



Rexnord™ Thomas™ XTSR Couplings

OVERVIEW BROCHURE





Compact Size, Powerful Performance

Rexnord™ Thomas™ XTSR couplings offer enhanced features, providing the highest value solution for rotating equipment.



Advancing the Industry

For decades, the reliability of Rexnord™ Thomas™ Series 52 and 71 couplings have led the industry as the most highly specified disc coupling by rotating equipment engineers around the globe. Committed to evolving with our customers and their needs, Regal Rexnord has advanced the Rexnord Thomas Series 52 and 71 couplings. The Rexnord Thomas XTSR52 and XTSR71 disc couplings offer improved features optimized for customer installation, maintenance, operation, and safety.



OPTIMIZED FOR THE INDUSTRY

- **Higher Torque, Lower Mass:** Couplings are optimized for both NEMA/IEC and non-NEMA/IEC drivers
- **All Metric Design:** Globally-accepted units for tools and designs
- **Industry Compliant:** API 671/ISO 10441 (when specified), API 610/ISO 13709, ISO 14691, ATEX II 2GD cT6

INSTALLATION & MAINTENANCE

- **Tapered Bolts:** Quick bolt installation without damaged disc packs
- **Unitized Disc Pack:** Quick and easy replacement with the elimination of loose parts
- **Modular Components:** XTSR52 and XTSR71 share disc packs and hardware components for convenient, lower cost inventory management
- **Clear Product Markings:** Highly visible markings make re-ordering easy

OPERATIONS & SAFETY

- **AGMA Class 9 Compliant:** Precise tolerancing of components reduces forces that cause vibration and wear, which can potentially cause a system failure
- **Overload Bushings:** Provide added protection in case of transient torque overload condition
- **Standard Manganese Phosphate Coating:** Enhanced corrosion protection over popular black oxide
- **Optional Torque Overload Protection System:** Integrates with Rexnord Autogard™ torque limiter to protect connected equipment against harmful torque spikes

Innovative Coupling Solutions

TO REDUCE TOTAL COST OF OWNERSHIP

Count on Regal Rexnord's superior product and service quality, expertise, and technical support to prevent costly maintenance, repairs, and shutdowns, maximizing return over the coupling's total lifecycle.

To see how the proprietary and standard design features of Rexnord™ Thomas™ XTSR couplings specifically help to deliver lower total cost of ownership, see the table below. The table provides points of consideration and potential savings when evaluating coupling total cost of ownership.

Design Feature	Delivered Benefit	Typical Quantified Benefit
Lighter coupling	<ul style="list-style-type: none"> Reduces wear on bearings and seals Reduces potential for unbalance 	\$7,800*
Component modularity	<ul style="list-style-type: none"> Reduces inventory of parts such as disc packs, drive bolts, and washers 	\$1,200**
Torque overload protection system	<ul style="list-style-type: none"> Low cost, high reliability system protection Replace-in-place design, no hub removal or special equipment required 	\$5,500***
Standard Manganese Phosphate protection	<ul style="list-style-type: none"> Prevents corrosion 	\$200****
Total Savings		\$14,700

* Financial calculation based on 1/5 increased bearing life of an average \$375 U.S.- priced bearing + 3 hours to change bearing at \$75 per hour rate + 3 hours non-production time at a rate of \$2,500 per hour.

** Standard cost of inventory reduced by 66% on a typical inventory value of \$3,600.00.

*** Cost of savings of center member element vs. special shear pins (avg. price of \$400) + 2 hours to change element at a \$75 per hour rate + 2 hours non-production time at a rate of \$2,500 per hour.

**** \$12.50 U.S.-priced paint or corrosion protection material + 2 ½ hours to prep and coat.



Single Platform, Broad Application Coverage

As an extension of the standard Rexnord™ Thomas™ spacer-type models (XTSR52 and XTSR71), the XTSR platform has been enhanced to cover applications with relatively long distances between connected equipment, either horizontally or vertically. The expanded offering leverages the modularity of the Series XTSR, sharing common components and hardware to reduce inventory requirements and simplify MRO.

LONG SPAN / FLOATING SHAFT — XTSRLS52 | XTSRLS71 | XTSRLS71-C

- Ideal when shaft spacing exceeds maximum length of standard fully machined spacer designs (XTSR52 / XTSR71)
- Lower weight of optional composite material spacer variant (XTSRLS71-C) enables extended span distances, and can eliminate need for intermediate support bearings
- Available with optional (XTSRLS52) or standard (XTSRLS71) adapters for greater bore capacity, easier installation, and enhanced spacer retention



XTSRLS71



XTSRLS71-C



XTSRGA



XTSRS

LONG SPAN GEAR COUPLING RETROFIT — XTSRGA

- Directly replaces lubricated gear couplings commonly found in many pulp and paper applications with long spans between connected equipment
- Designed to simplify retrofitting — mounts to existing rigid hubs using the gear coupling bolts

SINGLE FLEXING — XTSRS

- Typically used in three-bearing applications where radial load is supported by the coupling, such as single bearing generators
- Two single flexing couplings may be combined with intermediate shaft to support full floating shaft applications
- Accommodates angular misalignment only

XTSR Size	Max. Cont. Torque (lb•in)	Series XTSR Product Range				
		XTSR52	XTSR71	XTSRS	XTSRLS	XTSRGA
494	750					
644	1,280					
726	2,630					
826	4,900					
996	8,210					
1088	19,400					
1298	31,400					
1548	52,300					
1698	72,500					
1928	98,200					
2068	136,000					
2278	176,000					
2468	232,000					
2698	318,000					
2888	416,000					
3058	461,000					
3358	622,000					
3668	834,000					
3908	909,000					
4178	1,130,000					
4588	1,670,000					
4918	2,080,000					
5258	2,510,000					

Available Sizes

23
Standard
Sizes

Composite
Spacer
Option
XTSRLS71-C

Coupling eTools

SELECT. CONFIGURE. BUY.

Whether you're new to selecting couplings for an application or an experienced user, Regal Rexnord offers a variety of eTools to help you make an informed decision on selecting and configuring the best coupling for your application.

COUPLING SELECTOR

Select and size a preferred coupling type by entering your own basic application details including power, speed, shaft diameters, shaft gap, and service factor.

COUPLING SELECTOR

SAVE ARCHIVE INPUTS SOLUTIONS LOAD ARCHIVE

1 Power Power Unit
Select HP

2 Speed
Select

3 Driver Shaft Diameter in


4 Driven Shaft Diameter in

5 Shaft Gap Shaft Gap Unit
Select in

Coupling Service Factor
Select

OR
Equipment Type
Select

CLEAR ALL SOLVE



COUPLING SELECTOR

SAVE ARCHIVE INPUTS SOLUTIONS LOAD ARCHIVE

6 Results

Filter

Coupling Style


- Disc
- Elastomeric
- Gear
- Grid

Torsional Stiffness


- High
- Low
- Medium

Lubricated/NonLubricated

- Lubricated
- Non-Lubricated



Lifalign 1015G32
Lubricated, double-engagement gear coupling
Actual Service Factor in Application: 20790
SELECT
 Compare



Omega ES60
Non-lubricated, split-in-half elastomeric tire coupling
Actual Service Factor in Application: 12500
SELECT
 Compare

Regal Rexnord. With You Every Step of the Way



Regal Rexnord delivers the exact Rexnord™ Thomas™ XTZR coupling solution you need, when you need it:

- **Quick quote turnaround** — 48-hour turnaround time for standard products
- **Lead times** — Two-week lead time on standard products
- **Emergency shipments** — 24-hour shipping for standard product components

WHY CHOOSE THOMAS COUPLINGS?

Unsurpassed proven reliability and quality.

Rexnord Thomas disc couplings are engineered for infinite life. Regal Rexnord's experience and dedication to conservative design standards ensure maximum reliability on the most critical powertrain systems.

Longstanding industry experience.

Since 1914, Regal Rexnord™ engineers have worked with customers to design and enhance Rexnord Thomas disc coupling solutions. Regal Rexnord works with customers to select and customize designs that are optimized for their specific applications.

Solutions-based product offering.

The Rexnord Thomas coupling designs incorporate features optimized for motor, engine, and turbine driven applications. For custom applications, Regal Rexnord frequently works with customers to solve unique problems such as:

- Torsional tuning for variable frequency drives (VFD)
- Balancing for high-speed applications
- Split hub mounting
- Electrically insulated couplings

To learn more about the XTZR coupling offering, contact us today. Or visit our website for more information including:

Online disc coupling product selector, data sheets, drawings, brochures, manuals and technical white papers.

REXNORD™

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Contact us: regalrexnord.com/contact

regalrexnord.com

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