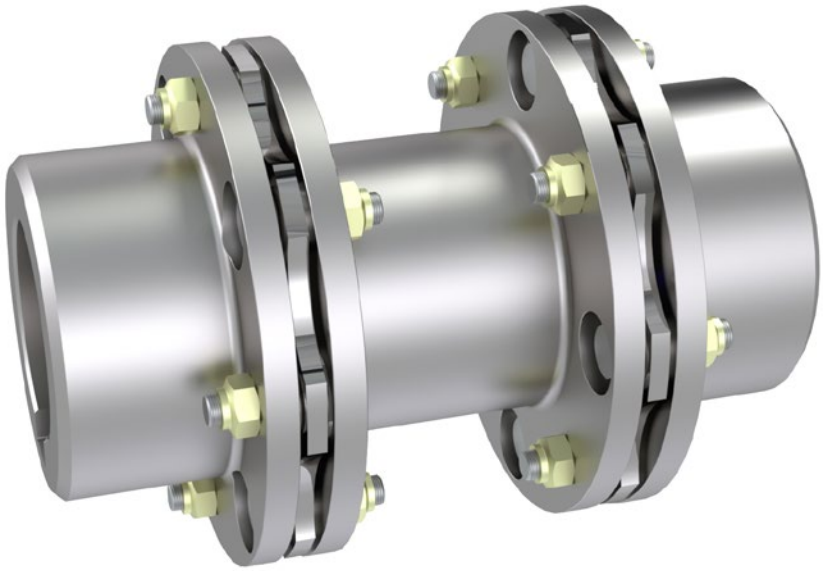


Figure 1 — Thomas Series 52 Tpack™ Coupling

1. General Information

1.1. To ensure you have the most up-to-date version of this manual CP3-014 (previously 538-212), please visit Rexnord.com under resources > documentation.

1.2. Rexnord Thomas Couplings are designed to provide a mechanical connection between the rotating shafts of mechanical equipment, using a flexible disc to accommodate inherent misalignment while transmitting the power and torque between the connected shafts.

1.3. These instructions are intended to help you to install and maintain your Rexnord Thomas Spacer Type Series 52T Coupling. Please read these instructions prior to installing the coupling, and prior to maintenance of the coupling and connected equipment. Keep these instructions near the coupling installation and available for review by maintenance personnel. For special engineered couplings, Rexnord may provide an engineering drawing containing installation instructions that take precedence over this document.

1.4.

1.5. Symbol descriptions:

STOP Danger of injury to persons.

Damages on the machine possible.

Pointing to important items.

Hints concerning explosion protection.

2. Safety and Advice Hints

DANGER!

2.1. Safety should be a primary concern in all aspects of coupling installation, operation, and maintenance.

2.2. Do not make contact with the coupling when it is rotating and/or in operation.

2.3. Because of the possible danger to person(s) or property from accidents which may result from improper use or installation of these products, it is extremely important to follow the proper selection, installation, maintenance and operational procedures.

2.4. All personnel involved in the installation, service, operation, maintenance, and repair of this coupling and the connected equipment must read, understand, and comply with these Installation and Maintenance instructions.

PRECAUTION!

For this coupling to meet the ATEX requirements, you must precisely follow these installation and maintenance instructions, and the supplement form 0005-08-49-01. This supplement outlines the ATEX requirements. If the operator does not follow these instructions, the coupling will immediately be considered non-conforming to ATEX.

2.5. All rotating power transmission products are potentially dangerous and can cause serious injury. They must be properly guarded in compliance with OSHA, ANSI, ATEX, European machine safety standards and other local standards. It is the responsibility of the user to provide proper guarding.

2.6. The coupling should be stored in a dry corrosion protected environment, free from external loads (for example by stacking) to prevent damage which may cause a hazard when the coupling is put into service.

2.7. For ATEX requirements the guard must have a minimum of 12.7 mm (1/2 inch) radial clearance to the coupling outside diameter "A" (see **Figure 3** and **Table 3**) and allow for proper ventilation.

2.8. Make sure to disengage the electrical power and any other sources of potential energy before you perform work on the coupling.

2.9. All conductive parts of the equipment should be connected in such a way that hazardous electrical potential differences cannot occur. In case insulated metal parts could be charged thus becoming a potential ignition source, earth connections must be provided.

2.10. Proper lockout-tag out procedures must be followed to safeguard against unintentional starting of the equipment. Ensure electrical power and any other sources of potential energy are disengaged before you perform any work on the coupling.

2.11. Packaging material can generate electrostatic charges. It may then become an explosive hazard. It must be removed from the coupling outside any hazardous areas.

2.12. All work on the coupling must be performed when the coupling is at rest with no load.

2.13. Do not start or jog the motor, engine, or drive system without securing the coupling components. If the equipment is started with only a hub attached, the hub must be properly mounted and ready for operation, with the key and set screw (if included) fastened. When the full coupling assembly is started, all fasteners and hardware must be completely and properly secured. Do not run the coupling with loose fasteners.

2.14. Use explosive environment appropriate tools only, for more information see DIN EN 1127-1:2008:02, Annex A.

2.15. The coupling may only be used in accordance with the technical data provided in the Thomas Disc coupling catalog. Customer modifications and alterations to the coupling are not permissible.

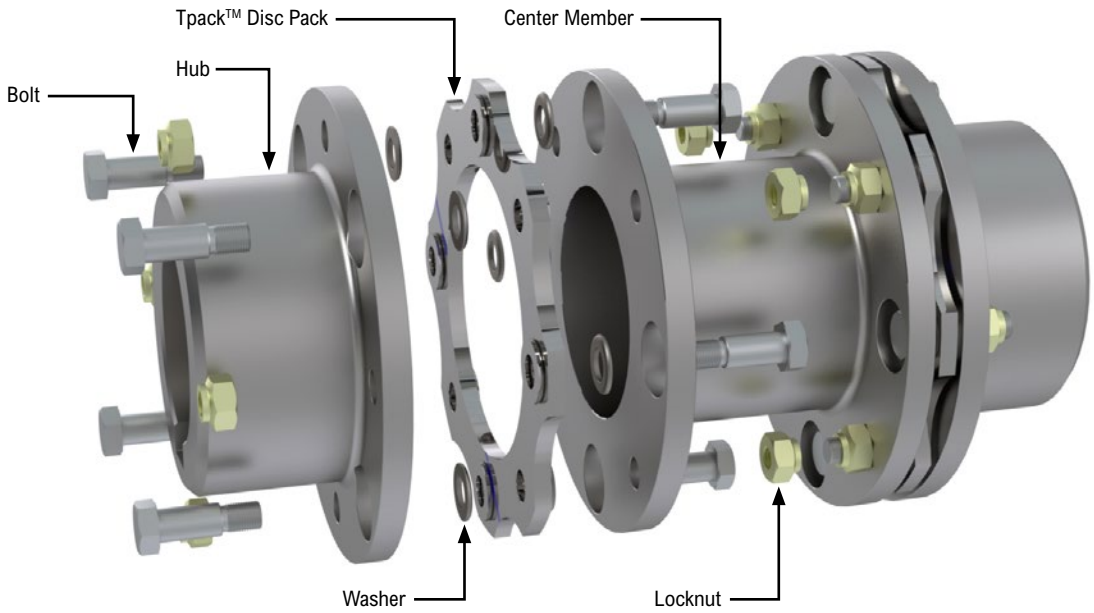
CAUTION: *Air driven wrenches for assembly are not permitted to avoid the potential of excessive speed and heat buildup that may lead to thread damage during assembly.*

2.16. All spare parts for service or replacement must originate from or be approved by Rexnord Industries, LLC.

Rexnord
5555 S. Moorland Rd., New Berlin, WI 53151-7953
Telephone: 262-796-4060 Fax: 262-796-4064 www.rexnord.com

3. Components and Material Numbers

Figure 2 — Rexnord Thomas Series 52T Coupling Components



Thomas Series 52T Couplings may be delivered from the factory assembled or non-assembled. If assembled, the locknuts are not fully tightened as they will need to be removed during installation. Examine the parts to ensure there is no visible damage. If assembled, remove the locknuts, bolts and washers that attach the hubs to the disc packs, remove both hubs. Leave the disc packs attached to the center member (the disc pack locknuts will be tightened later to the specifications shown in **Table 3** prior to operation).

Figure 3 — Rexnord Thomas Series 52T Cross Sectional View of Components

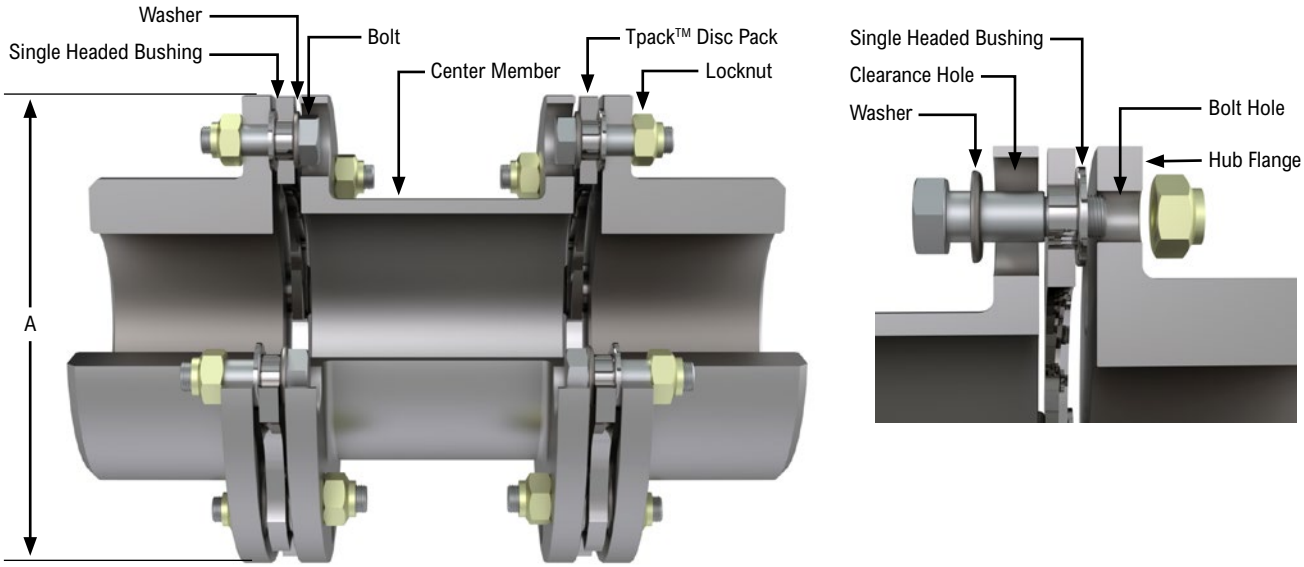


TABLE 1 — Part Numbers and Quantity Required

Coupling Size	Hub (Rough Bore) Qty = 2	Center Member Qty = 1		Tpack™ Disc Pack Two per Coupling		Tpack™ Disc Pack Repair Kit ** Kits Contents - Bolts, Locknuts and Washers				
				Tomaloy	Stainless	Repair Kit		Bolts	Locknuts	Washers
	Material No.	Material No.	Dim. "C"	Material No.	Material No.	Set	Material No.	Qty	Qty	Qty
225	10014811	10110905 10110906	5.00 7.00	10018617	10018622	Full Half	10027534 10760557	16 8	16 8	16 8
262	10016010	10110907 10110908	5.00 7.00	10015263	10015267	Full Half	10027535 10760558	16 8	16* 8*	16 8
312	10017949	10110909 10110910	5.50 7.00	10015262	10015268	Full Half	10027536 10760560	16 8	16* 8*	16 8
350	10010653	10110911 10015314	6.00 7.00	10015264	10015269	Full Half	10027499 10760561	16 8	16 8	16 8
375	10014154	10110912	7.00	10015265	10015270	Full Half	10027500 10760145	16 8	16 8	16 8
425	10014812	10110918	7.00	10015266	10015271	Full Half	10027501 10760562	16 8	16 8	16 8
450	10016011	10110919 10110920	7.00 8.00	10018618	10018623	Full Half	10027502 10760563	16 8	16* 8*	16 8
500	10017950	10110921	9.00	10018619	10018624	Full Half	10027503 10760564	16 8	16* 8*	16 8
550	10010654	10110922	10.00	10018620	10018625	Full Half	10027504 10760565	16 8	16* 8*	16 8
600	10014155	10110923	10.00	10018621	10018626	Full Half	10027505 10760566	16 8	16* 8*	16 8
700	10014813	10110924	11.00	10110650	10027019	Full Half	10113028 10760567	16 8	16* 8*	16 8
750	10015493	10110925	11.00	10110651	10027020	Full Half	10760569 10760568	16 8	16* 8*	16 8

* These locknuts are cadmium plated.

** Disc pack repair kits: Full kits contain hardware for one complete coupling (two hubs). Half kits contain hardware for one side of a coupling (one hub).

4. Hub Mounting

STOP ***DANGER!*** *Be sure to disengage the electrical power and any other sources of potential energy and ensure there is no stored energy before you perform work on the hub and coupling assembly.*

⚠ ***CAUTION:*** *When disc type couplings are installed on "sleeve bearing" motor drives, some precautions are necessary.*

It is important that the coupling be installed as close to its free state (neutral) axial position as possible and that the motor shaft is on its "magnetic center" (normally defined by a scribed line on the shaft).

Disc type couplings, with their flexing element(s) comprised of multiple laminated discs or sheets, will act as a spring in the axial direction (exhibiting non-linear restoring forces) and serve to hold the motor rotor on magnetic center during operation and away from the motor's internal thrust stops.

The coupling span ordered for the equipment must consider the motor rotor as being positioned on its magnetic center, and the installation must coincide with this.

4.1. Examine the coupling assembly to insure there is no visible damage from shipment or handling.

4.2. Clean the hub bores and equipment shafts using lint free cloth. Remove any nicks or burrs present.

4.3. When assembled, the key(s) should have a close side-to-side fit in the keyway in the hub and shaft, with a slight clearance over the top of the key.

⚠ ***CAUTION:*** *When heating hubs is required, an oven is preferred and an open flame is not recommended. If flame heating is considered mandatory, it is important to provide uniform heating to avoid distortion and excessive temperatures. A thermal stick applied to the hub surface will help determine the hub temperature.*

STOP ***DANGER!*** *Touching hot hubs causes burns. Wear safety gloves rated for the hub temperature to avoid direct contact with hot surfaces.*

Rexnord
5555 S. Moorland Rd., New Berlin, WI 53151-7953
Telephone: 262-796-4060 Fax: 262-796-4064 www.rexnord.com

5. Straight Bore with Clearance/Slip Fit

5.1. Install the key(s) in the shaft.

5.2. Check to be sure that the set screw(s) in the hub does not protrude into the keyway or the bore. Remove or back out the set screw to provide clearance during assembly.

5.3. Slide the hub up the shaft to the desired axial position.

5.4. If used; assemble and tighten the set screw(s) using a calibrated torque wrench to the values shown in **Table 2**.

TABLE 2 — Set Screw Tightening Torque

Set Screw Size		1/4-20	1/4-28	5/16-18	5/16-24	3/8-16	3/8-24	1/2-13	1/2-20
Hex Head Key Size		1/8	1/8	5/32	5/32	3/16	3/16	1/4	1/4
Tightening Torque	(lb-in)	66	76	132	144	240	276	600	660
	(Nm)	7	9	15	16	27	31	68	75

Set Screw Size		M6	M8	M10	M12	M16	1/4	3/8
Hex Head Key Size		3	4	5	6	8	1/8"	3/16"
Tightening Torque	(lb-in)	55	110	220	440	880	70	220
	(Nm)	6	12	25	50	100	8	25

☞ ***ATTENTION!*** *Never use two set screws with one on top of the other in the same tapped hole.*

6. Straight Bore with Interference Fit

6.1. Accurately measure the bore and shaft diameters to assure proper fit.

6.2. Install the key(s) in the shaft.

6.3. Heat the hub in an oven until the bore is sufficiently larger than the shaft.

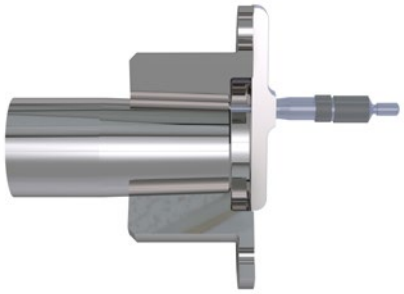
6.4. 275°F (135°C) is usually sufficient for carbon steel hubs. Do not exceed 400°F (205°C).

6.5. Higher temperatures may be required for higher interference fit levels where alloy steel hubs may be encountered. A general rule to consider is that for every 160°F increase in temperature, steel will expand 0.001 inch for every inch of shaft diameter (or .029mm/ 100°C). When calculating temperatures, also consider additional expansion to provide additional clearance and allow for a loss of heat and subsequent shrinkage during the handling process.

6.6. With the hub expanded, install it quickly on the shaft to the desired axial position. A pre-set axial stop device can be helpful.

6.7. When possible the hub should be mounted flush to the end of the shaft at final position. It is recommended to maintain minimum of 1:1 ratio of hub length engagement to shaft diameter, contact Rexnord if this must be reduced as additional interference may be required.

Figure 4 — Shaft end to hub face measurement example.



7. Taper Bore

7.1. Check for acceptable contact pattern between the hub and the shaft.

7.2. Put the hub on the shaft, keeping the keyways (if existing) aligned.

7.3. Lightly tap the face of the hub with a soft mallet. The resultant position will provide a starting point for the hub axial draw up.

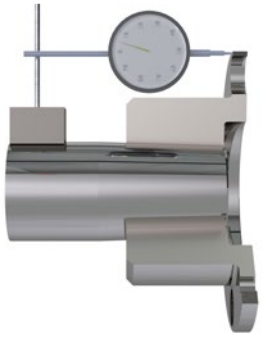
7.4. Use a depth micrometer to measure the distance from the shaft end to the hub face, as shown in **Figure 4**. Record the dimension.

7.5. Mount a dial indicator to read axial hub advancement, as shown in **Figure 5**. Alternatively, the indicator can be positioned to contact the end of the hub. Set the indicator to “zero”.

7.6. Remove the hub and install the key(s) in the shaft.

7.7. Heat the hub in an oven until the bore is sufficiently larger than the shaft.

Figure 5 — Dial indicator placement for axial draw measurement example.



7.8. 275°F (135°C) is usually sufficient for carbon steel hubs. Do not exceed 400°F (205°C). A thermal heat stick will help determine the hub temperature.

7.9. **DO NOT SPOT HEAT THE HUB OR DISTORTION MAY OCCUR.**

7.10. Higher temperatures may be required for higher interference fit levels where alloy steel hubs may be encountered. A general rule to consider is that for every 160°F increase in temperature, steel will expand 0.001 inch for every inch of shaft diameter (or 0.029 mm/100°C). When calculating temperatures, also consider additional expansion to provide clearance and allow for a loss of heat and subsequent shrinkage during the handling process.

7.11. With the hub expanded, install it quickly on the shaft to the "zero" set point. Continue to advance the hub up the taper to the desired axial position, as defined by Rexnord's customer. Use the indicator as a guide only. A pre-set axial stop device can be helpful.

7.12. Inspect the assembly to verify that the hub is properly positioned. Consult Rexnord if necessary.

7.13. Install any hub axial retention device (if any) in accordance with the equipment manufacturer's specifications.

8. Shaft Alignment

8.1. Move the connected equipment to achieve acceptable alignment. When well aligned, the disc packs will be centered and approximately parallel to their mating flange faces and the flexing elements will have little visible waviness when viewed from the side.

☞ ***ATTENTION!*** *Soft Foot — The equipment must rest flat on its base. If one or more feet of the machine are shorter, longer, or angled in some way to prevent uniform contact (a condition commonly known as "soft foot") it must now be corrected.*

8.2. Axial Spacing — The axial spacing of the shafts should be positioned so the disc packs (flexing elements) are not distorted when the equipment is running under normal operating conditions. This means there should be a minimal amount of waviness in the disc pack when viewed from the side.

8.3. Move the connected equipment to accomplish the above. Refer to the assembly drawing and the connected equipment installation procedures for specific axial spacing requirements.

☞ ***ATTENTION!*** *To improve the life of the coupling, the shafts must be aligned to minimize distortion of the flexing elements. Shaft alignment is required in the axial, parallel, and angular directions, with each of these values not to exceed the recommended ratings for the coupling and the alignment values shown in* ***Table 3***.

⚠ ***CAUTION!*** *The disc pack is designed to an optimal thickness and is not to be used for axial adjustment by removing or adding individual discs.*

8.4. As a guide, the maximum and minimum values for dimension "N" shown in **Figure 12** are given in **Table 3**. These dimensions are suggested for initial installation. Additional capacity is available to compensate for thermal and structural equipment movement. Maximum axial capacity values for these couplings are also given in **Table 3**.

8.5. Shaft alignment can be measured using various established methods, including Laser Alignment, Reverse Dial Indicator, and Rim and Face. Refer to Rexnord bulletin 538-214 "Coupling Alignment Fundamentals" for additional instructions regarding shaft alignment.

8.6. **Table 3** shows installation limits for Angular and Parallel alignment and axial alignment.

8.7. The "Angular Alignment Total Indicator Reading" value is the maximum difference between the measurements (X-Y) taken at opposite ends of the hub flange, as shown in **Figure 8**. To measure this rigidly mount a dial indicator on one hub, shaft or flange, reading the other hub flange outside diameter.

8.8. Rotate both shafts together making sure the axial spacing remains constant. Adjust the equipment by moving and/or shimming so that the indicator reading is within the values as shown in **Table 3**.

8.9. The "Parallel Alignment" value (P) is the offset between the centers of the hubs, as shown in **Figure 6**.

8.10. When parallel offset is measured by rotating the hubs in unison with a dial indicator on the outside diameter, as shown in **Figure 7** the total indicated reading (TIR) should be divided by (2) to calculate P.

Rexnord
5555 S. Moorland Rd., New Berlin, WI 53151-7953
Telephone: 262-796-4060 Fax: 262-796-4064 www.rexnord.com

Figure 6 — Parallel Offset Misalignment

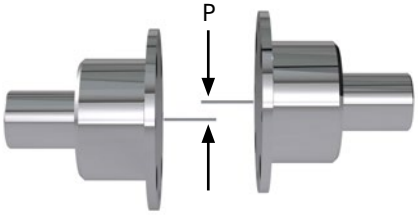


Figure 7 — Parallel Offset (TIR) Measurement

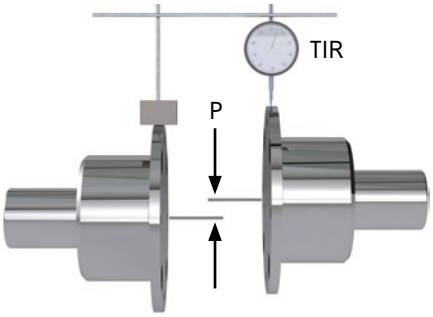
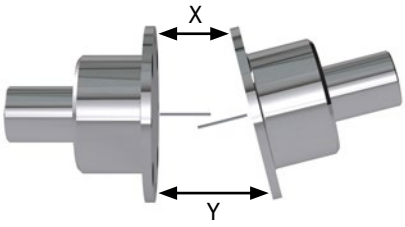


Figure 8 — Angular Misalignment



8.11. Adjust the equipment by moving and/or shimming so that the indicator reading is within 0.001 inch per inch of the axial length between the flex elements.

8.12. It should be noted that parallel offset measured on the hub surfaces includes misalignment of the equipment shafting plus any variation (TIR) in the hubs. This may be helpful to consider during problem solving for alignment difficulties.

☞ ***NOTE:*** *If the driver or driven equipment alignment tolerances are more stringent than our recommendations, the driver or driven equipment tolerance should be used. Also be sure to compensate for thermal movement in the equipment.*

8.13. These dimensions are suggested for initial installation. Additional capacity is available to compensate for thermal and structural equipment movement. However, close alignment at installation will provide for longer service life with smoother operation.

TABLE 3 — Locknut Tightening Torques, Dimension "N" Limits and Suggested Maximum Alignment Values

COUPLING SIZE	"A" Diameter Inch	Dimension "N" Inch		Axial Capacity Inch	Locknut			Alignment Total Indicator Reading	
					Thread Size	Torque			
		Min	Max			Ft-Lb (In-Lb)	Nm	(Angular) Inch	Parallel Inch
225	5.69	0.37	0.38	± .036	5/16 - 24	25	34	0.006	0.001 inch per inch of axial length between flex elements
262	6.63	0.48	0.49	± .043	3/8 - 24	34	46	0.007	
312	7.81	0.51	0.52	± .051	7/16 - 20	60	81	0.008	
350	8.69	0.54	0.55	± .056	1/2 - 20	95	129	0.009	
375	9.69	0.60	0.61	± .062	9/16 - 18	130	176	0.010	
425	10.50	0.63	0.64	± .067	5/8 - 18	175	237	0.011	
450	11.31	0.73	0.75	± .072	11/16 –16	150*	203*	0.012	
500	12.88	0.79	0.81	± .082	3/4 –16	190*	258*	0.012	
550	14.44	0.92	0.94	± .092	7/8 –14	255*	346*	0.014	
600	16.00	0.99	1.01	± .102	1-14	335*	454*	0.016	
700	18.25	1.20	1.23	± .115	1-1/8-12	425*	576*	0.018	
750	19.81	1.26	1.29	± .125	1-1/4-12	560*	759*	0.020	

NOTE:

1. These torque values are approximate for steel bolts with lubricated threads. The locknuts are prevailing torque type and some resistance will be felt. If galling is suspected, immediately stop and contact Rexnord. Modification will be necessary for stainless steel. For stainless steel, the tightened torque must be reduced to 60% of the values shown. Stainless steel bolt and locknut threads must also be liberally coated with molybdenum disulfide grease.
2. Bolts should be held from rotating while the locknuts are tightened to the values shown.

* These locknuts are cadmium plated. Do not use any lubricants other than clean oil noted in Section 6. Consult Rexnord if unsure.

9. Final Assembly

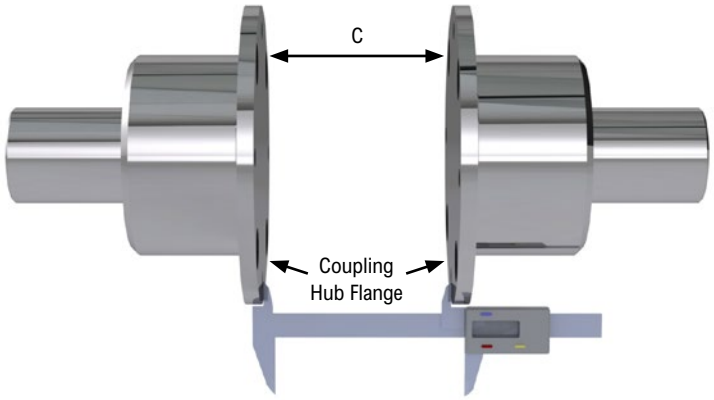
With the coupling in good alignment, the bolts should easily fit through the holes in the mating flanges and the disc packs.

☞ ***ATTENTION!*** *All bolt threads should be lubricated. A clean motor oil is recommended. Also see Footnote * below* ***Table 3***.

9.1. If the coupling arrived assembled, the disc packs are still attached to the center member assembly. Remove the disc packs from the center member.

9.2. Verify that the hubs have been mounted to provide the correct "C" dimension shown in **Figure 9** and defined in **Table 1**.

Figure 9 — "C" Dimension Measurement



☞ ***ATTENTION!*** *The "C" dimension is the distance measured between the faces of the two hub flanges.*

9.3. With the hubs mounted and the span length "C" set, proceed to put the center member into place between the two hubs. Care should be taken when handling the center member as the tube can be damaged. Support the center member at both ends on wood blocks, with nylon straps from a hoist, or some other convenient way. It may help to support the end not being worked on with bolts through the spool flange bolt holes, this will hold the parts in line at that end.

9.4. Now install the disc pack. Rotate the hub or center member so that the hub bolt holes line up with the center member flange clearance holes. If the coupling was assembly balanced, also align the match marks.

a.) Start a bolt through a loose washer.

☞ ***ATTENTION!*** **The radius side of the washer must always be against the disc pack.**

b.) Hold the disc pack in one hand and slip it down between the two flanges so that the bushing heads in the pack line up with the bolt holes in the flanges as shown in **Figure 10**.

c.) Slide the bolt and washer through the clearance hole in one flange, into the bushing, and through the bolt hole of the opposite flange.

d.) Make sure all parts pilot on the ground body area of the bolt.

e.) Install a locknut onto the bolt, but do not tighten at this time.

f.) Now pivot the pack around until it lines up the bushing heads with the rest of the bolt holes.

g.) Repeat steps a through f on the remaining bolts on this end of the coupling.

☞ ***NOTE:*** *The last bolt may be tight and require some light tapping on the head of the bolt, with a soft face non marring mallet, to work it through the disc pack.*

h.) The locknuts can be slightly tightened at this time, do NOT torque to final values.

☞ ***NOTE:*** *The disc pack, when installed, should look centered and parallel with the mating flange.*

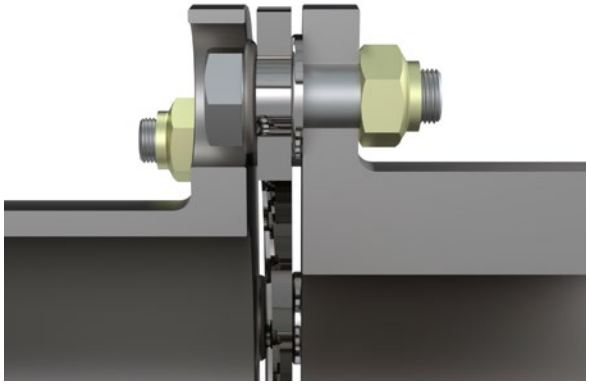
9.5. Now proceed to the other end of the coupling. Remove the support bolts, if used, and support the center member in one of the other ways.

9.6. Repeat the steps relayed in section 9.4. a.) through h.) above to install the second disc pack.

9.7. Make the final coupling alignment check at this time, the suggested maximum misalignment values can be located in **Table 3** on Page 7 of this manual.

Rexnord
5555 S. Moorland Rd., New Berlin, WI 53151-7953
Telephone: 262-796-4060 Fax: 262-796-4064 www.rexnord.com

Figure 10 — Bolt, Washer, Disc Pack and Flange Orientation



9.8. Fully tighten the locknuts evenly in an incremental alternating fashion as shown in **Figure 11** below. The locknut tightening torque is shown in **Table 3** on Page 7 of this manual.

☞ ***ATTENTION!*** *All bolt threads should be lubricated. A clean motor oil is recommended. Also see Footnote * below* ***Table 3***.

☞ ***NOTE:*** *With the coupling in good alignment, the bolts should easily fit through the holes in the flanges and the disc packs.*

9.9. For further help with the installation or alignment consult Rexnord.

9.10. Additional information for Coupling Alignment Fundamentals can be located in the Rexnord documentation library at Rexnord.com under manual number 538-214.

It is recommended that all locknuts be retightened after several hours of initial operation whenever possible.

Figure 11 — Alternating Tightening Sequence

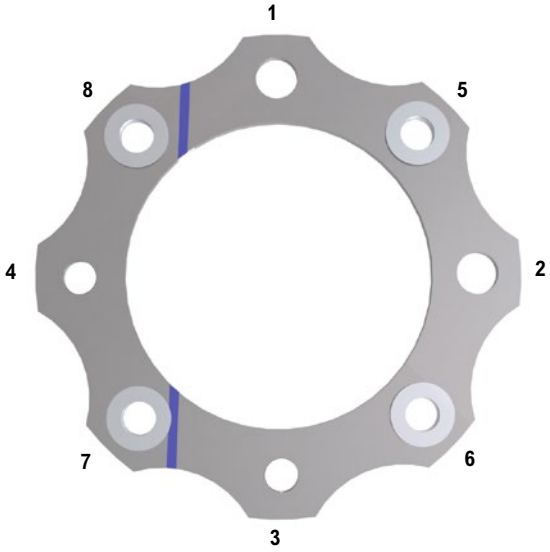
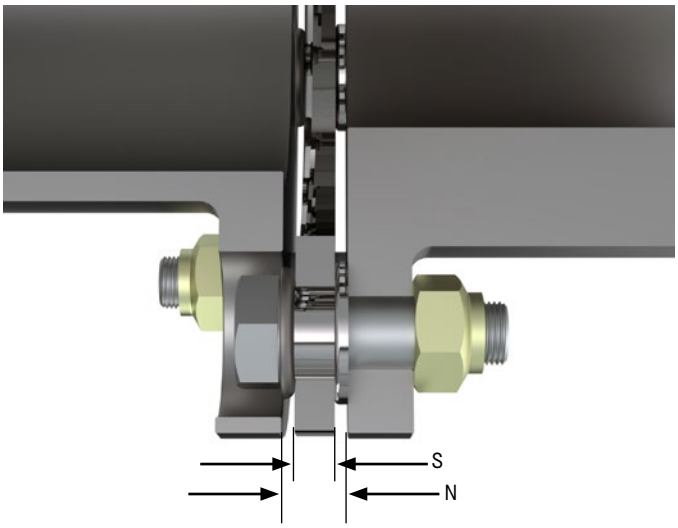


Figure 12 — Alignment Confirmation Values



9.11. As an assembly and alignment check, measure the distance "N" between the flanges of the hub and the center spool at each end, as shown in **Figure 12**. Dimension "N" should be measured at four (4) positions equally spaced around the circumference of the disc pack gap (at top, bottom, and side positions) at each end of the coupling.

- Calculate the "$N_{average}$" value at each end by adding the measurements and dividing by 4.
- $N_{average}$ = (N1 + N2 + N3 + N4) /4
- $N_{average}$ should be between the minimum and maximum values shown in **Table 4**.
- If the $N_{average}$ value is outside of these specifications, use a more precise measurement method to verify an acceptable gap, by first measuring the thickness of the disc pack "S" as shown in **Figure 12**. The discs should be tightly compressed during the measurement. Calculate "G" by subtracting "S" from Naverage
  - G = $N_{average}$ – S
  - G should be between the minimum and maximum values shown in **Table 4** for allowable G values.
- Calculate the Angular Misalignment at each end by subtracting the smallest (minimum) N value from the largest (maximum) N value. The Angular Misalignment should be less than the maximum value shown in **Table 4**.
  - Angular Misalignment = ($N_{maximum}$ – $N_{minimum}$)

9.12. If the "N average", and "G" values are outside of these specifications, or the angular misalignment exceeds the maximum capacity, it is suggested that the alignment is rechecked and improved. Dimensional measurements should also be made to verify the set up is accurate.

9.13. For further help with the installation or alignment consult Rexnord.

10. Disc Pack Replacement

10.1. If it becomes necessary to replace the disc packs, it can be done as follows.

☞ ***NOTE!*** *The Series 52T sizes 225 through Series 750 coupling uses the Tpack™ unitized disc pack.*

☞ ***ATTENTION!*** *The Tpack™ disc pack can be used to replace the original round, non-unitized disc pack without modification to the coupling. Be sure to use the washers that are supplied with the Tpack™ replacement kit, the washers used with the original disc pack are to be discarded.*

10.2. At one end of the coupling remove all locknuts, support the center member at this end.

10.3. Back out and remove the bolts and loose washers. It may be necessary to tap ends of the bolts with a soft mallet to start them out.

Rexnord
5555 S. Moorland Rd., New Berlin, WI 53151-7953
Telephone: 262-796-4060 Fax: 262-796-4064 www.rexnord.com

TABLE 4 — Alignment Check Values

Series 52 Coupling Size	"A" Dimension		Dimension "N" Allowable Range for "N average" *				Maximum Allowable Coupling Angular Misalignment per disc pack (N maximum)-(n minimum)**		Allowable Range for G=(N average)-S***			
			Min	Max	Min	Max	Maximum Capacity		Min	Max	Min	Max
	inch	mm	inch	inch	mm	mm	inch	mm	inch	inch	mm	mm
225	5.69	144.5	0.354	0.372	8.99	9.45	0.033	0.84	0.175	0.193	4.45	4.90
262	6.63	168.4	0.463	0.484	11.76	12.29	0.039	0.98	0.239	0.261	6.07	6.63
312	7.81	198.4	0.491	0.516	12.47	13.11	0.045	1.15	0.237	0.263	6.02	6.68
350	8.69	220.7	0.522	0.550	13.26	13.97	0.051	1.28	0.236	0.264	5.99	6.71
375	9.69	246.1	0.575	0.606	14.61	15.39	0.056	1.43	0.235	0.266	5.97	6.76
425	10.50	266.7	0.606	0.639	15.39	16.23	0.061	1.55	0.233	0.267	5.92	6.78
450	11.31	287.3	0.696	0.732	17.68	18.59	0.066	1.67	0.294	0.330	7.47	8.38
500	12.88	327.2	0.757	0.798	19.23	20.27	0.075	1.90	0.292	0.333	7.42	8.46
550	14.44	366.8	0.890	0.936	22.61	23.77	0.084	2.13	0.353	0.399	8.97	10.13
600	16.00	406.4	0.941	0.992	23.90	25.20	0.093	2.36	0.351	0.402	8.92	10.21
700	18.25	463.6	1.171	1.228	29.74	31.19	0.106	2.70	0.471	0.529	11.96	13.44
750	19.81	503.2	1.222	1.284	31.04	32.61	0.115	2.93	0.469	0.531	11.91	13.49

* "N average" is the average of four dimensions measuring the gap at four positions equally spaced around the circumference of the disc pack (at top, bottom, and side positions, or otherwise stated as 0°, 90°, 180°, and 270°).

** At each end, subtract the minimum N measurement from the maximum N measurement. The calculated value allows a maximum of 1/3° angular misalignment at each end.

*** G = (N average) - S, where S = measured thickness of stack of disc pack laminates (when tightly compressed).

Refer to Rexnord Bulletin 538-214 "Coupling Alignment Fundamentals" for more details and procedures regarding alignment methods and procedures

10.4. Slide the disc pack out while supporting the center member at this end.

10.5. Now disassemble the other end using the steps 10.2. to 10.4. above, being sure to support the center member when removing the last bolt.

10.6. Remove the center member

☞ ***ATTENTION!** Match marks (if applied at assembly balance) must be in-line to maintain balance integrity.*

Tpack™ Disc Pack Installation

10.7. Now install the disc pack. Rotate the hub or center member so that the hub bolt holes line up with the center member flange clearance holes. If the coupling was assembly balanced, also align the match marks.

a.) Start a bolt through a loose washer.

The radius side of the washer must always be against the disc pack.

b.) Hold the disc pack in one hand and slip it down between the two flanges so that the bushing heads in the pack line up with the bolt holes in the flanges as shown in **Figure 10**.

c.) Slide the bolt and washer through the clearance hole in one flange, into the bushing, and through the bolt hole of the opposite flange.

d.) Make sure all parts pilot on the ground body area of the bolt.

e.) Install a locknut onto the bolt, but do not tighten at this time.

f.) Now pivot the pack around until it lines up the bushing heads with the rest of the bolt holes.

g.) Repeat steps a through f on the remaining bolts on this end of the coupling.

☞ ***NOTE:*** *The last bolt may be tight and require some light tapping on the head of the bolt, with a soft face non marring mallet, to work it through the disc pack.*

h.) The locknuts can be slightly tightened at this time, do NOT torque to final values.

☞ ***NOTE:*** *The disc pack, when installed, should look centered and parallel with the mating flanges.*

10.8. Now proceed to the other end of the coupling. Remove the support bolts, if used, and support the center member in one of the other ways.

10.9. Repeat the steps relayed in section 10.7. a.) through h.) above to install the second disc pack.

10.10. Make the final coupling alignment check at this time, the suggested maximum misalignment values can be located in **Table 3** on Page 7 of this manual.

10.11. Fully tighten the locknuts evenly in an incremental alternating fashion as shown in **Figure 11** below. The locknut tightening torque is shown in **Table 3** on Page 7 of this manual.

☞ ***ATTENTION!*** *All bolt threads should be lubricated. A clean motor oil is recommended. Also see Footnote * below **Table 3**.*

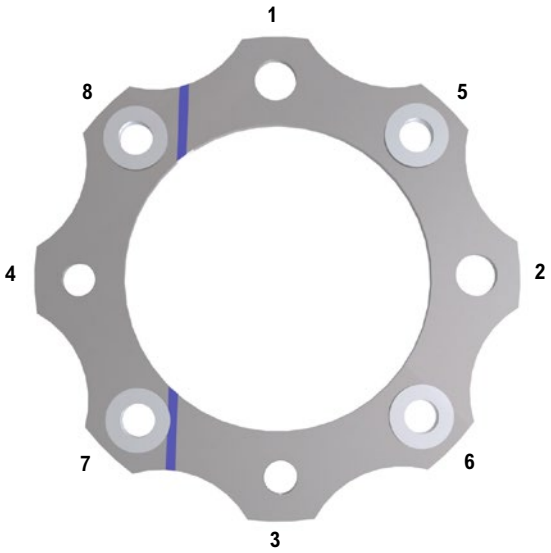
☞ ***NOTE:*** *With the coupling in good alignment, the bolts should easily ft through the holes in the flanges and the disc packs.*

10.12. For further help with the installation or alignment consult Rexnord.

10.13. Additional information for Coupling Alignment Fundamentals can be located in the Rexnord documentation library at Rexnord.com under manual number 538-214.

It is recommended that all locknuts be retightened after several hours of initial operation whenever possible.

Figure 11 — Alternating Tightening Sequence



Rexnord
5555 S. Moorland Rd., New Berlin, WI 53151-7953
Telephone: 262-796-4060 Fax: 262-796-4064 www.rexnord.com