



Thomas Flexible Disc Couplings

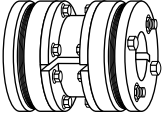
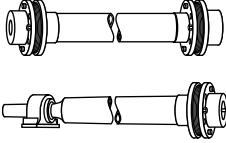

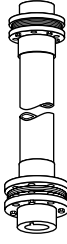
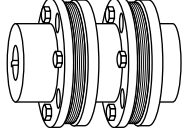
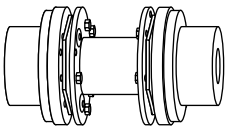
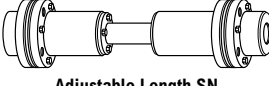
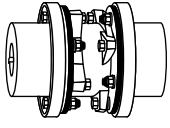
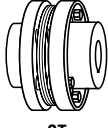
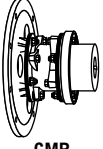
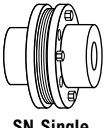
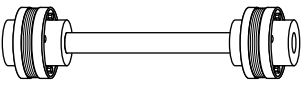

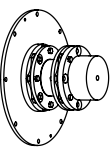
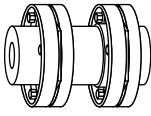
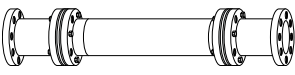
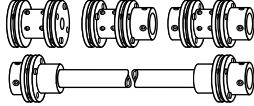
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Rexnord Thomas Coupling Application Guide

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

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

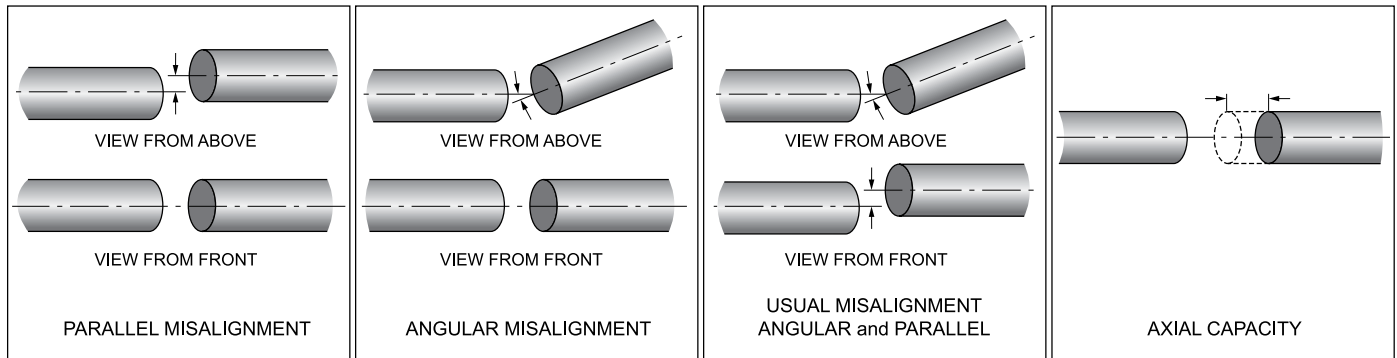
Misaligned shafts not properly coupled are subject to severe stresses that damage bearings and seals. Any or all of the misalignments shown in the above diagrams are present in all connected drives; therefore, it is imperative that flexible couplings be used to avoid costly damage to your equipment.

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:

$$i. \text{ Torque (lb-in)} = \frac{\text{Driver Horsepower} \times 63025}{\text{Operating Speed}}$$

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^2 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 ("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 (defined on drawings)		
	SR54RDG	D = Special Disc Pack Material (defined on drawings)		
	SN	R = Retrofit assembly (XTSR71 with special adapters to bolt up to John Crane or Thomas adapter hubs)		
	THP			
	SR63			
	SR71			
	SR71-8			
	SR52			

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

Rexnord Thomas Coupling Selection

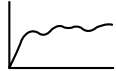

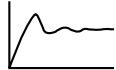

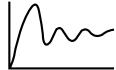

Typical Service Factors – Motor And Turbine Driven Equipment*

Application	Service Factor	Application	Service Factor	Application	Service Factor
AGITATORS		Bottling.....	1.5	Presses.....	2.0
Pure Liquids.....	1.0	GENERATORS		Reel.....	1.5
Variable Density.....	1.5	Non-Welding.....	1.5	Stock Chests.....	1.5
ALTERNATOR	1.5	Welding.....	3.0	Suction Roll.....	2.0
BLOWERS		HAMMER MILLS	3.0	Washers and Thickeners.....	1.5
Centrifugal.....	1.0	LUMBER INDUSTRY		Winders.....	1.5
Lobe.....	1.5	Barkers - Drum Type.....	2.5	PRINTING PRESSES	1.5
Vane.....	1.5	Edger Feed.....	2.0	PULLERS	
BRIQUETTER MACHINES	2.0	Live Rolls.....	2.0	Barge Haul.....	2.0
CAN FILLING MACHINES	1.0	Log Haul - Incline.....	2.0	PUMPS	
CANE KNIVES	2.0	Log Haul - Well Type.....	2.0	Centrifugal	
CAR DUMPERS	2.5	Off Bearing Rolls.....	2.0	General Duty (Liquid).....	1.0
CAR PULLERS	1.5	Planer Feed Chains.....	2.0	Boiler Feed.....	1.5
CLAY WORKING MACHINERY	2.0	Planer Floor Chains.....	2.0	Slurry (Sewage, etc.).....	1.5
COMPRESSORS		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	MACHINE TOOLS		1 or 2 Cylinders.....	2.5
CONVEYORS - uniformly loaded or fed.....	1.5	Bending Roll.....	2.0	3 or more Cylinders.....	2.0
CONVEYORS - heavy duty - not uniformly fed.....	2.5	Plate Planer.....	1.5	Rotary - Gear, Lobe, Vane.....	1.5
CRANES AND HOISTS	2.0	Punch Press - Gear Driven.....	2.0	RUBBER INDUSTRY	
CRUSHERS	3.0	Tapping Machines.....	2.5	Mixer - Banbury.....	3.0
DREDGES		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	METAL MILLS		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	SCREENS	
Screen Drives.....	2.0	Stitlers.....	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
ELEVATORS		Reversing.....	3.0	Vibratory.....	2.5
Bucket.....	2.0	Wire Drawing & Flattening Machine.....	2.0	SEWAGE DISPOSAL EQUIPMENT	1.5
Centrifugal Discharge.....	1.5	Wire Winding Machine.....	2.0	SEWAGE TREATMENT PUMPS	1.5
Escalators.....	1.5	MILLS, ROTARY TYPE		TEXTILE INDUSTRY	
Freight.....	2.0	Ball.....	2.5	Batchers.....	1.5
Gravity Discharge.....	1.5	Cement Kilns.....	2.0	Calenders.....	2.0
EXTRUDERS		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)	
FANS		Rod.....	2.0	(dryers, calenders, etc.).....	1.5
Centrifugal		Tumbling Barrels.....	2.0	Dry Cans.....	2.0
Forced Draft (Hostile Environment).....	1.5	MIXERS		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	OIL INDUSTRY		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
FEEDERS		PAPER MILLS		Winders (Other than Batchers).....	1.5
Light Duty.....	1.5	Barker Auxiliaries, Hydraulic.....	2.5	WINDLASS	2.0
Heavy Duty.....	2.5	Barker, Mechanical.....	2.5	WOODWORKING MACHINERY	1.5
FOOD INDUSTRY		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 9002-B04. The type of bore fit normally supplied by Rexnord is listed below.

Bore Specifications

DBZ	Straight Bore – Clearance fit – stocked Straight Bore – Interference fit on bore-to-order sizes ① Taper Bore – To customer specification
AMR, BMR, CMR, SN, SF, SV, ST, 52, 54RDG, 54RD, 71, 71-8, XT52, XT52, XT52, XT52	Straight Bore – Interference fit on all bores ① Taper Bore – To customer specification
Series 63/THP	All bores per customer specification
Miniatures	See pages 30-32.

① Unless specified otherwise by customer.

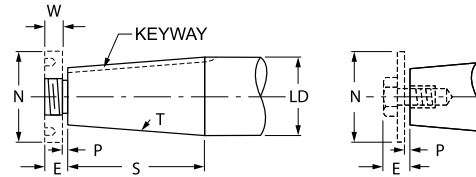
NOTE: Rexnord recommends an interference fit be used whenever possible.

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.

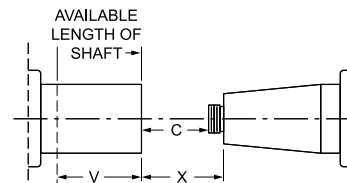
Keyway: Width, depth.

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

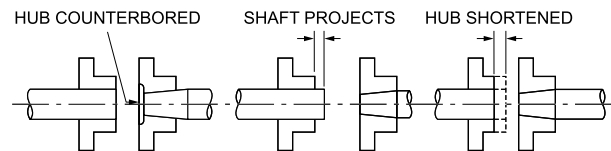
With connected equipment in fixed position, the following additional information is necessary:

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 Tormaloy, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/8° per disc pack

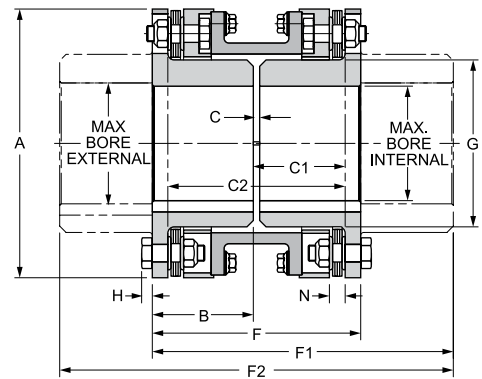
When specified, Series 54RDG couplings meet all requirements of API 610 or API 671.

If application requires API specification, please consult Rexnord.



General Dimensions (in)

Coupling Size	Max. Bore* Internal	Max. Bore* External	A	B	C	C1**	F	F1**	H	N	G	C2***	F2***
125	1.188	1.375	3.81	1.88	0.12	1.75	3.875	4.94	0.17	0.27	1.75	3.38	6.00
162	1.625	1.875	4.47	1.88	0.12	1.77	3.875	5.40	0.17	0.29	2.34	3.42	6.92
200	2.250	2.250	5.56	2.12	0.12	1.96	4.375	6.14	0.22	0.36	3.25	3.80	7.92
225	2.375	2.625	5.88	2.19	0.12	2.03	4.499	6.84	0.22	0.36	3.50	3.94	9.18
262	2.750	3.125	6.88	2.59	0.19	2.42	5.370	7.89	0.25	0.47	4.12	4.65	10.41
312	3.375	3.625	7.84	2.84	0.19	2.62	5.870	8.84	0.30	0.50	5.00	5.05	11.81
350	3.750	4.000	8.78	3.28	0.25	3.06	6.810	10.09	0.22	0.54	5.50	5.87	13.37
375	4.188	4.500	9.72	3.56	0.25	3.26	7.370	10.82	0.25	0.59	6.06	6.27	14.27
425	4.500	4.750	10.50	3.97	0.25	3.61	8.190	11.83	0.30	0.62	6.56	6.97	15.47
450	4.750	5.125	11.31	4.50	0.31	4.15	9.310	13.15	0.47	0.71	7.00	7.99	16.99
500	5.000	5.375	12.88	4.78	0.31	4.32	9.870	14.10	0.50	0.78	7.88	8.33	18.33
550	5.500	6.000	14.44	5.37	0.38	4.87	11.120	15.74	0.58	0.91	8.75	9.36	20.36
600	6.000	6.500	16.00	6.00	0.38	5.40	12.380	17.40	0.67	0.98	9.31	10.42	22.42
700	7.000	7.500	18.25	7.00	0.38	6.22	14.380	20.22	0.75	1.20	10.88	12.06	26.06
750	7.500	8.000	19.81	7.75	0.50	7.00	16.000	22.25	0.84	1.27	11.75	13.50	28.50
800	8.000	8.750	21.50	8.25	0.50	7.37	17.000	23.87	0.91	1.34	12.50	14.24	30.74
850	8.500	9.250	23.00	8.88	0.56	7.97	18.320	25.60	1.00	1.40	13.19	15.38	32.88
925	9.000	10.125	25.00	9.91	0.62	8.91	20.440	28.32	1.09	1.50	14.12	17.20	36.20



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

** Hubs may be reversed for alternate shaft spacing.

*** Both hubs reversed.

Coupling Size	Max. Horsepower Per 100 RPM Service Factor 1.0	Max. RPM		Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	② Weight (lb)	② WR ² (lb-in ²)	③ Axial Capacity (in)
		① Not Balanced	① Balanced					
125	4.3	4,600	10,500	2,700	5,400	6.9	12.5	±0.036
162	8.5	4,200	9,700	5,350	10,700	9.3	24	±0.036
200	16.7	3,800	8,600	10,500	21,000	16	67	±0.036
225	27.8	3,700	8,400	17,500	35,000	19	85	±0.036
262	52.1	3,600	7,400	32,830	65,660	31	192	±0.043
312	81.6	3,000	6,700	51,400	102,800	46	384	±0.051
350	106	2,800	6,200	66,900	133,800	66	689	±0.056
375	159	2,500	5,800	100,300	200,600	88	1,160	±0.062
425	213	2,300	5,400	134,300	268,600	117	1,780	±0.067
450	239	2,200	5,000	150,400	300,800	154	2,690	±0.072
500	391	2,000	4,600	246,400	492,800	224	4,970	±0.082
550	524	1,900	4,200	330,400	660,800	324	8,970	±0.092
600	688	1,800	3,900	433,800	867,600	437	14,900	±0.102
700	1,071	1,700	3,600	674,800	1,349,600	657	29,000	±0.115
750	1,331	1,550	3,400	838,800	1,677,600	839	43,400	±0.125
800	1,712	1,450	3,200	1,078,700	2,157,400	1,040	63,900	±0.136
850	2,020	1,350	3,000	1,273,000	2,546,000	1,260	88,900	±0.144
925	2,735	1,300	2,800	1,724,000	3,448,000	1,690	140,000	±0.156

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

② Weight and WR² 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 (in)

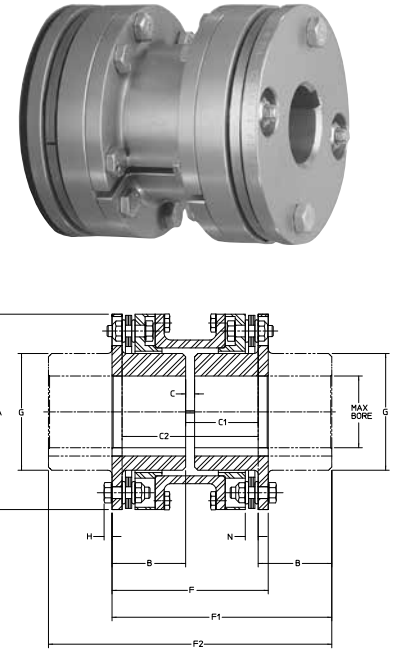
Coupling Size	Max Bore* Internal (in)	Max Bore* External (in)	A	B	C	C1**	F	F1**	H	N	G	C2***	F2***
125	1.19	1.38	3.69	1.84	0.12	1.71	3.80	5.39	0.17	0.27	1.75	3.30	6.98
162	1.62	1.88	4.34	1.88	0.12	1.77	3.88	5.52	0.17	0.29	2.34	3.42	7.18
200	2.25	2.25	5.44	2.12	0.12	1.97	4.36	6.22	0.22	0.36	3.25	3.80	7.49
225	2.38	2.63	5.69	2.19	0.12	2.03	4.50	6.40	0.22	0.36	3.50	3.94	8.32
262	2.75	3.13	6.62	2.59	0.19	2.42	5.37	7.61	0.25	0.47	4.12	4.65	9.83
312	3.38	3.63	7.81	2.84	0.19	2.62	5.87	8.31	0.30	0.50	5.00	5.05	10.73
350	3.75	4.00	8.69	3.28	0.25	3.06	6.81	9.62	0.34	0.54	5.50	5.87	12.43
375	4.19	4.50	9.69	3.56	0.25	3.27	7.37	10.40	0.39	0.59	6.06	6.27	13.39
425	4.50	4.75	10.50	3.97	0.25	3.61	8.19	11.55	0.42	0.62	6.56	6.97	14.91
450	4.75	5.13	11.31	4.50	0.31	4.16	9.31	13.16	0.47	0.71	7.00	7.99	16.99
500	5.00	5.38	12.88	4.72	0.31	4.27	9.75	13.71	0.50	0.78	7.88	8.21	17.65
550	5.50	6.00	14.44	5.31	0.38	4.81	11.00	15.44	0.58	0.91	8.75	9.24	19.86
600	6.00	6.50	16.00	6.00	0.38	5.39	12.38	17.39	0.67	0.98	9.31	10.42	22.42
700	7.00	7.50	18.25	7.00	0.38	6.22	14.38	20.22	0.75	1.19	10.88	12.06	26.06
750	7.50	8.00	19.81	7.75	0.50	7.00	16.00	22.50	0.84	1.27	11.75	13.50	29.00
800	8.00	8.75	21.50	8.25	0.50	7.37	17.00	23.87	0.91	1.34	12.50	14.24	30.74
850	8.50	9.25	23.00	8.88	0.56	7.97	18.32	25.73	1.00	1.40	13.19	15.38	33.14
925	9.00	10.12	25.00	9.91	0.62	8.91	20.44	28.73	1.09	1.50	14.12	17.20	37.02
1000	10.38	11.00	27.50	10.75	0.62	9.62	22.12	31.12	1.16	1.69	16.25	18.62	40.12

* 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. Horsepower Per 100 RPM	Max. RPM		Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	② Weight (lb)	② WR ² (lb-in ²)	① Axial Capacity (in)
	Service Factor 1.0	Not Balanced	③ Balanced					
125	3.7	4,600	7,200	2,330	4,660	6.7	12	±0.036
162	6.9	4,200	7,000	4,360	8,720	9.7	24	±0.036
200	13.5	3,800	6,300	8,490	16,980	16.0	65	±0.036
225	17.0	3,700	6,000	10,700	21,400	18.0	80	±0.036
262	27.8	3,600	5,500	17,500	35,000	31.0	179	±0.043
312	38.6	3,000	5,000	24,300	48,600	47.4	399	±0.051
350	54.1	2,800	4,500	34,100	68,200	68.3	708	±0.056
375	81.1	2,500	4,000	51,100	102,200	94.4	1,240	±0.062
425	115.0	2,300	3,700	72,300	144,600	125.0	1,920	±0.067
450	130.0	2,200	3,400	82,200	164,400	165.0	2,900	±0.072
500	197.0	2,000	3,300	124,000	248,000	241.0	5,420	±0.082
550	341.0	1,900	2,800	215,000	430,000	347.0	9,810	±0.092
600	427.0	1,800	2,500	269,000	538,000	478.0	16,500	±0.102
700	549.0	1,700	2,500	346,000	692,000	713.0	31,900	±0.115
750	741.0	1,550	2,200	467,000	934,000	885.0	46,100	±0.125
800	920.0	1,450	2,100	580,000	1,160,000	1,100.0	67,500	±0.136
850	1,125.0	1,350	1,950	709,000	1,418,000	1,460.0	103,000	±0.144
925	1,503.0	1,300	1,850	947,000	1,894,000	1,960.0	162,000	±0.156
1000	2,063.0	1,200	1,750	1,300,000	2,600,000	2,440.0	247,000	±0.172

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 WR² at maximum bore.

③ For higher speeds, consult Rexnord.

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

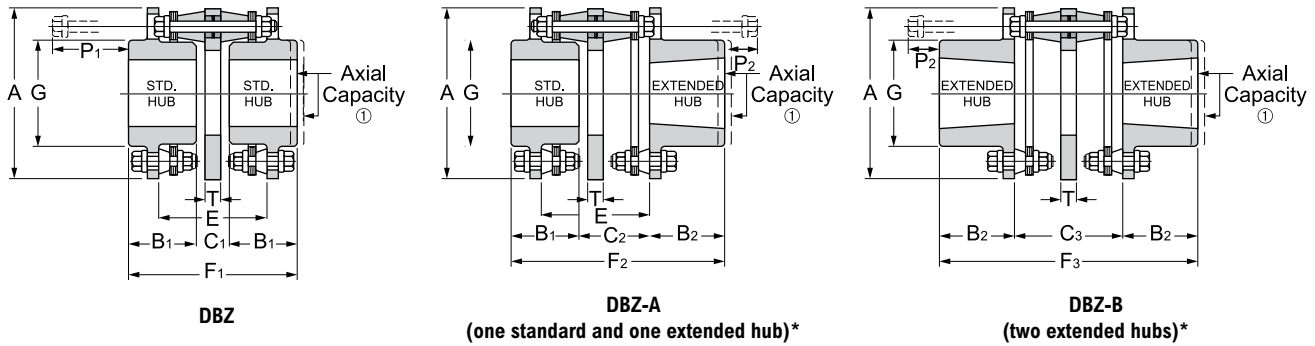
Bolts: Alloy steel

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



General Dimensions (in)

Coupling Size	Standard Hub Max. Bore	Extended Hub Max. Bore	A	B ₁	B ₂	C ₁	C ₂	C ₃	E	F ₁	F ₂	F ₃	G	P ₁	P ₂	T
50	0.63	0.63	2.00	0.88	0.88	0.32	0.84	1.36	1.36	2.08	2.60	3.12	1.00	1.25	0.78	0.19
62	0.75	0.75	2.44	1.09	1.09	0.38	1.05	1.72	1.72	2.56	3.23	3.90	1.19	1.56	1.06	0.25
75	0.88	0.88	2.69	1.12	1.12	0.37	1.06	1.75	1.75	2.61	3.30	3.99	1.44	1.56	1.06	0.25
101	1.13	1.16	3.22	1.38	1.38	0.69	1.39	2.08	2.08	3.45	4.15	4.84	1.69	1.69	1.00	0.31
126	1.38	1.38	3.84	1.50	1.62	0.96	1.70	2.45	2.45	3.96	4.82	5.69	2.06	2.00	1.13	0.41
163	1.88	1.88	4.56	1.69	1.88	0.95	1.70	2.45	2.45	4.33	5.27	6.21	2.75	1.81	0.88	0.41
201	2.13	2.25	5.34	1.94	2.12	0.96	1.96	2.96	2.96	4.84	6.02	7.20	3.28	2.31	1.13	0.56
226	2.38	2.63	6.06	2.38	2.62	1.22	2.53	3.84	3.84	5.98	7.53	9.08	3.78	2.69	1.13	0.66
263	2.88	3.00	7.00	2.75	3.00	1.31	2.81	4.31	4.31	6.81	8.56	10.31	4.44	3.00	1.25	0.75
301	3.13	3.50	8.00	3.12	3.44	1.50	3.19	4.88	4.88	7.74	9.75	11.76	5.06	3.56	1.56	0.84
351	3.63	4.00	9.38	3.69	4.06	1.80	3.86	5.92	5.92	9.18	11.61	14.04	5.81	4.50	2.06	1.06
401	4.13	4.50	10.69	4.19	4.62	1.94	4.32	6.70	6.70	10.32	13.13	15.94	6.63	5.13	2.31	1.19
451	4.63	4.75	12.13	4.75	5.25	2.12	4.72	7.28	7.28	11.66	14.72	17.78	7.38	5.44	2.38	1.34

Coupling Size	Max. Horsepower Per 100 RPM	Max. RPM		Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	② Weight (lb)			② WR ² (lb-in ²)			① Axial Capacity (in)
	Service Factor 1.0	Not Balanced	Balanced			DBZ	DBZ-A	DBZ-B	DBZ	DBZ-A	DBZ-B	
50	0.23	6,000	9,000	145	220	0.7	0.7	0.7	0.3	0.3	0.3	±0.023
62	0.39	6,000	8,200	246	370	1.5	1.5	1.5	0.7	0.7	0.7	±0.028
75	0.56	6,000	7,800	353	530	1.9	1.9	1.9	1.5	1.5	1.5	±0.032
101	1.10	6,000	7,100	693	1,040	3.3	3.3	3.3	4.5	4.5	4.5	±0.038
126	2.00	5,500	6,500	1,260	1,900	5.5	5.6	5.7	9.9	10.1	10.1	±0.046
163	2.70	5,000	6,000	1,700	2,600	8.4	8.6	8.8	21	21	22	±0.057
201	4.79	4,600	5,500	3,020	4,500	14.4	14.4	15.4	53	53	54	±0.067
226	8.73	4,100	5,200	5,500	8,300	21	22	23	95	95	105	±0.076
263	13.60	3,700	4,800	8,600	12,900	33	34	35	199	209	209	±0.089
301	20.50	3,300	4,500	12,900	19,400	50	52	54	365	375	385	±0.102
351	35.90	2,900	4,100	22,600	33,900	83	87	90	916	936	965	±0.118
401	52.70	2,700	3,900	33,200	49,800	125	125	135	1,705	1,710	1,710	±0.136
451	68.90	2,600	3,600	43,400	65,100	170	180	180	3,168	3,170	3,270	±0.154

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 WR² at maximum bore.

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

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 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.

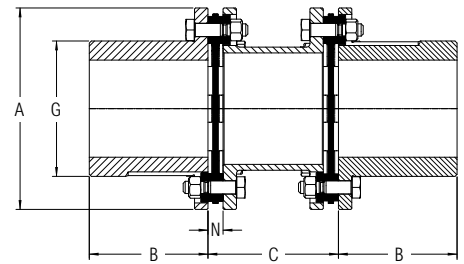
Construction

Hubs and Center assembly: Carbon steel

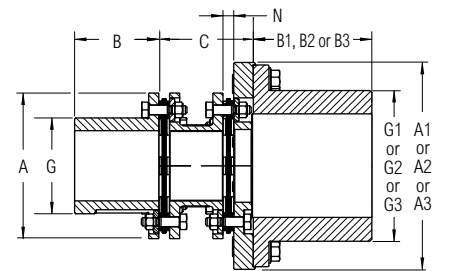
Bolts: Alloy steel

Disc Packs: Stainless steel. Max misalignment is 1° per disc pack for sizes 754 & 1004, 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 (lb·in) ^⑤	③ Std Hub Max. Bore	③ LH Hub Max. Bore	③ XL Hub Max. Bore	③ XXL Hub Max. Bore	Min. C (in)	Min. C with Adapter (in)	Max. C (in)	Max. Speed (rpm)		① Axial Capacity (in)	N (in)	② WR ² (lb·in ²)
									④ Not Balanced	Balanced			
754	2,213	1.50	—	—	—	2.95	—	7.87	3,600	25,000	±0.16	0.248	7.9
1004	2,655	1.94	—	—	—	2.95	—	7.87	3,600	22,000	±0.18	0.378	32.4
726	2,630	1.75	—	2.00	2.38	3.23	3.72	14.7	12,000	20,000	±0.05	0.339	6.55
826	4,900	2.00	—	2.38	2.88	3.47	4.06	14.7	10,900	18,500	±0.06	0.368	15.4
996	8,210	2.25	2.38	2.88	3.38	3.84	4.59	30.7	9,800	15,000	±0.07	0.378	32.6
1088	19,400	2.50	2.88	3.38	4.00	4.06	4.80	30.7	9,000	14,000	±0.05	0.408	64.2
1298	31,400	3.00	3.38	4.00	4.50	4.56	5.46	30.8	8,000	12,000	±0.06	0.508	152
1548	52,300	3.50	4.00	4.50	5.00	5.04	6.11	30.8	7,100	10,000	±0.07	0.582	336
1698	72,500	4.00	4.50	5.00	5.50	6.00	7.22	31.0	6,600	9,100	±0.08	0.622	568
1928	98,200	4.50	5.00	5.50	6.00	6.30	7.59	31.2	6,100	8,500	±0.09	0.672	968
2068	136,000	4.75	5.50	6.00	6.50	6.93	8.47	43.2	5,800	7,800	±0.10	0.725	1470
2278	176,000	5.38	6.00	6.50	7.75	8.38	9.97	43.3	5,500	7,100	±0.11	0.755	2430
2468	232,000	5.75	6.50	7.75	8.63	8.73	10.42	43.5	5,200	6,500	±0.12	0.807	3550
2698	318,000	6.00	7.75	8.63	9.13	9.36	11.27	43.5	4,800	6,000	±0.13	0.924	5540
2888	416,000	6.75	8.63	9.13	10.00	10.63	12.68	43.6	4,600	5,700	±0.14	0.991	8570
3058	461,000	7.13	9.13	10.00	11.00	10.63	12.69	43.8	4,400	5,400	±0.15	0.991	11100
3358	622,000	8.00	10.00	11.00	11.50	11.88	14.21	44.0	4,200	4,700	±0.16	1.076	17700
3668	834,000	8.88	11.00	11.50	12.25	12.62	15.09	44.0	3,900	4,400	±0.17	1.196	29100
3908	909,000	9.50	11.50	12.25	14.00	12.62	15.12	44.2	3,800	4,100	±0.19	1.196	37600
4178	1,130,000	10.13	12.25	14.00	15.00	13.50	16.26	44.4	3,600	3,900	±0.20	1.277	52700
4588	1,670,000	11.00	14.00	15.00	16.00	19.62	22.77	40.4	3,400	3,600	±0.22	1.415	90800
4918	2,080,000	11.75	15.00	16.00	—	20.38	23.68	40.6	3,200	3,300	±0.23	1.501	129000
5258	2,510,000	12.63	16.00	—	—	21.25	24.82	40.8	3,100	3,100	±0.25	1.586	179000

Example Selection:

1. Select coupling size 1088 for 19,000 lb-in torque and 2.5in pump shaft diameter.
 2. Select XXL 2nd hub for 3.5in motor shaft diameter.
 3. Therefore, coupling is a 1088 XTSR52 XXL.
- A 1088 XTSR52 XXL has one hub with 2.5in max bore and one hub with 4in max bore.

Size	Std A (in)	LH A1 (in)	XL A2 (in)	XXL A3 (in)	Std B (in)	LH B1 (in)	XL B2 (in)	XXL B3 (in)	Std G (in)	LH G1 (in)	XL G2 (in)	XXL G3 (in)	② Std Weight (lb)	Weight Change Per in of "C" (lb/in)
754	3.74	—	—	—	1.97	—	—	—	2.28	—	—	—	5.3	0.178
1004	5.12	—	—	—	1.97	—	—	—	2.95	—	—	—	11.0	0.353
726	3.74	—	4.25	5.08	1.18	—	1.65	2.01	2.51	—	2.87	3.39	3.9	0.203
826	4.25	—	5.08	5.51	1.97	—	2.01	3.23	2.83	—	3.39	4.09	7.4	0.315
996	5.08	5.08	5.51	6.54	1.97	2.01	3.23	3.74	3.32	3.39	4.09	4.84	10.5	0.286
1088	5.51	5.51	6.54	7.83	3.19	3.23	3.74	4.49	3.63	4.09	4.84	5.71	18.4	0.551
1298	6.54	6.54	7.83	8.66	3.82	3.74	4.49	4.80	4.35	4.84	5.71	6.50	29.9	0.687
1548	7.76	7.83	8.66	9.66	3.82	4.49	4.80	5.31	5.21	5.71	6.50	7.17	45.9	0.983
1698	8.58	8.66	9.66	10.39	4.33	4.80	5.31	6.10	5.78	6.50	7.17	7.87	63.9	1.23
1928	9.65	9.66	10.39	11.44	4.33	5.31	6.10	6.57	6.60	7.17	7.87	8.66	84.2	1.50
2068	10.39	10.39	11.44	12.32	4.92	6.10	6.57	7.48	7.03	7.87	8.66	9.29	110	1.90
2278	11.46	11.44	12.32	13.58	5.71	6.57	7.48	7.28	7.74	8.66	9.29	11.02	154	2.21
2468	12.32	12.32	13.58	15.00	5.91	7.48	7.28	7.87	8.41	9.29	11.02	12.13	192	2.66
2698	13.50	13.58	15.00	15.94	5.91	7.28	7.87	7.52	9.14	11.02	12.13	13.07	245	3.39
2888	14.61	15.00	15.94	17.20	6.89	7.87	7.52	8.86	9.69	12.13	13.07	13.98	331	4.35
3058	15.55	15.94	17.20	18.98	7.28	7.52	8.86	10.12	10.35	13.07	13.98	15.67	380	4.32
3358	16.81	17.20	18.98	19.80	9.65	8.86	10.12	9.80	11.34	13.98	15.67	16.50	512	5.37
3668	18.35	18.98	19.80	20.83	11.06	10.12	9.80	10.47	12.41	15.67	16.50	17.48	725	6.58
3908	19.29	19.80	20.83	23.94	11.93	9.80	10.47	11.81	13.35	16.50	17.48	19.84	840	6.46
4178	20.63	20.83	23.94	25.51	12.68	10.47	11.81	12.60	14.22	17.48	19.84	21.46	1030	7.51
4588	23.11	23.94	25.51	26.69	13.78	11.81	12.60	13.62	15.44	19.84	21.46	22.64	1460	10.5
4918	24.80	25.51	26.69	—	14.76	12.60	13.62	—	16.55	21.46	22.64	—	1800	12.4
5258	26.46	25.51	—	—	15.79	—	—	—	17.70	—	—	—	2190	13.9

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 WR² 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 (lb·in) is twice the Maximum Continuous Torque.

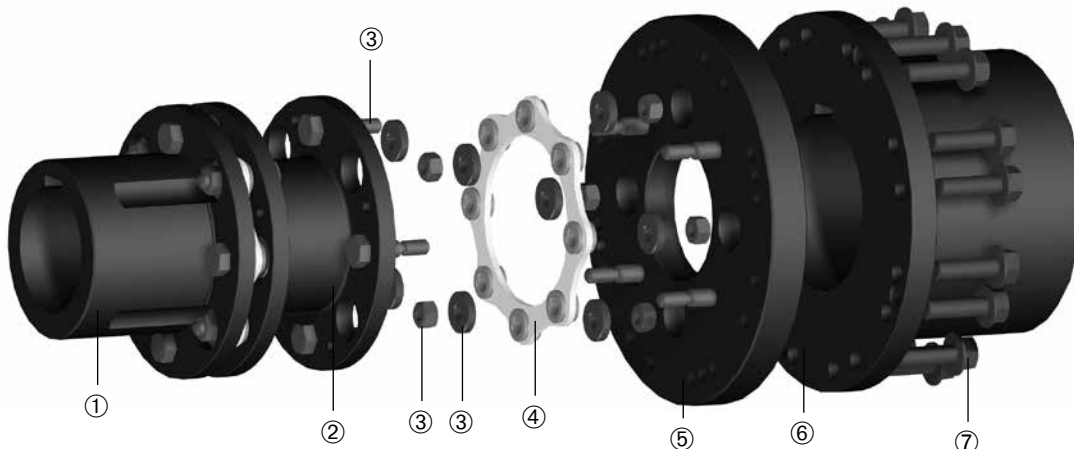
Rexnord Thomas Flexible Disc Couplings

Thomas XTSR52 Spacer Type Series Coupling with Optional Adapter

Component Part Numbers

Size	① Standard Hub	⑥ LH Hub + Cap Screw Kit	⑥ XL Hub + Cap Screw Kit	⑥ 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									
754	10003200	-	-	-	-	-	-	10003201	-	10003202	-	-	-	10003203	-	-	-
1004	10003204	-	-	-	-	-	-	10003205	-	10003206	-	-	-	10003207	-	-	-
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 Disc Pack Hardware Kit	④ Disc Pack	⑦ Adapter-Hub Capscrew Kit	
	4.375"	5.0"	7.5"	8.0"	9.0"	100mm	140mm	180mm	250mm				
	② Standard Center Member When Adapter Used (LH, XL, XXL)												
754	-	-	-	-	-	-	-	-	-	-	10003208	10003209	-
1004	-	-	-	-	-	-	-	-	-	-	10003210	10003211	-
726	-	10447053	-	-	-	10399144	10447054	-	-	-	10001561	10000091	10001591
826	10447077	10447078	-	-	-	-	10397202	-	-	-	10001562	10000092	10001591
996	-	10447082	-	-	-	-	10399148	10397204	-	-	10001563	10000093	10001592
1088	-	10404466	-	-	-	-	10399150	10397205	-	-	10001564	10000094	10001593
1298	-	-	-	-	-	-	10447083	10397206	-	-	10001565	10000095	10001594
1548	-	-	10447085	10447086	-	-	-	10399155	10447084	-	10001566	10000096	10001595
1698	-	-	10447087	10447088	-	-	-	-	10397207	-	10001567	10000097	10001596
1928	-	-	-	10447089	10447090	-	-	-	10397208	-	10001568	10000098	10001597
2068	-	-	-	-	10447043	-	-	-	10397211	-	10001569	10000099	10001598
2278	-	-	-	-	-	-	-	-	-	-	10001570	10000100	10001599
2468	-	-	-	-	-	-	-	-	-	-	10001571	10000101	10001600
2698	-	-	-	-	-	-	-	-	-	-	10001572	10000102	10001601
2888	-	-	-	-	-	-	-	-	-	-	10001573	10000103	10001602
3058	-	-	-	-	-	-	-	-	-	-	10001574	10000104	10001602
3358	-	-	-	-	-	-	-	-	-	-	10001575	10000105	10001603
3668	-	-	-	-	-	-	-	-	-	-	10001576	10000106	10001604
3908	-	-	-	-	-	-	-	-	-	-	10001577	10000107	10001605
4178	-	-	-	-	-	-	-	-	-	-	10001578	10000108	10001605
4588	-	-	-	-	-	-	-	-	-	-	10001579	10000109	10001606
4918	-	-	-	-	-	-	-	-	-	-	10001580	10000110	10001607
5258	-	-	-	-	-	-	-	-	-	-	10001581	10000111	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, ISO 10441, ISO 14691 compliant 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

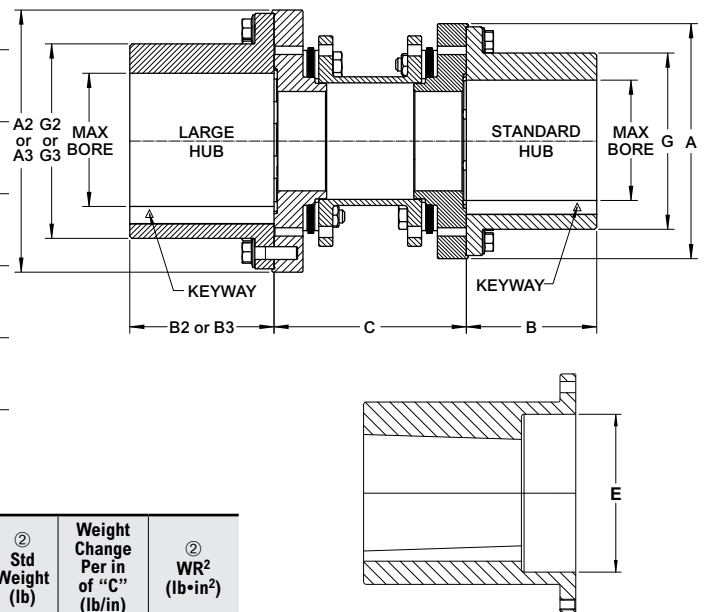
Bolts: Alloy steel

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 (lb•in) ⑤	③ Std Hub Max. Bore	③ XL Hub Max. Bore	③ XXL Hub Max. Bore	Min. C (in)	Max. C (in)	Max. Speed (rpm)		① Axial Capacity (in)	Max Counter Bore E (in)
							④ Not Balanced	Balanced		
726	2,630	1.63	2.00	2.38	2.56	15.66	12,000	20,000	±0.05	2.08
826	4,900	2.00	2.38	2.88	3.03	15.87	10,900	18,500	±0.06	2.58
996	8,210	2.38	2.88	3.38	3.62	32.18	9,800	15,000	±0.07	3.03
1088	19,400	2.88	3.38	4.00	3.78	32.21	9,000	14,000	±0.05	3.47
1298	31,400	3.38	4.00	4.50	4.53	32.56	8,000	12,000	±0.06	4.13
1548	52,300	4.00	4.50	5.00	5.31	32.95	7,100	10,000	±0.07	4.86
1698	72,500	4.50	5.00	5.50	5.94	33.46	6,600	9,100	±0.08	5.60
1928	98,200	5.00	5.50	6.00	6.34	33.74	6,100	8,500	±0.09	6.17
2068	136,000	5.50	6.00	6.50	7.36	46.30	5,800	7,800	±0.10	6.70
2278	176,000	6.00	6.50	7.75	7.72	46.54	5,500	7,100	±0.11	7.42
2468	232,000	6.50	7.75	8.63	8.23	46.85	5,200	6,500	±0.12	7.85
2698	318,000	7.75	8.63	9.13	9.29	47.32	4,800	6,000	±0.13	9.69
2888	416,000	8.63	9.13	10.00	10.04	47.72	4,600	5,700	±0.14	10.69
3058	461,000	9.13	10.00	11.00	10.12	47.99	4,400	5,400	±0.15	11.73
3358	622,000	10.00	11.00	11.50	11.30	48.66	4,200	4,700	±0.16	12.37
3668	834,000	11.00	11.50	12.25	12.20	48.94	3,900	4,400	±0.17	13.97
3908	909,000	11.50	12.25	14.00	12.24	49.09	3,800	4,100	±0.19	14.85
4178	1,130,000	12.25	14.00	15.00	13.39	49.92	3,600	3,900	±0.20	15.64
4588	1,670,000	14.00	15.00	16.00	15.20	46.69	3,400	3,600	±0.22	17.72
4918	2,080,000	15.00	16.00	—	16.06	47.15	3,200	3,300	±0.23	19.21
5258	2,510,000	16.00	—	—	17.24	47.96	3,100	3,100	±0.25	20.19



Size	Std A (in)	XL A2 (in)	XXL A3 (in)	Std B (in)	XL B2 (in)	XXL B3 (in)	Std G (in)	XL G2 (in)	XXL G3 (in)	② Std Weight (lb)	Weight Change Per in of "C" (lb/in)	② WR ² (lb•in ²)
726	3.74	4.25	5.08	1.38	1.65	2.01	2.32	2.87	3.39	6.83	0.174	12.4
826	4.25	5.08	5.51	1.65	2.01	3.23	2.87	3.39	4.09	11.0	0.300	26.3
996	5.08	5.51	6.54	2.01	3.23	3.74	3.39	4.09	4.84	18.5	0.281	64.2
1088	5.51	6.54	7.83	3.23	3.74	4.49	4.09	4.84	5.71	27.6	0.541	115
1298	6.54	7.83	8.66	3.74	4.49	4.80	4.84	5.71	6.50	45.4	0.661	272
1548	7.83	8.66	9.66	4.49	4.80	5.31	5.71	6.50	7.17	76.3	0.901	646
1698	8.66	9.66	10.39	4.80	5.31	6.10	6.50	7.17	7.87	104	1.20	1090
1928	9.66	10.39	11.44	5.31	6.10	6.57	7.17	7.87	8.66	138	1.40	1820
2068	10.39	11.44	12.32	6.10	6.57	7.48	7.87	8.66	9.29	187	1.82	2870
2278	11.44	12.32	13.58	6.57	7.48	7.28	8.66	9.29	11.02	243	2.11	4440
2468	12.32	13.58	15.00	7.48	7.28	7.87	9.29	11.02	12.13	315	2.52	6630
2698	13.58	15.00	15.94	7.28	7.87	7.52	11.02	12.13	13.07	406	3.20	11300
2888	15.00	15.94	17.20	7.87	7.52	8.86	12.13	13.07	13.98	567	4.01	18300
3058	15.94	17.20	18.98	7.52	8.86	10.12	13.07	13.98	15.67	604	4.05	23200
3358	17.20	18.98	19.80	8.86	10.12	9.80	13.98	15.67	16.50	807	5.08	35500
3668	18.98	19.80	20.83	10.12	9.80	10.47	15.67	16.50	17.48	1150	6.23	60100
3908	19.80	20.83	23.94	9.80	10.47	11.81	16.50	17.48	19.84	1180	6.21	71400
4178	20.83	23.94	25.51	10.47	11.81	12.60	17.48	19.84	21.46	1430	7.28	96000
4588	23.94	25.51	26.69	11.81	12.60	13.62	19.84	21.46	22.64	2190	10.0	185000
4918	25.51	26.69	—	12.60	13.62	—	21.46	22.64	—	2650	11.8	260000
5258	26.69	—	—	13.62	—	—	22.64	—	—	3130	13.1	341000

Example Selection:

- Select coupling size 1088 for 19,000 lb•in torque and 2.5in pump shaft diameter.
 - Select XXL 2nd hub for 3.5in motor shaft diameter.
 - Therefore, coupling is a 1088 XTSR71 XXL.
- A 1088 XTSR71 XXL has one hub with 2.88in max bore and one hub with 4in 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 WR² 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 (lb•in) is twice the Maximum Continuous Torque.

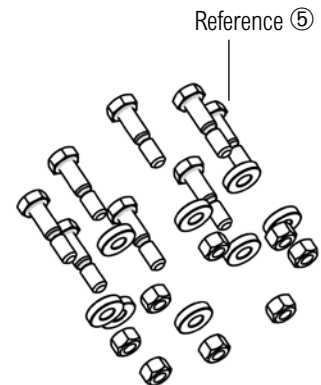
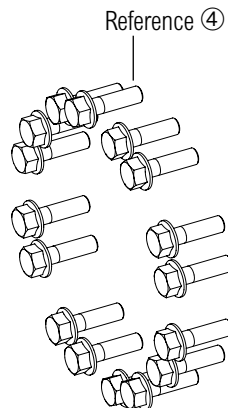
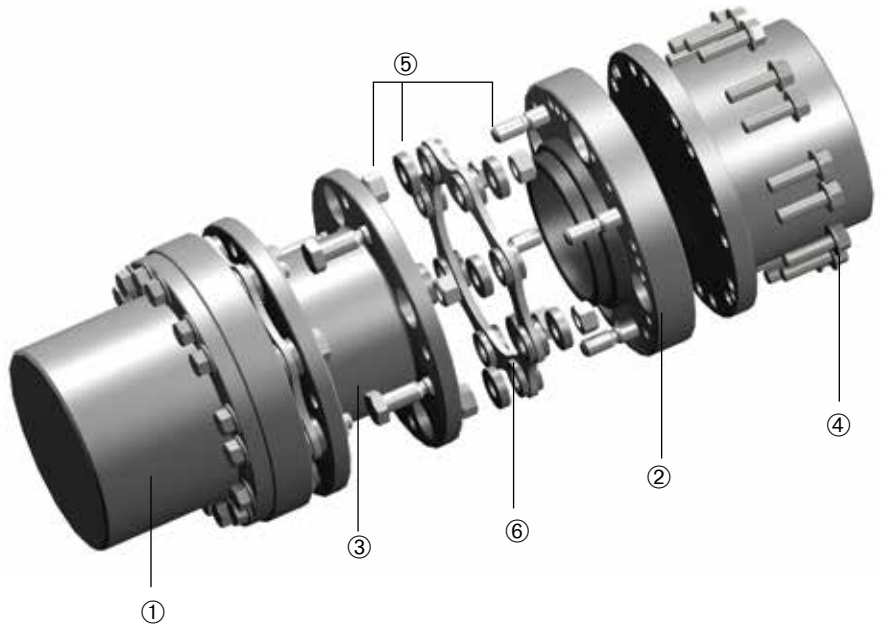
Rexnord Thomas Flexible Disc Couplings

Thomas XTSR71 Spacer Type Series Coupling with Adapters

Component Part Numbers

Size	① Standard Hub + Cap Screw Kit	XL Hub + Cap Screw Kit	② Standard Adapter	XL Adapter	XXL 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	-	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 Adapter Hub Capscrew Kit	⑤ Disc Pack Hardware Kit	⑥ Disc 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



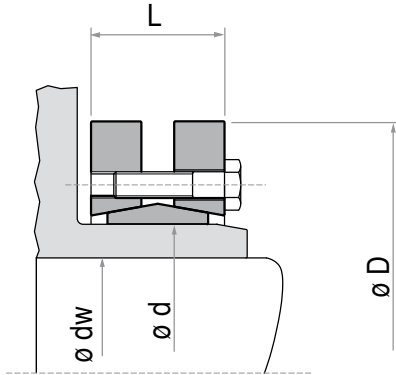
NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

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 TLK 603 $\varnothing d$ (in)	Shaft O.D. $\varnothing dw$		Max. Continous Torque (lb-in)		Tollok Data			XTSR71 Coupling Size												
	Min (in)	Max (in)	at Min dw	at Max dw	$\varnothing D$ (in)	L (in)	Weight (lb)	726	826	996	1088	1298	1548	1698	1928	2068	2278	2468	2698	
1.181	0.945	1.024	2,652	3,363	2.362	0.846	0.7													
1.417	1.102	1.220	3,894	5,576	2.835	0.925	1													
1.732	1.260	1.417	5,487	7,612	3.150	1.004	1													
1.969	1.496	1.654	8,320	12,214	3.543	1.083	2													
2.165	1.654	1.890	10,267	16,639	3.937	1.201	2													
2.441	1.890	2.047	16,374	21,242	4.331	1.201	3													
2.677	1.969	2.362	17,702	27,880	4.528	1.201	3													
2.953	2.165	2.559	22,127	34,960	5.433	1.280	4													
3.150	2.362	2.756	28,322	40,713	5.709	1.280	4													
3.346	2.559	2.953	42,484	65,496	6.102	1.535	8													
3.543	2.559	2.953	42,041	64,168	6.102	1.535	7													
3.937	2.756	3.150	61,070	79,657	6.693	1.732	10													
4.331	2.953	3.346	63,725	95,588	7.283	1.969	13													
4.528	3.150	3.543	65,496	98,243	7.402	1.969	12													
4.724	3.150	3.543	93,818	128,336	8.465	2.126	20													
4.921	3.346	3.740	97,358	132,761	8.465	2.126	18													
5.118	3.543	3.937	100,013	136,302	8.465	2.126	18													
5.512	3.740	4.134	133,646	177,900	9.055	2.382	22													
6.102	4.134	4.528	194,717	247,821	10.433	2.539	33													
6.299	4.331	4.724	200,027	254,902	10.433	2.539	32													
6.496	4.528	4.921	274,373	345,179	11.417	2.795	49													
6.693	4.724	5.118	282,339	354,915	11.417	2.795	46													
6.890	4.921	5.315	318,627	398,284	11.811	2.795	49													
7.087	5.118	5.512	327,478	409,790	11.811	2.795	46													
7.283	5.315	5.709	460,239	548,747	12.992	3.386	82													
7.480	5.512	5.906	473,515	564,678	12.992	3.386	79													
7.677	5.512	6.102	575,299	721,336	13.780	3.386	90													
7.874	5.906	6.299	654,956	761,165	13.780	3.386	90													
8.661	6.299	6.693	840,821	973,583	14.567	4.094	119													
9.449	6.693	7.480	1,062,090	1,380,717	15.945	4.291	148													

Identified selections meet minimum bore, maximum bore and are equal to or greater than coupling size peak overload torque rating.
 TLK 622 is available for applications where installation of the shrink disc without torque wrenches is desired.

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: Sizes 162 - 550 are carbon steel with integral washer, sizes 600 and larger are carbon steel with separate grooved washer

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

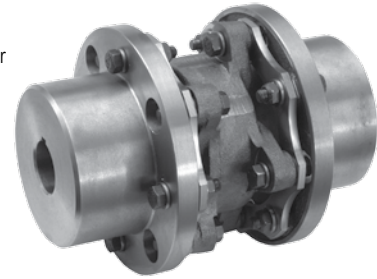
Bolts: Alloy steel

Disc Packs: Tomaloy Tpack (sizes 225 - 750)

Coatings Available: Consult Rexnord

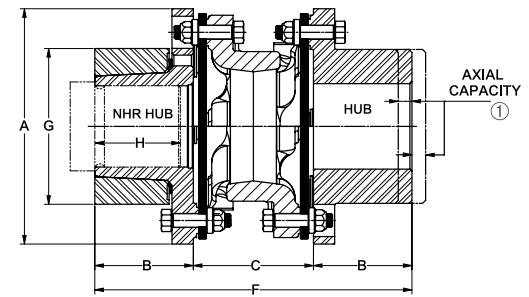
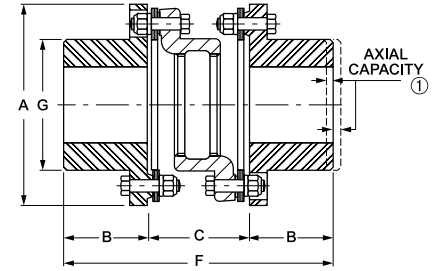
Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/3° per disc pack



General Dimensions (in)

Coupling Size	④ Rough Bore	⑥ Max. Bore	⑧ NHR Hub Min. Bore/ Shaft Dia.	A	B	C	F	G	⑨ Min. Shaft Length H
162	—	1.88	1.1875	4.56	1.75	2.64	6.12	2.75	1.34
200	—	2.25	1.4375	5.75	2.12	2.99	7.25	3.62	1.58
225	—	2.63	1.6250	6.00	2.50	2.99	8.00	3.88	1.97
262	—	3.13	1.7500	6.88	2.88	3.51	9.25	4.50	2.26
312	—	3.63	1.7500	8.12	3.38	4.14	10.88	5.44	2.63
350	—	4.00	2.3750	9.12	3.75	4.58	12.06	6.00	2.91
375	—	4.50	2.8750	10.06	4.00	5.18	13.12	6.50	3.13
425	—	4.75	3.0000	11.00	4.25	5.55	14.06	7.00	3.25
450	—	5.13	3.6250	11.88	4.50	5.93	14.94	7.44	3.44
500	2.69	5.38	4.0000	13.44	5.00	6.81	16.81	8.38	3.81
550	2.69	6.00	4.5000	15.00	5.50	7.70	18.69	9.44	4.19
600	3.69	6.50	5.0000	16.75	6.00	8.45	20.44	10.31	4.57
700	4.25	7.50	5.2500	18.94	7.00	9.66	23.62	11.75	5.32
750	4.94	8.00	6.0000	20.62	7.25	10.54	25.00	12.62	5.5
800	5.19	8.75	6.6250	22.38	7.75	11.36	26.88	13.75	5.81
850	5.44	9.25	6.7500	23.75	8.25	12.18	28.62	14.50	6.12
925	5.94	10.12	7.7500	25.75	9.00	13.25	31.25	15.88	6.75
1000	6.50	11.00	7.8750	28.25	9.50	14.51	33.50	17.50	7.19
1100	7.00	12.00	9.0000	30.25	10.25	15.50	36.00	18.50	7.81
1200	7.50	13.00	9.0000	33.38	11.00	17.06	39.06	20.25	—
1300	8.00	14.00	10.0000	36.00	12.00	18.31	42.31	22.50	—
1550	8.50	15.50	11.0000	39.25	14.50	19.44	48.44	26.00	—



Coupling Size	Max. Horsepower per 100 RPM	③ Max. RPM	Max. Continuous Torque (lb-in)	⑦ Peak Overload Torque (lb-in)	② Weight (lb)	② ⑤ WR ² (lb-in ²)	① Axial Capacity (in)
	Service Factor 1.0						
162	9.1	2,500	5,740	6,888	8	18	±0.036
200	17.5	2,500	11,030	13,236	16	57	±0.036
225	24.7	2,500	15,575	18,690	20	76	±0.036
262	33.4	2,500	21,038	25,245	32	162	±0.043
312	37.5	2,500	23,650	28,380	47	365	±0.051
350	83.8	2,300	52,800	63,360	71	659	±0.056
375	126	2,200	79,442	95,330	92	1,025	±0.062
425	140	2,000	88,000	105,600	117	1,590	±0.067
450	216	1,900	136,125	163,350	144	2,250	±0.072
500	319	1,800	200,750	240,900	212	4,240	±0.082
550	436	1,800	275,055	330,066	290	7,220	±0.092
600	569	1,800	358,875	430,650	389	12,000	±0.102
700	724	1,500	456,500	547,800	587	22,800	±0.115
750	1,023	1,500	644,930	773,916	722	33,900	±0.125
800	1,291	1,200	813,780	976,536	938	55,600	±0.136
850	1,426	1,100	898,700	1,078,440	1,150	75,600	±0.144
925	2,033	1,000	1,281,280	1,537,536	1,400	102,000	±0.156
1000	2,360	900	1,487,200	1,784,640	1,900	172,000	±0.172
1100	3,246	800	2,046,000	2,455,200	2,280	245,000	±0.183
1200	3,494	650	2,202,200	2,642,640	2,990	394,000	±0.203
1300	3,787	600	2,387,000	2,864,400	3,900	561,000	±0.218
1550	4,957	600	3,124,000	3,748,800	5,150	889,000	±0.242

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 WR² 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 3/4 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.

⑧ NHR Hub Min. Bore/Shaft Dia. was calculated based in a 1.2 Service factor over the peak overload torque called out by the American Petroleum Institute. If a different Bore/Shaft diameter is required consult Rexnord.

⑨ The Shaft must engage the hub at minimum distance defined by "H" when using and NHR hub assembly.

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: Sizes 162 - 550 are carbon steel with integral washer, sizes 600 and larger are carbon steel with separate grooved washer

Center Section: Sizes 162-750 are cast alloy iron, Sizes 800 and above are cast steel

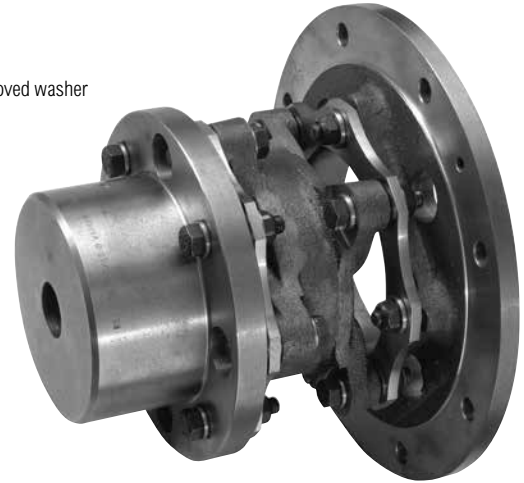
Bolts: Alloy steel

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 (in)										
	8.500	9.500	10.375	12.375	13.875	16.000	18.375	20.375	22.500	26.500	28.875
Adapter Tolerance	8.498	9.498	10.373	12.373	13.873	15.998	18.373	20.372	22.497	26.497	28.872
162											
200											
225											
262											
312											
350											
375											
425											
450											
500											
550											
600											
700											
750											
800											
850											

Available In These Sizes

Sizes 925 to 1550 - Adapting dimensions available upon request.

Bolting

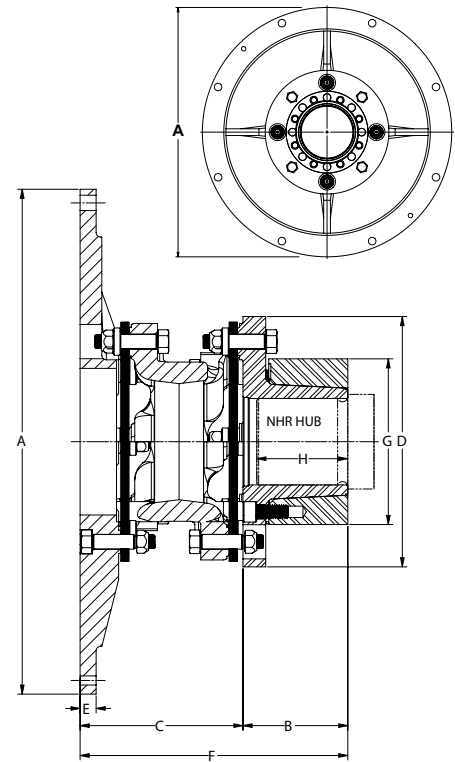
Standard A Diameter (in)	Light-Duty SAE Bolting			Heavy-Duty Thomas Bolting		
	Bolt Circle	No. Holes	Size (Dia.)	Bolt Circle	No. Holes	Size (Dia.)
8.5	7.88	6	0.34	7.50	8	0.41
9.5	8.75	8	0.34	8.62	8	0.47
10.38	9.62	6	0.41	9.50	8	0.47
12.38	11.62	8	0.41	11.50	8	0.53
13.88	13.12	8	0.41	12.50	8	0.66
16	—	—	—	14.38	8	0.78
18.38	17.25	8	0.53	16.75	8	0.78
20.38	19.25	8	0.53	18.50	8	0.91
22.5	21.38	6	0.66	20.50	8	1.03
26.5	25.25	12	0.66	24.50	12	1.03
28.88	27.25	12	0.78	26.88	12	1.03

Rexnord Thomas Flexible Disc Couplings

Flywheel Adapter Type CMR

General Dimensions (in)

Coupling Size	⑦ Rough Bore	② Max. Bore	⑨ NHR Hub Min. Bore/ Shaft Dia.	Min. "A" Dia.	B	C	D	E	F	G	⑩ Min. Shaft Length H
162	—	1.88	1.1875	6.25	1.75	3.32	4.56	0.31	5.06	2.75	1.34
200	—	2.25	1.4375	7.38	2.12	3.87	5.75	0.38	6.00	3.62	1.58
225	—	2.63	1.6250	7.62	2.50	3.87	6.00	0.38	6.38	3.88	1.97
262	—	3.13	1.7500	8.50	2.88	4.47	6.88	0.44	7.31	4.50	2.26
312	—	3.63	1.7500	9.50	3.38	5.34	8.12	0.50	8.69	5.44	2.63
350	—	4.00	2.3750	10.88	3.75	5.89	9.12	0.50	9.62	6.00	2.91
375	—	4.50	2.8750	11.88	4.00	6.62	10.06	0.56	10.62	6.50	3.13
425	—	4.75	3.0000	13.12	4.25	7.18	11.00	0.62	11.38	7.00	3.25
450	—	5.13	3.6250	14.75	4.50	7.68	11.88	0.69	12.12	7.44	3.44
500	2.69	5.38	4.0000	16.00	5.00	8.75	13.44	0.75	13.75	8.38	3.81
550	2.69	6.00	4.5000	18.00	5.50	9.89	15.00	0.88	15.38	9.44	4.19
600	3.69	6.50	5.0000	18.38	6.00	10.89	16.75	1.00	16.88	10.31	4.57
700	4.25	7.50	5.2500	20.38	7.00	12.48	18.94	1.00	19.44	11.75	5.32
750	4.94	8.00	6.0000	24.00	7.25	13.54	20.62	1.12	20.75	12.62	5.5
800	5.19	8.75	6.6250	25.62	7.75	14.74	22.38	1.25	22.50	13.75	5.81
850	5.44	9.25	6.7500	27.38	8.25	15.86	23.75	1.25	24.00	14.50	6.12
925	5.94	10.12	7.7500	28.88	9.00	17.24	25.75	1.38	26.25	15.88	6.75
1000	6.50	11.00	7.8750	31.62	9.50	18.57	28.25	1.62	28.06	17.50	7.19
1100	7.00	12.00	9.0000	33.38	10.25	19.81	30.25	1.75	30.06	18.50	7.81
1200	7.50	13.00	9.0000	37.50	11.00	21.56	33.88	2.00	32.56	20.25	—
1300	8.00	14.00	10.0000	39.88	12.00	23.31	36.00	2.12	35.31	22.12	—
1550	8.50	15.50	11.0000	43.62	14.50	23.75	39.25	2.12	38.25	26.00	—



Coupling Size	Max. Horsepower per 100 RPM	③ Max. RPM	Max. Continuous Torque (lb-in)	⑧ Peak Overload Torque (lb-in)	⑤ ⑥ Weight (lb)	⑤ WR ² (lb-in ²)	① Axial Capacity
	Service Factor 1.0						
162	9.1	2,500	5,740	6,888	8	27	±0.036
200	17.5	2,500	11,030	13,236	12	68	±0.036
225	24.7	2,500	15,575	18,690	16	83	±0.036
262	33.4	2,500	21,038	25,245	25	178	±0.043
312	37.5	2,500	23,650	28,380	39	367	±0.051
350	83.8	2,300	52,800	63,360	56	630	±0.056
375	126	2,200	79,442	95,330	77	1,040	±0.062
425	140	2,200	88,000	105,600	101	1,780	±0.067
450	216	1,900	136,125	163,350	126	2,470	±0.072
500	319	1,800	200,750	240,900	178	4,310	±0.082
550	436	1,800	275,055	330,066	245	7,700	±0.092
600	569	1,800	358,875	430,650	321	11,500	±0.102
700	724	1,500	456,500	547,800	481	21,200	±0.115
750	1,023	1,500	644,930	773,916	610	34,300	±0.125
800	1,291	1,200	813,780	976,536	800	58,700	±0.136
850	1,426	1,100	898,700	1,078,440	975	73,300	±0.144
925	2,033	1,000	1,281,280	1,537,536	1,180	107,000	±0.156
1000	2,360	900	1,487,200	1,784,640	1,650	156,000	±0.172
1100	3,246	800	2,046,000	2,455,200	1,950	247,000	±0.183
1200	3,494	650	2,202,200	2,642,640	2,550	407,000	±0.203
1300	3,787	600	2,387,000	2,864,400	3,320	567,000	±0.218
1550	4,957	600	3,124,000	3,748,800	4,100	840,000	±0.242

- 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 WR² 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.
- ⑨ "NHR Hub Min. Bore/Shaft Dia." was calculated based in a 1.2 Service factor over the peak overload torque called out by the American Petroleum Institute. If a different Bore/Shaft diameter is required consult Rexnord.
- ⑩ The Shaft must engage the hub at minimum distance defined by "H" when using the NHR hub assembly.

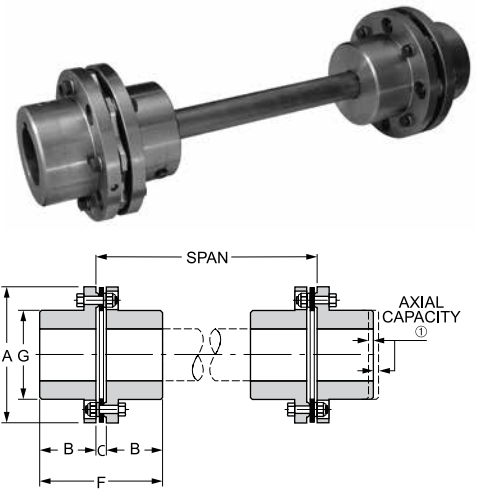
Rexnord Thomas Flexible Disc Couplings

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 Tomaloy Tpack (225-750 sizes, stainless steel also available). Misalignment: 1/3° per disc pack.

General Dimensions (in)

Coupling Size	③ Rough Bore	② ④ Max. Bore	A	B	C	F	G
162	—	1.62	4.56	1.75	0.41	6.12	2.75
200	—	2.00	5.75	2.12	0.44	7.25	3.62
225	—	2.25	6.00	2.50	0.44	8.00	3.88
262	—	2.62	6.88	2.88	0.53	9.25	4.50
312	—	3.12	8.12	3.38	0.62	10.88	5.44
350	—	3.50	9.12	3.75	0.67	12.06	6.00
375	—	3.75	10.06	4.00	0.81	13.12	6.50
425	—	4.25	11.00	4.25	0.88	14.06	7.00
450	—	4.50	11.88	4.50	0.88	14.94	7.44
500	2.69	5.00	13.44	5.00	1.06	16.81	8.38
550	2.69	5.50	15.00	5.50	1.25	18.69	9.44
600	3.69	6.00	16.75	6.00	1.38	20.44	10.31
700	4.25	7.00	18.94	7.00	1.56	23.62	11.75
750	4.94	7.50	20.62	7.25	1.75	25.00	12.62
800	5.19	8.00	22.38	7.75	1.81	26.88	13.75
850	5.44	8.50	23.75	8.25	2.00	28.62	14.50
925	5.94	9.25	25.75	9.00	2.25	31.25	15.88
1000	6.50	10.00	28.25	9.50	2.44	33.50	17.50
1100	7.00	11.00	30.25	10.25	2.52	36.00	18.50
1200	7.50	12.00	33.38	11.00	2.75	39.06	20.25
1300	8.00	13.00	36.00	12.00	2.85	42.31	22.50
1550	8.50	15.50	39.25	14.50	3.05	48.44	26.00



Coupling Size	Max. Horsepower per 100 RPM	Max. RPM	Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	② Weight (lb)	② WR ² (lb-in ²)	① Axial Capacity (in)
	Service Factor 1.0						
162	9.1	1,800	5,740	6,888	13	29	±0.036
200	17.5	1,800	1,030	13,236	25	81	±0.036
225	24.7	1,800	15,575	18,690	29	105	±0.036
262	33.4	1,800	21,038	25,246	43	214	±0.043
312	37.5	1,800	23,650	28,380	79	566	±0.051
350	84	1,800	52,800	63,360	106	934	±0.056
375	126	1,800	79,442	95,330	139	1,470	±0.062
425	140	1,800	88,000	105,600	174	2,320	±0.067
450	216	1,500	136,125	163,350	213	3,085	±0.072
500	319	1,500	200,750	240,900	292	5,500	±0.082
550	436	1,500	275,055	330,066	420	9,850	±0.092
600	569	1,200	358,875	430,650	550	15,700	±0.102

BMR Shafting Selection Table

Coupling Size	Shaft Diameter (in)	Max. HP/100 for Given Shaft Dia.	Max. Allowable Shaft Wt. (lb)	Max. Span (in) at Max. Allow Shaft Wt.	Max. Span (in) For Various RPM			
					1800	1200	900	720
162	1.62	6.9	60	102	54	66	76	85
200	2.00	13.5	74	83	60	73	83	83
225	2.25	19.0	86	76	64	76	76	76
262	2.50	24.3	178	128	67	82	95	106
312	2.88	34.1	233	127	72	88	102	114
350	3.50	76.2	290	107	79	97	107	107
375	3.75	99.7	412	132	82	100	116	130
425	4.25	127	502	125	87	107	123	125
450	4.50	157	596	132	90	110	127	132
500	5.00	232	804	145	95	116	134	145
550	5.50	300	1,027	153	99	122	140	153
600	6.00	414	1,296	162	104	127	147	162

- 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 WR² 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

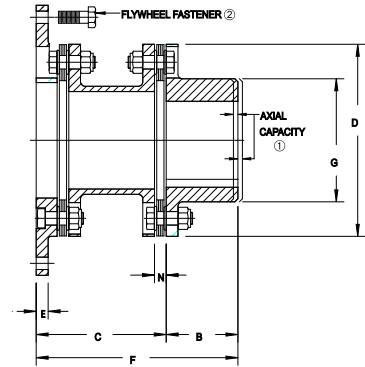
The Series 44 is an all-steel fully machined flywheel adapter style coupling. It is used in heavy-duty applications where high starting torque, shock loads, torque reversals or alternating torques are present. This coupling is similar to the type CMR, but with the following benefits:

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

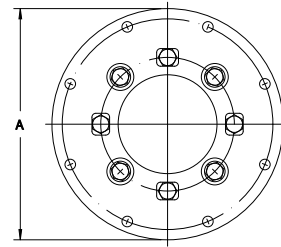
Hubs and Center Assembly: Carbon Steel
 Bolts: Alloy Steel
 Disc Packs: Tomaloy Tpack (225-750 Size)
 Coatings Available: Black Oxide, Zinc, Cadmium
 Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.
 Misalignment: 1/3° per disc pack

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



General Dimensions (in)

Coupling Size	Max. Bore	Min. "A" Dia.	B	Std. C	Min. C	D	E	F (Ref.)	G	N
350	4.00	10.88	3.75	5.88	5.15	8.69	0.50	9.63	5.88	0.54
375	4.50	11.88	4.00	6.62	5.71	9.69	0.56	10.62	6.50	0.59
425	4.75	13.12	4.25	7.18	6.15	10.50	0.62	11.43	7.00	0.62
450	5.13	14.75	4.50	7.62	6.71	11.31	0.69	12.12	7.44	0.71
500	5.38	16.00	5.00	8.75	7.53	12.88	0.75	13.75	8.38	0.78
550	6.00	18.00	5.50	9.88	8.53	14.44	0.88	15.38	9.44	0.91
600	6.50	18.38	6.00	10.88	9.36	16.00	1.00	16.88	10.25	0.98
700	7.50	20.38	7.00	12.44	10.68	18.25	1.00	19.44	11.75	1.20
750	8.00	24.00	7.50	13.50	11.58	19.81	1.12	21.00	12.62	1.27
800	8.75	25.62	8.25	14.75	12.68	21.50	1.25	23.00	13.62	1.34
850	9.25	27.38	8.75	15.75	13.59	23.00	1.25	24.50	14.50	1.40
925	10.12	28.88	9.50	17.25	14.56	25.00	1.38	26.75	15.75	1.50
1000	11.00	31.62	10.50	18.56	16.91	27.50	1.62	29.06	17.25	1.69



Coupling Size	Max. Horsepower Per 100 Service Factor 1.0	③ Max. RPM		Max. Continuous Torque (lb-in)	④ Peak Overload Torque (lb-in)	⑤ Weight (lb)	Weight Change Per Inch of "C" (lb)	⑤ WR ² (lb-in ²)	WR ² Change Per Inch of "C" (lb-in ²)	① Axial Capacity (in)
		Not Balanced	Balanced							
350	92.2	3,200	10,500	58,080	116,160	51	0.83	588	4.82	± 0.056
375	135	3,000	9,400	85,000	170,000	70	1.03	994	7.21	± 0.062
425	150	2,800	8,700	94,500	189,000	93	1.42	1,560	11.68	± 0.067
450	216	2,700	8,100	136,125	272,250	120	1.47	2,450	13.72	± 0.072
500	319	2,500	7,100	200,750	401,500	177	2.29	4,340	27.17	± 0.082
550	494	2,300	6,300	311,430	622,860	259	2.88	8,090	42.75	± 0.092
600	624	2,150	5,700	393,325	786,650	325	3.35	11,835	61.50	± 0.102
700	793	1,950	5,000	499,870	999,740	490	4.86	22,435	108	± 0.115
750	1037	1,850	4,600	653,725	1,307,450	642	5.37	36,510	146	± 0.125
800	1387	1,750	4,300	874,000	1,748,000	803	5.54	54,155	199	± 0.136
850	1782	1,600	3,900	1,123,375	2,246,750	975	6.67	74,430	284	± 0.144
925	2450	1,500	3,600	1,544,400	3,088,800	1,289	8.49	113,780	413	± 0.156
1000	2813	1,500	3,250	1,773,200	3,546,400	1,655	8.54	173,840	506	± 0.172

- 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 WR² 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 (in)	Light-Duty SAE Bolting			Heavy-Duty Thomas Bolting		
	Bolt Circle	No. Holes	Size (Dia.)	Bolt Circle	No. Holes	Size (Dia.)
12.375	11.62	8	0.41	11.50	8	0.53
13.875	13.12	8	0.41	12.50	8	0.66
16.000	N/A	N/A	N/A	14.37	8	0.78
18.375	17.25	8	0.53	16.75	8	0.78
20.375	19.25	8	0.53	18.50	8	0.91
22.500	21.38	6	0.66	20.50	8	1.03
26.500	25.25	12	0.66	24.50	12	1.03
28.875	27.25	12	0.78	26.88	12	1.03

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



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 (in) - Actual OD Tolerance as Listed							
		12.375	13.875	16.00	18.375	20.375	22.500	26.500	28.875
		12.373	13.873	15.998	18.373	20.372	22.497	26.497	28.872
350	10.88	Wt. = 3.88 WR ² = 132	Wt. = 8.25 WR ² = 320	Wt. = 15.3 WR ² = 716	Wt. = 24.4 WR ² = 1,391	Wt. = 33 WR ² = 2,200	Wt. = 43.1 WR ² = 3,365		
375	11.88	Wt. = 1.51 WR ² = 56	Wt. = 6.41 WR ² = 267	Wt. = 14.3 WR ² = 710	Wt. = 24.5 WR ² = 1,466	Wt. = 34.1 WR ² = 2,371	Wt. = 45.5 WR ² = 3,681		
425	13.12		Wt. = 2.79 WR ² = 127	Wt. = 11.5 WR ² = 616	Wt. = 22.8 WR ² = 1,453	Wt. = 33.5 WR ² = 2,460	Wt. = 46 WR ² = 3,901		
450	14.75			Wt. = 5.89 WR ² = 349	Wt. = 18.4 WR ² = 1,277	Wt. = 30.3 WR ² = 2,396	Wt. = 44.3 WR ² = 4,008	Wt. = 74.3 WR ² = 8,543	
500	16.00			Wt. = 0 WR ² = 0 ①	Wt. = 13.6 WR ² = 1,009	Wt. = 26.5 WR ² = 2,223	Wt. = 41.7 WR ² = 3,973	Wt. = 74.4 WR ² = 8,912	Wt. = 96.3 WR ² = 13,118
550	18.00				Wt. = 2.67 WR ² = 221	Wt. = 17.8 WR ² = 1,645	Wt. = 35.6 WR ² = 3,695	Wt. = 74 WR ² = 9,493	Wt. = 99.7 WR ² = 14,429
600	18.38				Wt. = 0 WR ² = 0 ①	Wt. = 17.2 WR ² = 1,618	Wt. = 37.5 WR ² = 3,956	Wt. = 81 WR ² = 10,529	Wt. = 110 WR ² = 16,107
700	20.38					Wt. = 0 WR ² = 0 ①	Wt. = 20.3 WR ² = 2,338	Wt. = 63.8 WR ² = 8,911	Wt. = 93 WR ² = 14,519
750	24.00							Wt. = 31.4 WR ² = 5,017	Wt. = 64.2 WR ² = 11,313
800	25.62							Wt. = 12.7 WR ² = 2,157	Wt. = 49.2 WR ² = 9,166
850	27.38								Wt. = 23.4 WR ² = 4,631
925	28.88								Wt. = 0 WR ² = 0 ①
1000	31.62	No industry standards exist for adapters to fit couplings this size or larger. Consult Rexnord.							

* Weight adder values are given in pounds. WR² values are given in lb-in².

① Wt. and WR² 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 WR² 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.

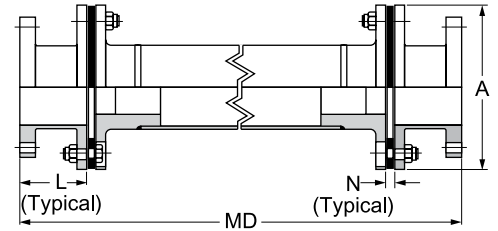
Misalignment: 1/3° per disc pack



Available Adapters

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

Available In These Sizes



For other sizes, please consult Rexnord.

Coupling Size	Max. Horsepower per 100 RPM	Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in) ^②	A	L	Min. MD	N	Axial Capacity (in) ^①
	Service Factor 1.0							
226	22.6	14,260	28,520	5.81	4	16.25	0.58	0.036
262	34.9	22,000	44,000	6.69	4.5	17.25	0.47	0.043
312	44.7	28,200	56,400	7.81	5.12	20	0.5	0.051
350	55.7	35,100	70,200	8.75	5.31	22.12	0.54	0.056
375	123	77,300	154,600	9.69	6.62	26	0.59	0.062
425	187	117,850	235,700	10.5	6.5	26.25	0.62	0.067
450 ^③	216	136,000	272,000	11.31	6.75	28.5	0.78	0.072
500T	369	232,400	464,800	12.88	7.25	30	0.78	0.082
550T	427	269,200	538,400	14.44	7.75	33.5	0.91	0.092
600T	652	411,000	822,000	16	9.12	36.74	0.98	0.102
700T	871	549,000	1,098,000	18.25	9.25	40.5	1.2	0.115
750T	1,001	631,000	1,262,000	19.81	9.75	43	1.27	0.125
800T	1,441	908,000	1,816,000	21.5	10.25	—	1.34	0.136
850T	1,756	1,107,000	2,214,000	23	10.25	—	1.4	0.144

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.

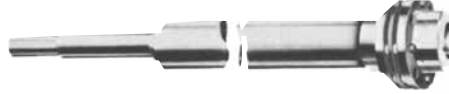
Connected shafts should be rigidly supported and long shaft overhang should be avoided. The tubular coupling shaft **MUST NOT** be supported with a bearing. They may be operated vertically if length does not exceed 36 in.



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

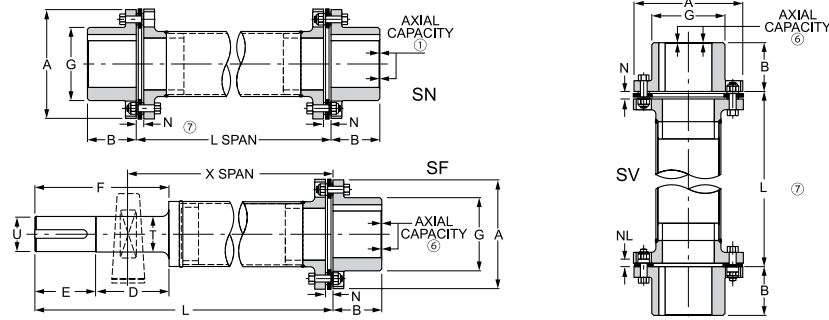
Floating Shaft Couplings

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 Coupling Size	Coupling Type			Max. Bore	A	B	D	E	③ T	③ U	F	G	N	NL	② Min. L	
	SN	SV	SF ⑧												SN	SF
50	•			0.63	2.00	0.88	—	—	—	—	—	1.00	0.24	—	4.00	—
62	•			0.75	2.44	1.09	—	—	—	—	—	1.19	0.32	—	4.50	—
75	•			0.88	2.69	1.13	—	—	—	—	—	1.44	0.33	—	4.75	—
100	•	•	•	1.16	3.22	1.38	3.75	1.75	0.94	0.88	5.50	1.69	0.45	0.13	5.75	12.00
125	•	•	•	1.38	3.84	1.63	4.25	2.13	1.19	1.13	6.38	2.06	0.52	0.15	6.25	12.20
162	•	•	•	1.88	4.47	1.88	4.50	2.63	1.44	1.38	7.13	2.75	0.54	0.16	6.75	13.20
200	•	•	•	2.25	5.44	2.13	5.50	2.88	1.69	1.63	8.38	3.28	0.57	0.16	7.50	15.50
226*	•	•	•	2.63	5.81	2.63	5.63	3.38	1.94	1.88	9.00	3.78	0.58	0.18	8.25	16.50
262	•	•	•	3.13	6.69	3.00	6.13	3.75	2.19	2.13	9.88	4.50	0.47	0.22	8.25	18.00
312	•	•	•	3.63	7.81	3.38	6.38	4.00	2.44	2.38	10.38	5.25	0.50	0.25	9.75	19.50
350	•	•	•	4.00	8.75	3.75	7.50	4.50	2.94	2.88	12.00	5.88	0.54	0.29	11.50	20.50
375	•	•	•	4.50	9.69	4.00	8.00	4.75	3.44	3.38	12.75	6.50	0.59	0.33	12.75	23.20
425	•	•	•	4.75	10.50	4.25	9.00	5.00	3.69	3.63	14.00	7.00	0.62	0.37	13.25	25.20
450*	•	•		5.13	11.31	4.50	—	—	—	—	—	7.44	0.78	0.40	15.00	—
500T	•	•		5.38	12.88	5.00	—	—	—	—	—	8.38	0.78	0.47	15.50	—
550T	•	•		6.00	14.44	5.50	—	—	—	—	—	9.44	0.91	0.53	18.00	—
600T	•	•		6.50	16.00	6.00	—	—	—	—	—	10.25	0.98	0.60	18.50	—
700T	•	•		7.50	18.25	7.00	—	—	—	—	—	11.75	1.20	0.70	22.00	—
750T	•	•		8.00	19.81	7.50	—	—	—	—	—	12.63	1.27	0.77	23.50	—
800T	•	•		8.75	21.50	8.25	—	—	—	—	—	13.62	1.34	0.84	26.00	—
850T	•	•		9.25	23.00	8.75	—	—	—	—	—	14.50	1.40	0.90	36.00	—
925T	•	•		10.12	25.00	9.50	—	—	—	—	—	15.75	1.50	1.00	36.00	—

⑤ Coupling Size	Max. Continuous Torque	Peak Overload Torque (lb-in)	④ Weight (lb)		Weight Change Per inch of "L" (lb-in)	④ WR ² (lb-in ²)		WR ² Change Per inch of "L" (lb-in ²)	① ⑥ Type SN Axial Capacity (in)
			SN, SV	SF		SN, SV	SF		
50	170	340	1.1	—	0.022	0.5	—	0.0026	±0.023
62	290	580	1.6	—	0.03	1.2	—	0.0063	±0.028
75	410	820	2.4	—	0.052	1.9	—	0.018	±0.032
100	820	1,640	4.9	3.6	0.076	5.3	3.1	0.033	±0.038
125	2,230	4,460	7.5	6.5	0.095	12.2	7.1	0.068	±0.046
162	4,250	8,500	11	10.5	0.13	27	15	0.22	±0.036
200	8,600	17,200	21	11	0.29	32	17	0.56	±0.036
226*	14,260	28,520	26.6	25	0.33	105	61	0.82	±0.036
262	22,000	44,000	38.6	36	0.41	218	133	1.6	±0.043
312	28,200	56,400	60.7	54	0.47	456	291	2.2	±0.051
350	35,100	70,200	85.5	78	0.52	807	478	3.1	±0.056
375	77,300	154,600	127	110	0.97	1,421	844	7.3	±0.062
425	117,850	235,700	173	—	1.58	2,448	—	15.9	±0.067
450*	136,000	272,000	206	—	1.58	3,350	—	15.9	±0.072
500T	232,400	464,800	239	—	2.38	4,955	—	41.1	±0.082
550T	269,200	538,400	337	—	2.38	8,400	—	41.1	±0.092
600T	411,000	822,000	442	—	3.37	14,510	—	91	±0.102
700T	549,000	1,098,000	717	—	4.56	27,970	—	120	±0.115
750T	631,000	1,262,000	882	—	4.56	40,270	—	120	±0.125
800T	908,000	1,816,000	1,140	—	5.45	64,170	—	205	±0.136
850T	1,107,000	2,214,000	1,420	—	6.00	91,730	—	274	±0.144
925T	1,466,000	2,932,000	1,820	—	6.89	143,500	—	414	±0.156

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 11/2 + .000 - .0005, 1 5/8 to 311/16 .000 - .001. Key furnished with standard keyway in SF stub shaft.

④ Weight and WR² 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.

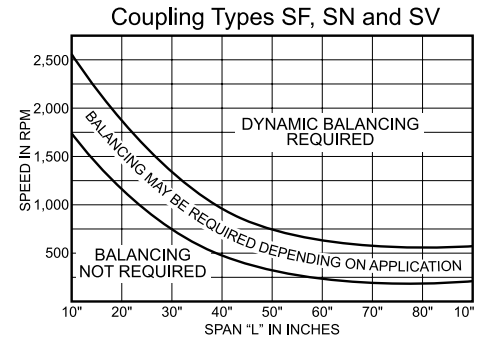
Rexnord Thomas Floating Shaft Coupling

Types SN, SF, SV

Maximum Span at Given RPM

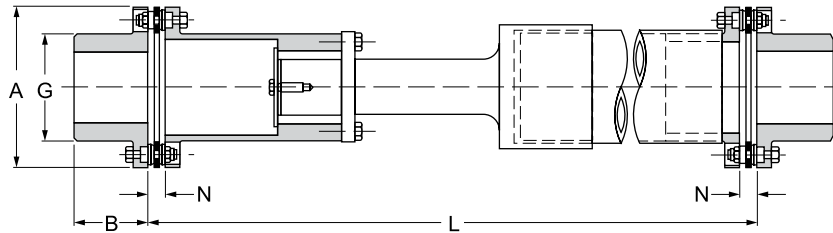
Coupling Size	3600 RPM	3000 RPM	1800 RPM	1500 RPM	1200 RPM	1000 RPM	900 RPM	750 RPM	720 RPM	600 RPM	500 RPM
50	Consult Rexnord		43	47	52	56	56	56	56	56	56
62	Consult Rexnord		50	54	61	67	70	75	75	75	75
75	Consult Rexnord		56	61	68	75	79	86	88	94	94
100	41	45	57	64	71	78	82	91	93	102	102
125	47	51	64	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	Consult Rexnord		165	180	202	221	233	255	260	285	312
700T	Consult Rexnord		164	179	200	219	231	253	258	283	310
750T	Consult Rexnord		164	179	200	219	231	253	258	283	310
800T	Consult Rexnord		179	196	219	240	252	276	282	309	Consult Rexnord
850T	Consult Rexnord		187	205	229	251	265	290	296	317	Consult Rexnord
925T	Consult Rexnord		200	220	245	269	284	311	317	317	Consult Rexnord

* 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 (in)

Coupling Size	Max. Bore	A	B	G	H	Min. "L"	Adjustment Range	② Weight (lb)	Weight Change Per inch of "L" (lb)	② WR ² (lb-in ²)	WR ² Change per inch of "L" (lb-in ²)	① Axial Capacity (in)
162	1.88	4.47	1.88	2.75	0.54	14.25	4.00	19	0.13	37	0.22	± 0.036
200	2.25	5.44	2.12	3.28	0.57	15.12	4.00	30	0.29	80	0.56	± 0.036
226	2.62	5.81	2.62	3.78	0.58	17.28	4.00	43	0.33	151	0.82	± 0.036
262	3.12	6.69	3.00	4.50	0.47	18.88	4.00	61	0.41	253	1.60	± 0.043

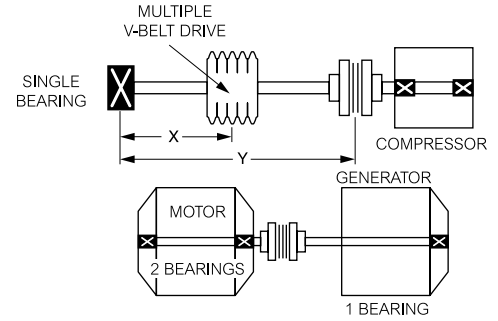
① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Weight and WR² 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

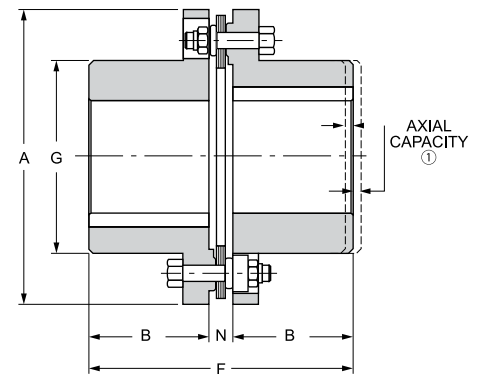
- Hubs: Carbon steel
- Bolts: Alloy steel
- Disc Packs: Tomaloy Tpack not available
- Coatings Available: Contact Rexnord.
- Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

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 (in)

Coupling Size	⑦ Rough Bore	Max. Bore	A	B	F	G	N
162	—	1.88	4.56	1.75	6.12	2.75	.41
200	—	2.25	5.75	2.12	7.25	3.62	.44
225	—	2.63	6.00	2.50	8.00	3.88	.44
262	—	3.13	6.88	2.88	9.25	4.50	.53
312	—	3.63	8.12	3.38	10.88	5.44	.62
350	—	4.00	9.12	3.75	12.06	6.00	.69
375	—	4.50	10.06	4.00	13.12	6.50	.86
425	—	4.75	11.00	4.25	14.06	7.00	.90
450	—	5.13	11.88	4.50	14.94	7.44	.94
500	2.69	5.38	13.44	5.00	16.81	8.38	1.13
550	2.69	6.00	15.00	5.50	18.69	9.44	1.31
600	3.69	6.50	16.75	6.00	20.44	10.31	1.38
700	4.25	7.50	18.94	7.00	23.62	11.75	—
750	4.94	8.00	20.62	7.25	25.00	12.62	—
800	5.19	8.75	22.38	7.75	26.88	13.75	—



Coupling Size	Max. Radial Load (lb)	Max. Horsepower per 100 RPM						Max. RPM	⑥ Max. Continuous Torque (lb-in)	⑥ Peak Overload Torque (lb-in)	② Weight (lb)	② WR ² (lb-in ²)	① Axial Capacity (in)
		Smooth			Pulsating								
		③ Col. 1	④ Col. 2	⑤ Col. 3	③ Col. 4	④ Col. 5	⑤ Col. 6						
162	150	0.8	1.1	1.4	0.4	0.6	0.7	2,500	880	1,320	7	16	±0.018
200	225	1.5	2.1	2.7	0.7	1.0	1.3	2,500	1,700	2,550	14	46	±0.018
225	340	2.1	3.0	3.8	1.0	1.5	1.9	2,500	2,400	3,600	15	59	±0.018
262	520	3.8	5.3	6.8	1.9	2.6	3.4	2,500	4,280	6,420	23	120	±0.022
312	700	6.0	8.4	10.7	3.0	4.2	5.4	2,500	6,740	10,100	41	310	±0.026
350	900	8.5	11.9	15.3	4.2	6.0	7.6	2,300	9,640	14,500	56	520	±0.028
375	1,250	13.1	18.3	23.6	6.6	9.2	11.8	2,200	14,900	22,400	71	820	±0.031
425	1,500	17.0	23.8	30.6	8.5	11.9	16.3	1,900	19,300	29,000	93	1,300	±0.034
450	1,800	21.7	30.4	39.0	10.8	15.2	19.5	1,500	24,600	36,900	110	1,700	±0.036
500	2,400	33.5	46.9	60.3	16.8	23.4	30.2	1,500	38,000	57,000	160	3,100	±0.041
550	3,200	48.9	68.4	87.0	24.4	34.2	43.5	1,500	54,800	82,200	230	5,600	±0.046
600	4,000	68.6	96.0	123.0	34.3	48.0	61.5	1,200	77,500	116,000	300	8,400	±0.051
700	5,500	106.0	148.0	190.0	53.0	74.0	95.0	1,100	120,000	180,000	440	18,000	±0.058
750	6,500	139.0	194.0	250.0	69.5	97.0	125.0	1,000	158,000	237,000	590	27,000	±0.062
800	7,700	177.0	247.0	318.0	88.5	124.0	159.0	900	200,000	300,000	700	39,000	±0.068

- 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 WR² 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

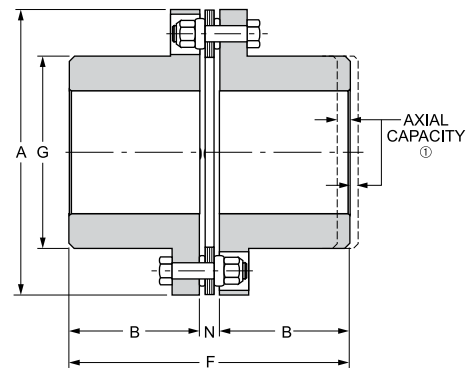
NOTE:

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 (in)

Coupling Size	② Max. Bore	A	B	F	G	N
100	1.16	3.22	1.38	3.21	1.69	0.45
125	1.38	3.84	1.63	3.78	2.06	0.52
162	1.88	4.47	1.88	4.30	2.75	0.54
200	2.25	5.44	2.13	4.83	3.28	0.57
226	2.63	5.81	2.63	5.84	3.78	0.58
262	3.13	6.69	3.00	6.47	4.50	0.47
312	3.63	7.81	3.38	7.26	5.25	0.50
350	4.00	8.75	3.75	8.04	5.88	0.54
375	4.50	9.69	4.00	8.59	6.50	0.59
425	4.75	10.50	4.25	9.12	7.00	0.62
450	5.13	11.31	4.50	9.78	7.44	0.78
500T	5.38	12.88	5.00	10.78	8.38	0.78
550T	6.00	14.44	5.50	11.91	9.44	0.91
600T	6.50	16.00	6.00	12.98	10.25	0.98
700T	7.50	18.25	7.00	15.20	11.75	1.20
750T	8.00	19.81	7.50	16.27	12.63	1.27



Coupling Size	Max. Horsepower Per 100 RPM	Max. RPM	Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	③ Weight (lb-in)	③ WR ² (lb-in ²)	① Axial Capacity (in)
	Service Factor 1.0						
100	1.3	7,100	820	1,640	2.3	2.7	±0.019
125	3.5	6,500	2,230	4,460	3.8	6.5	±0.023
162	7.1	6,000	4,450	8,900	5.8	17.1	±0.018
200	13.6	5,500	8,600	17,200	11	37	±0.018
226	22.6	5,200	14,260	28,520	14	53	±0.018
262	52.1	4,800	32,830	65,660	23	117	±0.022
312	81.6	4,500	51,400	102,800	37	264	±0.026
350	106	4,100	66,900	133,800	52	459	±0.028
375	159	3,900	100,300	200,600	71	770	±0.031
425	213	3,700	134,300	268,600	89	1,160	±0.034
450	239	3,600	150,400	300,800	121	1,580	±0.036
500T	391	2,800	246,400	492,800	150	2860	±0.041
550T	524	2,500	330,400	660,800	210	5,130	±0.046
600T	688	2,300	433,800	867,600	257	7,010	±0.051
700T	1,071	2,000	674,800	1,349,600	390	12,100	±0.057
750T	1,331	1,800	838,800	1,677,600	534	24,650	±0.062

- 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 WR² 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

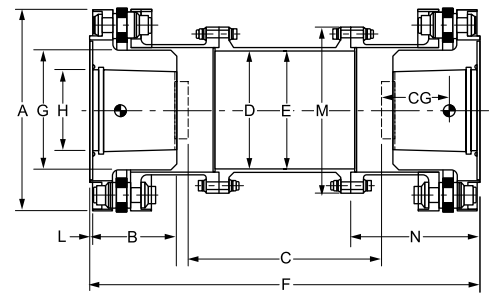
Coatings Available: Black oxide, zinc, cadmium and other coatings available per customer specification.

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



General Dimensions (in)

Coupling Size	A	B	C	D	E	F	② G	① Max. Bore Hydraulic H	L	M	N
442-6	5.375	2.062	18.00	3.125	2.875	23.125	3.000	2.0	0.125	4.500	3.79
519-6	6.375	2.594	18.00	3.875	3.625	24.312	3.750	2.5	0.125	5.312	4.56
519-8	6.438	2.594	18.00	3.875	3.625	24.312	3.750	2.5	0.125	5.312	4.56
638-6	7.688	3.094	18.00	4.625	4.375	25.438	4.500	3.0	0.125	6.375	5.00
638-8	7.688	3.094	18.00	4.625	4.375	25.438	4.500	3.0	0.125	6.375	5.05
744-6	8.875	3.688	18.00	5.438	5.125	26.625	5.250	3.5	0.125	7.438	5.29
744-8	8.875	3.688	18.00	5.438	5.125	26.625	5.250	3.5	0.125	7.438	5.31
850-6	10.125	4.188	18.00	6.250	5.875	27.750	6.000	4.0	0.125	8.312	6.26
850-8	10.125	4.188	18.00	6.250	5.875	27.750	6.000	4.0	0.125	8.312	6.32
948-6	11.438	4.688	18.00	7.000	6.562	28.875	6.750	4.5	0.125	9.344	7.26
948-8	11.438	4.688	18.00	7.000	6.562	28.875	6.750	4.5	0.125	9.344	7.27
1025-6	12.500	5.281	18.00	7.750	7.250	30.312	7.500	5.0	0.125	10.344	8.12
1025-8	12.500	5.281	18.00	7.750	7.250	30.312	7.500	5.0	0.125	10.344	8.19



Coupling Size	① Max. Standard Bore (in)	③ ④ Max. Continuous Torque Rating (lb-in)	Max. Speed RPM	⑤ Weight (lb)	⑤ WR ² (lb-in ²)	⑤ Half Coupling C.G. (in)	⑤ Torsional Stiffness K _t (10 ⁶ lb-in/Rad)	Spacer Tube Per Inch			⑥ Axial Capacity Continuous (in)
								K _t (10 ⁶ lb-in/Rad)	Weight (lb)	WR ² (lb-in ²)	
442-6	2.0	27,000	28,500	21.3	65.8	1.64	0.782	30.5	0.33	0.74	±0.120
519-6	2.5	51,000	24,000	35.3	163	2.01	1.60	59.6	0.41	1.45	±0.145
519-8	2.5	75,000	23,800	36.2	173	2.01	1.84	59.6	0.41	1.45	±0.100
638-6	3.0	78,000	19,900	54.5	365	2.43	2.85	103	0.50	2.51	±0.175
638-8	3.0	120,000	19,900	55.4	378	2.44	3.27	103	0.50	2.51	±0.125
744-6	3.5	124,500	17,200	82.3	730	2.87	5.01	208	0.73	5.07	±0.205
744-8	3.5	176,250	17,200	83.7	759	2.88	5.81	208	0.73	5.07	±0.145
850-6	4.0	195,000	15,100	125	1,470	3.18	8.12	378	1.00	9.20	±0.235
850-8	4.0	294,000	15,100	127	1,530	3.19	9.54	378	1.00	9.20	±0.165
948-6	4.5	285,000	13,400	174	2,600	3.57	12.8	617	1.31	15.0	±0.265
948-8	4.5	427,500	13,400	178	2,730	3.57	15.4	617	1.31	15.0	±0.185
1025-6	5.0	375,000	12,250	235	4,230	4.02	18.5	954	1.65	23.2	±0.290
1025-8	5.0	579,000	12,250	240	4,430	4.04	22.3	954	1.65	23.2	±0.205

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.

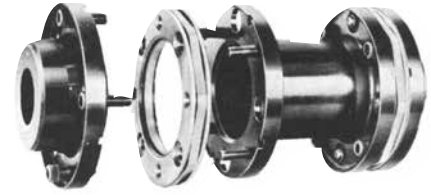
Rexnord Thomas Flexible Disc Couplings

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



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 ΔL = additional "C" dimension required ΔK_t = torsional stiffness change per inch of "C" dimension and $1/K_t$ - inverse of catalog value.

Construction

Hubs and Center Member: Heat-treated alloy steel

Bolts: Alloy steel

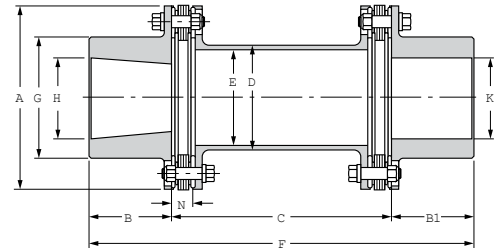
Disc Packs: High strength 300 series stainless steel

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.



General Dimensions (in)

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	2.00	1.88	4.25	2.06	1.88	5.00	3.25	2.41	2.22	8.94	2.81	0.53	±0.050
200	2.62	2.45	5.47	2.75	2.45	5.00	4.12	3.38	3.19	10.20	3.68	0.68	±0.070
225	2.81	2.62	5.72	2.91	2.62	5.00	4.25	3.50	3.31	10.53	3.94	0.70	±0.055
262	3.22	3.00	6.72	3.38	3.00	6.00	4.75	3.94	3.69	12.38	4.50	0.78	±0.060
312	3.75	3.50	8.00	3.94	3.50	6.00	5.00	4.75	4.44	13.44	5.25	0.94	±0.075
350	4.16	3.88	8.91	4.38	3.88	7.00	6.44	5.00	4.69	15.26	5.81	1.13	±0.080
375	4.69	4.38	9.88	4.88	4.38	7.00	6.62	6.06	5.72	16.26	6.56	1.17	±0.090
425	4.97	4.62	10.69	5.28	4.62	8.00	7.37	6.50	6.06	17.90	6.94	1.31	±0.100
450	5.36	5.00	11.50	5.69	5.00	8.00	7.62	7.00	6.55	18.69	7.50	1.37	±0.110
500	6.00	5.58	13.12	6.47	5.58	9.00	8.50	7.75	7.19	21.05	8.38	1.48	±0.120
550	6.70	6.25	14.75	7.38	6.25	9.88	9.88	8.75	8.06	23.51	9.38	1.73	±0.140
600	7.33	6.83	16.38	8.06	6.83	11.25	11.25	9.38	8.58	26.14	10.25	2.03	±0.150
700	8.17	7.62	18.69	8.97	7.62	12.00	—	10.63	9.67	28.59	11.44	2.10	±0.175
750	8.84	8.25	20.31	9.69	8.25	14.00	—	11.81	10.80	31.94	12.38	2.30	±0.190

Coupling Size	Dynamic Data			④ Standard Mass-Elastic Data						
	③ Max. Speed RPM	Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	Weight (lb)	WR ² (lb-in ²)	Kt (10 ⁶ lb-in/Rad)	C.G. (in)	Change per inch of "C"		
								Weight (lb)	WR ² (lb-in ²)	Kt (10 ⁶ lb-in/Rad)
162	36,000	5,890	14,700	7.76	16.5	0.502	0.37	0.19	0.26	10.5
200	28,600	13,600	34,000	16.4	59.8	1.78	0.56	0.27	0.76	29.9
225	26,700	21,100	52,700	19.2	78.2	2.33	0.62	0.28	0.82	33.6
262	22,500	37,800	94,500	30.7	167	3.9	0.67	0.42	1.53	62.7
312	19,100	64,100	160,000	51	397	5.66	0.74	0.63	3.33	137
350	17,200	81,900	205,000	69.2	666	9.54	0.79	0.67	3.9	160
375	15,600	126,000	315,000	93.1	1,100	12.3	0.99	0.89	7.72	317
425	14,300	169,000	423,000	118	1,630	19	0.97	1.21	11.9	491
450	13,300	213,000	533,000	147	2,330	21	1.09	1.35	15.5	636
500	11,600	316,000	790,000	214	4,350	34.8	1.2	1.85	25.8	1,060
550	10,300	454,000	1,135,000	308	7,870	49.9	1.35	2.54	45	1,850
600	9,300	630,000	1,575,000	416	13,000	61.3	1.37	3.15	63.5	2,610
700	8,200	903,000	2,258,000	605	24,600	100	1.46	4.25	110	4,510
750	7,500	1,150,000	2,875,000	773	37,000	131	1.52	5.02	162	6,600

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.

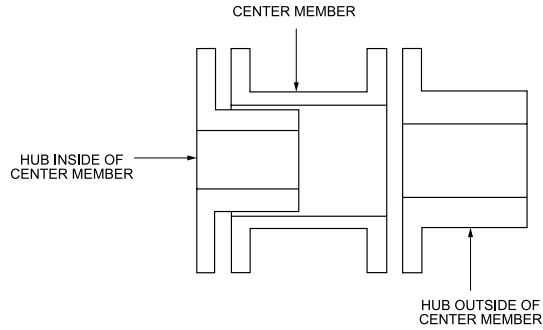
Rexnord Thomas Miniature Couplings

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



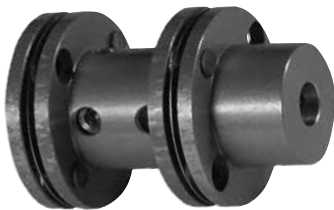
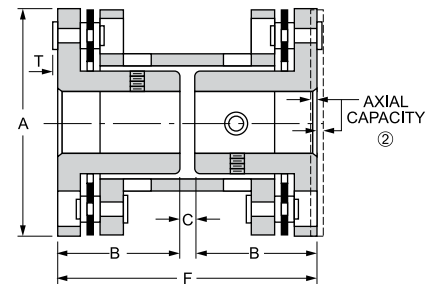
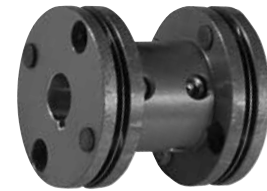
Style CC

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 (in)

Coupling Size	A	B	C	F	T	① Torque Capacity (lb-in)
12	0.500	0.250	0.0313	0.531	0.018	1.1
18	0.750	0.375	0.0625	0.813	0.023	2.2
25	1.000	0.500	0.0625	1.063	0.025	4.7
37	1.437	0.688	0.125	1.500	0.035	19.0
50	1.750	0.938	0.125	2.000	0.045	75.0
62	2.250	1.063	0.125	2.250	0.060	300
75	2.500	1.188	0.125	2.500	0.060	440
100	3.000	1.375	0.250	3.000	0.060	700

- 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.



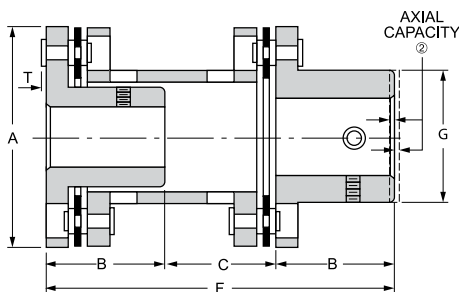
Style CA

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 (in)

Coupling Size	A	B	C	F	G	T	① Torque Capacity (lb-in)
12	0.500	0.250	0.234	0.734	0.313	0.018	1.10
18	0.750	0.375	0.375	1.125	0.469	0.023	2.20
25	1.000	0.500	0.469	1.469	0.625	0.025	4.70
37	1.438	0.688	0.688	2.063	0.875	0.035	19.0
50	1.750	0.938	0.906	2.781	1.063	0.045	75.0
62	2.250	1.063	1.000	3.125	1.375	0.060	300
75	2.500	1.188	1.125	3.500	1.625	0.060	440
100	3.000	1.375	1.375	4.125	1.875	0.060	700

- 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.

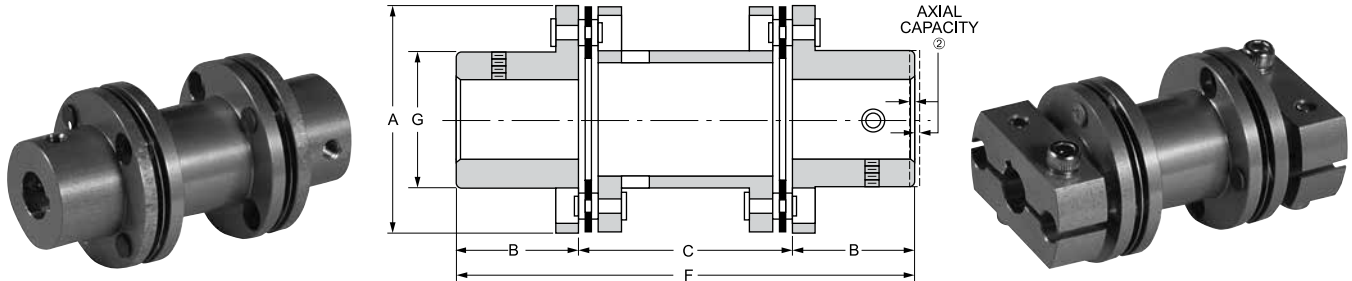


Rexnord Thomas Miniature Couplings

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 (in)

Coupling Size	A	B	C	F	G	Torque Capacity (lb-in)
12	0.500	0.250	0.438	0.938	0.313	1.10
18	0.750	0.375	0.688	1.438	0.469	2.20
25	1.000	0.500	0.875	1.875	0.625	4.70
37	1.437	0.688	1.250	2.625	0.875	19.0
50	1.750	0.938	1.688	3.563	1.063	75.0
62	2.250	1.063	1.875	4.000	1.375	300
75	2.500	1.188	2.125	5.000	1.625	440
100	3.000	1.375	2.500	5.000	1.875	700

Styles CC, CA, CB & CBC

Ratings and Mass Elastic Data

Coupling Size	Max. RPM	① Approx Weight (oz)	① Approx WR ² (oz-in ²)	Torsional Rigidity Kt (lb-in/radian)	Max. Angular Misalignment Continuous Per Flexing Element	Max. Parallel Misalignment Continuous (in)	Axial Capacity (lb-in)
12	150,000	0.09	0.00	422	2°	0.015	±0.016
18	100,000	0.29	0.02	688	2°	0.015	±0.016
25	80,000	0.74	0.08	1689	2°	0.028	±0.031
37	55,000	2.02	0.47	11,282	1.5°	0.028	±0.031
50	45,000	4.02	1.42	17,265	1°	0.028	±0.031
62	35,000	9.36	4.99	44,964	0.67°	0.028	±0.031
75	30,000	11.57	8.61	70,225	0.67°	0.028	±0.031
100	25,000	20.00	23.00	94,697	0.50°	0.020	±0.031

① Weight and WR² at maximum bore.

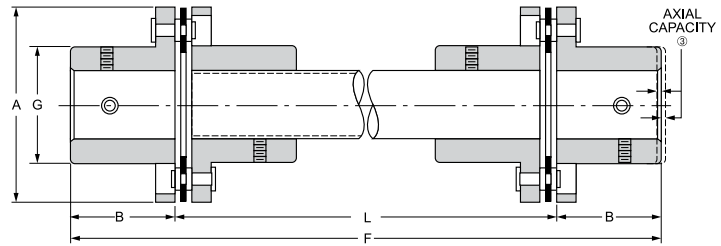
② All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

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 ④

Coupling Size	A	B	C	F	G	L	Max. RPM		① Torque Capacity (lb-in)	Weight (oz)		Weight Change Per Inch of "L" (oz)
							Style CE	Style CS		② CE	CS	
12	0.500	0.250	0.031	0.531	0.313	Varies to suit as required	Consult Rexnord	150,000	1.1	0.45	0.06	0.027
18	0.750	0.375	0.063	0.813	0.469			100,000	2.2	0.97	0.20	0.048
25	1.000	0.500	0.094	1.094	0.625			80,000	4.7	1.70	0.50	0.059
37	1.438	0.688	0.109	1.484	0.875			55,000	19	4.10	1.40	0.110
50	1.750	0.938	0.141	2.016	1.063			45,000	75	7.80	2.82	0.180
62	2.250	1.063	0.172	2.297	1.375			35,000	300	14.30	5.85	0.220
75	2.500	1.188	0.188	2.563	1.625			30,000	440	18.10	6.02	0.380
100	3.000	1.375	0.225	2.975	1.875			25,000	700	28.60	12.8	0.420

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 Weight calculated at maximum bore and "L" = 12".

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

④ For WR², misalignment capacities and torsional rigidity consult Rexnord.

Standard Bore Sizes for Style CC, CA, CB, CBC, CE & CS Miniature Couplings ①

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

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

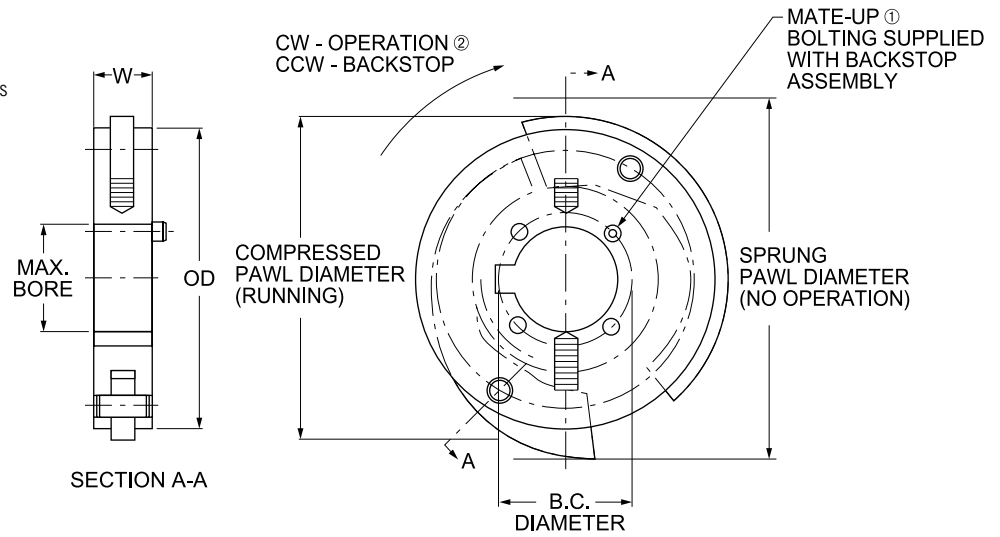
② Tolerances: Sizes 12 and 18, ±0.0003". Larger sizes, ±0.0005".

③ 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	Min Tap DP	Tight Torque (lb-in)					
162	1.88	2.312	1/4 - 20 NC × 1.50	0.62	25	5.25	1.00	5.69	6.50	450 RPM Ref
200	2.12	2.688	1/4 - 20 NC × 1.50	0.62	25					
226	2.62	3.250	1/4 - 20 NC × 1.50	0.62	40	9.12	1.12	9.19	10.56	400 RPM Ref
262	3.12	3.875	3/8 - 16 NC × 1.75	0.88	142					
312	3.62	4.438	7/16 - 14 NX × 2.00	1.12	225					
350/375	4.00	4.875	1/2 - 13 NC × 2.00	1.12	350					

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

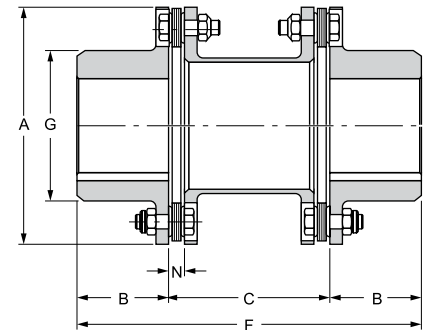
Hubs and Center Assembly: Carbon Steel
 Bolts: Alloy Steel
 Disc Packs: Tomaloy Tpack (225-750 Size)
 Coatings Available: Black Oxide, Zinc, Cadmium
 Other materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.
 Misalignment: 1/3° per disc pack

When specified, Series 52 couplings meet all requirements of API 610 or API 671.
 If application requires API specification, please consult Rexnord.



General Dimensions (in)

Coupling Size	⑥ Max. Bore	A	B	② Std. C	② Stocked C	Min. C	F	G	N
125	1.38	3.69	1.31	4.00	4	—	6.63	2.06	0.27
162	1.88	4.34	1.75	5.00	5	2.03	8.50	2.75	0.29
200	2.25	5.44	2.06	5.00	5	2.63	9.13	3.28	0.36
225	2.63	5.69	2.63	5.00	5 & 7	2.75	10.25	3.78	0.36
262	3.13	6.62	2.88	5.00	5 & 7	3.22	10.75	4.50	0.47
312	3.63	7.81	3.38	5.50	5.5 & 7	3.75	12.25	5.25	0.50
350	4.00	8.69	3.75	6.00	6 & 7	4.16	13.50	5.88	0.54
375	4.50	9.69	4.00	7.00	7	4.59	15.00	6.50	0.59
425	4.75	10.50	4.25	7.00	7	4.94	15.50	7.00	0.62
450	5.13	11.31	4.50	8.00	7 & 8	5.34	17.00	7.44	0.71
500	5.38	12.88	5.00	9.00	9	6.03	19.00	8.38	0.78
550	6.00	14.44	5.50	10.00	10	6.88	21.00	9.44	0.91
600	6.50	16.00	6.00	10.00	10	7.50	22.00	10.25	0.98
700	7.50	18.25	7.00	11.00	—	8.56	25.00	11.75	1.20
750	8.00	19.81	7.50	11.00	—	9.25	26.00	12.63	1.27
800	8.75	21.50	8.25	12.00	—	10.02	28.50	13.62	1.34
850	9.25	23.00	8.75	13.00	—	10.75	30.50	14.50	1.40
925	10.12	25.00	9.50	14.00	—	11.50	33.00	15.75	1.50
1000	11.00	27.50	10.50	14.50	—	—	35.50	17.25	1.69
1100	12.00	29.19	11.25	16.00	—	—	38.50	18.50	1.75
1200	13.00	32.12	12.25	17.00	—	—	41.50	20.25	1.97
1300	14.00	34.50	13.25	18.00	—	—	44.50	21.88	2.03



Taper Bores Also Available

Coupling Size	Max. Horsepower Per 100 RPM	⑤ Max. RPM		Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	④ Weight (lb)	Weight Change Per Inch of "C" (lb)	④ WR ² (lb-in ²)	WR ² Change Per Inch of "C" (lb-in ²)	① Axial Capacity (in)
	Service Factor 1.0	③ Not Balanced	⑤ Balanced							
125	4.28	5,000	15,000	2,700	5,400	4.6	0.16	7.4	0.15	±0.036
162	8.49	4,600	15,000	5,350	10,700	7.2	0.21	15.8	0.27	±0.036
200	16.7	4,250	15,000	10,500	21,000	12.4	0.25	43.7	0.58	±0.036
225	27.8	4,100	14,000	17,500	35,000	16.0	0.35	61	0.85	±0.036
262	52.1	3,900	13,000	32,830	65,660	26.0	0.50	137	1.6	±0.043
312	81.6	3,450	11,700	51,400	102,800	41.4	0.66	300	3.1	±0.051
350	106	3,200	10,500	66,900	133,800	58.6	0.83	528	4.8	±0.056
375	159	3,000	9,400	100,300	200,600	80.0	1.03	909	7.2	±0.062
425	213	2,800	8,700	134,300	268,600	104.0	1.43	1,380	11.7	±0.067
450	239	2,700	8,100	150,400	300,800	127	1.44	1,970	13.5	±0.072
500	391	2,500	7,100	246,400	492,800	196	2.30	3,800	27.2	±0.082
550	524	2,300	6,300	330,400	660,800	281	2.90	6,900	43.0	±0.092
600	688	2,150	5,700	433,800	867,600	370	3.30	11,200	61.2	±0.102
700	1,071	1,950	5,000	674,800	1,349,600	567	4.60	22,300	103.0	±0.115
750	1,331	1,850	4,600	838,800	1,677,600	712	5.20	33,100	143.0	±0.125
800	1,712	1,750	4,300	1,078,700	2,157,400	911	6.00	51,450	200.0	±0.136
850	2,020	1,600	3,900	1,273,000	2,546,000	1,109	6.00	71,700	200.0	±0.144
925	2,735	1,500	3,600	1,724,000	3,448,000	1,459	8.00	111,400	400.0	±0.156
1000	3,094	—	3,250	1,950,000	3,900,000	1,880	9.00	171,900	506.0	±0.172
1100	3,689	—	3,100	2,325,000	4,650,000	2,250	11.00	235,500	794.0	±0.183
1200	4,498	—	2,800	2,835,000	5,670,000	3,010	15.00	376,500	1,196.0	±0.203
1300	5,379	—	2,600	3,390,000	6,780,000	3,660	15.00	523,700	1,350.0	±0.218

- 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 WR² 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

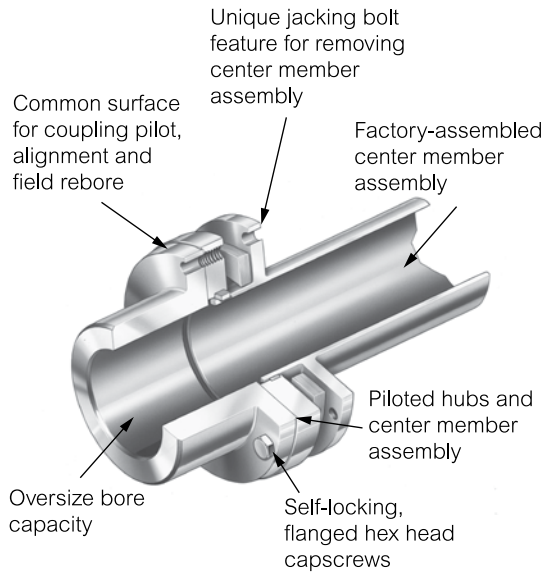
Series 71 couplings are designed for applications requiring a spacer-type coupling such as ANSI, API and other process pumps. Series 71 couplings are most commonly applied on motor, turbine, and gear driven pumps, compressors and blowers.

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

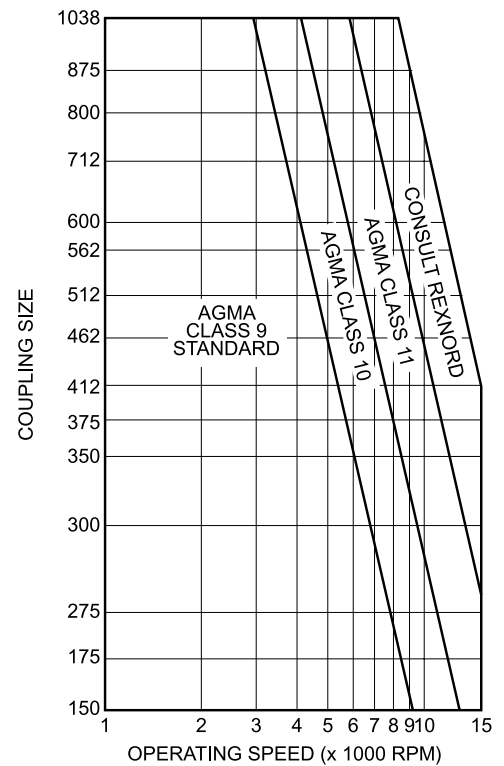
- Hubs and Center Assembly: Carbon steel
- Bolts: Alloy steel
- Disc Packs: Stainless steel for 4- & 6-bolt designs
- Stainless steel Tpack for 8-bolt design
- Coatings Available: Black oxide, zinc, cadmium
- Other disc pack materials such as Monel and Inconel are available; please consult Rexnord.
-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



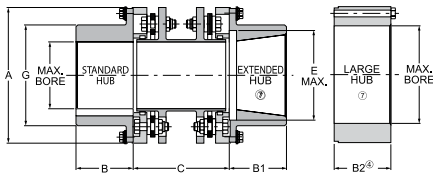
NOTE: These recommendations and balance classes are based on AGMA Specifications 9000-C90, high sensitivity. If conditions exist other than as defined in 9000-C90, for sensitivity, consult Rexnord. The above information should be used as a guide only. AGMA Class 9 balance is furnished as standard when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

Series 71 Balance Recommendations

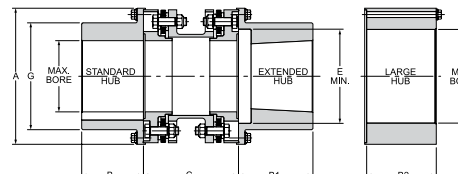


Rexnord Thomas Flexible Disc Couplings

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



4- & 6-Bolt Design



8-Bolt Design

General Dimensions (in)

Coupling Size	⑥ B&B ¹ Hub Max. Bore	⑥ B ² Hub Max. Bore	A	③ B	B1	Std. B2	Std. C	Min. C	E	G
4-Bolt Design										
150	1.500	2.375	3.59	1.31	1.69	1.62	3.50	3.44	2.06	2.31
175	1.875	2.750	4.16	1.56	2.06	1.81	3.50	3.44	2.56	2.81
6-Bolt Design										
225	2.250	3.250	4.94	2.00	2.50	2.06	5.00	3.44	3.09	3.34
300	3.000	4.000	5.97	2.62	3.25	2.75	5.00	4.00	4.13	4.44
350	3.500	4.500	6.75	3.12	3.75	3.00	5.00	4.88	5.00	5.25
375	3.750	5.000	7.62	3.25	4.00	3.25	5.50	5.00	3.31	5.66
412	4.125	5.310	8.00	3.62	4.38	3.62	7.00	6.12	5.75	6.09
462	4.625	6.000	9.00	4.12	5.00	4.12	7.00	7.00	6.31	6.84
512	5.125	6.690	10.03	4.50	5.38	4.50	7.00	7.00	7.06	7.62
562	5.625	7.310	10.97	5.00	6.00	5.00	8.00	8.00	7.69	8.38
600	6.000	7.810	11.72	5.25	6.38	5.25	9.00	9.00	8.31	8.94
8-Bolt Design										
225-8	3.000	3.750	5.97	2.50	3.12	3.06	5.00	4.75	4.19	4.56
262-8	3.438	4.188	6.88	3.06	3.69	3.56	7.00	5.50	4.69	5.19
312-8	4.188	5.125	8.00	3.56	4.31	4.12	7.50	6.00	5.75	6.31
350-8	4.688	5.562	8.94	3.88	4.75	4.50	7.50	6.75	6.50	7.06
375-8	5.250	6.500	9.94	4.44	5.31	5.16	7.50	7.25	7.13	7.94
425-8	5.625	6.750	10.75	4.88	5.88	5.50	8.00	7.50	7.44	8.44
450-8	6.188	7.500	11.56	5.06	6.19	6.00	9.00	8.75	8.38	9.28
500-8	7.000	8.750	13.12	5.94	7.06	6.75	11.00	10.25	9.13	10.50
550-8	7.625	—	14.69	6.56	7.81	—	11.50	11.50	10.00	11.50
600-8	8.812	—	16.38	7.19	8.44	—	12.50	12.50	11.75	13.22
700-8	9.750	—	18.56	8.31	9.69	—	14.50	14.50	12.78	14.69
750-8	10.812	—	20.12	8.94	10.31	—	15.75	15.75	14.31	16.25

Coupling Size	Max. Horsepower Per 100 RPM	Max. RPM		Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in)	② Weight (lb)	Weight Change Per Inch of "C" (lb)	② WR ² (lb-in ²)	WR ² Change Per Inch of "C" (lb-in ²)	① Axial Capacity (in)
	Service Factor 1.0	⑤ Not Balanced	④ Balanced							
4-Bolt Design										
150	1.48	9,000	20,800	930	1,860	6.7	0.10	10.6	0.03	±0.050
175	2.59	8,300	17,000	1,630	3,260	9.4	0.14	20.6	0.09	±0.070
6-Bolt Design										
225	4.86	7,700	16,000	3,060	6,120	14.0	0.19	42.0	0.25	±0.075
300	11.5	6,800	14,000	7,260	14,520	26.0	0.26	121.0	0.66	±0.085
350	21.3	6,200	13,500	13,400	26,800	43.0	0.42	259.0	1.18	±0.090
375	30.6	5,650	12,000	19,300	38,600	55.0	0.43	423.0	1.62	±0.095
412	35.7	5,350	11,000	22,500	45,000	71.0	0.60	615.0	2.90	±0.110
462	64.1	5,000	10,000	40,400	80,800	101.0	0.80	1,110.0	4.65	±0.120
512	87.3	4,700	9,200	55,000	110,000	135.0	1.04	1,830.0	7.43	±0.130
562	133.00	4,350	8,300	84,100	168,200	186.0	1.28	3,020.0	10.38	±0.145
600	145.00	4,150	7,800	91,700	183,400	228.0	1.75	4,250.0	17.51	±0.160
8-Bolt Design										
225-8	27.77	7,500	14,000	17,500	35,000	27.8	0.38	128.0	1.07	±0.036
262-8	52.09	6,800	12,500	32,830	65,660	43.0	0.46	265.0	1.95	±0.043
312-8	81.55	6,200	11,500	51,400	102,800	67.0	0.55	580.0	3.34	±0.051
350-8	106.00	5,700	10,500	66,900	133,800	95.0	0.75	1,031.0	5.63	±0.056
375-8	159.00	5,200	9,800	100,300	200,600	134.0	1.05	1,784.0	9.23	±0.062
425-8	213.00	5,000	9,300	134,300	268,600	169.0	1.22	2,616.0	12.60	±0.067
450-8	239.00	4,700	8,700	150,400	300,800	220.0	1.59	4,020.0	18.00	±0.072
500-8	391.00	4,200	7,900	246,400	492,800	341.0	2.12	8,040.0	31.40	±0.082
550-8	524.00	3,900	7,300	330,400	660,800	475.0	2.65	13,930.0	49.80	±0.092
600-8	688.00	3,600	6,800	433,800	867,600	653.0	3.05	24,130.0	69.10	±0.102
700-8	1,071.00	3,300	6,200	674,800	1,349,600	961.0	4.13	44,900.0	118.00	±0.115
750-8	1,331.00	3,100	5,800	838,800	1,677,600	1,242.0	5.17	69,220.0	175.00	±0.125

- 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 WR² 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 Dia.	Clearance Fit		Interference Fit		Shaft Dia.	Clearance Fit		Interference Fit		Shaft Dia.	Interference Fit	
	Hub Bore	Clearance	Hub Bore	Interference		Hub Bore	Clearance	Hub Bore	Interference		Hub bore	Interference
+0.000	+0.010	.0000	+0.0005	.0000	3.1250	3.1250		3.1220		+0.0000	0.0015	0.0015
-0.0005	-0.0000	.0015	-0.0000	.0010	3.1875	3.1875		3.1845		-0.0010	-0.0000	0.0040
.5000	.5000		0.4990		3.2500	3.2500		3.2470		6.7500	6.7460	
.5625	.5625		0.5615		3.3125	3.3125		3.3095		7.0000	6.9960	
.625	.625		0.6240		3.3750	3.3750		3.3720		+0.0000	0.0015	0.0020
.6875	.6875		0.6865		3.4375	3.4375		3.4350		-0.0010	-0.0000	0.0050
.7500	.7500		0.7490		3.5000	3.5000		3.4970		7.2500	7.2450	
.8125	.8125		0.8115		3.5625	3.5625		3.5595		7.5000	7.4950	
.8750	.8750		0.8740		3.6250	3.6250		3.6220		7.7500	7.7450	
.9375	.9375		0.9365		3.6875	3.6875		3.6845		8.0000	7.9950	
1.0000	1.0000		0.9990		3.7500	3.7500		3.7470		8.2500	8.2445	0.0025
1.0625	1.0625		1.0615		3.8125	3.8125		3.8100		8.5000	8.4945	0.0055
1.125	1.125		1.1240		3.8750	3.8750		3.8720		8.7500	8.7445	
1.1875	1.1875		1.1865		3.9375	3.9375		3.9345		9.0000	8.9945	
1.2500	1.2500		1.2490		4.0000	4.0000		3.9970		9.2500	9.2440	0.0030
1.3125	1.3125		1.3115		+0.0000	+0.015	.0000	+0.015	.0010	9.5000	9.4940	0.0060
1.3750	1.3750		1.3740		-0.010	-0.0000	.0025	-0.0000	.0035	9.7500	9.7440	
1.4375	1.4375		1.4365		4.0625	4.0625		4.0590		10.0000	9.9940	
1.5000	1.5000		1.4990		4.1250	4.1250		4.1215		10.2500	10.2435	0.0035
+0.0000	+0.010	.0000	+0.010	.0000	4.1875	4.1875		4.1840		10.5000	10.4935	0.0065
-0.010	-0.0000	.0020	-0.0000	.0020	4.2500	4.2500		4.2465		10.7500	10.7435	
1.5625	1.5625		1.5605		4.3125	4.3125		4.3090		11.0000	10.9935	
1.6250	1.6250		1.6230		4.3750	4.3750		4.3715		11.2500	11.2430	0.0040
1.6875	1.6875		1.6855		4.4375	4.4375		4.4345		11.5000	11.4930	0.0070
1.7500	1.7500		1.7480		4.5000	4.5000		4.4965		11.7500	11.7430	
1.8125	1.8125		1.8105		4.5625	4.5625		4.5590		12.0000	11.9930	
1.8750	1.8750		1.8730		4.6250	4.6250		4.6215		12.5000	12.4925	0.0045
1.9375	1.9375		1.9355		4.6875	4.6875		4.6840		13.0000	12.9925	0.0075
2.0000	2.0000		1.9980		4.7500	4.7500		4.7465		+0.0000	+0.0020	.0050
+0.0000	+0.015	.0000	+0.010	.0000	4.8125	4.8125		4.8090		-0.015	-0.0000	.0085
-0.010	-0.0000	.0025	-0.0000	.0020	4.8750	4.8750		4.8715		13.500	13.4915	
2.0625	2.0625		2.0605		4.9375	4.9375		4.9340		14.000	13.9915	
2.1250	2.1250		2.1230		5.0000	5.0000		4.9965		14.500	14.4910	0.0055
2.1875	2.1875		2.1855		5.0625	5.0625		5.0585	0.0015	15.000	14.9910	0.0090
2.2500	2.2500		2.2480		5.1250	5.1250		5.1210	0.0040	+0.0000	+0.0025	.0060
2.31250	2.31250		2.3105		5.1875	5.1875		5.1835		-0.015	-0.0000	.0100
2.3750	2.3750		2.3730		5.2500	5.2500		5.2460		15.500	15.4900	
2.4375	2.4375		2.4355		5.3125	5.3125		5.3085		16.000	15.9900	
2.5000	2.5000		2.4980		5.3750	5.3750		5.3710		16.500	16.4895	0.0065
2.5625	2.5625		2.5605		5.4375	5.4375		5.4335		17.000	16.9895	0.0105
2.6250	2.6250		2.6230		5.5000	5.5000		5.4960		17.500	17.4890	0.0070
2.6875	2.6875		2.6855		5.5625	5.5625		5.5585		18.000	17.9890	0.0110
2.7500	2.7500		2.7480		5.6250	5.6250		5.6210		18.500	18.4890	
2.8125	2.8125		2.8105		5.6875	5.6875		5.6835		19.000	18.9890	
2.8750	2.8750		2.8730		5.7500	5.7500		5.7460		19.500	19.4880	0.0080
2.9375	2.9375		2.9355		5.8125	5.8125		5.8085		20.000	19.9880	0.0120
3.0000	3.0000		2.9980		5.8750	5.8750		5.8710				
+0.0000	+0.015	.0000	+0.015	.0000	5.9375	5.9375		5.9335				
-0.010	-0.0000	.0025	-0.0000	.0030	6.0000	6.0000		5.9960				
3.0625	3.0625		3.0595		6.2500	6.2500		6.2460				
					6.5000	6.5000		6.4960				

NOTE: Consult Rexnord for all keyless bore fits.

Taper-Lock and Q.D. Bushing Selection Cross Reference

In order to cross reference tapered bushing and bore sizes to a coupling selection, the following tables will cover the majority of cases.

Taper-Lock Type

Bushing Size	Coupling Size and Type					
	Max. Bore	DBZ	SV, SF, SN	Series 52	Series 54RDG	AMR, BMR, CMR, ST
1108	1.125	126	125	125	162	162
1215	1.250	163	162	162	200	200
1310	1.375	201	200	200	200	200
1610	1.625	201	200	200	200	200
1615	1.625	201	200	200	225	200
2012	2.000	226	226	225	262	262
2517	2.500	263	262	262	312	312
2525	2.500	263	262	262	312	262
3020	3.000	351	350	350	375	375
3030	3.000	351	312	312	350	350
3535	3.500	401	375	375	450	425

NOTE: "C" Dimension will be as listed for all couplings; "F" Dimension will vary according to bushing selection; Consult Rexnord for "F" dimensions and bushings.

Hubs bored for Q.D. or Taper-Lock® bushings will be modified for proper fit with bushing length. Consult Rexnord for specific dimensional data.

If specific reference to the coupling series or type is not found in the table, i.e. special designs, comparison of the shaft size with the maximum bore table only, will indicate the correct taper bushing in the left side of each table. Other flange style and compression bushings can be used with coupling hubs.

Q.D. Type

① Bushing Size	Coupling Size and Type						
	Max. Bore	DBZ	SV, SF, SN	Series 52	Series 54RDG	Series 71	AMR, BMR, CMR, ST
JA	1.250	126	125	125	162	150	162
SH	1.625	163	162	200	200	175	200
SDS	1.938	201	226	225	225	300	200
SD	1.938	201	226	225	225	300	200
SK	2.500	263	262	262	312	300	262
SF	2.938	301	312	350	350	350	312
E	3.438	401	375	375	425	462	375
F	3.938	-	450	450	500	512	450

① With shallow keyway. Key supplied with bushing where shallow keyway is furnished.

Standard Keyway Dimensions – Tolerances

Nominal Shaft Diameter		Keyway			Keyway Tolerance		
Over	Thru	Width	Depth		Width		Depth
			Sq. ②	Rect. ②	Close Side Fit ③	Free Side Fit ④	
5/16	7/16	3/32	3/64	—			+0.015 -0.000
7/16	9/16	1/8	1/16	3/64			
9/16	7/8	3/16	3/32	1/16	+0.0005	+0.002	
7/8	1 1/4	1/4	1/8	3/32	-0.0015	-0.000	
1 1/4	1 3/8	5/16	5/32	1/8			
1 3/8	1 3/4	3/8	3/16	1/8	+0.0005	+0.0025	+0.023 -0.000
1 3/4	2 1/4	1/2	1/4	3/16	-0.0020	-0.000	
2 1/4	2 3/4	5/8	5/16	7/32			
2 3/4	3 1/4	3/4	3/8	1/4	+0.0005	+0.003	
3 1/4	3 3/4	7/8	7/16	5/16	-0.0025	-0.000	
3 3/4	4 1/2	1	1/2	3/8			
4 1/2	5 1/2	1 1/4	5/8	7/16	+0.0010	+0.0035	+0.030 -0.000
5 1/2	6 1/2	1 1/2	3/4	1/2	-0.0025	-0.000	
6 1/2	7 1/2	1 3/4	7/8	3/4	+0.0010	+0.004	
7 1/2	9	2	1	3/4	-0.0030	-0.000	

② Rectangular keyways recommended for shafts over 6 1/2" diameter.

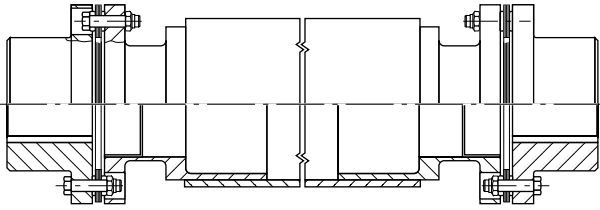
③ Close Side Fit Keyways – recommended for reversing torque, drives or other drives which are vibratory in nature, or where zero backlash is required. A close side fit keyway will be furnished on all **Disc Type couplings** unless specified by the customer.

④ Free Side Fit Keyways – recommended for use on smooth, unidirectional drives where fitting of key as assembly cannot be tolerated. A free side fit keyway will be furnished on **DBZ couplings** with Class 1 clearance fits unless specified by customer.

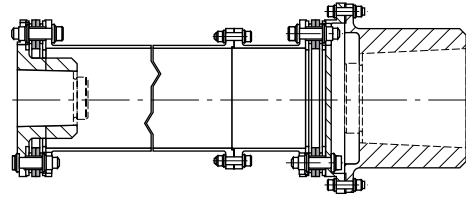
Rexnord Thomas Couplings

Customized Flexible Disc Couplings Designs

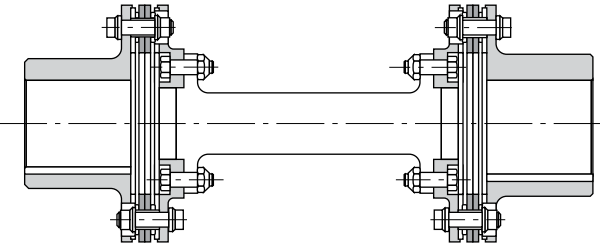
The following pages illustrate a sampling of the special disc coupling products designed and manufactured by Rexnord for applications requiring special coupling designs; please contact your Rexnord representative.



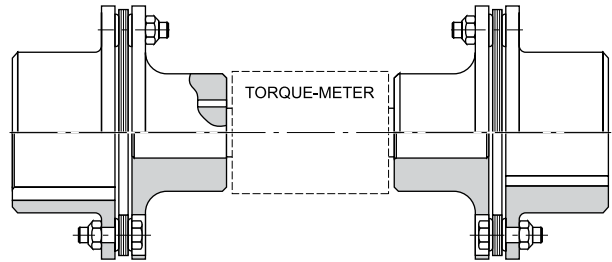
SN-EL – Extra Long Span



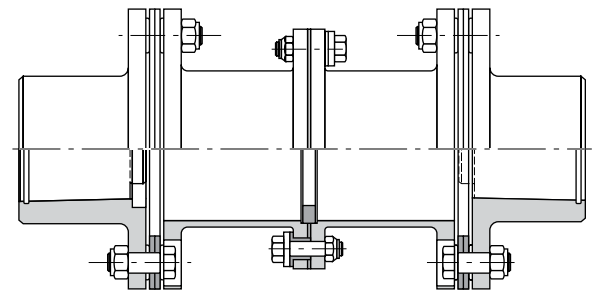
Semi-Reduced Movement – Bolt On Hub



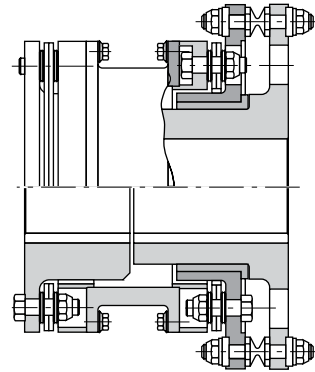
Torsionally Tuned Center Members



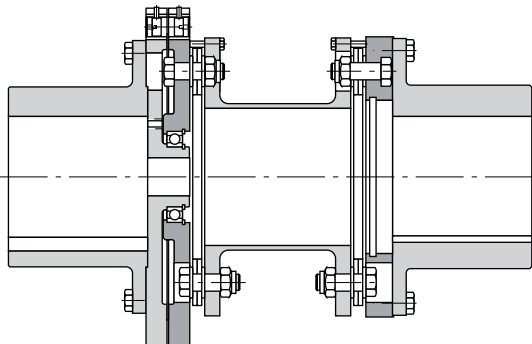
Torque Meter Coupling



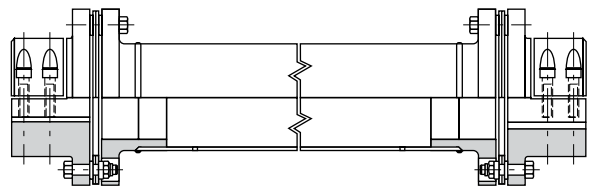
Electrically Insulated Couplings



Breaker Pin Coupling – Bushing Style



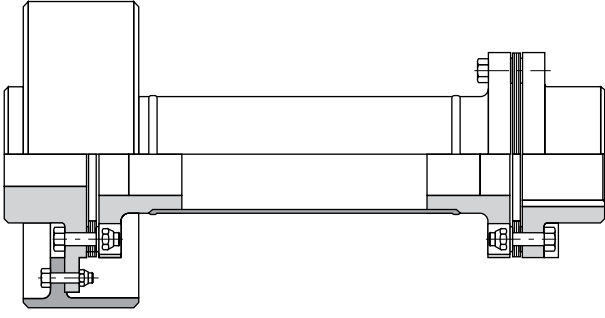
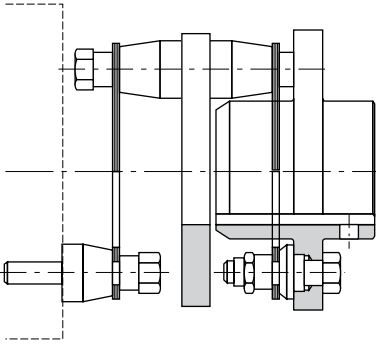
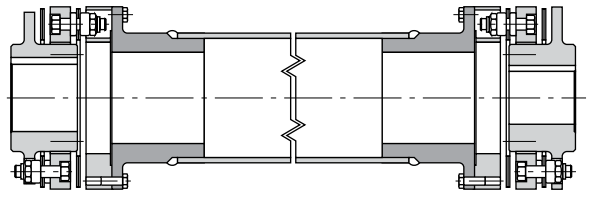
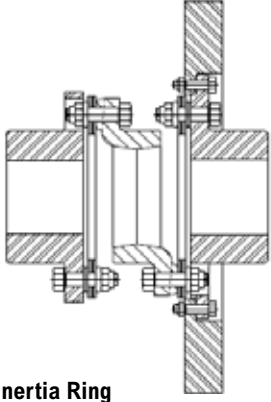
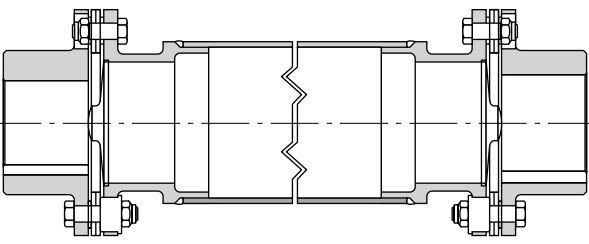
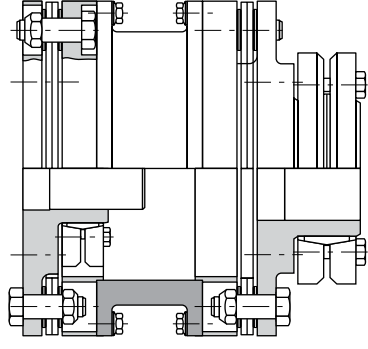
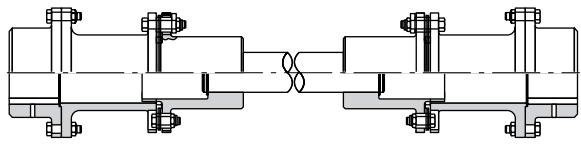
Breaker Pin Coupling – Bearing Style



Clamp Hub Mounting

Rexnord Thomas Couplings

Customized Flexible Disc Couplings Designs

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



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

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