Type XTSRS
Sizes 494-5258

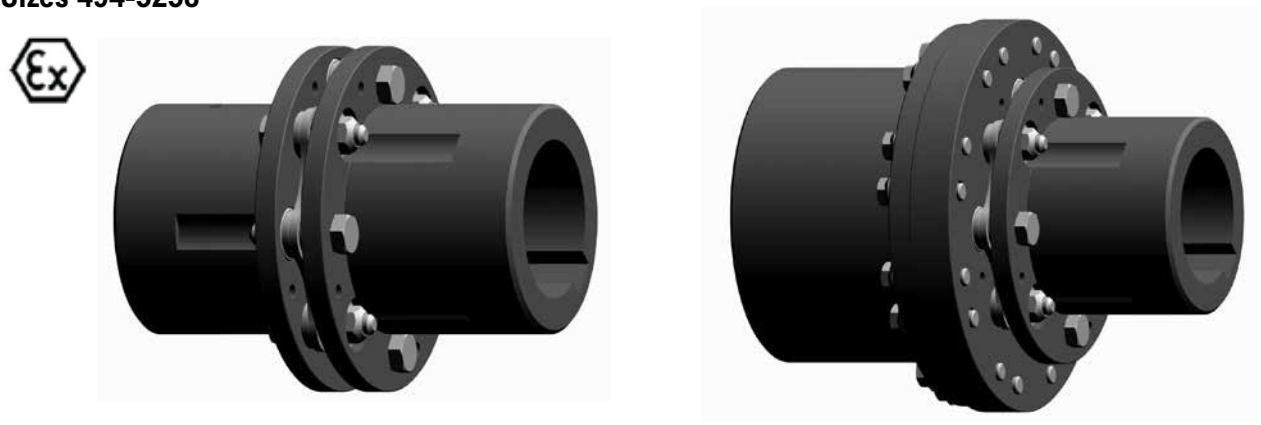


Figure 1 – Thomas XTSRS Coupling Range 494 to 5258 sizes

1. General Information

1.1. 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.

1.2. These instructions are intended to help you to install and maintain your Rexnord Thomas 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. Symbol descriptions:

STOP Danger of injury to persons.

Damages on the machine possible.

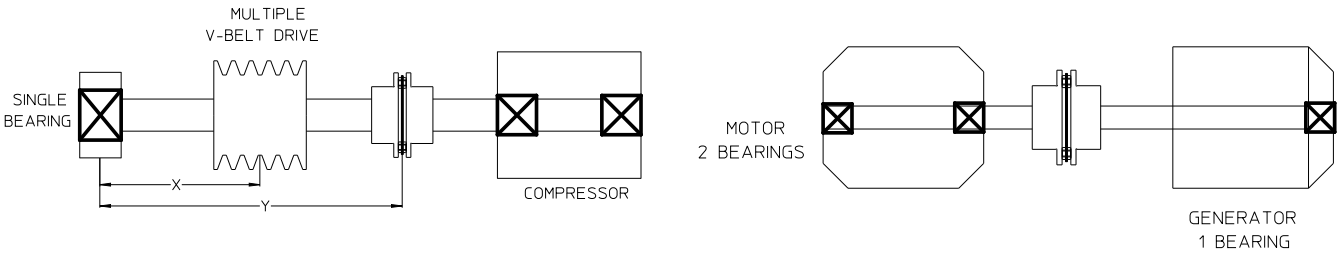
Pointing to important items.

Hints concerning explosion protection.

NOTE: THOMAS XTSRS ARE SINGLE FLEX COUPLINGS, AS SUCH THEY CANNOT ACCOMMODATE PARALLEL OFFSET MISALIGNMENT.

They are not suitable for connecting equipment where both shafts are held radially rigid in their own bearings.

Typical installations include close-coupled motor generator sets or motor compressor units where one shaft is fully supported in it's own bearings, and the other shaft is single-bearing supported as shown below.



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 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.

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. Coupling Diagrams

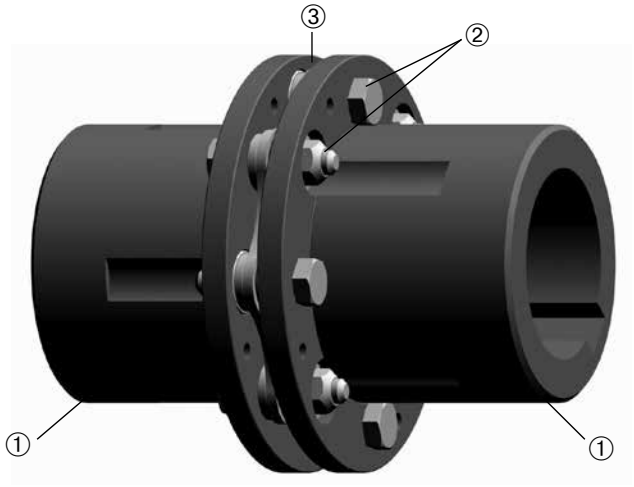


Figure 2 – Rexnord Thomas XTSRS with Standard Hub – Component Identification.

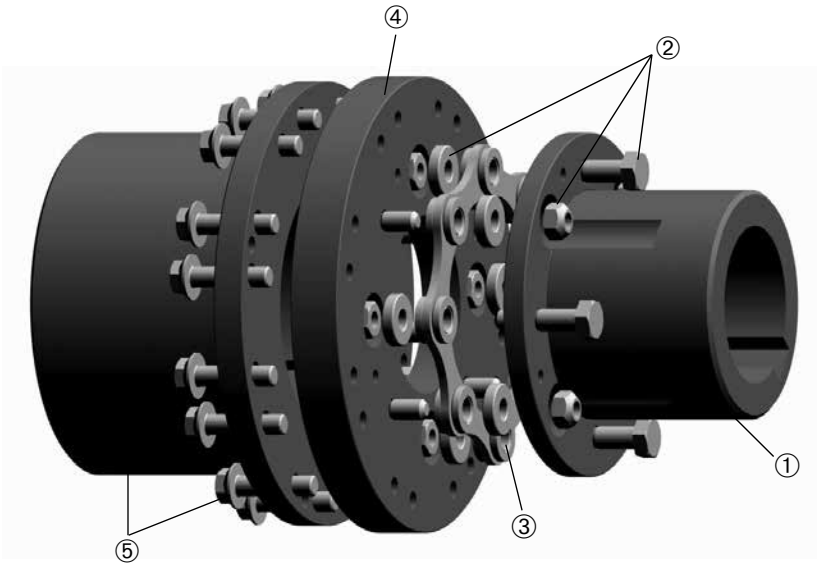
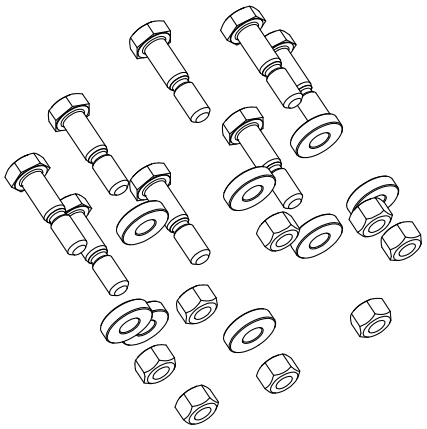
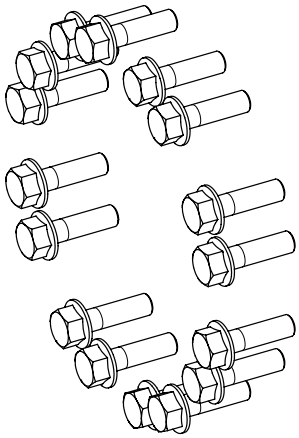


Figure 3 – Rexnord Thomas XTSRS with One Oversize Hub – Component Identification.

Thomas XTSRS couplings with standard hubs do not utilize adapters, as such are not factory tightened to the locknut torque found in Table 5.



Disc Pack Hardware Parts Kit contains Bolts, Locknuts and Overload Bushings for ONE Disc Pack



* Adapter hub capscrews are included with the oversize hub options of LH, XL or XXL hub

Figure 4 – Rexnord Thomas XTSRS Adapter Series Coupling Components

Thomas XTSRS couplings with oversize hub are delivered from the factory consisting of an adapter, disc pack, bolts, overload bushings and locknuts. On this coupling style the locknuts are NOT factory tightened and will be supplied as individual components, please see table 5 for the torque specification.

TABLE 1 — Rexnord Thomas XTSRS Coupling Component Part Numbers

Note: The circled numbers identified in the column headers below, correspond to the coupling component numbers in Figures 2 and 3.

XTSRS Coupling Size	Hubs**				Adapters ④			② Disc Pack Hardware Kit	③ Disc Pack
	① Standard Hub	⑤ LH Hub + Cap Screw Kit	⑤ XL Hub + Cap Screw Kit	⑤ XXL Hub + Cap Screw Kit	LH Part No.	XL Part No.	XXL Part No.		
494	10003201	10611141	10611142	10001611	10003209	10003210	10003211	10611144	10003753
644	10003202	10611142	–	10001612	10003212	–	10003214	10611145	10002803
726	10001191	10001611	10001612	10001613	10000241	10001161	10002621	10001561	10000091
826	10001192	10001612	10001613	10001614	10000242	10001162	10002622	10001562	10000092
996	10001193	10001613	10001614	10001615	10000243	10001163	10002623	10001563	10000093
1088	10001194	10001614	10001615	10001616	10000244	10001164	10002624	10001564	10000094
1298	10001195	10001615	10001616	10001617	10000245	10001165	10002625	10001565	10000095
1548	10001196	10001616	10001617	10001618	10000246	10001166	10002626	10001566	10000096
1698	10001197	10001617	10001618	10001619	10000247	10001167	10002627	10001567	10000097
1928	10001198	10001618	10001619	10001620	10000248	10001168	10002628	10001568	10000098
2068	10001199	10001619	10001620	10001621	10000249	10001169	10002629	10001569	10000099
2278	10001200	10001620	10001621	10001622	10000250	10001170	10002630	10001570	10000100
2468	10001201	10001621	10001622	10001623	10000251	10001171	10002631	10001571	10000101
2698	10001202	10001622	10001623	10001624	10000252	10001172	10002632	10001572	10000102
2888	10001203	10001623	10001624	10001631	10000253	10001173	10002633	10001573	10000103
3058	10001204	10001624	10001631	10001625	10000254	10001174	10002634	10001574	10000104
3358	10001205	10001631	10001625	10001626	10000255	10001175	10002635	10001575	10000105
3668	10001206	10001625	10001626	10001627	10000256	10001176	10002636	10001576	10000106
3908	10001207	10001626	10001627	10001628	10000257	10001177	10002637	10001577	10000107
4178	10001208	10001627	10001628	10001629	10000258	10001178	10002638	10001578	10000108
4588	10001209	10001628	10001629	10001630	10000259	10001179	10002639	10001579	10000109
4918	10001210	10001629	10001630	–	10000260	10001180	–	10001580	10000110
5258	10001211	10001630	–	–	10000261	–	–	10001581	10000111

**All hub part numbers are non bored.

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

DANGER!

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

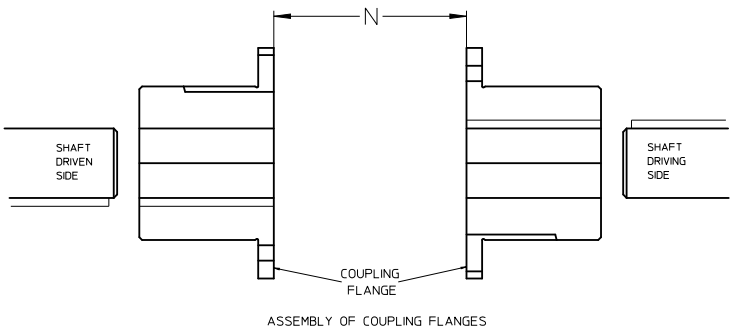


Figure 5 – Mounting Hubs on Shafts

4. Hub Mounting

4.1. Examine the coupling assembly to assure there is no visible damage.

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

4.3. 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 when assembled

4.4. If an over-size hub is being used remove the cap screws that attach the hubs to the adapters, and remove the hub.

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 temperature. A thermal stick applied to the hub surface will help determine the hub temperature.

DANGER!

Touching hot hubs causes burns. Wear safety gloves to avoid contact with hot surfaces.

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	(Nm)	7	9	15	16	27	31	68	75
	(in-lb)	66	76	132	144	240	276	600	660

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

CAUTION: 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.

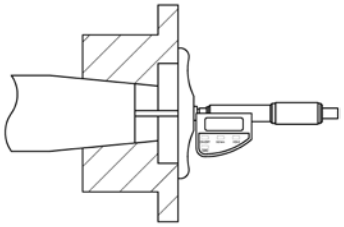
6.2. Install the key(s) in the shaft.

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

6.4. 350°F (177°C) is usually sufficient for carbon steel hubs. Do not exceed 500°F (260°C).

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

Figure 6 – Shaft end to hub face measurement example



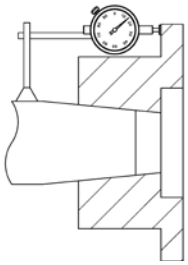


Figure 7 – Dial indicator placement for axial draw measurement example

7. Taper Bore

7.1. STOP 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 6. Record the dimension.

7.5. Mount a dial indicator to read axial hub advancement, as shown in Figure 7. 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.

7.8. 350°F (177°C) is usually sufficient for carbon steel hubs. Do not exceed 500°F (260°C).

7.9. 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.

7.10. 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.

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

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

8. Shaft Alignment

⚠ **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.

☞ **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 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. Shaft alignment can be measured using various established methods, including Laser Alignment, Reverse Dial Indicator, and Rim and Face.

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

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.

As a guide, the maximum and minimum values for dimension "N" shown in Figure 9 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.

8.2. Table 3 shows installation limits for angular alignment. 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 7.

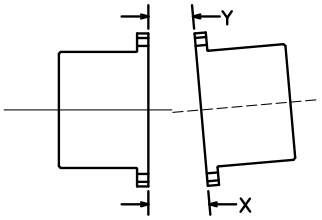


Figure 8 – Angular Misalignment

Note: As the XTSRS design is a single flexing design the coupling does not have the ability to accept parallel misalignment, only angular.

8.3. The "Angular Misalignment" value is the maximum difference between the measurements X and Y taken at opposite ends of the hub flanges, as shown in Figure 8.

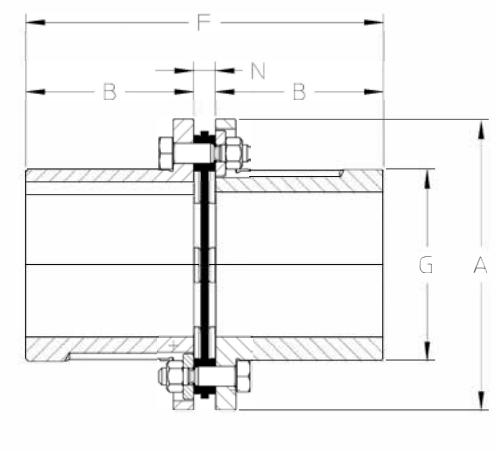


Figure 9 – XTSRS Standard Hubs

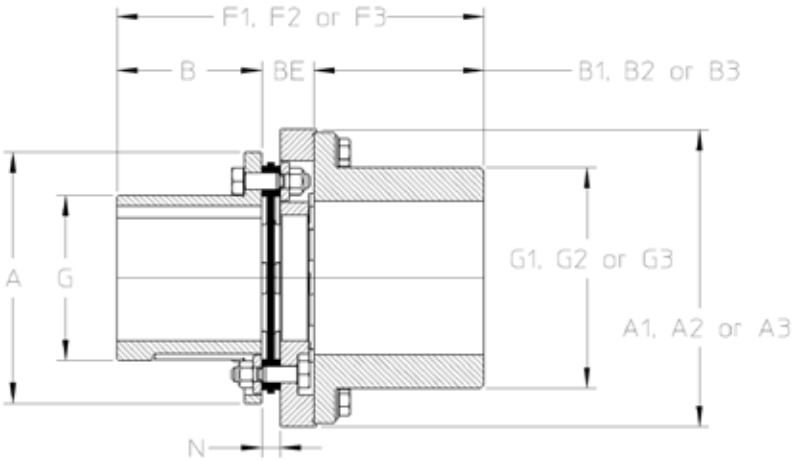


Figure 10 – XTSRS Oversize Hub

TABLE 3 — Alignment Values

XTSRS Coupling Size	"A" Dimension		"N" Dimension				"BE" Dimension (with Adapter)				Installation Axial Limits +/-		Axial Capacity +/-		Recommended Installation Limits◆	
	Std Hub		Min.	Max.	Min.	Max.	Min.	Max	Min.	Max					Max Angular Misalignment Between Hubs (X-Y)	
	(in)	(mm)	(in)	(in)	(mm)	(mm)	(in)	(in)	(mm)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
494	2.76	70.0	0.33	0.35	8.3	8.8	0.81	0.83	20.5	21.0	0.010	0.30	0.020	0.6	0.004	0.10
644	3.35	85.0	0.33	0.35	8.3	8.8	0.85	0.87	21.6	22.1	0.015	0.45	0.030	0.9	0.004	0.10
726	3.74	95.0	0.33	0.35	8.3	8.8	0.82	0.84	20.8	21.3	0.015	0.35	0.030	0.7	0.005	0.13
826	4.25	108.0	0.36	0.38	9.1	9.6	0.95	0.97	24.2	24.7	0.015	0.40	0.030	0.8	0.006	0.15
996	5.08	129.0	0.37	0.39	9.3	9.9	1.12	1.14	28.4	29.0	0.020	0.45	0.040	0.9	0.007	0.18
1088	5.51	140.0	0.40	0.42	10.1	10.7	1.14	1.16	28.9	29.5	0.015	0.35	0.030	0.7	0.005	0.13
1298	6.54	166.0	0.50	0.52	12.6	13.3	1.40	1.43	35.5	36.2	0.015	0.40	0.030	0.8	0.006	0.15
1548	7.76	197.0	0.57	0.59	14.4	15.1	1.63	1.66	41.5	42.2	0.020	0.45	0.040	0.9	0.007	0.18
1698	8.58	218.0	0.61	0.64	15.4	16.2	1.83	1.86	46.5	47.3	0.020	0.50	0.040	1.0	0.008	0.20
1928	9.66	245.4	0.66	0.69	16.7	17.4	1.94	1.97	49.4	50.1	0.025	0.60	0.050	1.2	0.009	0.23
2068	10.39	264.0	0.71	0.74	18.0	18.8	2.25	2.28	57.2	58.0	0.025	0.65	0.050	1.3	0.010	0.25
2278	11.44	290.5	0.74	0.77	18.8	19.5	2.33	2.36	59.3	60.0	0.025	0.70	0.050	1.4	0.011	0.28
2468	12.32	313.0	0.79	0.82	20.1	20.8	2.48	2.51	63.1	63.8	0.030	0.75	0.060	1.5	0.012	0.30
2698	13.50	343.0	0.91	0.94	23.0	23.9	2.81	2.85	71.5	72.4	0.030	0.80	0.060	1.6	0.013	0.33
2888	14.61	371.0	0.97	1.01	24.7	25.6	3.02	3.06	76.7	77.6	0.035	0.90	0.070	1.8	0.014	0.36
3058	15.55	395.0	0.97	1.01	24.7	25.6	3.04	3.07	77.1	78.0	0.035	0.95	0.070	1.9	0.015	0.38
3358	16.81	427.0	1.06	1.09	27.0	27.7	3.39	3.42	86.1	86.8	0.040	1.00	0.080	2.0	0.016	0.41
3668	18.35	466.0	1.18	1.21	29.9	30.8	3.65	3.68	92.7	93.6	0.045	1.10	0.090	2.2	0.018	0.46
3908	19.29	490.0	1.18	1.21	29.9	30.8	3.68	3.71	93.3	94.2	0.045	1.20	0.090	2.4	0.019	0.48
4178	20.63	524.0	1.25	1.30	31.9	33.0	4.01	4.05	101.9	103.0	0.050	1.25	0.100	2.5	0.020	0.51
4588	23.11	587.0	1.40	1.43	35.5	36.4	4.55	4.58	115.5	116.4	0.055	1.40	0.110	2.8	0.022	0.56
4918	24.80	630.0	1.48	1.52	37.6	38.6	4.78	4.82	121.4	122.4	0.060	1.50	0.120	3.0	0.024	0.61
5258	26.46	672.0	1.56	1.61	39.7	40.8	5.13	5.17	130.3	131.4	0.060	1.60	0.120	3.2	0.025	0.64

◆ During installation and/or operation, do not exceed the maximum misalignment capacity of coupling.
For sizes 494 - 644 maximum misalignment capacity of coupling is 2/3° per disc pack.
For sizes 726 - 996 maximum misalignment capacity of coupling is 1/2° per disc pack.
For sizes 1088 - 5258 maximum misalignment capacity of coupling is 1/3° per disc pack.

Note:

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

a. The Angular Misalignment value is the maximum difference between the measurements X and Y taken at opposite ends of the hub flanges, as shown in Figure 7.

9. Final Assembly — Standard Hub Both Ends

☞ If your Rexnord Thomas XTSRS coupling was supplied with an oversize hub option proceed to section 10 for the final assembly procedure to be followed.

9.1. Rexnord Thomas XTSRS Single flexing coupling with standard hubs will have the hubs, disc pack, bolts, locknuts and overload bushings supplied as separate components and will not be factory tightened to the value found in Table 5.

9.2. Refer to the assembly drawing of coupling or Table 3 above to obtain the appropriate 'N' length.

9.3. Verify that the hubs have been mounted to provide the correct "N" dimension shown in Figure 9 and defined in Table 3. The "N" dimension is the distance measured between the faces of the two hub flanges.

9.4. Place disc pack between the flange of the adapter and the flange of the standard hub and align the bolt holes of the disc pack to the bolt holes in the adapter or hub.

9.5. Push bolt through small diameter bolt hole and through disc pack until the face of the disc pack is in contact with the flange face.

9.6. Place overload bushing on threaded side of bolt through large diameter flange clearance hole.

9.7. Apply a clean motor oil to the bolt threads and screw a locknut onto each bolt until hand tight.

9.8. Repeat steps 9.6. through 9.8. until all bolts, overload bushings, and locknuts are in place connecting the standard hub's to the disc pack.

☞ **Note:** All bolts and cap screw threads must be lubricated prior to assembly. A clean motor oil is recommended. Do not use lubricants containing molybdenum disulfide or greases.

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

9.9. Slightly tighten all locknuts using an alternating progressive pattern on each disc pack as shown in Figures 11, 12 and 13 making sure the disc pack is not distorted and all the bolts are fully seated. Tighten each locknut to the appropriate torque value shown in Table 5, using an incremental torque in a progressive alternating pattern as shown in Figures 11, 12 and 13.

As a guide, measure the distance between flanges known as dimension 'N' shown in Figure 9 and given in Table 3.

PRECAUTION

Remove any dust deposits from the coupling components and the coupling elements in an appropriate way for explosive environments.

10. Final Assembly — Standard Hub and Oversize Hub

10.1. Thomas XTSRS couplings with oversize hub are delivered from the factory consisting of two hubs, adapter, disc pack, bolts, overload bushings and locknuts as separate components as such the fasteners are NOT factory tightened to the required torque value as shown in Table 5.

10.2. Verify that the hubs have been mounted to provide the correct "BE" dimension shown in Figure 10 and defined in Table 3. The "BE" dimension is the distance measured between the faces of the two hub flanges. Do not set the DBSE to the 'N' dimension if an oversize hub is utilized.

10.3. Due to the hub-to-adapter piloting feature when an oversize hub is supplied, the connected equipment will need to be moved to permit access to tighten the locknuts connecting the standard hub to the disc pack and the adapter.

10.4. As the equipment was moved to facilitate the tightening of the locknuts when the equipment is returned to the final position for the hub to adapter connection the alignment will need to be checked once again.

10.5. Place disc pack between the flange of the adapter and the flange of the standard hub and align the bolt holes of the disc pack to the bolt holes in the adapter or hub.

10.6. Push bolt through small diameter bolt hole and through disc pack until the face of the disc pack is in contact with the flange face.

10.7. Place overload bushing on threaded side of bolt through large diameter flange clearance hole.

10.8. Apply a clean motor oil to the bolt threads and screw a locknut onto each bolt until hand tight.

10.9. Align the mating component with the large clearance holes positioned over the locknuts and overload bushings installed on the first side and repeat steps 10.5 thru 10.7. until all bolts, overload bushings and locknuts have been installed.

Note: All bolts and cap screw threads must be lubricated prior to assembly. A clean motor oil is recommended. Do not use lubricants containing molybdenum disulfide or greases.

10.10. Slightly tighten all locknuts using an alternating progressive pattern on each disc pack as shown in Figure 11, 12 and 13 making sure the disc pack is not distorted and all the bolts are fully seated. Tighten each locknut to the appropriate torque value shown in Table 5, using an incremental torque in a progressive alternating pattern as shown in Figures 11, 12 and 13.

As a guide, measure the distance between flanges known as dimension 'N' shown in Figure 9 and given in Table 3.

PRECAUTION

Remove any dust deposits from the coupling components and the coupling elements in an appropriate way for explosive environments.

10.11. Move equipment into position so mounted oversize hub can mate up with the adapter assembled to the mounted standard hub.

10.12. Align mounted oversize hub drilled holes to the threaded holes in the adapter.

10.13. Lubricate the cap screw threads and insert the cap screws through the hub flange clearance holes and into the mating threaded holes in the adapter. Tighten each cap screw to the torque as listed in Table 4 below.

PRECAUTION

Remove any dust deposits from the coupling components and the coupling elements in an appropriate way for explosive environments.

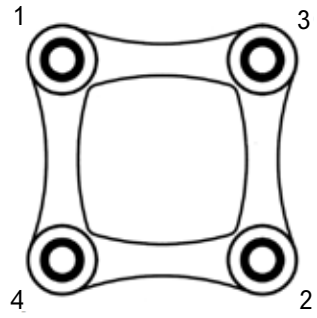


Figure 11 –
494 & 644 Disc Pack

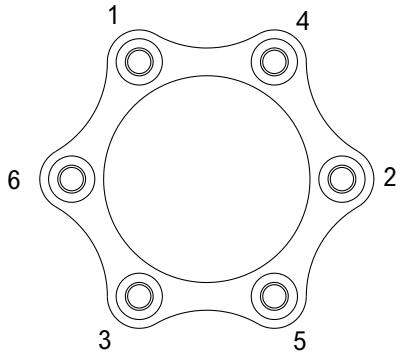


Figure 12 –
726 thru 996 Disc Pack

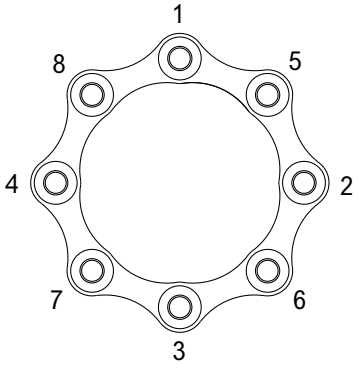


Figure 13 –
1088 thru 5258 Disc Pack

Table 4 — Flange Hex Head Cap Screw Tightening Torques

XTSRS Coupling Size	"A" Dimension LH Hub		Cap Screw for LH Hub				"A" Dimension XL Hub		Cap Screw for XL Hub				"A" Dimension XXL Hub		Cap Screw for XXL Hub			
			Size	Torque		Wrench Size (mm)			Size	Torque		Wrench Size (mm)			Size	Torque		Wrench Size (mm)
	(in)	(mm)	(mm)	(lb-ft)	(Nm)		(in)	(mm)	(mm)	(lb-ft)	(Nm)		(in)	(mm)	(mm)	(lb-ft)	(Nm)	
494	2.77	70	M5x20	6.3	8.5	8	3.36	85	M5x20	6.3	8.5	8	–	–	–	–	–	–
644	3.36	85	M5x20	6	9	8	–	–	–	–	–	–	4.25	108	M6x20	12.3	17	10
726	–	–	–	–	–	–	4.25	108	M6x20	12.3	16.7	10	5.08	129	M8x25	27.0	36	13
826	4.25	108	M6x20	12.3	16.7	10	5.08	129	M8x25	27	36	13	5.51	140	M6x25	12	16.7	10
996	5.08	129	M8x25	27	36	13	5.51	140	M6x25	12.3	16.7	10	6.54	166	M8x30	27.0	36	13
1088	5.51	140	M6x25	12.3	16.7	10	6.54	166	M8x30	27	36	13	7.83	199	M10x35	51	69	15
1298	6.54	166	M8x30	27	36	13	7.83	199	M10x35	51	69	15	8.66	220	M10x40	51	69	15
1548	7.83	199	M10x35	51	69	15	8.66	220	M10x40	51	69	15	9.66	245	M12x40	92	124	16
1698	8.66	220	M10x40	51	69	15	9.66	245	M12x40	92	124	16	10.39	264	M12x40	92	124	16
1928	9.66	245	M12x40	92	124	16	10.39	264	M12x40	92	124	16	11.44	291	M12x50	92	124	16
2068	10.39	264	M12x40	92	124	16	11.44	291	M12x50	92	124	16	12.32	313	M14x50	142	193	18
2278	11.44	291	M12x50	92	124	16	12.32	313	M14x50	142	193	18	13.58	345	M12x60	92	124	16
2468	12.32	313	M14x50	142	193	18	13.58	345	M12x60	92	124	16	15.00	381	M14x70	142	193	18
2698	13.58	345	M12x60	92	124	16	15.00	381	M14x70	142	193	18	15.94	405	M14x70	142	193	18
2888	15.00	381	M14x70	142	193	18	15.94	405	M14x70	142	193	18	17.20	437	M16x70	218	295	21
3058	15.94	405	M14x70	142	193	18	17.20	437	M16x70	218	295	21	18.98	482	M16x80	218	295	21
3358	17.20	437	M16x70	218	295	21	18.98	482	M16x80	218	295	21	19.80	503	M16x80	218	295	21
3668	18.98	482	M16x80	218	295	21	19.80	503	M16x80	218	295	21	20.83	529	M16x80	218	295	21
3908	19.80	503	M16x80	218	295	21	20.83	529	M16x80	218	295	21	23.94	608	M20x90	427	579	27
4178	20.83	529	M16x80	218	295	21	23.94	608	M20x90	427	579	27	25.51	648	M20x100	427	579	27
4588	23.94	608	M20x90	427	579	27	25.51	648	M20x100	427	579	27	26.69	678	M20x110	427	579	27
4918	25.51	648	M20x100	427	579	27	26.69	678	M20x110	427	579	27	–	–	–	–	–	–
5258	26.69	678	M20x110	427	579	27	–	–	–	–	–	–	–	–	–	–	–	–

Note: These torque values are approximate for cap screws with lubricated threads.

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

11. Disc Pack Replacement

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

Standard Hubs Only

11.1. Remove all locknuts, overload bushings and bolts then remove disc pack. Special wrenches may be required.

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

11.2. Place disc pack between the hub flanges and align the bolt holes of the disc pack to the bolt holes in the hubs.

11.3. Push bolt through small diameter bolt hole and through disc pack until the face of the disc pack is in contact with the flange face.

11.4. Place overload bushing on threaded side of bolt through large diameter flange clearance hole.

11.5. Apply a clean motor oil to the bolt threads and screw a locknut onto each bolt until hand tight

11.6. Repeat steps 9.6. through 9.8. until all bolts, overload bushings, and locknuts are in place connecting the standard hub's to the disc pack.

☞ **Note:** All bolts and cap screw threads must be lubricated prior to assembly. A clean motor oil is recommended. Do not use lubricants containing molybdenum disulfide or greases.

11.7. Slightly tighten all locknuts using an alternating progressive pattern on each disc pack as shown in Figures 11, 12 and 13 making sure the disc pack is not distorted and all the bolts are fully seated. Tighten each locknut to the appropriate torque value shown in Table 5, using an incremental torque in a progressive alternating pattern as shown in Figures 11, 12 and 13.

☞ As a guide, measure the distance between flanges known as dimension 'N' shown in Figure 9 and given in Table 3.

PRECAUTION

Remove any dust deposits from the coupling components and the coupling elements in an appropriate way for explosive environments.

Oversize Hub Used Only

11.8. Remove capscrews connecting oversize hub to adapter.

11.9. Move equipment sufficient distance to permit available wrenching access to the coupling bolts.

11.10. Remove all locknuts, overload bushings and bolts then remove disc pack. Special wrenches may be required.

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

11.11. Repeat process in Final Assembly section steps 10.4. thru 10.12.

Table 5 — Lock Nut Tightening Torque

XTSRS Coupling Size	"A" Dimension Std. Hub		Locknut			
			Thread Size (mm)	Torque		Wrench Size (in)
	(in)	(mm)		(lb-ft)	(Nm)	
494	2.76	70.0	M5	4.7	6.4	8
644	3.35	85.0	M5	4.7	6.4	8
726	3.74	95.0	M5	4.7	6.4	8
826	4.25	108.0	M6	8.1	11	11
996	5.08	129.0	M8	18	24	14
1088	5.51	140.0	M8	19	26	15
1298	6.54	166.0	M10	39	53	18
1548	7.76	197.0	M12	66	90	21
1698	8.58	218.0	M14	110	150	22
1928	9.66	245.4	M16	160	220	24
2068	10.39	264.0	M18	240	320	27
2278	11.44	290.5	M20	270	360	30
2468	12.32	313.0	M22	380	520	32
2698	13.50	343.0	M24	580	780	36
2888	14.61	371.0	M27	850	1200	41
3058	15.55	395.0	M27	850	1200	41
3358	16.81	427.0	M30	1200	1600	46
3668	18.35	466.0	M33	1500	2000	50
3908	19.29	490.0	M33	1500	2000	50
4178	20.63	524.0	M36	2100	2800	55
4588	23.11	587.0	M42	3200	4400	65
4918	24.80	630.0	M45	4100	5600	70
5258	26.46	672.0	M48	4900	6700	75

Note:

1. These torque values are approximate for steel bolts with lubricated threads.
2. Bolts should be held from rotating while the locknuts are tightened to the values shown. Do not tighten the fastener by rotating the bolt head.

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