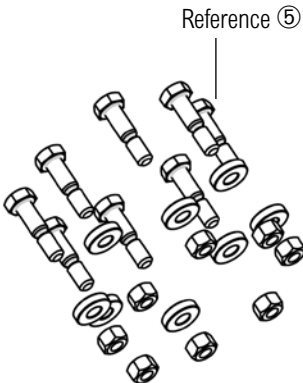
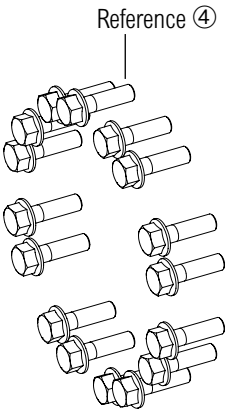
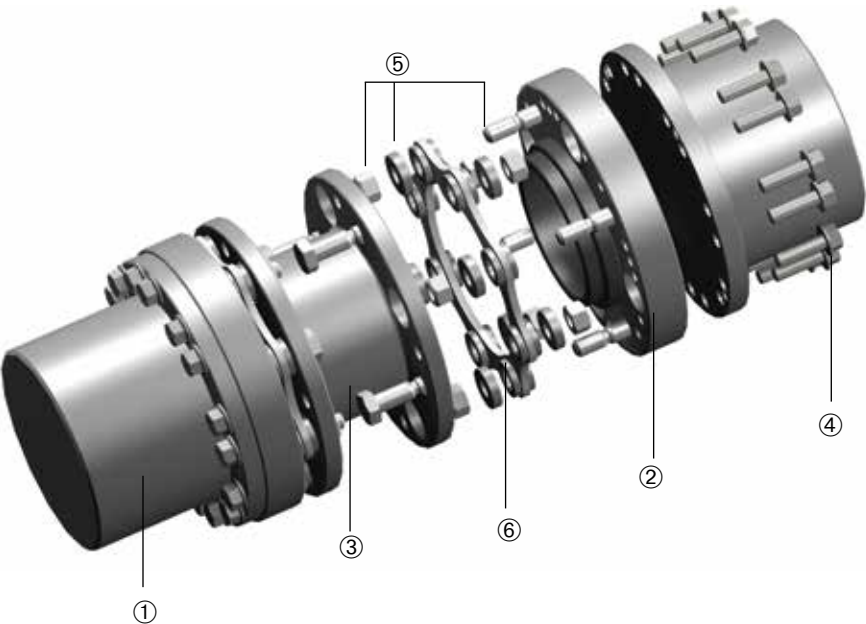
Rexnord Thomas Flexible Disc Couplings

Thomas XTSR71 Spacer Type Series Coupling with Adapters

Component Part Numbers

| Size | ①<br>Standard Hub<br>+ Cap<br>Screw<br>Kit | XL Hub<br>+ Cap<br>Screw<br>Kit | ②<br>Standard<br>Adapter | XL<br>Adapter | XXL<br>Adapter | Inch Standard C Dimensions            |          |          |          |          |          |          | Metric Standard C Dimensions |          |          |          |
|------|--------------------------------------------|---------------------------------|--------------------------|---------------|----------------|---------------------------------------|----------|----------|----------|----------|----------|----------|------------------------------|----------|----------|----------|
|      |                                            |                                 |                          |               |                | 3.5"                                  | 4.375"   | 5.0"     | 7.0"     | 7.5"     | 8.0"     | 9.0"     | 100mm                        | 140mm    | 180mm    | 250mm    |
|      |                                            |                                 |                          |               |                | ③ Standard Center Member STD, XL, XXL |          |          |          |          |          |          |                              |          |          |          |
| 726  | 10001611                                   | 10001612                        | 10001131                 | 10001781      | 10002805       | 10000871                              | 10000872 | 10000873 | —        | —        | —        | —        | 10000801                     | 10000860 | —        | —        |
| 826  | 10001612                                   | 10001613                        | 10001132                 | 10001782      | 10002806       | 10355817                              | 10000875 | 10000876 | —        | —        | —        | —        | 10000802                     | 10000861 | —        | —        |
| 996  | 10001613                                   | 10001614                        | 10001133                 | 10001783      | 10002807       | —                                     | 10000877 | 10000878 | 10000879 | —        | —        | —        | 10000862                     | 10000803 | 10000863 | —        |
| 1088 | 10001614                                   | 10001615                        | 10001134                 | 10001784      | 10002808       | —                                     | —        | 10000880 | 10000881 | —        | —        | —        | —                            | 10000804 | 10000864 | —        |
| 1298 | 10001615                                   | 10001616                        | 10001135                 | 10001785      | 10002809       | —                                     | —        | 10000882 | 10000883 | —        | —        | —        | —                            | 10000805 | 10000865 | —        |
| 1548 | 10001616                                   | 10001617                        | 10001136                 | 10001786      | 10002810       | —                                     | —        | —        | 10000885 | —        | —        | —        | —                            | 10000866 | 10000806 | 10000867 |
| 1698 | 10001617                                   | 10001618                        | 10001137                 | 10001787      | 10002811       | —                                     | —        | —        | 10000886 | —        | —        | —        | —                            | —        | 10000807 | 10000868 |
| 1928 | 10001618                                   | 10001619                        | 10001138                 | 10001788      | 10002812       | —                                     | —        | —        | 10000887 | 10000888 | 10000889 | —        | —                            | —        | 10000808 | 10000869 |
| 2068 | 10001619                                   | 10001620                        | 10001139                 | 10001789      | 10002813       | —                                     | —        | —        | —        | —        | 10000891 | —        | —                            | —        | —        | 10000809 |
| 2278 | 10001620                                   | 10001621                        | 10001140                 | 10001790      | 10002814       | —                                     | —        | —        | —        | —        | 10000892 | —        | —                            | —        | —        | 10000810 |
| 2468 | 10001621                                   | 10001622                        | 10001141                 | 10001791      | 10002815       | —                                     | —        | —        | —        | —        | —        | 10000893 | —                            | —        | —        | 10000811 |
| 2698 | 10001622                                   | 10001623                        | 10001142                 | 10001792      | 10002816       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | 10000812 |
| 2888 | 10001623                                   | 10001624                        | 10001143                 | 10001793      | 10002817       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 3058 | 10001624                                   | 10001631                        | 10001144                 | 10001794      | 10002818       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 3358 | 10001631                                   | 10001625                        | 10001145                 | 10001795      | 10002819       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 3668 | 10001625                                   | 10001626                        | 10001146                 | 10001796      | 10002820       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 3908 | 10001626                                   | 10001627                        | 10001147                 | 10001797      | 10002821       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 4178 | 10001627                                   | 10001628                        | 10001148                 | 10001798      | 10002822       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 4588 | 10001628                                   | 10001629                        | 10001149                 | 10001799      | 10002823       | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 4918 | 10001629                                   | 10001630                        | 10001150                 | 10001800      | —              | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |
| 5258 | 10001630                                   | —                               | 10001151                 | —             | —              | —                                     | —        | —        | —        | —        | —        | —        | —                            | —        | —        | —        |

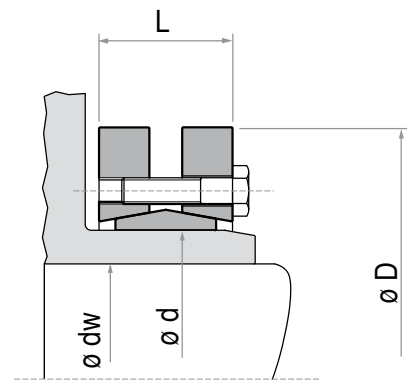
| Size | ④<br>Adapter Hub<br>Capscrew<br>Kit | ⑤<br>Disc Pack<br>Hardware<br>Kit | ⑥<br>Disc<br>Pack |
|------|-------------------------------------|-----------------------------------|-------------------|
| 726  | 10001591                            | 10001561                          | 10000091          |
| 826  | 10001591                            | 10001562                          | 10000092          |
| 996  | 10001592                            | 10001563                          | 10000093          |
| 1088 | 10001593                            | 10001564                          | 10000094          |
| 1298 | 10001594                            | 10001565                          | 10000095          |
| 1548 | 10001595                            | 10001566                          | 10000096          |
| 1698 | 10001596                            | 10001567                          | 10000097          |
| 1928 | 10001597                            | 10001568                          | 10000098          |
| 2068 | 10001598                            | 10001569                          | 10000099          |
| 2278 | 10001599                            | 10001570                          | 10000100          |
| 2468 | 10001600                            | 10001571                          | 10000101          |
| 2698 | 10001601                            | 10001572                          | 10000102          |
| 2888 | 10001602                            | 10001573                          | 10000103          |
| 3058 | 10001602                            | 10001574                          | 10000104          |
| 3358 | 10001603                            | 10001575                          | 10000105          |
| 3668 | 10001604                            | 10001576                          | 10000106          |
| 3908 | 10001605                            | 10001577                          | 10000107          |
| 4178 | 10001605                            | 10001578                          | 10000108          |
| 4588 | 10001606                            | 10001579                          | 10000109          |
| 4918 | 10001607                            | 10001580                          | 10000110          |
| 5258 | 10001608                            | 10001581                          | 10000111          |



**Rexnord Thomas Flexible Disc Couplings**  
**Tollok TLK 603 External Shrink Disc Standard Version**

**Characteristics**

- Medium-high torque
- No shaft-hub axial movement
- Limited installation time
- Quick dismantling



TLK 603 shown mounted on separately sold XTSR71 coupling.

**TLK 603**

| Tollok<br>TLK 603<br>Ød (mm) | Shaft O.D.<br>Ødw |             | Max. Continous<br>Torque (N·m) |              | Tollok Data |           |                | XTSR71 Coupling Size |     |     |      |      |      |      |      |      |      |      |      |
|------------------------------|-------------------|-------------|--------------------------------|--------------|-------------|-----------|----------------|----------------------|-----|-----|------|------|------|------|------|------|------|------|------|
|                              | Min<br>(mm)       | Max<br>(mm) | at<br>Min dw                   | at<br>Max dw | ØD<br>(mm)  | L<br>(mm) | Weight<br>(kg) | 726                  | 826 | 996 | 1088 | 1298 | 1548 | 1698 | 1928 | 2068 | 2278 | 2468 | 2698 |
| 30                           | 24                | 26          | 300                            | 380          | 60          | 21.5      | 0.3            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 36                           | 28                | 31          | 440                            | 630          | 72          | 23.5      | 0.4            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 44                           | 32                | 36          | 620                            | 860          | 80          | 25.5      | 0.6            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 50                           | 38                | 42          | 940                            | 1,380        | 90          | 27.5      | 0.8            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 55                           | 42                | 48          | 1,160                          | 1,880        | 100         | 30.5      | 1.1            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 62                           | 48                | 52          | 1,850                          | 2,400        | 110         | 30.5      | 1.3            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 68                           | 50                | 60          | 2,000                          | 3,150        | 115         | 30.5      | 1.4            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 75                           | 55                | 65          | 2,500                          | 3,950        | 138         | 32.5      | 1.7            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 80                           | 60                | 70          | 3,200                          | 4,600        | 145         | 32.5      | 1.9            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 85                           | 65                | 75          | 4,800                          | 7,400        | 155         | 39.0      | 3.5            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 90                           | 65                | 75          | 4,750                          | 7,250        | 155         | 39.0      | 3.3            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 100                          | 70                | 80          | 6,900                          | 9,000        | 170         | 44.0      | 4.7            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 110                          | 75                | 85          | 7,200                          | 10,800       | 185         | 50.0      | 5.9            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 115                          | 80                | 90          | 7,400                          | 11,100       | 188         | 50.0      | 5.5            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 120                          | 80                | 90          | 10,600                         | 14,500       | 215         | 54.0      | 9.0            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 125                          | 85                | 95          | 11,000                         | 15,000       | 215         | 54.0      | 8.3            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 130                          | 90                | 100         | 11,300                         | 15,400       | 215         | 54.0      | 8.0            |                      |     |     |      |      |      |      |      |      |      |      |      |
| 140                          | 95                | 105         | 15,100                         | 20,100       | 230         | 60.5      | 10.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 155                          | 105               | 115         | 22,000                         | 28,000       | 265         | 64.5      | 15.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 160                          | 110               | 120         | 22,600                         | 28,800       | 265         | 64.5      | 14.5           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 140                          | 115               | 125         | 31,000                         | 39,000       | 290         | 71.0      | 22.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 155                          | 120               | 130         | 31,900                         | 40,100       | 290         | 71.0      | 21.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 175                          | 125               | 135         | 36,000                         | 45,000       | 300         | 71.0      | 22.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 140                          | 130               | 140         | 37,000                         | 46,300       | 300         | 71.0      | 21.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 155                          | 135               | 145         | 52,000                         | 62,000       | 330         | 86.0      | 37.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 190                          | 140               | 150         | 53,500                         | 63,800       | 330         | 86.0      | 36.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 140                          | 140               | 155         | 65,000                         | 81,500       | 350         | 86.0      | 41.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 155                          | 150               | 160         | 74,000                         | 86,000       | 350         | 86.0      | 41.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 220                          | 160               | 170         | 95,000                         | 110,000      | 370         | 104.0     | 54.0           |                      |     |     |      |      |      |      |      |      |      |      |      |
| 240                          | 170               | 190         | 120,000                        | 156,000      | 405         | 109.0     | 67.0           |                      |     |     |      |      |      |      |      |      |      |      |      |

Identified selections meet minimum bore, maximum bore and are equal to or greater than coupling size peak overload torque rating.

[illegible]

# Rexnord Thomas Flexible Disc Couplings

## Type AMR

AMR couplings are used in heavy-duty, slow to medium speed applications, where high-starting torque, shock loads, torque reversals or continuous alternating torque are present. The open lug type center member provides ample clearance for assembly while minimizing the space required for coupling installation.

### Construction

Hubs: Carbon steel

Center Member: Sizes 162 - 750 are cast alloy iron, sizes 800 and larger are cast steel

Bolts: Alloy steel

Disc Packs: Tomaloy Tpack (sizes 225 - 750)

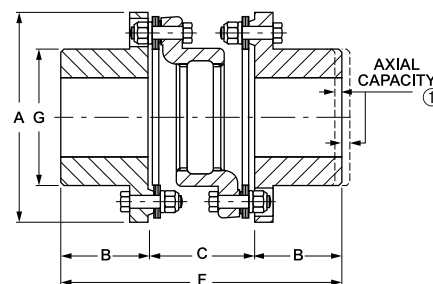
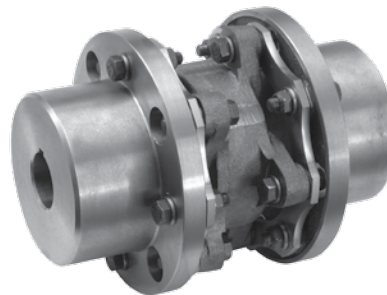
Coatings Available: Consult Rexnord

Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/3° per disc pack

### General Dimensions (mm)

| Coupling Size | ④<br>Rough Bore | ⑥<br>Max. Bore (mm) | A   | B   | C   | F    | G   |
|---------------|-----------------|---------------------|-----|-----|-----|------|-----|
| 162           | —               | 50                  | 116 | 44  | 67  | 155  | 70  |
| 200           | —               | 58                  | 146 | 54  | 76  | 184  | 92  |
| 225           | —               | 70                  | 152 | 64  | 76  | 204  | 99  |
| 262           | —               | 84                  | 175 | 73  | 89  | 235  | 114 |
| 312           | —               | 97                  | 206 | 86  | 105 | 277  | 138 |
| 350           | —               | 110                 | 232 | 95  | 116 | 306  | 152 |
| 375           | —               | 120                 | 256 | 102 | 132 | 336  | 165 |
| 425           | —               | 130                 | 279 | 108 | 141 | 357  | 178 |
| 450           | —               | 140                 | 302 | 114 | 151 | 379  | 189 |
| 500           | 68              | 146                 | 341 | 127 | 173 | 427  | 213 |
| 550           | 68              | 166                 | 381 | 140 | 196 | 476  | 240 |
| 600           | 94              | 176                 | 425 | 152 | 215 | 519  | 262 |
| 700           | 108             | 205                 | 481 | 178 | 245 | 601  | 298 |
| 750           | 125             | 224                 | 524 | 184 | 268 | 636  | 321 |
| 800           | 132             | 241                 | 568 | 197 | 289 | 683  | 349 |
| 850           | 138             | 250                 | 603 | 210 | 309 | 729  | 368 |
| 925           | 151             | 267                 | 654 | 229 | 337 | 795  | 403 |
| 1000          | 165             | 290                 | 718 | 241 | 369 | 851  | 445 |
| 1100          | 178             | 314                 | 768 | 260 | 394 | 914  | 470 |
| 1200          | 191             | 339                 | 848 | 279 | 433 | 991  | 514 |
| 1300          | 203             | 376                 | 914 | 305 | 465 | 1075 | 572 |
| 1550          | 216             | 394                 | 997 | 368 | 494 | 1230 | 660 |



| Coupling Size | Max. Kilowatt per 100 RPM | ③<br>Max. RPM | Max. Continuous Torque (Nm) | ⑦<br>Peak Overload Torque (Nm) | ②<br>Weight (kg) | ② ⑤<br>WR <sup>2</sup> (kg-m <sup>2</sup> ) | ①<br>Axial Capacity (mm) |
|---------------|---------------------------|---------------|-----------------------------|--------------------------------|------------------|---------------------------------------------|--------------------------|
|               | Service Factor 1.0        |               |                             |                                |                  |                                             |                          |
| 162           | 6.8                       | 2,500         | 648                         | 778                            | 3.6              | 0.005                                       | ±0.91                    |
| 200           | 13                        | 2,500         | 1,245                       | 1,494                          | 7.3              | 0.017                                       | ±0.91                    |
| 225           | 18.4                      | 2,500         | 1,758                       | 2,110                          | 9.1              | 0.022                                       | ±0.91                    |
| 262           | 24.9                      | 2,500         | 2,375                       | 2,850                          | 14.5             | 0.047                                       | ±1.09                    |
| 312           | 28                        | 2,500         | 2,670                       | 3,204                          | 21.3             | 0.107                                       | ±1.29                    |
| 350           | 62.4                      | 2,300         | 5,961                       | 7,153                          | 32.2             | 0.193                                       | ±1.42                    |
| 375           | 93.9                      | 2,200         | 8,968                       | 10,762                         | 41.8             | 0.300                                       | ±1.57                    |
| 425           | 104                       | 2,000         | 9,935                       | 11,921                         | 53.1             | 0.465                                       | ±1.70                    |
| 450           | 161                       | 1,900         | 15,367                      | 18,441                         | 65.4             | 0.658                                       | ±1.82                    |
| 500           | 237                       | 1,800         | 22,663                      | 27,196                         | 96.2             | 1.241                                       | ±2.02                    |
| 550           | 325                       | 1,800         | 31,052                      | 37,262                         | 131.7            | 2.113                                       | ±2.33                    |
| 600           | 424                       | 1,800         | 40,514                      | 48,617                         | 176.6            | 3.511                                       | ±2.59                    |
| 700           | 540                       | 1,500         | 51,535                      | 61,842                         | 266.5            | 6.671                                       | ±2.92                    |
| 750           | 763                       | 1,500         | 72,808                      | 87,369                         | 327.8            | 9.919                                       | ±3.17                    |
| 800           | 962                       | 1,200         | 91,869                      | 110,243                        | 425.9            | 16.27                                       | ±3.45                    |
| 850           | 1063                      | 1,100         | 101,456                     | 121,748                        | 522.1            | 22.12                                       | ±3.65                    |
| 925           | 1515                      | 1,000         | 144,647                     | 173,576                        | 635.6            | 29.85                                       | ±3.96                    |
| 1000          | 1758                      | 900           | 167,893                     | 201,472                        | 863              | 50.33                                       | ±4.36                    |
| 1100          | 2419                      | 800           | 230,978                     | 277,173                        | 1,035            | 71.69                                       | ±4.64                    |
| 1200          | 2604                      | 650           | 248,611                     | 298,334                        | 1,357            | 115.3                                       | ±5.15                    |
| 1300          | 2822                      | 600           | 269,474                     | 323,369                        | 1,771            | 164.1                                       | ±5.53                    |
| 1550          | 3693                      | 600           | 352,676                     | 423,211                        | 2,338            | 260.1                                       | ±6.14                    |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> at maximum bore.

③ Consult Rexnord if balancing is required.

④ Consult Rexnord for minimum rough bore on size 162-450.

⑤ Special hub available for size 600 with 6 ¾ max. bore. Consult Rexnord.

⑥ Straight bores with no keyway require a special material hub. Consult Rexnord.

⑦ The peak overload torque is not an alternating torque limit.

Rexnord Thomas Flexible Disc Couplings

Flywheel Adapter Type CMR

CMR couplings are used in heavy-duty, slow to medium speed applications, where high-starting torque, shock loads, torque reversals or continuous alternating torque are present. The open lug type center member provides ample clearance for assembly while minimizing the space required for coupling installation.

The CMR couplings are designed with a flywheel adapter plate which bolts directly to the flywheel of an engine or compressor. The adapters are made to fit accurately into the recess in the flywheel, and external strains on the crankshaft resulting from the misalignment of the driven equipment is minimized.

Construction

- Hubs: Carbon steel
- Center Section: Sizes 162-750 are cast alloy iron, Sizes 800 and above are cast steel
- Bolts: Alloy steel
- Disc Packs: Tomaloy Tpack (225-750 size)
- Coatings: Consult Rexnord
- Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.
- Misalignment: 1/3° per disc pack



Flywheel Adapter Information

Adapters can be furnished to accommodate virtually any flange design. Where possible, the user should select dimensions from the tables below, as these represent industry standards and thus are the most economical selection. Note that most sizes are available either with SAE bolting or Thomas heavy-duty bolting.

Available Adapters

| Coupling Size     | Adapters Available in Shaded Sizes (mm) |         |         |         |         |         |         |         |         |         |         |
|-------------------|-----------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Adapter Tolerance | 215.900                                 | 241.300 | 263.525 | 314.325 | 352.425 | 406.400 | 466.725 | 517.525 | 571.500 | 673.100 | 733.425 |
|                   | 215.849                                 | 241.249 | 263.474 | 314.274 | 352.374 | 406.349 | 466.674 | 517.449 | 571.424 | 673.024 | 733.349 |
| 162               |                                         |         |         |         |         |         |         |         |         |         |         |
| 200               |                                         |         |         |         |         |         |         |         |         |         |         |
| 225               |                                         |         |         |         |         |         |         |         |         |         |         |
| 262               |                                         |         |         |         |         |         |         |         |         |         |         |
| 312               |                                         |         |         |         |         |         |         |         |         |         |         |
| 350               |                                         |         |         |         |         |         |         |         |         |         |         |
| 375               |                                         |         |         |         |         |         |         |         |         |         |         |
| 425               |                                         |         |         |         |         |         |         |         |         |         |         |
| 450               |                                         |         |         |         |         |         |         |         |         |         |         |
| 500               |                                         |         |         |         |         |         |         |         |         |         |         |
| 550               |                                         |         |         |         |         |         |         |         |         |         |         |
| 600               |                                         |         |         |         |         |         |         |         |         |         |         |
| 700               |                                         |         |         |         |         |         |         |         |         |         |         |
| 750               |                                         |         |         |         |         |         |         |         |         |         |         |
| 800               |                                         |         |         |         |         |         |         |         |         |         |         |
| 850               |                                         |         |         |         |         |         |         |         |         |         |         |

Sizes 925 to 1550 - Adapting dimensions available upon request.

**NOTE:** values are metric conversions of standard SAE Inch adapter diameters.

Bolting

| Standard A Diameter (mm) | Light-Duty SAE Bolting |           |           | Heavy-Duty Thomas Bolting |           |           |
|--------------------------|------------------------|-----------|-----------|---------------------------|-----------|-----------|
|                          | Bolt Circle            | No. Holes | Hole Dia. | Bolt Circle               | No. Holes | Hole Dia. |
| 215.90                   | 200.2                  | 6         | 8.6       | 190.5                     | 8         | 10.4      |
| 241.30                   | 222.3                  | 8         | 8.6       | 219.0                     | 8         | 11.9      |
| 263.65                   | 244.4                  | 6         | 10.4      | 241.3                     | 8         | 11.9      |
| 314.45                   | 295.2                  | 8         | 10.4      | 292.1                     | 8         | 13.5      |
| 352.55                   | 333.3                  | 8         | 10.4      | 317.5                     | 8         | 16.8      |
| 406.40                   | —                      | —         | —         | 365.3                     | 8         | 19.8      |
| 466.85                   | 438.2                  | 8         | 13.5      | 425.5                     | 8         | 19.8      |
| 517.65                   | 489.0                  | 8         | 13.5      | 469.9                     | 8         | 23.1      |
| 571.50                   | 543.1                  | 6         | 16.8      | 520.7                     | 8         | 26.2      |
| 673.10                   | 641.4                  | 12        | 16.8      | 622.3                     | 12        | 26.2      |
| 733.55                   | 692.2                  | 12        | 19.8      | 682.8                     | 12        | 26.2      |

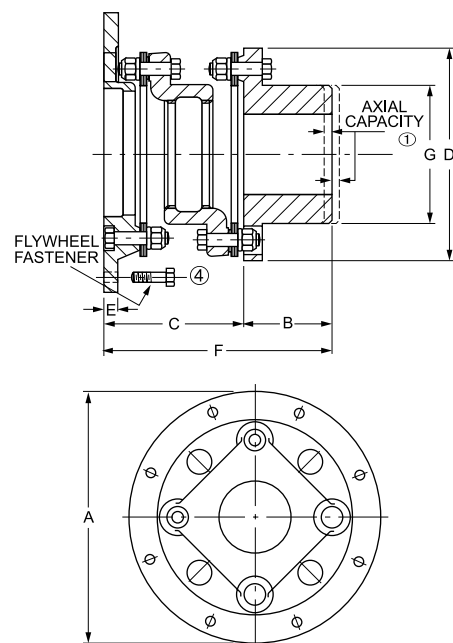
**NOTE:** values are metric conversions of standard SAE Inch series diameters, bolt circle diameters and bolt holes.

# Rexnord Thomas Flexible Disc Couplings

## Flywheel Adapter Type CMR

### General Dimensions (mm)

| Coupling Size | ⑦ Rough Bore | ② Max. Bore (mm) | Min. "A" Dia. | B   | C   | D   | E    | F   | G   |
|---------------|--------------|------------------|---------------|-----|-----|-----|------|-----|-----|
| 162           | —            | 50               | 158,8         | 44  | 84  | 116 | 7,9  | 128 | 70  |
| 200           | —            | 58               | 187,5         | 54  | 99  | 146 | 9,7  | 153 | 92  |
| 225           | —            | 70               | 193,5         | 64  | 99  | 152 | 9,7  | 163 | 99  |
| 262           | —            | 84               | 215,9         | 73  | 113 | 175 | 11,2 | 186 | 114 |
| 312           | —            | 97               | 241,3         | 86  | 135 | 206 | 12,7 | 221 | 138 |
| 350           | —            | 110              | 276,4         | 95  | 149 | 232 | 12,7 | 244 | 152 |
| 375           | —            | 120              | 301,8         | 102 | 168 | 256 | 14,2 | 270 | 165 |
| 425           | —            | 130              | 333,2         | 108 | 181 | 279 | 15,7 | 289 | 178 |
| 450           | —            | 140              | 374,7         | 114 | 194 | 302 | 17,5 | 308 | 189 |
| 500           | 68           | 146              | 406,4         | 127 | 222 | 341 | 19,1 | 349 | 213 |
| 550           | 68           | 166              | 457,2         | 140 | 251 | 381 | 22,4 | 391 | 240 |
| 600           | 94           | 176              | 466,9         | 152 | 276 | 425 | 25,4 | 428 | 262 |
| 700           | 108          | 205              | 517,7         | 178 | 316 | 481 | 25,4 | 494 | 298 |
| 750           | 125          | 224              | 609,6         | 184 | 343 | 524 | 28,4 | 527 | 321 |
| 800           | 132          | 241              | 650,7         | 197 | 375 | 568 | 31,8 | 572 | 349 |
| 850           | 138          | 250              | 685,5         | 210 | 400 | 603 | 31,8 | 610 | 368 |
| 925           | 151          | 267              | 733,6         | 229 | 438 | 654 | 35,1 | 667 | 403 |
| 1000          | 165          | 290              | 803,1         | 241 | 471 | 718 | 41,1 | 712 | 445 |
| 1100          | 178          | 314              | 847,9         | 260 | 503 | 769 | 44,5 | 763 | 470 |
| 1200          | 191          | 339              | 952,5         | 279 | 548 | 861 | 50,8 | 827 | 514 |
| 1300          | 203          | 376              | 1013          | 305 | 592 | 914 | 53,8 | 897 | 562 |
| 1550          | 216          | 394              | 1107,9        | 368 | 603 | 997 | 53,8 | 971 | 660 |



| Coupling Size | Max. Kilowatt per 100 RPM | ③ Max. RPM | Max. Continuous Torque (Nm) | ⑧ Peak Overload Torque (Nm) | ⑤ ⑥ Weight (kg) | ⑤ WR <sup>2</sup> (kg-m <sup>2</sup> ) | ① Axial Capacity |
|---------------|---------------------------|------------|-----------------------------|-----------------------------|-----------------|----------------------------------------|------------------|
|               | Service Factor 1.0        |            |                             |                             |                 |                                        |                  |
| 162           | 6.8                       | 2,500      | 648                         | 778                         | 3.6             | 0,005                                  | ±0.91            |
| 200           | 13                        | 2,500      | 1,245                       | 1,494                       | 7.3             | 0,017                                  | ±0.91            |
| 225           | 18                        | 2,500      | 1,758                       | 2,110                       | 9.1             | 0,022                                  | ±0.91            |
| 262           | 25                        | 2,500      | 2,375                       | 2,850                       | 14.5            | 0,047                                  | ±1.09            |
| 312           | 28                        | 2,500      | 2,670                       | 3,204                       | 21.3            | 0,107                                  | ±1.29            |
| 350           | 62                        | 2,300      | 5,961                       | 7,153                       | 32.2            | 0,193                                  | ±1.42            |
| 375           | 94                        | 2,200      | 8,968                       | 10,762                      | 41.8            | 0,300                                  | ±1.57            |
| 425           | 104                       | 2,200      | 9,935                       | 11,921                      | 53.1            | 0,465                                  | ±1.70            |
| 450           | 161                       | 1,900      | 15,367                      | 18,441                      | 65.4            | 0,658                                  | ±1.82            |
| 500           | 237                       | 1,800      | 22,663                      | 27,196                      | 96.2            | 1,241                                  | ±2.02            |
| 550           | 325                       | 1,800      | 31,052                      | 37,262                      | 131.7           | 2,113                                  | ±2.33            |
| 600           | 424                       | 1,800      | 40,514                      | 48,617                      | 176.6           | 3,511                                  | ±2.59            |
| 700           | 540                       | 1,500      | 51,535                      | 61,842                      | 266.5           | 6,671                                  | ±2.92            |
| 750           | 763                       | 1,500      | 72,808                      | 87,369                      | 327.8           | 9,919                                  | ±3.17            |
| 800           | 962                       | 1,200      | 91,869                      | 110,243                     | 425.9           | 16,269                                 | ±3.45            |
| 850           | 1063                      | 1,100      | 101,456                     | 121,748                     | 522.1           | 22,121                                 | ±3.65            |
| 925           | 1515                      | 1,000      | 144,647                     | 173,576                     | 635.6           | 29,845                                 | ±3.96            |
| 1000          | 1758                      | 900        | 167,893                     | 201,472                     | 749.1           | 45,645                                 | ±4.36            |
| 1100          | 2419                      | 800        | 230,978                     | 277,173                     | 885.3           | 72,272                                 | ±4.64            |
| 1200          | 2604                      | 650        | 248,611                     | 298,334                     | 1157.7          | 119,088                                | ±5.15            |
| 1300          | 2822                      | 600        | 269,474                     | 323,369                     | 1507.3          | 165,904                                | ±5.53            |
| 1550          | 3693                      | 600        | 352,676                     | 423,211                     | 1861.4          | 245,784                                | ±6.14            |

- ① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.
- ② Straight bores with no keyway require special material.
- ③ Maximum speeds are based on smallest available adapter O.D. For higher speeds, consult Rexnord.
- ④ Flywheel bolts are not supplied with coupling.
- ⑤ Weight and WR<sup>2</sup> at maximum bores and minimum adapter diameter.
- ⑥ Special hub available for size 600 with 6.75 in. max. bore. Consult Rexnord.
- ⑦ Consult Rexnord for minimum rough bore on sizes 162-450.
- ⑧ The peak overload torque is not an alternating torque limit.

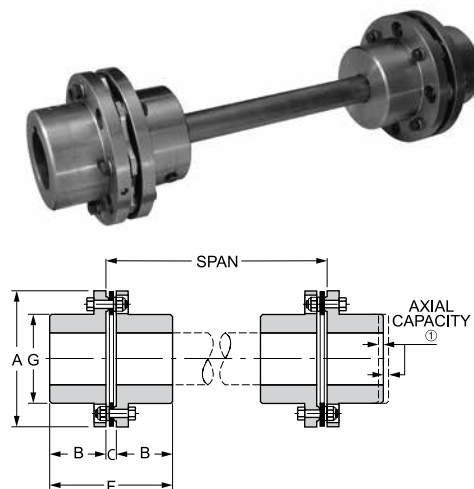
# Rexnord Thomas Flexible Disc Couplings

## Type BMR

Type BMR couplings are recommended for heavy-duty motor and engine driven service such as paper machines, grinding mills, dredges, and marine propulsion. The BMR uses a solid intermediate shaft which can be furnished complete by Rexnord or fabricated by the user. Hubs are carbon steel, shafting is hot or cold-rolled steel, and disc packs are Tormaloy Tpack (225-750 sizes, stainless steel also available). Misalignment: 1/3° per disc pack.

### General Dimensions (mm)

| Coupling Size | ③ Rough Bore | ② ④ Max. Bore (mm) | A   | B   | C  | F   | G   |
|---------------|--------------|--------------------|-----|-----|----|-----|-----|
| 162           | —            | 50                 | 116 | 44  | 10 | 128 | 70  |
| 200           | —            | 58                 | 146 | 54  | 11 | 153 | 92  |
| 225           | —            | 70                 | 152 | 64  | 11 | 163 | 99  |
| 262           | —            | 84                 | 175 | 73  | 13 | 186 | 114 |
| 312           | —            | 97                 | 206 | 86  | 16 | 221 | 138 |
| 350           | —            | 110                | 232 | 95  | 17 | 244 | 152 |
| 375           | —            | 120                | 256 | 102 | 21 | 270 | 165 |
| 425           | —            | 130                | 279 | 108 | 22 | 289 | 178 |
| 450           | —            | 140                | 302 | 114 | 22 | 308 | 189 |
| 500           | 68           | 146                | 341 | 127 | 27 | 349 | 213 |
| 550           | 68           | 166                | 381 | 140 | 32 | 391 | 240 |
| 600           | 94           | 176                | 425 | 152 | 35 | 428 | 262 |
| 700           | 108          | 205                | 481 | 178 | 40 | 494 | 298 |
| 750           | 125          | 224                | 524 | 184 | 44 | 527 | 321 |
| 800           | 132          | 241                | 568 | 197 | 46 | 572 | 349 |
| 850           | 138          | 250                | 603 | 210 | 51 | 610 | 368 |
| 925           | 151          | 267                | 654 | 229 | 57 | 667 | 403 |
| 1000          | 165          | 290                | 718 | 241 | 62 | 712 | 445 |
| 1100          | 178          | 314                | 768 | 260 | 64 | 763 | 470 |
| 1200          | 191          | 339                | 848 | 279 | 70 | 827 | 514 |
| 1300          | 203          | 376                | 914 | 305 | 72 | 897 | 562 |
| 1550          | 216          | 394                | 997 | 368 | 77 | 971 | 660 |



| Coupling Size | Max. Kilowatt per 100 RPM | Max. RPM | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | ② Weight (kg) | ② WR <sup>2</sup> (kg-m <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|---------------------------|----------|-----------------------------|---------------------------|---------------|----------------------------------------|-----------------------|
|               | Service Factor 1.0        |          |                             |                           |               |                                        |                       |
| 162           | 6.8                       | 1,800    | 648                         | 778                       | 5.9           | 29                                     | ±0.91                 |
| 200           | 13                        | 1,800    | 1,245                       | 1,494                     | 11.4          | 81                                     | ±0.91                 |
| 225           | 18                        | 1,800    | 1,758                       | 2,110                     | 13.2          | 105                                    | ±0.91                 |
| 262           | 25                        | 1,800    | 2,375                       | 2,850                     | 19.5          | 214                                    | ±1.09                 |
| 312           | 28                        | 1,800    | 2,670                       | 3,204                     | 35.9          | 566                                    | ±1.29                 |
| 350           | 62                        | 1,800    | 5,961                       | 7,153                     | 48.1          | 934                                    | ±1.42                 |
| 375           | 94                        | 1,800    | 8,968                       | 10,762                    | 63.1          | 1,470                                  | ±1.57                 |
| 425           | 104                       | 1,800    | 9,935                       | 11,921                    | 79.0          | 2,320                                  | ±1.70                 |
| 450           | 161                       | 1,500    | 15,367                      | 18,441                    | 96.7          | 3,085                                  | ±1.82                 |
| 500           | 237                       | 1,500    | 22,663                      | 27,196                    | 132.6         | 5,500                                  | ±2.0                  |
| 550           | 325                       | 1,500    | 31,052                      | 37,262                    | 190.7         | 9,850                                  | ±2.33                 |
| 600           | 424                       | 1,200    | 40,514                      | 48,617                    | 249.7         | 15,700                                 | ±2.59                 |

### BMR Shafting Selection Table

| Coupling Size | Shaft Diameter (mm) | Max. Kw/100 for Given Shaft Dia. | Max. Allowable Shaft Wt. (kg) | Max. Span (mm) at Max. Allow Shaft Wt. | Max. Span (mm) For Various RPM |      |      |      |
|---------------|---------------------|----------------------------------|-------------------------------|----------------------------------------|--------------------------------|------|------|------|
|               |                     |                                  |                               |                                        | 1800                           | 1200 | 900  | 720  |
| 162           | 41                  | 5.0                              | 27                            | 2591                                   | 1372                           | 1676 | 1930 | 2159 |
| 200           | 51                  | 9.9                              | 34                            | 2108                                   | 1524                           | 1854 | 2108 | 2108 |
| 225           | 57                  | 13.9                             | 39                            | 1930                                   | 1626                           | 1930 | 1930 | 1930 |
| 262           | 64                  | 17.7                             | 81                            | 3251                                   | 1702                           | 2083 | 2413 | 2692 |
| 312           | 73                  | 25                               | 106                           | 3226                                   | 1829                           | 2235 | 2591 | 2896 |
| 350           | 89                  | 56                               | 132                           | 2718                                   | 2007                           | 2464 | 2718 | 2718 |
| 375           | 95                  | 73                               | 187                           | 3353                                   | 2083                           | 2540 | 2946 | 3302 |
| 425           | 108                 | 93                               | 228                           | 3175                                   | 2210                           | 2718 | 3124 | 3175 |
| 450           | 114                 | 115                              | 271                           | 3353                                   | 2286                           | 2794 | 3226 | 3353 |
| 500           | 127                 | 169                              | 365                           | 3683                                   | 2413                           | 2946 | 3404 | 3683 |
| 550           | 140                 | 219                              | 466                           | 3886                                   | 2515                           | 3099 | 3556 | 3886 |
| 600           | 152                 | 302                              | 588                           | 4115                                   | 2642                           | 3226 | 3734 | 4115 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modifications or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> at maximum bore and minimum "L".

③ Consult Rexnord for minimum rough bore on sizes 162-450.

④ Straight bores with no keyway require special material.

# Rexnord Thomas Flexible Disc Couplings

## Series 44 Flywheel Adapter Type

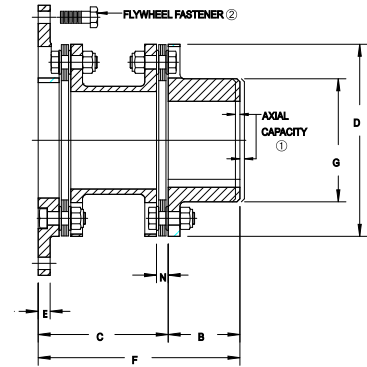
The Series 44 is an all-steel fully machined flywheel adapter style coupling. It is used in heavy-duty applications where high starting torque, shock loads, torque reversals or alternating torques are present. This coupling is similar to the type CMR, but with the following benefits:

Dimension "C" and spool are adjustable to meet specific spacing requirements and/or to make adjustment to torsional characteristics.  
The all-steel design provides a higher maximum continuous and peak overload torque rating.  
Fully-machined components offer a higher operating speed and balancing level.

## Construction

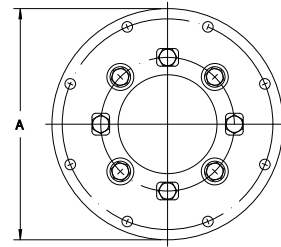
Hubs and Center Assembly: Carbon Steel  
Bolts: Alloy Steel  
Disc Packs: Tomaloy Tpack (225-750 Size)  
Coatings Available: Black Oxide, Zinc, Cadmium  
Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.  
Misalignment: 1/3° per disc pack

When specified, Series 44 couplings meet all requirements of API 610 or API 671.  
If application requires API specification, please consult Rexnord.



## General Dimensions (mm)

| Coupling Size | Max. Bore | Min. "A" Dia. | B   | Std. C | Min. C | D   | E  | F (Ref.) | G   | N  |
|---------------|-----------|---------------|-----|--------|--------|-----|----|----------|-----|----|
| 350           | 110       | 276           | 95  | 149    | 131    | 221 | 13 | 245      | 149 | 14 |
| 375           | 120       | 302           | 102 | 168    | 145    | 246 | 14 | 270      | 165 | 15 |
| 425           | 130       | 333           | 108 | 181    | 156    | 267 | 16 | 289      | 178 | 16 |
| 450           | 140       | 375           | 114 | 194    | 170    | 287 | 18 | 308      | 189 | 18 |
| 500           | 146       | 406           | 127 | 222    | 191    | 327 | 19 | 349      | 213 | 20 |
| 550           | 166       | 457           | 140 | 251    | 217    | 367 | 22 | 391      | 240 | 23 |
| 600           | 176       | 467           | 152 | 276    | 238    | 406 | 25 | 429      | 260 | 25 |
| 700           | 205       | 518           | 178 | 316    | 271    | 464 | 25 | 494      | 298 | 30 |
| 750           | 224       | 610           | 191 | 343    | 294    | 503 | 28 | 533      | 321 | 32 |
| 800           | 241       | 651           | 210 | 375    | 322    | 546 | 32 | 584      | 346 | 34 |
| 850           | 250       | 695           | 222 | 400    | 345    | 584 | 32 | 622      | 368 | 36 |
| 925           | 267       | 734           | 241 | 438    | 370    | 635 | 35 | 679      | 400 | 38 |
| 1000          | 290       | 803           | 267 | 471    | 430    | 699 | 41 | 738      | 438 | 43 |



| Coupling Size | Max. Kilowatt Per 100 Service Factor 1.0 | ③ Max. RPM   |          | Max. Continuous Torque (Nm) | ④ Peak Overload Torque (Nm) | ⑤ Weight (kg) | Weight Change Per mm of "C" (kg) | ⑤ WR <sup>2</sup> (kg-m <sup>2</sup> ) | WR <sup>2</sup> Change Per mm of "C" (kg-m <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|------------------------------------------|--------------|----------|-----------------------------|-----------------------------|---------------|----------------------------------|----------------------------------------|-----------------------------------------------------------|-----------------------|
|               |                                          | Not Balanced | Balanced |                             |                             |               |                                  |                                        |                                                           |                       |
| 350           | 68.7                                     | 3,200        | 10,500   | 6,562                       | 13,124                      | 23            | 0.38                             | 0.17                                   | 0.0553                                                    | ±1.42                 |
| 375           | 100.6                                    | 3,000        | 9,400    | 9,604                       | 19,208                      | 32            | 0.47                             | 0.29                                   | 0.0829                                                    | ±1.57                 |
| 425           | 111.8                                    | 2,800        | 8,700    | 10,677                      | 21,354                      | 42            | 0.64                             | 0.46                                   | 0.135                                                     | ±1.70                 |
| 450           | 161.0                                    | 2,700        | 8,100    | 15,380                      | 30,760                      | 54            | 0.67                             | 0.72                                   | 0.156                                                     | ±1.82                 |
| 500           | 237.5                                    | 2,500        | 7,100    | 22,682                      | 45,364                      | 80            | 1.04                             | 1.27                                   | 0.313                                                     | ±2.02                 |
| 550           | 368.4                                    | 2,300        | 6,300    | 35,187                      | 70,374                      | 118           | 1.31                             | 2.37                                   | 0.495                                                     | ±2.33                 |
| 600           | 465.3                                    | 2,150        | 5,700    | 44,440                      | 88,880                      | 148           | 1.52                             | 3.46                                   | 0.705                                                     | ±2.59                 |
| 700           | 591.4                                    | 1,950        | 500      | 56,478                      | 112,956                     | 222           | 2.21                             | 6.56                                   | 1.19                                                      | ±2.92                 |
| 750           | 773.4                                    | 1,850        | 4,600    | 73,861                      | 147,722                     | 291           | 2.44                             | 10.68                                  | 1.65                                                      | ±3.17                 |
| 800           | 1034.0                                   | 1,750        | 4,300    | 98,749                      | 197,498                     | 365           | 2.52                             | 15.85                                  | 2.30                                                      | ±3.45                 |
| 850           | 1329.0                                   | 1,600        | 3,900    | 126,924                     | 253,848                     | 443           | 3.03                             | 21.78                                  | 2.30                                                      | ±3.65                 |
| 925           | 1827.1                                   | 1,500        | 3,600    | 174,494                     | 348,988                     | 585           | 3.85                             | 33.29                                  | 4.61                                                      | ±3.96                 |
| 1000          | 2097.7                                   | 1,500        | 3,250    | 200,345                     | 400,690                     | 751           | 3.88                             | 50.87                                  | 5.83                                                      | ±4.36                 |

- ① Thomas disc couplings meet NEMA MG1-14.37, 1-20.81, & 1-21.81 specifications without the addition of end-float restricting devices.
- ② Flywheel fasteners are not supplied with this coupling. Contact equipment manufacturer for this hardware and tightening instructions.
- ③ Maximum speeds are based on use with all standard available adapters. For larger sizes or higher speeds, please consult Rexnord.
- ④ The peak overload torque rating is an infrequent torque overload limit and not an alternating or vibratory torque limit.
- ⑤ Weight and WR<sup>2</sup> values are based on maximum bores and minimum adapter diameters listed above.

# Rexnord Thomas Flexible Disc Couplings

## Series 44 Flywheel Adapter Type

### Flywheel to Adapter Bolt Patterns

| Standard A Diameter (mm) | Light-Duty SAE Bolting |           |           | Heavy-Duty Thomas Bolting |           |           |
|--------------------------|------------------------|-----------|-----------|---------------------------|-----------|-----------|
|                          | Bolt Circle            | No. Holes | Hole Dia. | Bolt Circle               | No. Holes | Hole Dia. |
| 314.5                    | 295.2                  | 8         | 10.4      | 292.1                     | 8         | 13.5      |
| 352.6                    | 333.3                  | 8         | 10.4      | 317.5                     | 8         | 16.8      |
| 406.4                    | N/A                    | N/A       | N/A       | 365.3                     | 8         | 19.8      |
| 466.9                    | 438.2                  | 8         | 13.5      | 425.5                     | 8         | 19.8      |
| 517.7                    | 489.0                  | 8         | 13.5      | 469.9                     | 8         | 23.1      |
| 571.5                    | 543.1                  | 6         | 16.8      | 520.7                     | 8         | 26.2      |
| 673.1                    | 641.4                  | 12        | 16.8      | 622.3                     | 12        | 26.2      |
| 733.6                    | 692.2                  | 12        | 19.8      | 682.8                     | 12        | 26.2      |

All dimensions listed are in millimeters and bolt holes are equally spaced.

**NOTE:** values are metric conversions of standard SAE inch series diameters, bolt circle diameters and bolt holes.



### Flywheel Adapter Information\*

Adapters can be furnished to accommodate most flange designs. Where possible, the user should select dimensions from the tables shown, as these represent industry standards that are more economical and readily available. Note that most sizes can be supplied with either SAE light-duty bolting or Thomas heavy-duty bolting. Please contact Rexnord for custom designs.

| Coupling Size | Minimum Adapter "A" Dia. | ① Standard Available Adapter Diameters (mm) - Actual OD Tolerance as Listed                     |                                       |                                       |                                        |                                        |                                        |                                         |                                        |
|---------------|--------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------|
|               |                          | 314.3                                                                                           | 352.4                                 | 406.4                                 | 466.7                                  | 517.5                                  | 571.5                                  | 673.1                                   | 733.4                                  |
|               |                          | 314.3                                                                                           | 352.4                                 | 406.3                                 | 466.7                                  | 517.4                                  | 571.4                                  | 673.0                                   | 733.3                                  |
| 350           | 276.4                    | Wt. = 1.76<br>WR <sup>2</sup> = 0.094                                                           | Wt. = 3.75<br>WR <sup>2</sup> = 0.210 | Wt. = 6.95<br>WR <sup>2</sup> = 0.407 | Wt. = 11.08<br>WR <sup>2</sup> = 0.644 | Wt. = 14.98<br>WR <sup>2</sup> = 0.985 | Wt. = 19.57<br>WR <sup>2</sup> = 0.985 |                                         |                                        |
| 375           | 301.8                    | Wt. = 0.69<br>WR <sup>2</sup> = 0.016                                                           | Wt. = 2.91<br>WR <sup>2</sup> = 0.078 | Wt. = 6.49<br>WR <sup>2</sup> = 0.208 | Wt. = 11.12<br>WR <sup>2</sup> = 0.429 | Wt. = 15.48<br>WR <sup>2</sup> = 0.694 | Wt. = 20.66<br>WR <sup>2</sup> = 1.077 |                                         |                                        |
| 425           | 333.3                    |                                                                                                 | Wt. = 1.27<br>WR <sup>2</sup> = 0.037 | Wt. = 5.22<br>WR <sup>2</sup> = 0.180 | Wt. = 10.35<br>WR <sup>2</sup> = 0.425 | Wt. = 15.21<br>WR <sup>2</sup> = 0.720 | Wt. = 20.88<br>WR <sup>2</sup> = 1.141 |                                         |                                        |
| 450           | 374.7                    |                                                                                                 |                                       | Wt. = 2.67<br>WR <sup>2</sup> = 0.102 | Wt. = 8.35<br>WR <sup>2</sup> = 0.374  | Wt. = 13.76<br>WR <sup>2</sup> = 0.701 | Wt. = 20.11<br>WR <sup>2</sup> = 1.173 | Wt. = 33.73<br>WR <sup>2</sup> = 2.500  |                                        |
| 500           | 406.4                    |                                                                                                 |                                       | Wt. = 0<br>WR <sup>2</sup> = 0 ①      | Wt. = 6.17<br>WR <sup>2</sup> = 0.295  | Wt. = 12.03<br>WR <sup>2</sup> = 0.650 | Wt. = 18.93<br>WR <sup>2</sup> = 1.162 | Wt. = 33.78<br>WR <sup>2</sup> = 2.608  | Wt. = 43.72<br>WR <sup>2</sup> = 3.838 |
| 550           | 457.2                    |                                                                                                 |                                       |                                       | Wt. = 1.21<br>WR <sup>2</sup> = 0.065  | Wt. = 8.08<br>WR <sup>2</sup> = 0.481  | Wt. = 16.16<br>WR <sup>2</sup> = 1.081 | Wt. = 33.60<br>WR <sup>2</sup> = 2.778  | Wt. = 45.26<br>WR <sup>2</sup> = 4.22  |
| 600           | 466.9                    |                                                                                                 |                                       |                                       | Wt. = 0<br>WR <sup>2</sup> = 0 ①       | Wt. = 7.81<br>WR <sup>2</sup> = 0.473  | Wt. = 17.03<br>WR <sup>2</sup> = 1.158 | Wt. = 36.77<br>WR <sup>2</sup> = 3.081  | Wt. = 49.94<br>WR <sup>2</sup> = 4.713 |
| 700           | 517.7                    |                                                                                                 |                                       |                                       |                                        | Wt. = 0<br>WR <sup>2</sup> = 0 ①       | Wt. = 9.22<br>WR <sup>2</sup> = 0.684  | Wt. = 28.97<br>WR <sup>2</sup> = 32.607 | Wt. = 42.22<br>WR <sup>2</sup> = 4.248 |
| 750           | 609.6                    |                                                                                                 |                                       |                                       |                                        |                                        |                                        | Wt. = 14.26<br>WR <sup>2</sup> = 1.468  | Wt. = 29.15<br>WR <sup>2</sup> = 3.310 |
| 800           | 650.8                    |                                                                                                 |                                       |                                       |                                        |                                        |                                        | Wt. = 5.77<br>WR <sup>2</sup> = 0.631   | Wt. = 22.34<br>WR <sup>2</sup> = 2.682 |
| 850           | 695.5                    |                                                                                                 |                                       |                                       |                                        |                                        |                                        |                                         | Wt. = 10.62<br>WR <sup>2</sup> = 1.355 |
| 925           | 733.5                    |                                                                                                 |                                       |                                       |                                        |                                        |                                        |                                         | Wt. = 0<br>WR <sup>2</sup> = 0 ①       |
| 1000          | 803.2                    | No industry standards exist for adapters to fit couplings this size or larger. Consult Rexnord. |                                       |                                       |                                        |                                        |                                        |                                         |                                        |

\* Weight adder values are given in kg. WR<sup>2</sup> values are given in kg-m<sup>2</sup>.

① Wt. and WR<sup>2</sup> is zero if the listed minimum adapter "A" diameter is the same as complete coupling calculated values in general dimension tables on page 18.

**NOTE:** Add Wt. and WR<sup>2</sup> values listed in table to the weight and inertia values provided on page 18 for given size to calculate actual values based on selected adapter size.

# Rexnord Thomas Flexible Disc Couplings

## Type SN-GA

Replaces troublesome gear couplings on pulp and paper applications. The Thomas one-piece, factory-torqued assembly is easy to install. This coupling is designed to bolt directly to existing rigid hubs using the gear coupling bolts. Axial shims are supplied for minor axial positioning adjustment.

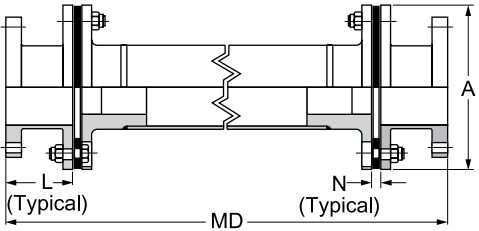
### Construction

Hubs and Center Assembly: Carbon steel  
Bolts: Alloy steel  
Disc Packs: Stainless Tpack  
Coatings Available: Consult Rexnord  
Other disc pack materials such as Tomaloy, stainless steel, Monel and Inconel are available; please consult Rexnord.  
Misalignment: 1/3° per disc pack



### Available Adapters

| Gear Coupling<br>Thomas<br>Coupling | #1½<br>(1015) | #2<br>(1020) | #2½<br>(1025) | #3<br>(1030) | #3½<br>(1035) | #4<br>(1040) | #4½<br>(1045) | #5<br>(1050) | #5½<br>(1055) | #6<br>(1060) | #7<br>(1070) |
|-------------------------------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|--------------|
| 226                                 |               |              |               |              |               |              |               |              |               |              |              |
| 262                                 |               |              |               |              |               |              |               |              |               |              |              |
| 312                                 |               |              |               |              |               |              |               |              |               |              |              |
| 350                                 |               |              |               |              |               |              |               |              |               |              |              |
| 375                                 |               |              |               |              |               |              |               |              |               |              |              |
| 425                                 |               |              |               |              |               |              |               |              |               |              |              |
| 450                                 |               |              |               |              |               |              |               |              |               |              |              |
| 500T                                |               |              |               |              |               |              |               |              |               |              |              |
| 550T                                |               |              |               |              |               |              |               |              |               |              |              |
| 600T                                |               |              |               |              |               |              |               |              |               |              |              |
| 700T                                |               |              |               |              |               |              |               |              |               |              |              |
| 750T                                |               |              |               |              |               |              |               |              |               |              |              |
| 800T                                |               |              |               |              |               |              |               |              |               |              |              |
| 850T                                |               |              |               |              |               |              |               |              |               |              |              |



For other sizes, please consult Rexnord.

| Coupling<br>Size | Max. Kilowatt<br>per 100 RPM | Max. Continuous<br>Torque<br>(Nm) | Peak Overload<br>Torque<br>(Nm) | A   | L   | Min.<br>MD | N    | Axial<br>Capacity<br>(mm) |
|------------------|------------------------------|-----------------------------------|---------------------------------|-----|-----|------------|------|---------------------------|
|                  | Service Factor<br>1.0        |                                   |                                 |     |     |            |      |                           |
| 226              | 16.9                         | 1611                              | 3222                            | 148 | 102 | 413        | 14.7 | ±0.91                     |
| 262              | 26.0                         | 2486                              | 4971                            | 170 | 114 | 438        | 11.9 | ±1.09                     |
| 312              | 33.3                         | 3186                              | 6372                            | 198 | 130 | 508        | 12.7 | ±1.29                     |
| 350              | 41.5                         | 3966                              | 7931                            | 222 | 135 | 562        | 13.7 | ±1.42                     |
| 375              | 92                           | 8733                              | 17467                           | 246 | 168 | 660        | 15.0 | ±1.57                     |
| 425              | 139                          | 13315                             | 26629                           | 267 | 165 | 667        | 15.7 | ±1.70                     |
| 450 ③            | 161                          | 15365                             | 30731                           | 287 | 171 | 724        | 19.8 | ±1.82                     |
| 500T             | 275                          | 26257                             | 52513                           | 327 | 184 | 762        | 19.8 | ±2.00                     |
| 550T             | 318                          | 30414                             | 60828                           | 367 | 197 | 851        | 23.1 | ±2.33                     |
| 600T             | 486                          | 46435                             | 92870                           | 406 | 232 | 933        | 24.9 | ±2.59                     |
| 700T             | 649                          | 62026                             | 124052                          | 464 | 235 | 1029       | 30.5 | ±2.92                     |
| 750T             | 746                          | 71290                             | 142581                          | 503 | 248 | 1092       | 32.3 | ±3.17                     |
| 800T             | 1074                         | 102586                            | 205172                          | 546 | 260 | —          | 34.0 | ±3.45                     |
| 850T             | 1309                         | 125069                            | 250138                          | 584 | 260 | —          | 35.6 | ±3.65                     |

- ① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.  
② The peak overload torque is not an alternating torque limit.  
③ Available with Tpack for new couplings, not retrofittable in size 450.

## Rexnord Thomas Flexible Disc Couplings

### Floating Shaft Types SN, SF, SV

Floating shaft couplings are used to connect units which are relatively far apart. Such arrangements are particularly suited to transmit power into areas where moisture, dust or corrosive conditions would adversely affect the driving machinery. Floating shaft couplings' operating speeds are dependent upon the length of span required. Refer to the speed/span table for speed recommendations. In addition, special balancing may be required for high-speed service or for extended shaft lengths. Consult Rexnord for intended applications at speeds not covered in the table. The SN, SF and SV type couplings are furnished with stainless steel disc packs unless otherwise specified.

#### Type SN

##### Full-Floating Shaft Coupling

Type SN couplings use a tubular center shaft, fabricated complete by Rexnord. Typical applications include cooling tower fan drives, paper machinery, printing presses, pumps and compressors.

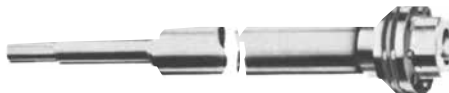
Connected shafts should be rigidly supported and long shaft overhang should be avoided. The tubular coupling shaft **MUST NOT** be supported with a bearing. They may be operated vertically if length does not exceed 36 in.



#### Type SF

##### Semi-Floating Shaft Coupling

Type SF couplings are a tubular shaft design with a stub shaft and bearing journal replacing the half-coupling on one end. They are typically used in tandem with the Type SN or Type SV where spans are too long for a single section of shafting.



#### Type SV

##### Vertical Floating Shaft Couplings

Type SV couplings are similar to the Type SN except that the lower half-coupling is modified to support the weight of the floating shaft. Typical applications include fresh-water pumps, sewage pumps, and marine cargo pumps. They may be used in tandem with the Type SF where spans are too long for a single shaft.



### Corrosion Resistant Materials

Types SN, SV and SF couplings are particularly suited to applications involving wet or corrosive conditions, for this reason they are all furnished with 300 series stainless steel disc packs. For extremely corrosive environments, 316 stainless steel, Inconel 625 or Monel disc pack materials are available on request. As standard, these couplings are available in the following material classes.

**NOTE:** The stub shaft on the SF coupling is always furnished as unplated carbon steel in classes A, B, C and D. Couplings may be painted with acid and alkali resistant paints or coating besides the corrosion resistant classes listed.

#### CLASS

- A** — All steel
- B** — All steel — zinc plated
- C** — All steel — zinc plated w/stainless steel hardware
- D** — Stainless steel except for zinc plated hubs
- E** — All 300 series stainless steel

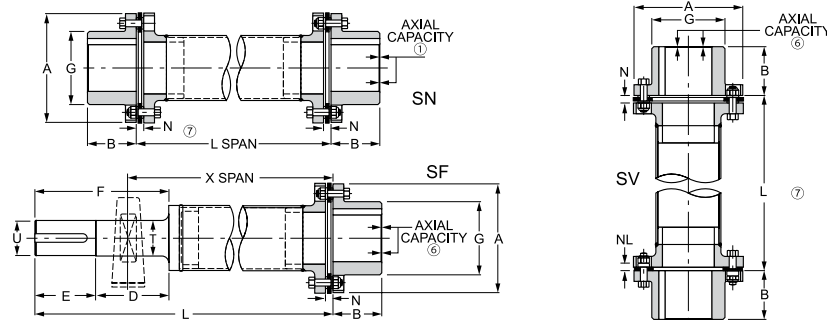
### Floating Shaft Couplings

Types SN, SV and SF center members are of tubular construction, requiring special considerations for the operating speed and span length. The graph to the right may be used as a guide when determining whether it is desirable to balance the center member.

The standard procedure for balancing of SN, SV and SF couplings includes straightening of the tubular shaft prior to balancing. Many couplings of this type operate relatively near to the lateral resonant frequency of the coupling center member, and special balancing techniques are often required. For speeds 1800 RPM and under see page 4 for balancing recommendations. Consult Rexnord for any application with speed in excess of 1800 RPM.

# Rexnord Thomas Floating Shaft Coupling

Types SN, SF, SV



## General Dimensions

| ⑤<br>Coupling<br>Size | Coupling Type |    |      | Max.<br>Bore | A   | B   | D   | E   | ③<br>T | ③<br>U | F   | G   | N    | NL   | ② Min. L |     |
|-----------------------|---------------|----|------|--------------|-----|-----|-----|-----|--------|--------|-----|-----|------|------|----------|-----|
|                       | SN            | SV | SF ⑧ |              |     |     |     |     |        |        |     |     |      |      | SN       | SF  |
| 50                    | •             |    |      | 16           | 51  | 22  | —   | —   | —      | —      | —   | 25  | 6.1  | —    | 102      | —   |
| 62                    | •             |    |      | 19           | 62  | 28  | —   | —   | —      | —      | —   | 30  | 8.1  | —    | 114      | —   |
| 75                    | •             |    |      | 22           | 68  | 29  | —   | —   | —      | —      | —   | 37  | 8.4  | —    | 121      | —   |
| 100                   | •             | •  | •    | 29           | 82  | 35  | 95  | 44  | 24     | 22     | 140 | 43  | 11.4 | 3.3  | 146      | 305 |
| 125                   | •             | •  | •    | 35           | 98  | 41  | 108 | 54  | 30     | 29     | 162 | 52  | 13.2 | 3.8  | 159      | 310 |
| 162                   | •             | •  | •    | 48           | 114 | 48  | 114 | 67  | 37     | 35     | 181 | 70  | 13.7 | 4.1  | 171      | 335 |
| 200                   | •             | •  | •    | 57           | 138 | 54  | 140 | 73  | 43     | 41     | 213 | 83  | 14.5 | 4.1  | 191      | 394 |
| 226*                  | •             | •  | •    | 67           | 148 | 67  | 143 | 86  | 49     | 48     | 229 | 96  | 14.7 | 4.6  | 210      | 419 |
| 262                   | •             | •  | •    | 80           | 170 | 76  | 156 | 95  | 56     | 54     | 251 | 114 | 11.9 | 5.6  | 210      | 457 |
| 312                   | •             | •  | •    | 92           | 198 | 86  | 162 | 102 | 62     | 60     | 264 | 133 | 12.7 | 6.4  | 248      | 495 |
| 350                   | •             | •  | •    | 102          | 222 | 95  | 191 | 114 | 75     | 73     | 305 | 149 | 13.7 | 7.4  | 292      | 521 |
| 375                   | •             | •  | •    | 114          | 246 | 102 | 203 | 121 | 87     | 86     | 324 | 165 | 15.0 | 8.4  | 324      | 589 |
| 425                   | •             | •  | •    | 121          | 267 | 108 | 229 | 127 | 94     | 92     | 356 | 178 | 15.7 | 9.4  | 337      | 640 |
| 450*                  | •             | •  |      | 130          | 287 | 114 | —   | —   | —      | —      | —   | 189 | 19.8 | 10.2 | 381      | —   |
| 500T                  | •             | •  |      | 137          | 327 | 127 | —   | —   | —      | —      | —   | 213 | 19.8 | 11.9 | 394      | —   |
| 550T                  | •             | •  |      | 152          | 367 | 140 | —   | —   | —      | —      | —   | 240 | 23.1 | 13.5 | 457      | —   |
| 600T                  | •             | •  |      | 165          | 406 | 152 | —   | —   | —      | —      | —   | 260 | 24.9 | 15.2 | 470      | —   |
| 700T                  | •             | •  |      | 191          | 464 | 178 | —   | —   | —      | —      | —   | 298 | 30.5 | 17.8 | 559      | —   |
| 750T                  | •             | •  |      | 203          | 503 | 191 | —   | —   | —      | —      | —   | 321 | 32.3 | 19.6 | 597      | —   |
| 800T                  | •             | •  |      | 222          | 546 | 210 | —   | —   | —      | —      | —   | 346 | 34.0 | 21.3 | 660      | —   |
| 850T                  | •             | •  |      | 235          | 584 | 222 | —   | —   | —      | —      | —   | 368 | 35.6 | 22.9 | 914      | —   |
| 925T                  | •             | •  |      | 257          | 635 | 241 | —   | —   | —      | —      | —   | 400 | 38.1 | 25.4 | 914      | —   |

| ⑤<br>Coupling<br>Size | Max.<br>Continuous<br>Torque (Nm) | Peak Overload<br>Torque (Nm) | ④<br>Weight<br>(kg) |       | Weight Change<br>Per mm of "L"<br>(kg) | ④<br>WR <sup>2</sup><br>(kg-m <sup>2</sup> ) |       | WR <sup>2</sup> Change<br>Per mm of "L"<br>(kg-m <sup>2</sup> -m) | ① ⑥<br>Type SN Axial<br>Capacity<br>(mm) |
|-----------------------|-----------------------------------|------------------------------|---------------------|-------|----------------------------------------|----------------------------------------------|-------|-------------------------------------------------------------------|------------------------------------------|
|                       |                                   |                              | SN, SV              | SF    |                                        | SN, SV                                       | SF    |                                                                   |                                          |
| 50                    | 19                                | 38                           | 0.499               | —     | 0.0100                                 | 0.147                                        | —     | 0.0194                                                            | ±0.58                                    |
| 62                    | 33                                | 66                           | 0.726               | —     | 0.0136                                 | 0.352                                        | —     | 0.0470                                                            | ±0.71                                    |
| 75                    | 46                                | 93                           | 1.09                | —     | 0.0236                                 | 0.557                                        | —     | 0.134                                                             | ±0.81                                    |
| 100                   | 93                                | 185                          | 2.22                | 1.63  | 0.0345                                 | 1.55                                         | 0.908 | 0.246                                                             | ±0.96                                    |
| 125                   | 252                               | 504                          | 3.41                | 2.95  | 0.0431                                 | 3.57                                         | 2.08  | 0.505                                                             | ±1.16                                    |
| 162                   | 480                               | 960                          | 4.99                | 4.77  | 0.0590                                 | 7.91                                         | 4.4   | 1.64                                                              | ±0.91                                    |
| 200                   | 972                               | 1943                         | 9.53                | 4.99  | 0.132                                  | 9.38                                         | 4.98  | 4.17                                                              | ±0.91                                    |
| 226*                  | 1611                              | 3222                         | 12.08               | 11.35 | 0.150                                  | 30.8                                         | 17.9  | 6.10                                                              | ±0.91                                    |
| 262                   | 2486                              | 4971                         | 17.52               | 16.34 | 0.186                                  | 63.9                                         | 39    | 11.91                                                             | ±1.09                                    |
| 312                   | 3186                              | 6372                         | 28                  | 25    | 0.213                                  | 133.6                                        | 85.3  | 16.38                                                             | ±1.29                                    |
| 350                   | 3966                              | 7931                         | 39                  | 35    | 0.236                                  | 236                                          | 140   | 23.06                                                             | ±1.42                                    |
| 375                   | 8733                              | 17467                        | 58                  | 50    | 0.440                                  | 416                                          | 247   | 54.36                                                             | ±1.57                                    |
| 425                   | 13315                             | 26629                        | 79                  | —     | 0.717                                  | 717                                          | —     | 118                                                               | ±1.70                                    |
| 450*                  | 15365                             | 30731                        | 94                  | —     | 0.717                                  | 982                                          | —     | 118                                                               | ±1.82                                    |
| 500T                  | 26257                             | 52513                        | 109                 | —     | 1.08                                   | 1452                                         | —     | 305                                                               | ±2.02                                    |
| 550T                  | 30414                             | 60828                        | 153                 | —     | 1.08                                   | 2461                                         | —     | 305                                                               | ±2.33                                    |
| 600T                  | 46435                             | 92870                        | 201                 | —     | 1.53                                   | 4251                                         | —     | 678                                                               | ±2.59                                    |
| 700T                  | 62026                             | 124052                       | 326                 | —     | 2.07                                   | 8195                                         | —     | 894                                                               | ±2.92                                    |
| 750T                  | 71290                             | 142581                       | 400                 | —     | 2.07                                   | 11799                                        | —     | 894                                                               | ±3.17                                    |
| 800T                  | 102586                            | 205172                       | 518                 | —     | 2.47                                   | 18802                                        | —     | 1527                                                              | ±3.45                                    |
| 850T                  | 125069                            | 250138                       | 645                 | —     | 2.72                                   | 26877                                        | —     | 2040                                                              | ±3.65                                    |
| 925T                  | 165629                            | 331257                       | 826                 | —     | 3.13                                   | 42046                                        | —     | 3081                                                              | ±3.96                                    |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Shorter "L" requires special construction. Consult Rexnord.

③ Shaft tolerances: 5/16 to 1-1/2 + .000 - .0005. 1-5/8 to 3-11/16 .000 - .001. Key furnished with standard keyway in SF stub shaft.

④ Weight and WR<sup>2</sup> at max. bore and min. "L" dimension.

⑤ T suffix to coupling size indicates thin flange design. Consult Rexnord for larger sizes.

⑥ Types SF and SV end-float is one half ± value shown for type SN.

⑦ Maximum span (L) in inches for various speeds - For SN & SV

⑧ Consult Rexnord for larger sizes.

\*Not available with Tpack.

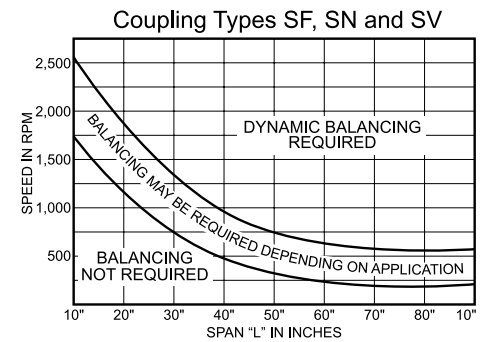
# Rexnord Thomas Floating Shaft Coupling

## Types SN, SF, SV

### Maximum Span at Given RPM

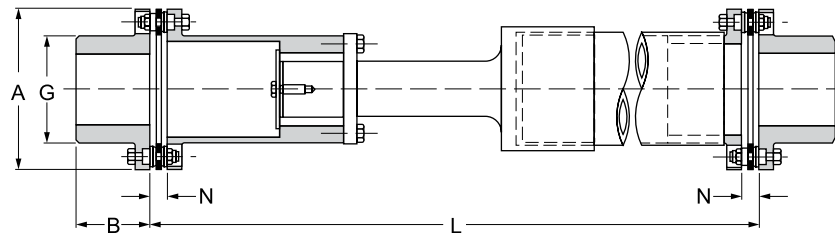
| Coupling Size | 3600 RPM        | 3000 RPM | 1800 RPM | 1500 RPM | 1200 RPM | 1000 RPM | 900 RPM | 750 RPM | 720 RPM | 600 RPM | 500 RPM         |
|---------------|-----------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|-----------------|
| 50            | Consult Rexnord |          | 43       | 47       | 52       | 56       | 56      | 56      | 56      | 56      | 56              |
| 62            |                 |          | 50       | 54       | 61       | 67       | 70      | 75      | 75      | 75      | 75              |
| 75            |                 |          | 56       | 61       | 68       | 75       | 79      | 86      | 88      | 94      | 94              |
| 100           | 41              | 45       | 57       | 64       | 71       | 78       | 82      | 91      | 93      | 102     | 102             |
| 125           | 47              | 51       | 64       | 72       | 81       | 88       | 93      | 103     | 105     | 114     | 114             |
| 162           | 54              | 59       | 75       | 84       | 94       | 103      | 109     | 119     | 122     | 133     | 133             |
| 200           | 60              | 66       | 85       | 93       | 104      | 114      | 120     | 132     | 135     | 147     | 161             |
| 226           | 64              | 70       | 90       | 99       | 112      | 122      | 128     | 141     | 144     | 157     | 172             |
| 262           | 71              | 77       | 100      | 110      | 123      | 135      | 142     | 156     | 160     | 173     | 191             |
| 312           | 75              | 82       | 107      | 117      | 130      | 143      | 151     | 165     | 173     | 185     | 203             |
| 350           | 79              | 87       | 113      | 123      | 138      | 151      | 159     | 174     | 178     | 195     | 213             |
| 375           | 87              | 95       | 123      | 135      | 151      | 165      | 174     | 191     | 195     | 213     | 234             |
| 425           | 90              | 99       | 128      | 141      | 157      | 172      | 182     | 199     | 203     | 222     | 244             |
| 450*          | 90              | 99       | 128      | 141      | 157      | 172      | 182     | 199     | 203     | 222     | 244             |
| 500T          | 104             | 113      | 147      | 161      | 180      | 197      | 207     | 227     | 232     | 254     | 279             |
| 550T          | Consult Rexnord |          | 147      | 161      | 180      | 197      | 207     | 227     | 232     | 254     | 279             |
| 600T          |                 |          | 165      | 180      | 202      | 221      | 233     | 255     | 260     | 285     | 312             |
| 700T          |                 |          | 164      | 179      | 200      | 219      | 231     | 253     | 258     | 283     | 310             |
| 750T          |                 |          | 164      | 179      | 200      | 219      | 231     | 253     | 258     | 283     | 310             |
| 800T          |                 |          | 179      | 196      | 219      | 240      | 252     | 276     | 282     | 309     | Consult Rexnord |
| 850T          |                 |          | 187      | 205      | 229      | 251      | 265     | 290     | 296     |         |                 |
| 925T          |                 |          | 200      | 220      | 245      | 269      | 284     | 311     | 317     |         |                 |

\* Not available with Tpack



## Type SN Adjustable

Type SN adjustable couplings were developed as emergency replacements for standard Type SN couplings and are available from stock in most sizes required for cooling tower applications. Each shaft may be adjusted through a four-inch length range, using a special compression bushing to lock the shaft in place once the length is set.



### General Dimensions (mm)

| Coupling Size | Max. Bore | A   | B  | G   | H  | Min. "L" | Adjustment Range | ② Weight (kg) | Weight Change Per mm of "L" (kg) | ② WR <sup>2</sup> (kg-m <sup>2</sup> ) | WR <sup>2</sup> Change per mm of "L" (kg-m <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|-----------|-----|----|-----|----|----------|------------------|---------------|----------------------------------|----------------------------------------|-----------------------------------------------------------|-----------------------|
| 162           | 48        | 114 | 48 | 70  | 14 | 362      | 101.6            | 8.6           | 0.06                             | 0.0108                                 | 0.0640                                                    | ±0.91                 |
| 200           | 57        | 138 | 54 | 83  | 14 | 384      | 101.6            | 13.6          | 0.13                             | 0.0234                                 | 0.164                                                     | ±0.91                 |
| 226           | 67        | 148 | 67 | 96  | 15 | 439      | 101.6            | 19.5          | 0.15                             | 0.0442                                 | 0.240                                                     | ±0.91                 |
| 262           | 79        | 170 | 76 | 114 | 12 | 480      | 101.6            | 27.7          | 0.19                             | 0.0741                                 | 0.469                                                     | ±1.09                 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> at maximum bore.

# Rexnord Thomas Single-Flexing Disc Couplings

## Type ST

ST couplings are designed for applications which require the coupling to support a substantial radial load while accommodating angular misalignment. Typical installations include units where one shaft is fully supported in its own bearings and the other shaft is single-bearing supported. The radial load is transmitted through the coupling to the inner bearing of the other shaft. Belt drives can be designed to utilize this type of coupling to eliminate a jack shaft bearing and transfer radial loading directly to a machine bearing. Such arrangements are economical and space saving. See the sketches to the right.

### Construction

Hubs: Carbon steel

Bolts: Alloy steel

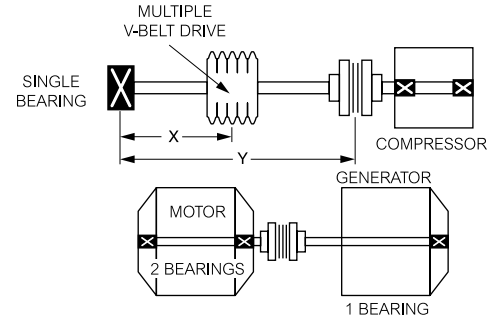
Disc Packs: Tomaloy Tpack not available

Coatings Available: Contact Rexnord.

Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

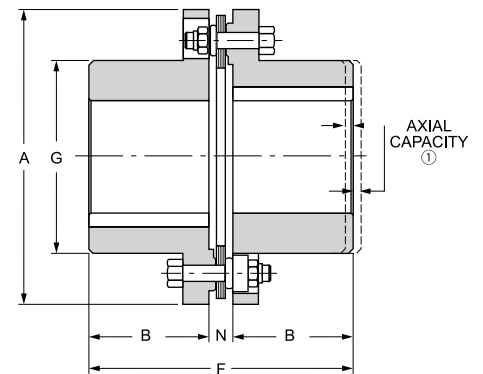
### NOTE:

Single-flexing couplings cannot accommodate parallel misalignment. They are not suitable for connecting equipment where both shafts are held rigidly in their own bearings.



### General Dimensions (mm)

| Coupling Size | ⑦ Rough Bore | Max. Bore | A   | B   | C   | F   | G   |
|---------------|--------------|-----------|-----|-----|-----|-----|-----|
| 162           | —            | 41        | 116 | 44  | 67  | 155 | 70  |
| 200           | —            | 51        | 146 | 54  | 76  | 184 | 92  |
| 225           | —            | 57        | 152 | 64  | 76  | 203 | 99  |
| 262           | —            | 67        | 175 | 73  | 89  | 235 | 114 |
| 312           | —            | 79        | 206 | 86  | 105 | 276 | 138 |
| 350           | —            | 89        | 232 | 95  | 116 | 306 | 152 |
| 375           | —            | 95        | 256 | 102 | 132 | 333 | 165 |
| 425           | —            | 108       | 279 | 108 | 141 | 357 | 178 |
| 450           | —            | 114       | 302 | 114 | 151 | 379 | 189 |
| 500           | 68           | 127       | 341 | 127 | 173 | 427 | 213 |
| 550           | 68           | 140       | 381 | 140 | 196 | 475 | 240 |
| 600           | 94           | 152       | 425 | 152 | 215 | 519 | 262 |
| 700           | 108          | 178       | 481 | 178 | 245 | 600 | 298 |
| 750           | 125          | 191       | 524 | 184 | 268 | 635 | 321 |
| 800           | 132          | 203       | 568 | 197 | 289 | 683 | 349 |



| Coupling Size | Max. Radial Load (kg) | Max. Kilowatt per 100 RPM |          |          |           |          |          | Max. RPM | ⑥ Max. Continuous Torque (Nm) | ⑥ Peak Overload Torque (Nm) | ② Weight (kg) | ② WR <sup>2</sup> (kg-m <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|-----------------------|---------------------------|----------|----------|-----------|----------|----------|----------|-------------------------------|-----------------------------|---------------|----------------------------------------|-----------------------|
|               |                       | Smooth                    |          |          | Pulsating |          |          |          |                               |                             |               |                                        |                       |
|               |                       | ③ Col. 1                  | ④ Col. 2 | ⑤ Col. 3 | ③ Col. 4  | ④ Col. 5 | ⑤ Col. 6 |          |                               |                             |               |                                        |                       |
| 162           | 68                    | 0.6                       | 0.8      | 1.0      | 0.3       | 0.4      | 0.5      | 2,500    | 99                            | 149                         | 3.2           | 0.00469                                | ±0.45                 |
| 200           | 102                   | 1.1                       | 1.6      | 2.0      | 0.5       | 0.7      | 1.0      | 2,500    | 192                           | 288                         | 6.4           | 0.0135                                 | ±0.45                 |
| 225           | 154                   | 1.6                       | 2.2      | 2.8      | 0.7       | 1.1      | 1.4      | 2,500    | 271                           | 407                         | 6.8           | 0.0173                                 | ±0.45                 |
| 262           | 236                   | 2.8                       | 4.0      | 5.1      | 1.4       | 1.9      | 2.5      | 2,500    | 484                           | 725                         | 10.4          | 0.0352                                 | ±0.55                 |
| 312           | 318                   | 4.5                       | 6.3      | 8.0      | 2.2       | 3.1      | 4.0      | 2,500    | 761                           | 1,141                       | 18.6          | 0.0908                                 | ±0.66                 |
| 350           | 409                   | 6.4                       | 8.9      | 11.5     | 3.1       | 4.5      | 5.7      | 2,300    | 1,089                         | 1,638                       | 25.4          | 0.152                                  | ±0.71                 |
| 375           | 568                   | 9.8                       | 13.7     | 17.7     | 4.9       | 6.9      | 8.8      | 2,200    | 1,683                         | 2,531                       | 32.2          | 0.240                                  | ±0.78                 |
| 425           | 681                   | 12.7                      | 17.8     | 23       | 6.4       | 8.9      | 12.2     | 1,900    | 2,181                         | 3,276                       | 42.2          | 0.381                                  | ±0.86                 |
| 450           | 817                   | 16.3                      | 23       | 29       | 8.1       | 11.4     | 14.6     | 1,500    | 2,779                         | 4,169                       | 49.9          | 0.498                                  | ±0.91                 |
| 500           | 1090                  | 25                        | 35       | 45       | 12.6      | 17.5     | 23       | 1,500    | 4,293                         | 6,440                       | 72.6          | 0.908                                  | ±1.04                 |
| 550           | 1453                  | 37                        | 51       | 65       | 18.3      | 26       | 33       | 1,500    | 6,191                         | 9,287                       | 104.4         | 1.64                                   | ±1.16                 |
| 600           | 1816                  | 51                        | 72       | 92       | 26        | 36       | 46       | 1,200    | 8,756                         | 13,106                      | 136.2         | 2.46                                   | ±1.29                 |
| 700           | 2497                  | 79                        | 111      | 142      | 40        | 55       | 71       | 1,100    | 13,558                        | 20,336                      | 199.8         | 5.27                                   | ±1.47                 |
| 750           | 2951                  | 104                       | 145      | 187      | 52        | 73       | 94       | 1,000    | 17,851                        | 26,776                      | 267.9         | 7.91                                   | ±1.58                 |
| 800           | 3496                  | 133                       | 185      | 238      | 66        | 93       | 119      | 900      | 22,596                        | 33,894                      | 317.8         | 11.43                                  | ±1.72                 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> at maximum bore.

③ Col. 1 and 4 give maximum HP/100 RPM permitted when combined with maximum radial load.

④ Col. 2 and 5 give maximum HP/100 RPM permitted when combined with 2/3 maximum radial load.

⑤ Col. 3 and 6 give maximum HP/100 RPM permitted when combined with 1/3 maximum radial load.

⑥ Maximum torque and peak overload torque are based on 1/3 maximum radial load.

⑦ Consult Rexnord for minimum rough bore on sizes 162-450.

# Rexnord Thomas Single-Flexing Disc Couplings

## Type SN Single

Type SN single couplings are used for floating shaft applications where the user wishes to supply his own intermediate solid shaft, or for single-flexing applications where light-to-moderate radial loads occur. They are generally more economical than ST couplings.

### Construction

Hubs: Carbon steel

Bolts: Alloy steel

Disc Packs: Tomaloy Tpack (not available for size 450)

Coatings Available: Consult Rexnord

Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/3° per disc pack

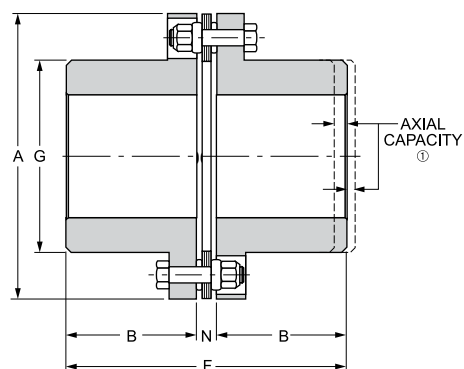


### NOTE:

Single-flexing couplings cannot accommodate parallel misalignment. They are not suitable for connecting equipment where both shafts are held rigidly in their own bearings.

### General Dimensions (mm)

| Coupling Size | ② Max. Bore | A   | B   | F   | G   | N    |
|---------------|-------------|-----|-----|-----|-----|------|
| 100           | 28          | 82  | 35  | 82  | 43  | 11.4 |
| 125           | 34          | 98  | 41  | 96  | 52  | 13.2 |
| 162           | 50          | 114 | 48  | 109 | 70  | 13.7 |
| 200           | 58          | 138 | 54  | 123 | 43  | 11.4 |
| 226           | 70          | 148 | 67  | 148 | 52  | 13.2 |
| 262           | 84          | 170 | 76  | 164 | 70  | 13.7 |
| 312           | 97          | 198 | 86  | 184 | 43  | 11.4 |
| 350           | 110         | 222 | 95  | 204 | 52  | 13.2 |
| 375           | 120         | 246 | 102 | 218 | 70  | 13.7 |
| 425           | 130         | 267 | 108 | 232 | 178 | 15.7 |
| 450           | 140         | 287 | 114 | 248 | 189 | 19.8 |
| 500T          | 146         | 327 | 127 | 274 | 213 | 19.8 |
| 550T          | 166         | 367 | 140 | 303 | 240 | 23.1 |
| 600T          | 176         | 406 | 152 | 330 | 260 | 24.9 |
| 700T          | 205         | 464 | 178 | 386 | 298 | 30.5 |
| 750T          | 224         | 503 | 191 | 413 | 321 | 32.3 |



| Coupling Size | Max. Kilowatt Per 100 RPM | Max. RPM | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | ③ Weight (kg) | ③ WR <sup>2</sup> (kg-m <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|---------------------------|----------|-----------------------------|---------------------------|---------------|----------------------------------------|-----------------------|
|               | Service Factor 1.0        |          |                             |                           |               |                                        |                       |
| 100           | 0.97                      | 7,100    | 93                          | 185                       | 1.0           | 0.0008                                 | ±0.48                 |
| 125           | 2.64                      | 6,500    | 252                         | 504                       | 1.7           | 0.0019                                 | ±0.58                 |
| 162           | 5.03                      | 6,000    | 480                         | 960                       | 2.6           | 0.0050                                 | ±0.45                 |
| 200           | 10.2                      | 5,500    | 972                         | 1943                      | 5.0           | 0.0108                                 | ±0.45                 |
| 226           | 16.9                      | 5,200    | 1611                        | 3222                      | 6.4           | 0.0155                                 | ±0.45                 |
| 262           | 61                        | 4,800    | 5966                        | 11931                     | 10.4          | 0.0342                                 | ±0.55                 |
| 312           | 61                        | 4,500    | 5,803                       | 11605                     | 16.8          | 0.0772                                 | ±0.66                 |
| 350           | 79                        | 4,100    | 7,552                       | 15105                     | 23.6          | 0.134                                  | ±0.71                 |
| 375           | 119                       | 3,900    | 11,323                      | 22646                     | 32.2          | 0.225                                  | ±0.78                 |
| 425           | 159                       | 3,700    | 15,161                      | 30323                     | 40.4          | 0.339                                  | ±0.86                 |
| 450           | 178                       | 3,600    | 16,979                      | 33958                     | 54.9          | 0.462                                  | ±0.91                 |
| 500T          | 292                       | 2,800    | 27,817                      | 55633                     | 68.1          | 0.837                                  | ±1.04                 |
| 550T          | 391                       | 2,500    | 37,300                      | 74599                     | 95.3          | 1.50                                   | ±1.16                 |
| 600T          | 513                       | 2,300    | 48,973                      | 97945                     | 116.7         | 2.05                                   | ±1.29                 |
| 700T          | 799                       | 2,000    | 76,180                      | 152359                    | 177.1         | 3.54                                   | ±1.47                 |
| 750T          | 992                       | 1,800    | 94,694                      | 189388                    | 242.4         | 7.21                                   | ±1.58                 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of the end-float restricting devices.

② Consult Rexnord for minimum rough bore on sizes 162-450.

③ Weight and WR<sup>2</sup> shown at maximum bore.

# Rexnord Thomas Flexible Disc Couplings

## High Performance THP

THP couplings are designed for use on high-speed equipment where coupling size and weight must be kept to a minimum. Typically, these couplings connect prime movers such as motors, steam and gas turbines, rotary engines and gas expanders, to centrifugal and rotary compressors, generators, process and boiler feed pumps. Test stand and marine propulsion drives also benefit from this unique coupling design.

The flexing elements are precision-stamped from a high-strength 300 series stainless steel. This material has been used successfully for many years in Thomas couplings manufactured for helicopter drive shaft applications. Special materials for hubs, spacers and/or flexing elements are available to meet unique application requirements.

## Construction

Hubs and Center Member: Heat treated 4140 and 4340 alloy steel

Bolts: Aircraft quality alloy steel with 12-point wrenching pattern

Disc Packs: High strength 300 series stainless steel

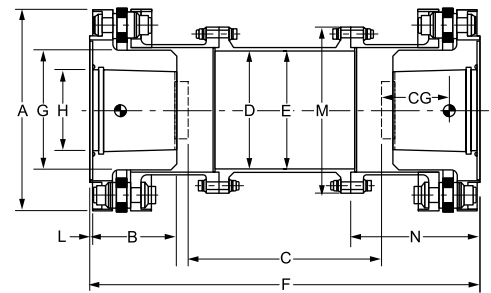
Coatings Available: Black oxide, zinc, cadmium and other coatings available per customer specification.

Other disc pack materials such as Monel and Inconel are available; please consult Rexnord.



## General Dimensions (mm)

| Coupling Size | A   | B   | C   | D   | E   | F   | ② G | ① Max. Bore Hydraulic H | L   | M   | N   |
|---------------|-----|-----|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|
| 442-6         | 137 | 52  | 457 | 79  | 73  | 587 | 76  | 51                      | 3.2 | 114 | 96  |
| 519-6         | 162 | 66  | 457 | 98  | 92  | 618 | 95  | 64                      | 3.2 | 135 | 114 |
| 519-8         | 164 | 66  | 457 | 98  | 92  | 618 | 95  | 64                      | 3.2 | 135 | 114 |
| 638-6         | 195 | 79  | 457 | 117 | 111 | 646 | 114 | 76                      | 3.2 | 162 | 127 |
| 638-8         | 195 | 79  | 457 | 117 | 111 | 646 | 114 | 76                      | 3.2 | 162 | 128 |
| 744-6         | 225 | 94  | 457 | 138 | 130 | 676 | 133 | 89                      | 3.2 | 189 | 133 |
| 744-8         | 225 | 94  | 457 | 138 | 130 | 676 | 133 | 89                      | 3.2 | 189 | 133 |
| 850-6         | 257 | 106 | 457 | 159 | 149 | 705 | 152 | 102                     | 3.2 | 211 | 159 |
| 850-8         | 257 | 106 | 457 | 159 | 149 | 705 | 152 | 102                     | 3.2 | 211 | 161 |
| 948-6         | 291 | 119 | 457 | 178 | 167 | 733 | 171 | 114                     | 3.2 | 237 | 181 |
| 948-8         | 291 | 119 | 457 | 178 | 167 | 733 | 171 | 114                     | 3.2 | 237 | 182 |
| 1025-6        | 318 | 134 | 457 | 197 | 184 | 770 | 191 | 127                     | 3.2 | 263 | 201 |
| 1025-8        | 318 | 134 | 457 | 197 | 184 | 770 | 191 | 127                     | 3.2 | 263 | 203 |



| Coupling Size | ① Max. Standard Bore (mm) | ③ ④ Max. Continuous Torque Rating (Nm) | Max. Speed RPM | ⑤ Weight (kg) | ⑤ WR <sup>2</sup> (kg-m <sup>2</sup> ) | ⑤ Half Coupling C.G. (mm) | ⑤ Torsional Stiffness K <sub>t</sub> x 10 <sup>6</sup> (Nm/Rad) | Spacer Tube Per Inch                      |             |                                      | ⑥ Axial Capacity Continuous (mm) |
|---------------|---------------------------|----------------------------------------|----------------|---------------|----------------------------------------|---------------------------|-----------------------------------------------------------------|-------------------------------------------|-------------|--------------------------------------|----------------------------------|
|               |                           |                                        |                |               |                                        |                           |                                                                 | K <sub>t</sub> x 10 <sup>6</sup> (Nm/Rad) | Weight (kg) | WR <sup>2</sup> (kg-m <sup>2</sup> ) |                                  |
| 442-6         | 51                        | 3050                                   | 28,500         | 9.7           | 0.02                                   | 41.7                      | 0.0884                                                          | 3.45                                      | 0.150       | 0.000217                             | ±3.05                            |
| 519-6         | 64                        | 5760                                   | 24,000         | 16.0          | 0.05                                   | 51.1                      | 0.181                                                           | 6.73                                      | 0.187       | 0.000424                             | ±3.68                            |
| 519-8         | 64                        | 8470                                   | 23,800         | 16.4          | 0.05                                   | 51.1                      | 0.208                                                           | 6.73                                      | 0.187       | 0.000424                             | ±2.54                            |
| 638-6         | 76                        | 8810                                   | 19,900         | 24.7          | 0.11                                   | 61.7                      | 0.322                                                           | 11.6                                      | 0.224       | 0.000734                             | ±4.44                            |
| 638-8         | 76                        | 8810                                   | 19,900         | 24.7          | 0.11                                   | 62.0                      | 0.369                                                           | 11.6                                      | 0.224       | 0.000734                             | ±3.18                            |
| 744-6         | 89                        | 14100                                  | 17,200         | 37.3          | 0.214                                  | 72.9                      | 0.566                                                           | 23.5                                      | 0.224       | 0.00148                              | ±5.21                            |
| 744-8         | 89                        | 19900                                  | 17,200         | 38.0          | 0.222                                  | 73.2                      | 0.656                                                           | 23.5                                      | 0.330       | 0.00148                              | ±3.68                            |
| 850-6         | 102                       | 22000                                  | 15,100         | 56.7          | 0.430                                  | 80.8                      | 0.917                                                           | 42.7                                      | 0.454       | 0.00269                              | ±5.97                            |
| 850-8         | 102                       | 33200                                  | 15,100         | 57.6          | 0.448                                  | 81.0                      | 1.08                                                            | 42.7                                      | 0.454       | 0.00269                              | ±4.19                            |
| 948-6         | 114                       | 32200                                  | 13,400         | 78.9          | 0.761                                  | 90.7                      | 1.45                                                            | 69.7                                      | 0.594       | 0.00439                              | ±6.73                            |
| 948-8         | 114                       | 48300                                  | 13,400         | 80.7          | 0.799                                  | 90.7                      | 1.74                                                            | 69.7                                      | 0.594       | 0.00439                              | ±4.70                            |
| 1025-6        | 127                       | 42400                                  | 12,250         | 107           | 1.24                                   | 102                       | 2.09                                                            | 108                                       | 0.748       | 0.00679                              | ±7.37                            |
| 1025-8        | 127                       | 65400                                  | 12,250         | 109           | 1.30                                   | 103                       | 2.52                                                            | 108                                       | 0.748       | 0.00679                              | ±5.21                            |

① For larger bores, consult Rexnord.

② May be reduced for smaller shaft sizes. Consult Rexnord.

③ Minimum service factor to be applied = 1.5

④ Max. peak overload torque = 1.33 x max. cont. torque

⑤ Information based on standard dimensional data shown.

⑥ Max. transient axial misalignment = 120% of values shown above.

# Rexnord Thomas Flexible Disc Couplings

## High Performance Series 63

Series 63 couplings incorporate a patented\* one-piece disc/diaphragm flexing element for positive torque transmission with low restoring forces. This unitized assembly accommodates misalignment and transmits torque through a multiple disc arrangement which provides redundancy in construction with a high degree of reliability. Pilot plates on the sides of each flexing element give accurate, repeatable registration of coupling components, and retain original dynamic balance repeatability while protecting the flexing members from damage.

Series 63 couplings are ideal for the most demanding drive requirements. Prime movers include motor, steam and gas turbines, rotary engines, and gas expanders. Driven equipment applications include centrifugal and rotary compressors, generators, test stands, boiler feed pumps and other multi-stage pumps, and marine propulsion drives. Custom designs available for torsional tuning and reduced moment.

\*U.S. Patent 4055966

## Construction

Hubs and Center Member: Heat-treated alloy steel

Bolts: Alloy steel

Disc Packs: High strength 300 series stainless steel

Coatings Available: Consult Rexnord

Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

When specified, Series 63 couplings meet all requirements of API 671.

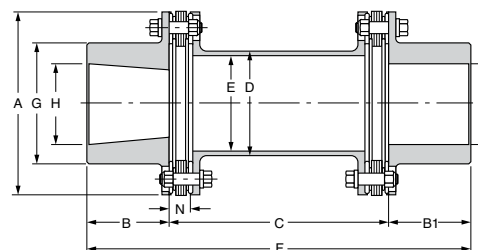
If application requires API specification, please consult Rexnord.



To determine Kt for a coupling with longer than standard "C" dimension, use the formula shown to the right:

$$K_t = \frac{1}{\frac{1}{K_t} + \frac{\Delta L}{\Delta K_t}}$$

Where  $\Delta L$  = additional "C" dimension required  $\Delta K_t$  = torsional stiffness change per inch of "C" dimension and  $1/K_t$  - inverse of catalog value.



## General Dimensions (mm)

| Coupling Size | Max. Bore   |         | A     | B     | B1    | ① Std. C | Min. C | D     | E     | F     | ② G Max. | N     | Capacity |
|---------------|-------------|---------|-------|-------|-------|----------|--------|-------|-------|-------|----------|-------|----------|
|               | Hydraulic H | Keyed K |       |       |       |          |        |       |       |       |          |       |          |
| 162           | 51          | 48      | 108   | 52    | 48    | 127      | 83     | 61    | 56    | 227   | 71       | 13.46 | ±1.27    |
| 200           | 67          | 62      | 139   | 70    | 62    | 127      | 105    | 86    | 81    | 259   | 93       | 17.27 | ±1.77    |
| 225           | 71          | 67      | 145   | 74    | 67    | 127      | 108    | 89    | 84    | 267   | 100      | 17.78 | ±1.39    |
| 262           | 82          | 76      | 171   | 86    | 76    | 152      | 121    | 100   | 94    | 314   | 114      | 19.81 | ±1.52    |
| 312           | 95          | 89      | 203   | 100   | 89    | 152      | 127    | 121   | 113   | 341   | 133      | 23.88 | ±1.90    |
| 350           | 106         | 99      | 226   | 111   | 99    | 178      | 164    | 127   | 119   | 388   | 148      | 28.70 | ±2.03    |
| 375           | 119         | 111     | 251   | 124   | 111   | 178      | 168    | 154   | 145   | 413   | 167      | 29.72 | ±2.28    |
| 425           | 126         | 117     | 272   | 134   | 117   | 203      | 187    | 165   | 154   | 455   | 176      | 33.27 | ±2.54    |
| 450           | 136         | 127     | 292   | 145   | 127   | 203      | 194    | 178   | 166   | 475   | 191      | 34.80 | ±2.79    |
| 500           | 152         | 142     | 333   | 164   | 142   | 229      | 216    | 197   | 183   | 535   | 213      | 37.59 | ±3.04    |
| 550           | 170         | 159     | 375   | 187   | 159   | 251      | 251    | 222   | 205   | 597   | 238      | 43.94 | ±3.55    |
| 600           | 186         | 173     | 416   | 205   | 173   | 286      | 286    | 238   | 218   | 664   | 260      | 51.56 | ±3.81    |
| 700           | 208         | 194     | 475   | 228   | 194   | 305      | —      | 270   | 246   | 726   | 291      | 53.34 | ±4.44    |
| 750           | 224.5       | 209.6   | 515.9 | 246.1 | 209.6 | 355.6    | —      | 300.0 | 274.3 | 811.3 | 314.5    | 58.42 | ±4.82    |

| Coupling Size | ③ Max. Speed RPM | Dynamic Data                |                           | ④ Standard Mass-Elastic Data |                                      |                                  |           |                      |                                      |                                  |
|---------------|------------------|-----------------------------|---------------------------|------------------------------|--------------------------------------|----------------------------------|-----------|----------------------|--------------------------------------|----------------------------------|
|               |                  | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | Weight (kg)                  | WR <sup>2</sup> (kg-m <sup>2</sup> ) | Kt x 10 <sup>6</sup> (kg-mm/Rad) | C.G. (mm) | Change per mm of "C" |                                      |                                  |
|               |                  |                             |                           |                              |                                      |                                  |           | Weight (kg)          | WR <sup>2</sup> (kg-m <sup>2</sup> ) | Kt x 10 <sup>6</sup> (kg-mm/Rad) |
| 162           | 36,000           | 665                         | 1,661                     | 3.5                          | 0.00483                              | 5.78                             | 9.4       | 0.086                | 0.00008                              | 121.0                            |
| 200           | 28,600           | 1,537                       | 3,841                     | 7.4                          | 0.01752                              | 20.51                            | 14.2      | 0.122                | 0.00022                              | 344.5                            |
| 225           | 26,700           | 2,384                       | 5,954                     | 8.7                          | 0.02291                              | 26.84                            | 15.7      | 0.127                | 0.00024                              | 387.1                            |
| 262           | 22,500           | 4,271                       | 10,677                    | 13.9                         | 0.04893                              | 44.93                            | 17.0      | 0.191                | 0.00045                              | 722.4                            |
| 312           | 19,100           | 7,242                       | 18,078                    | 23.1                         | 0.116                                | 65.21                            | 18.8      | 0.286                | 0.00098                              | 1578                             |
| 350           | 17,200           | 9,253                       | 23,162                    | 31.4                         | 0.195                                | 109.9                            | 20.1      | 0.304                | 0.00114                              | 1843                             |
| 375           | 15,600           | 14,236                      | 35,590                    | 42.2                         | 0.322                                | 141.7                            | 25.1      | 0.404                | 0.00226                              | 3652                             |
| 425           | 14,300           | 19,094                      | 47,793                    | 53.5                         | 0.478                                | 218.9                            | 24.6      | 0.549                | 0.00349                              | 5657                             |
| 450           | 13,300           | 24,066                      | 60,221                    | 66.7                         | 0.683                                | 241.9                            | 27.7      | 0.612                | 0.00454                              | 7328                             |
| 500           | 11,600           | 35,703                      | 89,258                    | 97.1                         | 1.275                                | 400.9                            | 30        | 0.839                | 0.00756                              | 12213                            |
| 550           | 10,300           | 51,295                      | 128,238                   | 139.7                        | 2.306                                | 574.9                            | 34        | 1.15                 | 0.0132                               | 21314                            |
| 600           | 9,300            | 71,180                      | 177,951                   | 188.7                        | 3.809                                | 706.3                            | 35        | 1.43                 | 0.0186                               | 30070                            |
| 700           | 8,200            | 102,025                     | 255,120                   | 274.4                        | 7.21                                 | 1152                             | 37        | 1.93                 | 0.0322                               | 51961                            |
| 750           | 7,500            | 129,933                     | 324,831                   | 350.6                        | 10.84                                | 1509                             | 39        | 2.28                 | 0.0475                               | 76040                            |

① Standard dimension - may be modified as necessary.

② "G" dimension at listed maximum bore and will vary depending on bore size.

③ Consult Rexnord with higher speed requirements.

④ Weight and C.G. data based on standard "C" dimension, maximum hydraulic bores (H) and hydraulic hub lengths (B). Torsional stiffness (Kt) assumes a 1/3 shaft penetration factor.

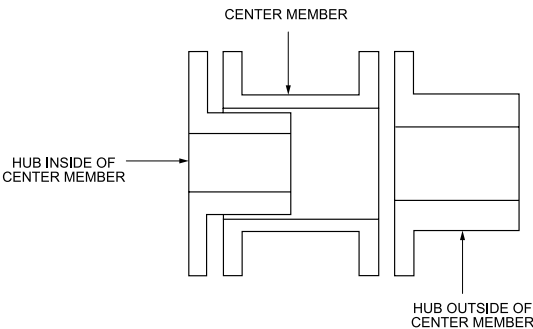
Rexnord Thomas Miniature Couplings

Thomas Miniature Flexible Disc Couplings

Construction

Hubs and Center Member: Aluminum alloy, anodized  
Rivets: Brass  
Washers: Brass  
Discs: Stainless steel  
Set screws: 18-8 Stainless steel, Passivated  
Max. Temperature: 250°F  
Available with electronically insulated phenolic material.

Guide to Proper Designation of Hubs



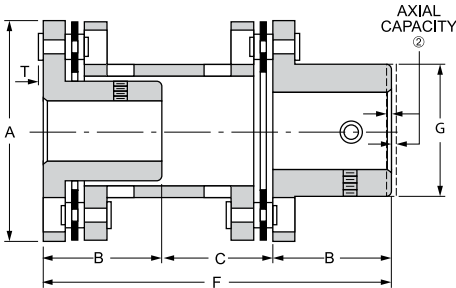
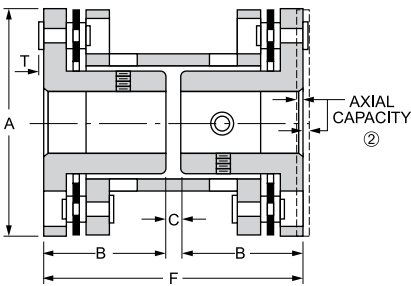
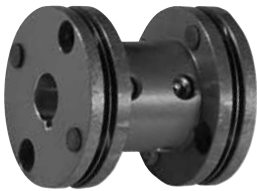
Style CC

This coupling has both hubs inverted and is designed to fit shafts normally encountered at a given torque range. Ideal for use where space limitations require close coupling of the shafts.

General Dimensions (mm)

| Coupling Size | A    | B    | C   | F    | T    | <sup>①</sup> Torque Capacity (Nm) |
|---------------|------|------|-----|------|------|-----------------------------------|
| 12            | 12.7 | 6.4  | 0.8 | 13.5 | 0.46 | 0.12                              |
| 18            | 19.1 | 9.5  | 1.6 | 20.6 | 0.58 | 0.25                              |
| 25            | 25.4 | 12.7 | 1.6 | 27.0 | 0.64 | 0.53                              |
| 37            | 36.5 | 17.5 | 3.2 | 38.1 | 0.89 | 2.15                              |
| 50            | 44.5 | 23.8 | 3.2 | 50.8 | 1.14 | 8.47                              |
| 62            | 57.2 | 27.0 | 3.2 | 57.2 | 1.52 | 33.90                             |
| 75            | 63.5 | 30.2 | 3.2 | 63.5 | 1.52 | 49.71                             |
| 100           | 76.2 | 34.9 | 6.4 | 76.2 | 1.52 | 79.09                             |

- ① Torque capacities are based on smooth drives with moderate torque fluctuations. Reduce ratings to 1/3 the value shown for severe applications such as indexing drives where torque reversals occur.
- ② All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.



Style CA

This design of our miniature coupling has one inverted hub to accept a normal shaft and one extended hub to accommodate oversize shafts. It also accommodates a larger shaft gap than the Style CC.

General Dimensions (mm)

| Coupling Size | A    | B    | C    | F     | G    | T    | <sup>①</sup> Torque Capacity (Nm) |
|---------------|------|------|------|-------|------|------|-----------------------------------|
| 12            | 12.7 | 6.4  | 6.0  | 18.7  | 7.9  | 0.46 | 0.12                              |
| 18            | 19.1 | 9.5  | 9.5  | 28.6  | 11.9 | 0.58 | 0.25                              |
| 25            | 25.4 | 12.7 | 11.9 | 37.3  | 15.9 | 0.64 | 0.53                              |
| 37            | 36.5 | 17.5 | 17.5 | 52.4  | 22.2 | 0.89 | 2.15                              |
| 50            | 44.5 | 23.8 | 23.0 | 70.6  | 27.0 | 1.14 | 8.47                              |
| 62            | 57.2 | 27.0 | 25.4 | 79.4  | 34.9 | 1.52 | 33.90                             |
| 75            | 63.5 | 30.2 | 28.6 | 88.9  | 41.3 | 1.52 | 49.71                             |
| 100           | 76.2 | 34.9 | 34.9 | 104.8 | 47.6 | 1.52 | 79.09                             |

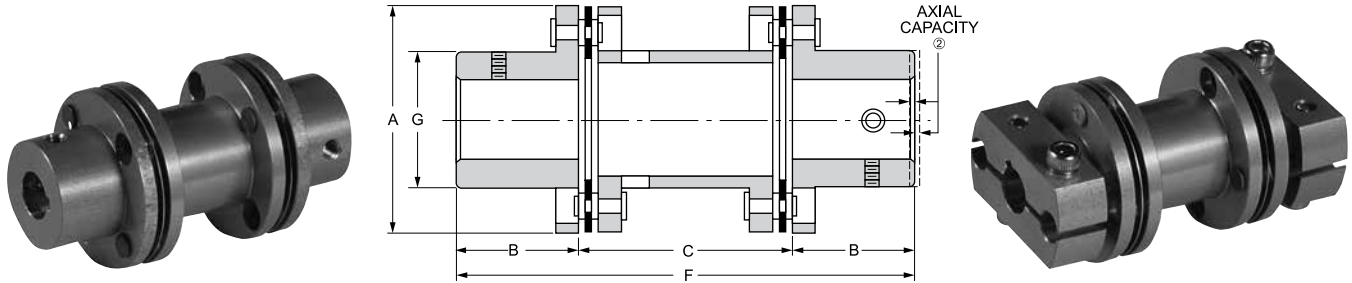
- ① Torque capacities are based on smooth drives with moderate torque fluctuations. Reduce ratings to 1/3 the value shown for severe applications such as indexing drives where torque reversals occur.
- ② All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

## Rexnord Thomas Miniature Couplings

### Style CB & CBC

This coupling design has both hubs extended to accept two oversized shafts. Shaft gap is larger than that of the Style CA or CC couplings.

Style CBC is the newest addition to our miniature coupling line. It offers clamping hubs that are an integral part of the coupling. The clamping hubs assure positive fit on the shafts. There are no loose parts to handle during installation. The Style CBC coupling has the same dimensions and torque capacities as the Style CB. Consult Rexnord for additional design and engineering data.



#### General Dimensions (mm)

| Coupling Size | A    | B    | C    | F     | G    | Torque Capacity (Nm) |
|---------------|------|------|------|-------|------|----------------------|
| 12            | 12.7 | 6.4  | 11.1 | 23.8  | 7.9  | 0.13                 |
| 18            | 19.1 | 9.5  | 17.5 | 36.5  | 11.9 | 0.25                 |
| 25            | 25.4 | 12.7 | 22.2 | 47.6  | 15.9 | 0.53                 |
| 37            | 36.5 | 17.5 | 31.8 | 66.7  | 22.2 | 2.15                 |
| 50            | 44.5 | 23.8 | 42.9 | 90.5  | 27.0 | 8.49                 |
| 62            | 57.2 | 27.0 | 47.6 | 101.6 | 34.9 | 33.98                |
| 75            | 63.5 | 30.2 | 54.0 | 127.0 | 41.3 | 49.83                |
| 100           | 76.2 | 34.9 | 63.5 | 127.0 | 47.6 | 79.28                |

### Styles CC, CA, CB & CBC

#### Ratings and Mass Elastic Data

| Coupling Size | Max. RPM | ① Approx Weight (kg) | ① Approx WR <sup>2</sup> (kg-m <sup>2</sup> ) | Torsional Rigidity K <sub>t</sub> x 10 <sup>3</sup> (kg-mm/Rad) | Max. Angular Misalignment Continuous Per Flexing Element | Max. Parallel Misalignment Continuous (mm) | Axial Capacity (Nm) |
|---------------|----------|----------------------|-----------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------|---------------------|
| 12            | 150,000  | .003                 | 0.048                                         | 4.779                                                           | 2°                                                       | 0.381                                      | ±0.40               |
| 18            | 100,000  | .008                 | 0.324                                         | 7.792                                                           | 2°                                                       | 0.381                                      | ±0.40               |
| 25            | 80,000   | .021                 | 1.46                                          | 19.128                                                          | 2°                                                       | 0.711                                      | ±0.78               |
| 37            | 55,000   | .057                 | 8.67                                          | 127.769                                                         | 1.5°                                                     | 0.711                                      | ±0.78               |
| 50            | 45,000   | .114                 | 25.94                                         | 195.527                                                         | 1°                                                       | 0.711                                      | ±0.78               |
| 62            | 35,000   | .265                 | 91.3                                          | 509.219                                                         | 0.67°                                                    | 0.711                                      | ±0.78               |
| 75            | 30,000   | .328                 | 157.5                                         | 795.300                                                         | 0.67°                                                    | 0.711                                      | ±0.78               |
| 100           | 25,000   | .567                 | 420.7                                         | 1072.446                                                        | 0.50°                                                    | 0.508                                      | ±0.78               |

① Weight and WR<sup>2</sup> at maximum bore.

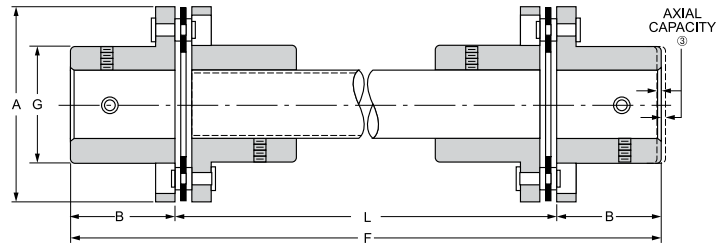
② All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

## Rexnord Thomas Miniature Couplings

### Style CE & CS

The Style CE coupling consists of two Style CS single flexing couplings that are connected by a tubular shaft. It is designed to span large distances between shafts and is ideal for those applications where a large amount of parallel misalignment is anticipated.

The Style CS is designed for applications where one shaft is fully supported in its own bearings and the other shaft is single-bearing supported. The single flexing design can only accept angular misalignment.



#### General Data <sup>④</sup>

| Coupling Size | A (mm) | B (mm) | C (mm) | F (mm) | G (mm) | L (mm)                     | Max. RPM        |          | <sup>①</sup> Torque Capacity (Nm) | Weight (kg)     |       | Weight Change Per Inch of "L" (kg) |
|---------------|--------|--------|--------|--------|--------|----------------------------|-----------------|----------|-----------------------------------|-----------------|-------|------------------------------------|
|               |        |        |        |        |        |                            | Style CE        | Style CS |                                   | <sup>②</sup> CE | CS    |                                    |
| 12            | 12.7   | 6.4    | 0.8    | 13.5   | 8.0    | Varies to suit as required | Consult Rexnord | 150,000  | 0.12                              | 0.013           | 0.002 | 0.0008                             |
| 18            | 19.1   | 9.5    | 1.6    | 20.7   | 11.9   |                            |                 | 100,000  | 0.25                              | 0.027           | 0.006 | 0.0014                             |
| 25            | 25.4   | 12.7   | 2.4    | 27.8   | 15.9   |                            |                 | 80,000   | 0.53                              | 0.048           | 0.014 | 0.0017                             |
| 37            | 36.5   | 17.5   | 2.8    | 37.7   | 22.2   |                            |                 | 55,000   | 2.15                              | 0.116           | 0.040 | 0.0031                             |
| 50            | 44.5   | 23.8   | 3.6    | 51.2   | 27.0   |                            |                 | 45,000   | 8.49                              | 0.221           | 0.080 | 0.0051                             |
| 62            | 57.2   | 27.0   | 4.4    | 58.3   | 34.9   |                            |                 | 35,000   | 33.98                             | 0.405           | 0.166 | 0.0062                             |
| 75            | 63.5   | 30.2   | 4.8    | 65.1   | 41.3   |                            |                 | 30,000   | 49.83                             | 0.513           | 0.171 | 0.0108                             |
| 100           | 76.2   | 34.9   | 5.7    | 75.6   | 47.6   |                            |                 | 25,000   | 79.28                             | 0.811           | 0.363 | 0.0119                             |

<sup>①</sup> Torque capacities are based on smooth drives with moderate torque fluctuations. Reduce ratings to 1/3 the value shown for severe applications such as indexing drives where torque reversals occur.

<sup>②</sup> Weight calculated at maximum bore and "L" = 12".

<sup>③</sup> All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

<sup>④</sup> For WR<sup>2</sup>, misalignment capacities and torsional rigidity consult Rexnord.

#### Standard Bore Sizes for Style CC, CA, CB, CBC, CE & CS Miniature Couplings <sup>①</sup>

| Coupling Size | Bores <sup>②③</sup> (in)                   |                                                    | Coupling Size | Bores <sup>②③</sup> (in)                   |                                                    |
|---------------|--------------------------------------------|----------------------------------------------------|---------------|--------------------------------------------|----------------------------------------------------|
|               | Hub Inside Center Member                   | Hub Outside Center Member                          |               | Hub Inside Center Member                   | Hub Outside Center Member                          |
| 12            | 0.0781, 0.0937<br>0.1200, 0.1250           | 0.1200, 0.1250<br>0.1562, 0.1875                   | 50            | 0.2505, 0.3130<br>0.3755, 0.4380<br>0.5005 | 0.2505, 0.3130<br>0.3755, 0.4380<br>0.5005, 0.6255 |
| 18            | 0.0937, 0.1200<br>0.1250, 0.1562<br>0.1875 | 0.1250, 0.1562<br>0.1875, 0.2500                   | 62            | 0.3755, 0.4380<br>0.5005, 0.6255           | 0.4380, 0.5005<br>0.6255, 0.7505                   |
| 25            | 0.1255, 0.1880<br>0.2505                   | 0.1255, 0.1880<br>0.2505, 0.3130<br>0.3755         | 75            | 0.4380, 0.5005<br>0.6255, 0.7505           | 0.5005, 0.6255<br>0.7505, 0.8755<br>1.0005         |
| 37            | 0.1255, 0.1880<br>0.2505, 0.3130<br>0.3755 | 0.1880, 0.2505<br>0.3130, 0.3755<br>0.4380, 0.5005 | 100           | 0.6255, 0.7505<br>0.8755, 1.0005           | 0.7505, 0.8755<br>1.0005, 1.1255<br>1.2505         |

<sup>①</sup> Couplings not available with rough bore. Keyway not included in standard bore. Keyways and nonstandard bores also available.

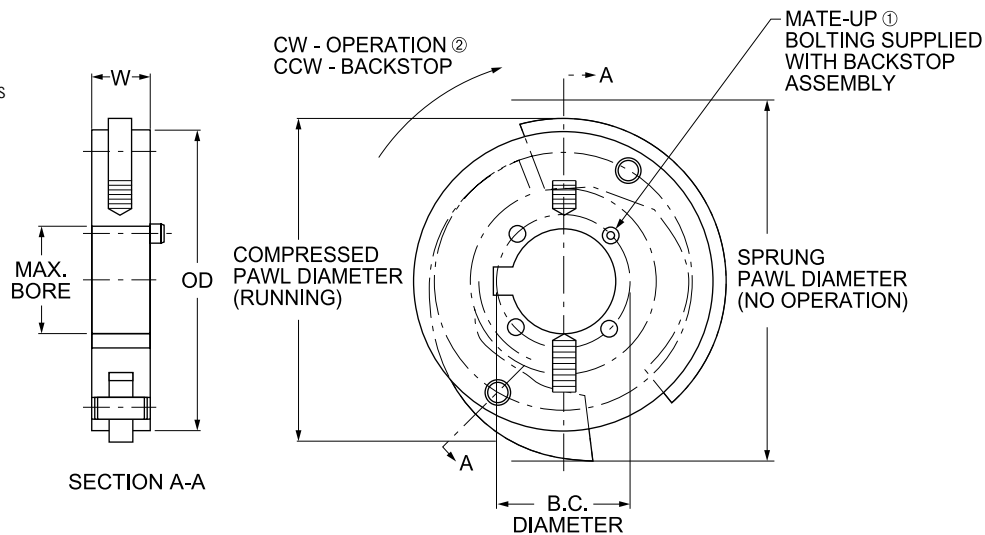
<sup>②</sup> Tolerances: Sizes 12 and 18,  $\pm 0.0003$ ". Larger sizes,  $\pm 0.0005$ ".

<sup>③</sup> The largest bore shown for each hub is maximum allowable bore. Consult Rexnord if a larger bore is required.

Rexnord Thomas Couplings

Rexnord Thomas Backstop

- Bolts directly to Thomas SN & TSN-CT hubs
- Prevents reverse shaft rotation of cooling tower fans
- All stainless steel construction
- For non-corrosive environments this can be supplied in carbon steel



Bolt-On Backstop Tabulation

| Coupling Size | Max. Bore | Mating Hub Backstop Bolting Info |                                                |            |                   | OD      | W (Ref) | Compressed | Sprung  | Compressed Speed (RPM Ref) |
|---------------|-----------|----------------------------------|------------------------------------------------|------------|-------------------|---------|---------|------------|---------|----------------------------|
|               |           | B.C. Dia                         | ① Capscrew Size (Inch for capscrew dimensions) | Min Tap DP | Tight Torque (Nm) |         |         |            |         |                            |
| 162           | 48        | 58.7                             | 1/4 - 20 NC x 1.50                             | 15.7       | 2.8               | 133.35  | 25.4    | 144.526    | 165.1   | 450 RPM Ref                |
| 200           | 54        | 68.3                             | 1/4 - 20 NC x 1.50                             | 15.7       | 2.8               |         |         |            |         |                            |
| 226           | 67        | 82.6                             | 1/4 - 20 NC x 1.50                             | 15.7       | 4.5               | 231.648 | 28.448  | 233.426    | 268.224 | 400 RPM Ref                |
| 262           | 79        | 98.4                             | 3/8 - 16 NC x 1.75                             | 22.4       | 16.0              |         |         |            |         |                            |
| 312           | 92        | 112.7                            | 7/16 - 14 NX x 2.00                            | 28.4       | 25.4              |         |         |            |         |                            |
| 350/375       | 102       | 123.8                            | 1/2 - 13 NC x 2.00                             | 28.4       | 39.5              |         |         |            |         |                            |

Special integral hub/backstop can be supplied.

① 162 & 200 size supplied with (4) socket head capscrews. All other sizes supplied with four hex head capscrews.

② Backstop may be inversely mounted for opposite rotation.

## Rexnord Thomas Flexible Disc Couplings

### Spacer Type Series 52 - SEE PAGES 10-11 FOR UPDATED VERSION WITH ENHANCED FEATURES

Series 52 couplings are all-purpose high-speed, high-torque couplings used where minimum coupling weight is desirable. They are commonly used on motor and turbine driven pumps, compressors and fans. Design modifications may be made to further reduce the coupling weight, making it an economic alternative to high performance disc and diaphragm couplings.

#### Construction

Hubs and Center Assembly: Carbon Steel

Bolts: Alloy Steel

Disc Packs: Tomaloy Tpack (225-750 Size)

Coatings Available: Black Oxide, Zinc, Cadmium

Other materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/3° per disc pack

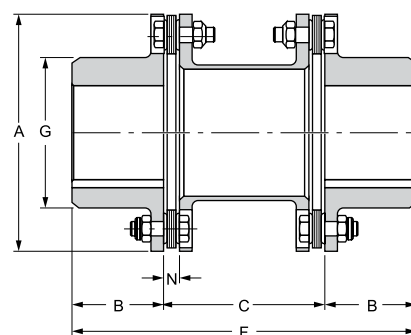
When specified, Series 52 couplings meet all requirements of API 610 or API 671.

If application requires API specification, please consult Rexnord.



#### General Dimensions (mm)

| Coupling Size | ⑥ Max. Bore | A   | B   | ② Std. C | ② Stocked C   | Min. C  | F    | G   | N  |
|---------------|-------------|-----|-----|----------|---------------|---------|------|-----|----|
| 125           | 34          | 94  | 33  | 102      | 100           | Consult | 168  | 52  | 7  |
| 162           | 50          | 110 | 44  | 127      | 100, 140      | 52      | 216  | 70  | 7  |
| 200           | 58          | 138 | 52  | 127      | 100, 140      | 67      | 232  | 83  | 9  |
| 225           | 70          | 145 | 67  | 127      | 100, 140, 180 | 70      | 260  | 96  | 9  |
| 262           | 84          | 168 | 73  | 127      | 140, 180      | 82      | 273  | 114 | 12 |
| 312           | 97          | 198 | 86  | 140      | 140, 180      | 95      | 311  | 133 | 13 |
| 350           | 110         | 221 | 95  | 152      | 180, 250      | 106     | 343  | 149 | 14 |
| 375           | 120         | 246 | 102 | 178      | 180, 250      | 117     | 381  | 165 | 15 |
| 425           | 130         | 267 | 108 | 178      | 180, 250      | 125     | 394  | 178 | 16 |
| 450           | 140         | 287 | 114 | 203      | 180, 250      | 136     | 432  | 189 | 18 |
| 500           | 146         | 327 | 127 | 229      | 250           | 153     | 483  | 213 | 20 |
| 550           | 166         | 367 | 140 | 254      | 250           | 175     | 533  | 240 | 23 |
| 600           | 176         | 406 | 152 | 254      | 250           | 191     | 559  | 260 | 25 |
| 700           | 205         | 464 | 178 | 279      | —             | 217     | 635  | 298 | 30 |
| 750           | 224         | 503 | 191 | 279      | —             | 235     | 660  | 321 | 32 |
| 800           | 241         | 546 | 210 | 305      | —             | 255     | 724  | 346 | 34 |
| 850           | 250         | 584 | 222 | 330      | —             | 273     | 775  | 368 | 36 |
| 925           | 267         | 635 | 241 | 356      | —             | 292     | 838  | 400 | 38 |
| 1000          | 290         | 699 | 267 | 368      | —             | —       | 902  | 438 | 43 |
| 1100          | 314         | 741 | 286 | 406      | —             | —       | 978  | 470 | 44 |
| 1200          | 339         | 816 | 311 | 432      | —             | —       | 1054 | 514 | 50 |
| 1300          | 376         | 876 | 337 | 457      | —             | —       | 1130 | 556 | 52 |



Taper Bores Also Available

| Coupling Size | Max. Kilowatt Per 100 RPM | ⑤ Max. RPM       |          | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | ④ Weight (kg) | Weight Change Per mm of "C" (kg) | ④ WR <sup>2</sup> (kg-m <sup>2</sup> ) | WR <sup>2</sup> Change Per mm of "C" (kg-m <sup>2</sup> ) | ① Axial Capacity (mm) |
|---------------|---------------------------|------------------|----------|-----------------------------|---------------------------|---------------|----------------------------------|----------------------------------------|-----------------------------------------------------------|-----------------------|
|               | Service Factor 1.0        | ③ ⑤ Not Balanced | Balanced |                             |                           |               |                                  |                                        |                                                           |                       |
| 125           | 3.2                       | 5,000            | 15,000   | 305                         | 610                       | 2.1           | 0.003                            | 0.0022                                 | 0.00170                                                   | ±0.91                 |
| 162           | 6.3                       | 4,600            | 15,000   | 604                         | 1,208                     | 3.3           | 0.004                            | 0.0046                                 | 0.00310                                                   | ±0.91                 |
| 200           | 12.5                      | 4,250            | 15,000   | 1,185                       | 2,371                     | 5.6           | 0.004                            | 0.0128                                 | 0.00670                                                   | ±0.91                 |
| 225           | 20.7                      | 4,100            | 14,000   | 1,976                       | 3,951                     | 7.3           | 0.006                            | 0.0178                                 | 0.00980                                                   | ±0.91                 |
| 262           | 38.9                      | 3,900            | 13,000   | 3,706                       | 7,413                     | 11.8          | 0.009                            | 0.0401                                 | 0.0180                                                    | ±1.09                 |
| 312           | 60.8                      | 3,450            | 11,700   | 5,803                       | 11,605                    | 18.8          | 0.012                            | 0.0878                                 | 0.0360                                                    | ±1.29                 |
| 350           | 79.0                      | 3,200            | 10,500   | 7,552                       | 15,105                    | 26.6          | 0.015                            | 0.154                                  | 0.0550                                                    | ±1.42                 |
| 375           | 118.6                     | 3,000            | 9,400    | 11,323                      | 22,646                    | 36.3          | 0.018                            | 0.266                                  | 0.0830                                                    | ±1.57                 |
| 425           | 158.8                     | 2,800            | 8,700    | 15,161                      | 30,323                    | 47.2          | 0.026                            | 0.404                                  | 0.135                                                     | ±1.70                 |
| 450           | 178.2                     | 2,700            | 8,100    | 16,979                      | 33,958                    | 57.7          | 0.026                            | 0.576                                  | 0.156                                                     | ±1.82                 |
| 500           | 291.5                     | 2,500            | 7,100    | 27,817                      | 55,633                    | 89.0          | 0.041                            | 1.112                                  | 0.313                                                     | ±2.02                 |
| 550           | 390.7                     | 2,300            | 6,300    | 37,300                      | 74,599                    | 127.6         | 0.052                            | 2.019                                  | 0.495                                                     | ±2.33                 |
| 600           | 512.9                     | 2,150            | 5,700    | 48,973                      | 97,945                    | 168.0         | 0.059                            | 3.277                                  | 0.705                                                     | ±2.59                 |
| 700           | 798.5                     | 1,950            | 5,000    | 76,180                      | 152,359                   | 257.4         | 0.082                            | 6.525                                  | 1.19                                                      | ±2.92                 |
| 750           | 992.4                     | 1,850            | 4,600    | 94,694                      | 189,388                   | 323.2         | 0.093                            | 9.685                                  | 1.65                                                      | ±3.17                 |
| 800           | 1276.5                    | 1,750            | 4,300    | 121,777                     | 243,554                   | 413.6         | 0.107                            | 15.05                                  | 2.30                                                      | ±3.45                 |
| 850           | 1506.1                    | 1,600            | 3,900    | 143,712                     | 287,424                   | 503.5         | 0.107                            | 20.98                                  | 2.30                                                      | ±3.65                 |
| 925           | 2039.2                    | 1,500            | 3,600    | 194,626                     | 389,253                   | 662.4         | 0.143                            | 32.60                                  | 4.61                                                      | ±3.96                 |
| 1000          | 2306.9                    | —                | 3,250    | 220,140                     | 440,280                   | 853.5         | 0.161                            | 50.30                                  | 5.83                                                      | ±4.36                 |
| 1100          | 2750.5                    | —                | 3,100    | 262,475                     | 524,949                   | 1021.5        | 0.197                            | 68.91                                  | 9.15                                                      | ±4.64                 |
| 1200          | 3353.7                    | —                | 2,800    | 320,050                     | 640,099                   | 1366.5        | 0.268                            | 110.16                                 | 13.78                                                     | ±5.15                 |
| 1300          | 4010.6                    | —                | 2,600    | 382,705                     | 765,410                   | 1661.6        | 0.268                            | 153.23                                 | 15.55                                                     | ±5.53                 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Additional "C" dimensions available. Consult Rexnord.

③ Series 52 couplings meet AGMA Class 9 balance requirements as manufactured with interference fit bore and close fit keyway. If clearance fit and/or setscrews are required, please consult Rexnord. See page 4 for explanation of RPM limits and balancing recommendations.

④ Weight and WR<sup>2</sup> at maximum bore and standard "C" dimension listed.

⑤ Balance recommendations based on AGMA Specification 9000-C90 Average Sensitivity.

⑥ Consult Rexnord for minimum rough bore sizes.

# Rexnord Thomas Flexible Disc Couplings

## Spacer Type Series 71 - SEE PAGES 12-13 FOR UPDATED VERSION WITH ENHANCED FEATURES

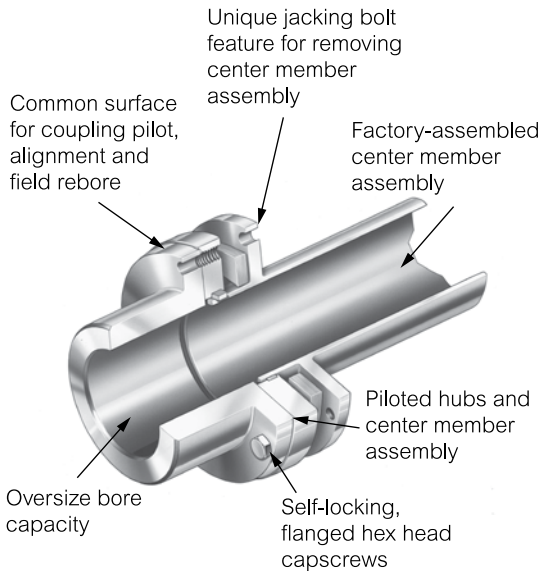
Series 71 couplings are designed for applications requiring a spacer-type coupling such as ANSI, API and other process pumps. Series 71 couplings are most commonly applied on motor, turbine, and gear driven pumps, compressors and blowers.

Series 71 is a simple three-piece design. Three piece design features unitized center member assembly and two piloted hubs. Hubs are piloted fit to the factory assembled center member. The piloting provides repeatable assembly of components for better dynamic balance characteristics. The center assembly simply “drops out” for fast installation or removal without special tools. The disc design allows for low flexing forces and high overload capacity.

### Construction

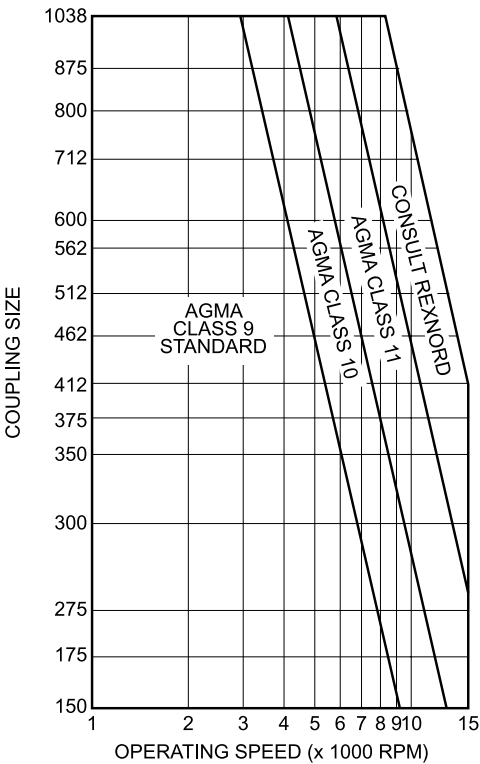
- Hubs and Center Assembly: Carbon steel
- Bolts: Alloy steel
- Disc Packs: Stainless steel for 4- & 6-bolt designs
- Stainless steel Tpack for 8-bolt design
- Coatings Available: Black oxide, zinc, cadmium
- Other disc pack materials such as Monel and Inconel are available; please consult Rexnord.
- Misalignment: 1/2° per disc pack for 4- and 6-bolt designs, 1/3° per disc pack for 8-bolt design

When specified, Series 71 couplings meet all requirements of API 610 or API 671.  
If application requires API specification, please consult Rexnord.



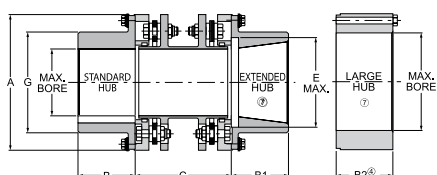
**NOTE:** These recommendations and balance classes are based on AGMA Specifications 9000-C90, high sensitivity. If conditions exist other than as defined in 9000-C90, for sensitivity, consult Rexnord. The above information should be used as a guide only. AGMA Class 9 balance is furnished as standard when Series 71 couplings are finished bored with interference fits.

Series 71 Balance Recommendations

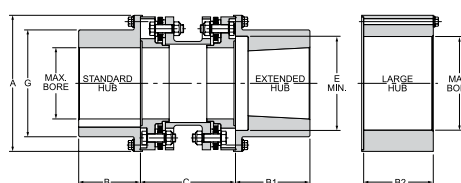


# Rexnord Thomas Flexible Disc Couplings

## Spacer Type Series 71 4-, 6- & 8-Bolt



**4- & 6-Bolt Design**



**8-Bolt Design**

### General Dimensions (mm)

| Coupling Size        | ⑥ B&B <sup>1</sup> Hub Max. Bore | ⑥ B&B <sup>2</sup> Hub Max. Bore | A   | B   | B1  | Std. B2 | Std. C | Min. C | E   | G   |
|----------------------|----------------------------------|----------------------------------|-----|-----|-----|---------|--------|--------|-----|-----|
| <b>4-Bolt Design</b> |                                  |                                  |     |     |     |         |        |        |     |     |
| 150                  | 39                               | 64                               | 91  | 33  | 43  | 41      | 89     | 87     | 52  | 59  |
| 175                  | 50                               | 73                               | 106 | 40  | 52  | 46      | 89     | 87     | 65  | 71  |
| <b>6-Bolt Design</b> |                                  |                                  |     |     |     |         |        |        |     |     |
| 225                  | 58                               | 87                               | 125 | 51  | 64  | 52      | 127    | 87     | 78  | 85  |
| 300                  | 81                               | 110                              | 152 | 67  | 83  | 70      | 127    | 102    | 105 | 113 |
| 350                  | 95                               | 120                              | 171 | 79  | 95  | 76      | 127    | 124    | 127 | 133 |
| 375                  | 100                              | 137                              | 194 | 83  | 102 | 83      | 140    | 127    | 135 | 144 |
| 412                  | 110                              | 145                              | 203 | 92  | 111 | 92      | 178    | 155    | 146 | 155 |
| 462                  | 130                              | 166                              | 229 | 105 | 127 | 105     | 178    | 178    | 160 | 174 |
| 512                  | 140                              | 187                              | 255 | 114 | 137 | 114     | 178    | 191    | 179 | 194 |
| 562                  | 156                              | 200                              | 279 | 127 | 152 | 127     | 203    | 203    | 195 | 213 |
| 600                  | 166                              | 220                              | 298 | 133 | 162 | 133     | 229    | 229    | 211 | 227 |
| <b>8-Bolt Design</b> |                                  |                                  |     |     |     |         |        |        |     |     |
| 225-8                | 80                               | 106                              | 152 | 64  | 79  | 78      | 127    | 121    | 106 | 116 |
| 262-8                | 95                               | 128                              | 175 | 78  | 94  | 90      | 178    | 140    | 119 | 132 |
| 312-8                | 112                              | 145                              | 203 | 90  | 109 | 105     | 191    | 152    | 146 | 160 |
| 350-8                | 130                              | 166                              | 227 | 99  | 121 | 114     | 191    | 171    | 165 | 179 |
| 375-8                | 144                              | 185                              | 252 | 113 | 135 | 131     | 191    | 184    | 181 | 202 |
| 425-8                | 158                              | 203                              | 273 | 124 | 149 | 140     | 203    | 191    | 189 | 214 |
| 450-8                | 170                              | 214                              | 294 | 129 | 157 | 152     | 229    | 222    | 213 | 236 |
| 500-8                | 196                              | 248                              | 333 | 151 | 179 | 171     | 279    | 260    | 232 | 267 |
| 550-8                | 215                              | —                                | 373 | 167 | 198 | —       | 292    | 292    | 254 | 292 |
| 600-8                | 242                              | —                                | 416 | 183 | 214 | —       | 318    | 318    | 298 | 336 |
| 700-8                | 258                              | —                                | 471 | 211 | 246 | —       | 368    | 368    | 325 | 373 |
| 750-8                | 286                              | —                                | 511 | 227 | 262 | —       | 400    | 400    | 363 | 413 |

| Coupling Size | Max. Kilowatt Per 100 RPM | ④ Max. RPM     |            | Max. Continuous Torque (Nm) | Peak Overload Torque (Nm) | ② Weight (kg) | Weight Change Per mm of “C” (kg) | ② WR <sup>2</sup> (kg-m <sup>2</sup> ) | WR <sup>2</sup> Change Per mm of “C” (kg-m <sup>2</sup> -m) | ① Axial Capacity (mm) |
|---------------|---------------------------|----------------|------------|-----------------------------|---------------------------|---------------|----------------------------------|----------------------------------------|-------------------------------------------------------------|-----------------------|
|               | Service Factor 1.0        | ⑤ Not Balanced | ④ Balanced |                             |                           |               |                                  |                                        |                                                             |                       |
| 4-Bolt Design |                           |                |            |                             |                           |               |                                  |                                        |                                                             |                       |
| 150           | 1.1                       | 9,000          | 20,800     | 105                         | 210                       | 3.0           | 0.0018                           | 0.0031                                 | 0.00035                                                     | ±0.127                |
| 175           | 1.9                       | 8,300          | 17,000     | 184                         | 368                       | 4.3           | 0.0025                           | 0.0060                                 | 0.00104                                                     | ±0.1778               |
| 6-Bolt Design |                           |                |            |                             |                           |               |                                  |                                        |                                                             |                       |
| 225           | 3.6                       | 7,700          | 16,000     | 345                         | 691                       | 6.4           | 0.0034                           | 0.0123                                 | 0.00288                                                     | ±0.1905               |
| 300           | 8.6                       | 6,800          | 14,000     | 820                         | 1,639                     | 11.8          | 0.0046                           | 0.0354                                 | 0.00760                                                     | ±2.159                |
| 350           | 15.8                      | 6,200          | 13,500     | 1,513                       | 3,026                     | 19.5          | 0.0075                           | 0.0758                                 | 0.0136                                                      | ±2.296                |
| 375           | 22.8                      | 5,650          | 12,000     | 2,179                       | 4,358                     | 25.0          | 0.0077                           | 0.1238                                 | 0.0187                                                      | ±2.413                |
| 412           | 26.6                      | 5,350          | 11,000     | 2,540                       | 5,080                     | 32.2          | 0.0107                           | 0.1799                                 | 0.0334                                                      | ±2.794                |
| 462           | 47.8                      | 5,000          | 10,000     | 4,561                       | 9,122                     | 45.9          | 0.0143                           | 0.3248                                 | 0.0536                                                      | ±3.048                |
| 512           | 65.0                      | 4,700          | 9,200      | 6,209                       | 12,418                    | 61.3          | 0.0186                           | 0.5355                                 | 0.0856                                                      | ±3.302                |
| 562           | 99.4                      | 4,350          | 8,300      | 9,494                       | 18,988                    | 84.4          | 0.0229                           | 0.8837                                 | 0.120                                                       | ±3.683                |
| 600           | 108.4                     | 4,150          | 7,800      | 10,352                      | 20,704                    | 103.5         | 0.0313                           | 1.2436                                 | 0.202                                                       | ±4.064                |
| 8-Bolt Design |                           |                |            |                             |                           |               |                                  |                                        |                                                             |                       |
| 225-8         | 20.7                      | 7,500          | 14,000     | 1,976                       | 3,952                     | 12.6          | 0.0068                           | 0.0375                                 | 0.0123                                                      | ±0.91                 |
| 262-8         | 38.8                      | 6,800          | 12,500     | 3,706                       | 7,412                     | 19.5          | 0.0082                           | 0.0775                                 | 0.0225                                                      | ±1.09                 |
| 312-8         | 60.8                      | 6,200          | 11,500     | 5,803                       | 11,606                    | 30.0          | 0.0098                           | 0.1697                                 | 0.0385                                                      | ±1.29                 |
| 350-8         | 79.1                      | 5,700          | 10,500     | 7,552                       | 15,104                    | 43.0          | 0.0134                           | 0.3017                                 | 0.0649                                                      | ±1.42                 |
| 375-8         | 118.6                     | 5,200          | 9,800      | 11,323                      | 22,646                    | 61.0          | 0.0188                           | 0.5220                                 | 0.106                                                       | ±1.57                 |
| 425-8         | 158.8                     | 5,000          | 9,300      | 15,161                      | 30,322                    | 77.0          | 0.0218                           | 0.7654                                 | 0.145                                                       | ±1.70                 |
| 450-8         | 177.8                     | 4,700          | 8,700      | 16,979                      | 33,958                    | 100.0         | 0.0284                           | 1.1763                                 | 0.207                                                       | ±1.82                 |
| 500-8         | 291.3                     | 4,200          | 7,900      | 27,817                      | 55,634                    | 155.0         | 0.0379                           | 2.3525                                 | 0.362                                                       | ±2.02                 |
| 550-8         | 390.6                     | 3,900          | 7,300      | 37,300                      | 74,600                    | 216.0         | 0.0474                           | 4.0759                                 | 0.574                                                       | ±2.34                 |
| 600-8         | 512.9                     | 3,600          | 6,800      | 48,973                      | 97,946                    | 296.0         | 0.0545                           | 7.0604                                 | 0.796                                                       | ±2.59                 |
| 700-8         | 797.8                     | 3,300          | 6,200      | 76,180                      | 152,360                   | 436.0         | 0.0738                           | 13.1377                                | 1.36                                                        | ±2.92                 |
| 750-8         | 991.7                     | 3,100          | 5,800      | 94,694                      | 189,388                   | 564.0         | 0.0924                           | 20.2538                                | 2.02                                                        | ±3.18                 |

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modifications or the addition of end-float restricting devices.

② Weight and WR<sup>2</sup> with standard length hubs, maximum bore and standard "C".

③ Extended hub length is designed longer in order to include a counter-bore for the threaded extension on a tapered shaft.

④ See page 4 for explanation of RPM limits and balancing recommendations.

⑤ Series 71 Coupling assembly meets AGMA Class 9 Balance when finish bored with interference fits.

⑥ Consult Rexnord for minimum rough bore sizes.

⑦ If a block hub is supplied, extra capscrews will be provided for center member jacking feature.

## Engineering Data – All Rexnord Couplings

### Recommended Hub Bores for Clearance & Interference Fit on Keyed Shafting

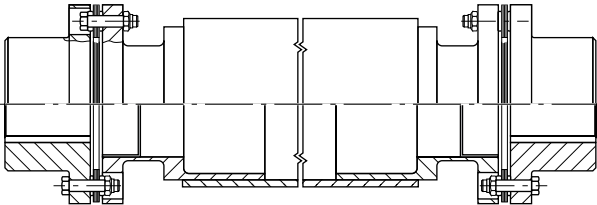
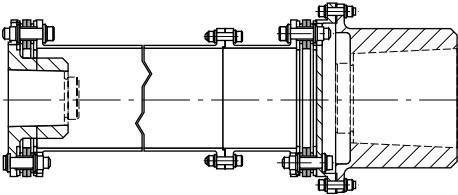
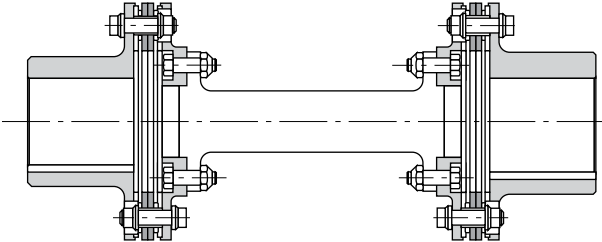
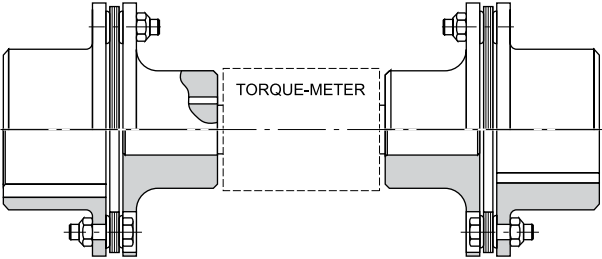
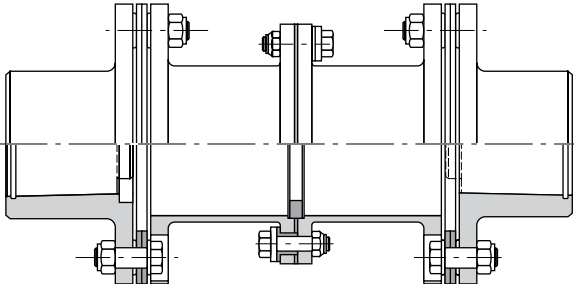
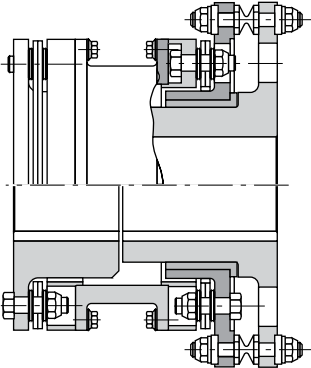
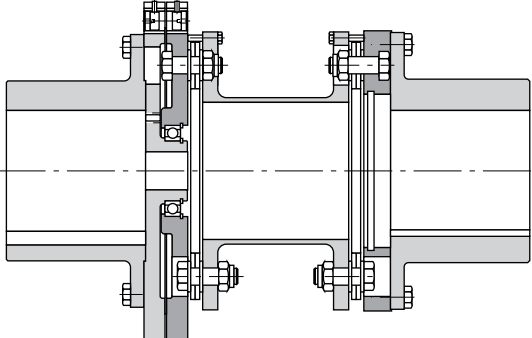
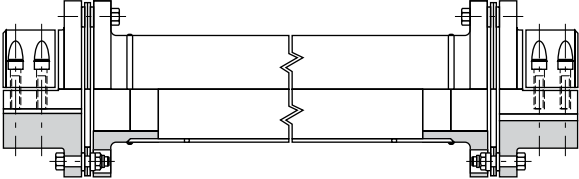
|                | Shaft Diameter       | Clearance Fit        |               | Transitional Fit     |               | Interference Fit     |               |
|----------------|----------------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|
|                |                      | Hub Bore             | Fit*          | Hub Bore             | Fit*          | Hub Bore             | Fit*          |
|                | <b>j6</b>            | <b>F7</b>            | <b>+0.008</b> | <b>H7</b>            | <b>-0.008</b> | <b>M6</b>            | <b>-0.023</b> |
| <b>MM</b>      | <b>+0.008/-0.003</b> | <b>+0.016/+0.034</b> | <b>+0.037</b> | <b>+0.000/+0.018</b> | <b>+0.021</b> | <b>-0.015/-0.004</b> | <b>-0.001</b> |
| 12             | 12.008/11.997        | 12.016/12.034        | ↓             | 12.000/12.018        | ↓             | 11.985/11.996        | ↓             |
| 14             | 14.008/13.997        | 14.016/14.034        | ↓             | 14.000/14.018        | ↓             | 13.985/13.996        | ↓             |
| 16             | 16.008/15.997        | 16.016/16.034        | ↓             | 16.000/16.018        | ↓             | 15.985/15.996        | ↓             |
| 18             | 18.008/17.997        | 18.016/18.034        | ↓             | 18.000/18.018        | ↓             | 17.985/17.996        | ↓             |
|                | <b>j6</b>            | <b>F7</b>            | <b>+0.011</b> | <b>H7</b>            | <b>-0.009</b> | <b>M6</b>            | <b>-0.026</b> |
| <b>MM</b>      | <b>+0.009/-0.004</b> | <b>+0.020/+0.041</b> | <b>+0.045</b> | <b>+0.000/+0.021</b> | <b>+0.025</b> | <b>-0.017/-0.004</b> | <b>+0.000</b> |
| 19             | 19.009/18.996        | 19.020/19.041        | ↓             | 19.020/19.041        | ↓             | 18.983/18.996        | ↓             |
| 20             | 20.009/19.996        | 20.020/20.041        | ↓             | 20.020/20.041        | ↓             | 20.983/20.996        | ↓             |
| 22             | 22.009/21.996        | 22.020/22.041        | ↓             | 22.020/22.041        | ↓             | 21.983/21.996        | ↓             |
| 24             | 24.009/23.996        | 24.020/24.041        | ↓             | 24.020/24.041        | ↓             | 23.983/23.996        | ↓             |
| 25             | 25.009/24.996        | 25.020/25.041        | ↓             | 25.020/25.041        | ↓             | 24.983/24.996        | ↓             |
| 28             | 28.009/27.996        | 28.020/28.041        | ↓             | 28.020/28.041        | ↓             | 27.983/27.996        | ↓             |
| 30             | 30.009/29.996        | 30.020/30.041        | ↓             | 30.020/30.041        | ↓             | 29.983/29.996        | ↓             |
| <b>&gt;30</b>  | <b>k6</b>            | <b>F7</b>            | <b>+0.007</b> | <b>H7</b>            | <b>-0.018</b> | <b>K6</b>            | <b>-0.031</b> |
| <b>MM</b>      | <b>+0.018/+0.002</b> | <b>+0.025/+0.050</b> | <b>+0.048</b> | <b>+0.000/+0.025</b> | <b>+0.023</b> | <b>-0.013/+0.003</b> | <b>+0.001</b> |
| 32             | 32.018/32.002        | 32.025/32.050        | ↓             | 32.000/32.025        | ↓             | 31.987/32.003        | ↓             |
| 35             | 35.018/35.002        | 35.025/35.050        | ↓             | 35.000/35.025        | ↓             | 34.987/35.003        | ↓             |
| 38             | 38.018/38.002        | 38.025/38.050        | ↓             | 38.000/38.025        | ↓             | 37.987/38.003        | ↓             |
| 40             | 40.018/40.002        | 40.025/40.050        | ↓             | 40.000/40.025        | ↓             | 39.987/40.003        | ↓             |
| 42             | 42.018/42.002        | 42.025/42.050        | ↓             | 42.000/42.025        | ↓             | 41.987/42.003        | ↓             |
| 45             | 45.018/45.002        | 45.025/45.050        | ↓             | 45.000/45.025        | ↓             | 44.987/45.003        | ↓             |
| 48             | 48.018/48.002        | 48.025/48.050        | ↓             | 48.000/48.025        | ↓             | 47.987/48.003        | ↓             |
| 50             | 50.018/50.002        | 50.025/50.050        | ↓             | 50.000/50.025        | ↓             | 49.987/50.003        | ↓             |
| <b>&gt;50</b>  | <b>m6</b>            | <b>F7</b>            | <b>+0.000</b> | <b>H7</b>            | <b>-0.030</b> | <b>K7</b>            | <b>-0.051</b> |
| <b>MM</b>      | <b>+0.030/+0.011</b> | <b>+0.030/+0.060</b> | <b>+0.049</b> | <b>+0.000/+0.030</b> | <b>+0.019</b> | <b>-0.021/+0.009</b> | <b>-0.002</b> |
| 55             | 55.030/55.011        | 55.030/55.060        | ↓             | 55.000/55.030        | ↓             | 54.975/55.009        | ↓             |
| 56             | 56.030/56.011        | 56.030/56.060        | ↓             | 56.000/56.030        | ↓             | 55.975/56.009        | ↓             |
| 60             | 60.030/60.011        | 60.030/60.060        | ↓             | 60.000/60.030        | ↓             | 59.975/60.009        | ↓             |
| 63             | 63.030/63.011        | 63.030/63.060        | ↓             | 63.000/63.030        | ↓             | 62.975/63.009        | ↓             |
| 65             | 65.030/65.011        | 65.030/65.060        | ↓             | 65.000/65.030        | ↓             | 64.975/65.009        | ↓             |
| 70             | 70.030/70.011        | 70.030/70.060        | ↓             | 70.000/70.030        | ↓             | 69.975/70.009        | ↓             |
| 71             | 71.030/71.011        | 71.030/71.060        | ↓             | 71.000/71.030        | ↓             | 70.975/71.009        | ↓             |
| 75             | 75.030/75.011        | 75.030/75.060        | ↓             | 75.000/75.030        | ↓             | 74.975/75.009        | ↓             |
| 80             | 80.030/80.011        | 80.030/80.060        | ↓             | 80.000/80.030        | ↓             | 79.975/80.009        | ↓             |
| <b>&gt;80</b>  | <b>m6</b>            | <b>F7</b>            | <b>+0.001</b> | <b>H7</b>            | <b>-0.035</b> | <b>M7</b>            | <b>-0.070</b> |
| <b>MM</b>      | <b>+0.035/+0.013</b> | <b>+0.036/+0.071</b> | <b>+0.058</b> | <b>+0.000/+0.035</b> | <b>+0.022</b> | <b>-0.035/+0.000</b> | <b>-0.013</b> |
| 85             | 85.035/85.013        | 85.036/85.071        | ↓             | 85.000/85.035        | ↓             | 84.965/85.000        | ↓             |
| 90             | 90.035/90.013        | 90.036/90.071        | ↓             | 90.000/90.035        | ↓             | 89.965/90.000        | ↓             |
| 95             | 95.035/95.013        | 95.036/95.071        | ↓             | 95.000/95.035        | ↓             | 94.965/95.000        | ↓             |
| 100            | 100.035/100.013      | 100.036/100.071      | ↓             | 100.000/100.035      | ↓             | 99.965/100.000       | ↓             |
| <b>&gt;100</b> | <b>m6</b>            | <b>F7</b>            | <b>+0.003</b> | <b>H7</b>            | <b>-0.040</b> | <b>P7</b>            | <b>-0.094</b> |
| <b>MM</b>      | <b>+0.035/+0.013</b> | <b>+0.036/+0.071</b> | <b>+0.068</b> | <b>+0.000/+0.035</b> | <b>+0.025</b> | <b>-0.059/-0.024</b> | <b>-0.037</b> |
| 110            | 110.035/110.013      | 110.036/110.071      | ↓             | 110.000/100.035      | ↓             | 109.941/109.976      | ↓             |
| 120            | 120.035/120.013      | 120.036/120.071      | ↓             | 120.000/120.035      | ↓             | 119.941/119.976      | ↓             |
| <b>&gt;120</b> | <b>m6</b>            | <b>F7</b>            | <b>+0.003</b> | <b>H7</b>            | <b>-0.040</b> | <b>P7</b>            | <b>-0.108</b> |
| <b>MM</b>      | <b>+0.040/+0.015</b> | <b>+0.043/+0.083</b> | <b>+0.068</b> | <b>+0.000/+0.040</b> | <b>+0.025</b> | <b>-0.068/-0.028</b> | <b>-0.043</b> |
| 125            | 125.040/125.015      | 125.043/125.083      | ↓             | 125.000/125.040      | ↓             | 124.932/124.972      | ↓             |
| 130            | 130.040/130.015      | 130.043/130.083      | ↓             | 130.000/130.040      | ↓             | 129.932/129.972      | ↓             |
| 140            | 140.040/140.015      | 140.043/140.083      | ↓             | 140.000/140.040      | ↓             | 139.932/139.972      | ↓             |
| 150            | 150.040/150.015      | 150.043/150.083      | ↓             | 150.000/150.040      | ↓             | 149.932/149.972      | ↓             |
| 160            | 160.040/160.015      | 160.043/160.083      | ↓             | 160.000/160.040      | ↓             | 159.932/159.972      | ↓             |
| 170            | 170.040/170.015      | 170.043/170.083      | ↓             | 170.000/170.040      | ↓             | 169.932/169.972      | ↓             |
| 180            | 180.040/180.015      | 180.043/180.083      | ↓             | 180.000/180.040      | ↓             | 179.932/179.972      | ↓             |

|      | Shaft Diameter  | Clearance Fit   |                 | Transitional Fit |                 | Interference Fit |        |        |                 |        |
|------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|--------|--------|-----------------|--------|
|      |                 | Hub Bore        | Fit*            | Hub Bore         | Fit*            | Hub Bore         | Fit*   |        |                 |        |
| >180 | m6              | F7              | +0.004          | H7               | -0.046          | P7               | -0.125 |        |                 |        |
| MM   | +0.046/+0.017   | +0.050/+0.096   | +0.079          | +0.000/+0.046    | +0.029          | -0.079/-0.033    | -0.050 |        |                 |        |
| 190  | 190.046/190.017 | 190.050/190.096 | ↓               | 190.000/190.046  | ↓               | 189.921/189.967  | ↓      |        |                 |        |
| 200  | 200.046/200.017 | 200.050/200.096 |                 | 200.000/200.046  |                 | 199.921/199.967  |        |        |                 |        |
| >200 | m6              | F7              |                 | H7               |                 | R7               |        | -0.155 |                 |        |
| MM   | +0.046/+0.017   | +0.050/+0.096   |                 | +0.000/+0.046    |                 | -0.109/-0.063    |        | -0.080 |                 |        |
| 210  | 210.046/210.017 | 210.050/210.096 |                 | 210.000/210.046  |                 | 209.891/209.937  |        | ↓      |                 |        |
| 220  | 220.046/220.017 | 220.050/220.096 | 220.000/220.046 | 219.891/219.937  |                 |                  |        |        |                 |        |
| 225  | 225.046/225.017 | 225.050/220.096 | 225.000/225.046 | 224.891/224.937  |                 |                  |        |        |                 |        |
| >225 | m6              | F7              | H7              | R7               | -0.159          |                  |        |        |                 |        |
| MM   | +0.046/+0.017   | +0.050/+0.096   | +0.000/+0.046   | -0.113/-0.067    | -0.084          |                  |        |        |                 |        |
| 230  | 230.046/230.017 | 230.050/230.096 | ↓               | 230.000/230.046  | ↓               | 229.887/229.933  | ↓      |        |                 |        |
| 240  | 240.046/240.017 | 240.050/240.096 |                 | 240.000/240.046  |                 | 239.887/239.933  |        |        |                 |        |
| 250  | 250.046/250.017 | 250.050/250.096 |                 | 250.000/250.046  |                 | 249.887/249.933  |        |        |                 |        |
| >250 | m6              | F7              |                 | H7               |                 | R7               |        | -0.178 |                 |        |
| MM   | +0.052/+0.020   | +0.056/+0.108   |                 | +0.000/+0.052    |                 | -0.052           |        | +0.032 | -0.126/-0.074   | -0.094 |
| 260  | 260.052/260.020 | 260.056/260.108 | ↓               | 260.000/260.052  | ↓               | 259.874/259.926  | ↓      |        |                 |        |
| 270  | 270.052/270.020 | 270.056/270.108 |                 | 270.000/270.052  |                 | 269.874/269.926  |        |        |                 |        |
| 280  | 280.052/280.020 | 280.056/280.108 |                 | 280.000/280.052  |                 | 279.874/279.926  |        |        |                 |        |
| >280 | m6              | F7              |                 | H7               |                 | R7               |        | -0.182 |                 |        |
| MM   | +0.052/+0.020   | +0.056/+0.108   |                 | +0.000/+0.052    |                 | -0.130/-0.078    |        | -0.098 |                 |        |
| 290  | 290.052/290.020 | 290.056/290.108 | ↓               | 290.000/290.052  | ↓               | 289.870/289.922  | ↓      |        |                 |        |
| 300  | 300.052/300.020 | 300.056/300.108 |                 | 300.000/300.052  |                 | 299.870/299.922  |        |        |                 |        |
| 310  | 310.052/310.020 | 310.056/310.108 |                 | 310.000/310.052  |                 | 309.870/309.922  |        |        |                 |        |
| 315  | 315.052/315.020 | 315.056/310.108 |                 | 315.000/315.052  |                 | 314.870/314.922  |        |        |                 |        |
| >315 | m6              | F7              |                 | H7               |                 | R7               |        | -0.201 |                 |        |
| MM   | +0.057/+0.021   | +0.062/+0.119   | +0.000/+0.057   | -0.057           | +0.036          | -0.144/-0.187    | -0.108 |        |                 |        |
| 320  | 320.057/320.021 | 320.062/320.119 | ↓               | 320.000/320.057  | ↓               | 319.856/319.813  | ↓      |        |                 |        |
| 330  | 330.057/330.021 | 330.062/330.119 |                 | 330.000/330.057  |                 | 329.856/329.813  |        |        |                 |        |
| 340  | 340.057/340.021 | 340.062/340.119 |                 | 340.000/340.057  |                 | 339.856/339.813  |        |        |                 |        |
| 350  | 350.057/350.021 | 350.062/350.119 |                 | 350.000/350.057  |                 | 349.856/349.813  |        |        |                 |        |
| 355  | 355.057/355.021 | 355.062/355.119 |                 | 355.000/355.057  |                 | 354.856/354.813  |        |        |                 |        |
| >355 | m6              | F7              |                 | H7               |                 | R8               |        | -0.260 |                 |        |
| MM   | +0.057/+0.021   | +0.062/+0.119   |                 | +0.000/+0.057    |                 | -0.063           |        | +0.040 | -0.203/-0.114   | -0.135 |
| 360  | 360.057/360.021 | 360.062/360.119 |                 | 360.000/360.057  |                 | 359.797/359.886  |        | ↓      |                 |        |
| 370  | 370.057/370.021 | 370.062/370.119 |                 | 370.000/370.057  |                 | 369.797/369.886  |        |        |                 |        |
| 380  | 380.057/380.021 | 380.062/380.119 |                 | 380.000/380.057  |                 | 379.797/379.886  |        |        |                 |        |
| 390  | 390.057/390.021 | 390.062/390.119 | 390.000/390.057 | 389.797/389.886  |                 |                  |        |        |                 |        |
| 400  | 400.057/400.021 | 400.062/400.119 | 400.000/400.057 | 399.797/399.886  |                 |                  |        |        |                 |        |
| >400 | m6              | F7              | H7              | R8               | -0.286          |                  |        |        |                 |        |
| MM   | +0.063/+0.023   | +0.068/+0.131   | +0.000/+0.063   | -0.063           | +0.040          | -0.223/-0.126    | -0.149 |        |                 |        |
| 410  | 410.063/410.023 | 410.068/410.131 | ↓               | 410.000/410.063  | ↓               | 409.777/409.874  | ↓      |        |                 |        |
| 420  | 420.063/420.023 | 420.068/420.131 |                 | 420.000/420.063  |                 | 419.777/419.874  |        |        |                 |        |
| 430  | 430.063/430.023 | 430.068/430.131 |                 | 430.000/430.063  |                 | 429.777/429.874  |        |        |                 |        |
| 440  | 440.063/440.023 | 440.068/440.131 |                 | 440.000/440.063  |                 | 439.777/439.874  |        |        |                 |        |
| 450  | 450.063/450.023 | 450.068/450.131 |                 | 450.000/450.063  |                 | 449.777/449.874  |        |        |                 |        |
| >450 | m6              | F7              |                 | H7               |                 | R8               |        | -0.292 |                 |        |
| MM   | +0.063/+0.023   | +0.068/+0.131   |                 | +0.000/+0.063    |                 | -0.229/-0.132    |        | -0.155 |                 |        |
| 460  | 460.063/460.023 | 460.068/460.131 |                 | ↓                |                 | 460.000/460.063  |        | ↓      | 459.771/459.868 | ↓      |
| 470  | 470.063/470.023 | 470.068/470.131 |                 |                  |                 | 470.000/470.063  |        |        | 469.771/469.868 |        |
| 480  | 480.063/480.023 | 480.068/480.131 |                 |                  |                 | 480.000/480.063  |        |        | 479.771/479.868 |        |
| 490  | 490.063/490.023 | 490.068/490.131 | 490.000/490.063 |                  | 489.771/489.868 |                  |        |        |                 |        |
| 500  | 500.063/500.023 | 500.068/500.131 | 500.000/500.063 |                  | 499.771/499.868 |                  |        |        |                 |        |

**Rexnord Thomas Couplings**

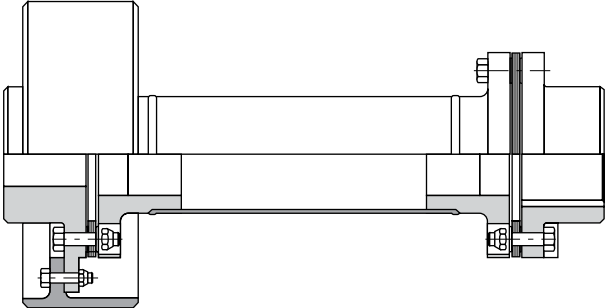
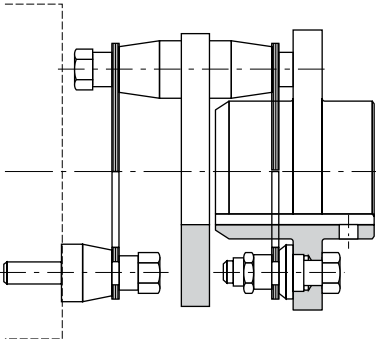
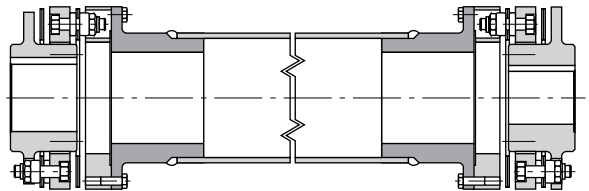
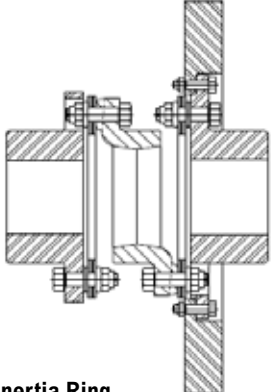
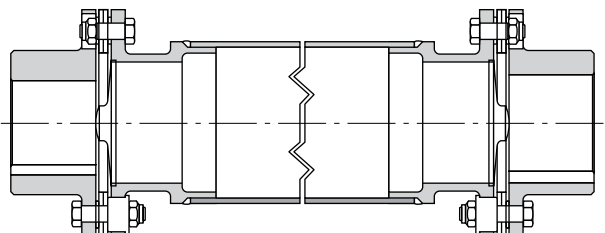
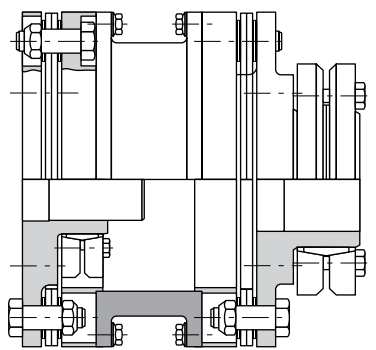
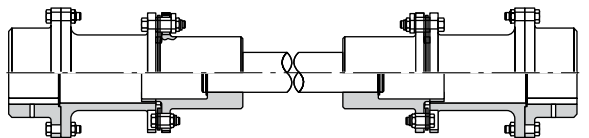
**Customized Flexible Disc Couplings Designs**

The following pages illustrate a sampling of the special disc coupling products designed and manufactured by Rexnord for applications requiring special coupling designs; please contact your Rexnord representative.

|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |    |
| <b>SN-EL – Extra Long Span</b>                                                      | <b>Semi-Reduced Movement – Bolt On Hub</b>                                           |
|   |   |
| <b>Torsionally Tuned Center Members</b>                                             | <b>Torque Meter Coupling</b>                                                         |
|  |  |
| <b>Electrically Insulated Couplings</b>                                             | <b>Breaker Pin Coupling – Bushing Style</b>                                          |
|  |  |
| <b>Breaker Pin Coupling – Bearing Style</b>                                         | <b>Clamp Hub Mounting</b>                                                            |

**Rexnord Thomas Couplings**

**Customized Flexible Disc Couplings Designs**

|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |    |
| <b>Brake Drum Hub</b>                                                               | <b>Motor-Tachometer Coupling</b>                                                     |
|    |   |
| <b>Double Disc Packs</b>                                                            | <b>AMR Bolt-On Inertia Ring</b>                                                      |
|  |  |
| <b>Axial Limiting Stops</b>                                                         | <b>Shrink Disc Hub Mounting</b>                                                      |
|  |                                                                                      |
| <b>Slide Coupling</b>                                                               |                                                                                      |

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## This image shows a full page of blank, lined paper. It features approximately 28 horizontal blue or grey lines spaced evenly apart, typical of notebook paper. The lines extend across the entire width of the page, leaving small margins at the top and bottom. There are no vertical lines, text, or other markings on the page.



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## Why Choose Rexnord?

When it comes to providing highly engineered products that improve productivity and efficiency for industrial applications worldwide, Rexnord is the most reliable in the industry. Commitment to customer satisfaction and superior value extend across every business function.

### Delivering Lowest Total Cost of Ownership

The highest quality products are designed to help prevent equipment downtime and increase productivity and dependable operation.

### Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

### Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time.

# REXNORD

## Rexnord Company Overview

Rexnord is a growth-oriented, multi-platform industrial company with leading market shares and highly trusted brands that serve a diverse array of global end markets.

### Process & Motion Control

The Rexnord Process & Motion Control platform designs, manufactures, markets and services specified, highly engineered mechanical components used within complex systems where our customers' reliability requirements and the cost of failure or downtime are extremely high.

### Water Management

The Rexnord Water Management platform designs, procures, manufactures and markets products that provide and enhance water quality, safety, flow control and conservation.