

RoundRail Linear Guides and Components

Linear Ball Bushing® Bearings, 60 Case® Shafting and RoundRail Linear Guides

www.thomsonlinear.com

THOMSON
Linear Motion. Optimized.™



Linear Motion. Optimized.™

Thomson - the Choice for Optimized Motion Solution

Often the ideal design solution is not about finding the fastest, sturdiest, most accurate or even the least expensive option. Rather, the ideal solution is the optimal balance of performance, life and cost.

Quickly Configure the Optimal Mechanical Motion Solution

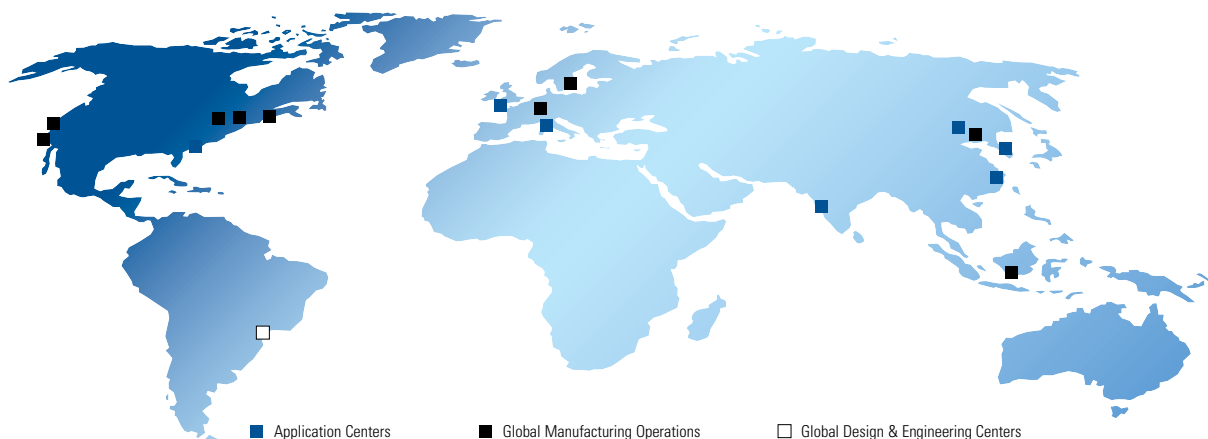
Thomson has several advantages that makes us the supplier of choice for motion control technology.

- Thomson owns the broadest standard product offering of mechanical motion technologies in the industry.
- Modified versions of standard product or white sheet design solutions are routine for us.
- Choose Thomson and gain access to over 70 years of global application experience in industries including packaging, factory automation, material handling, medical, clean energy, printing, automotive, machine tool, aerospace and defense.
- As part of Altra Industrial Motion, we are financially strong and unique in our ability to bring together control, drive, motor, power transmission and precision linear motion technologies.

A Name You Can Trust

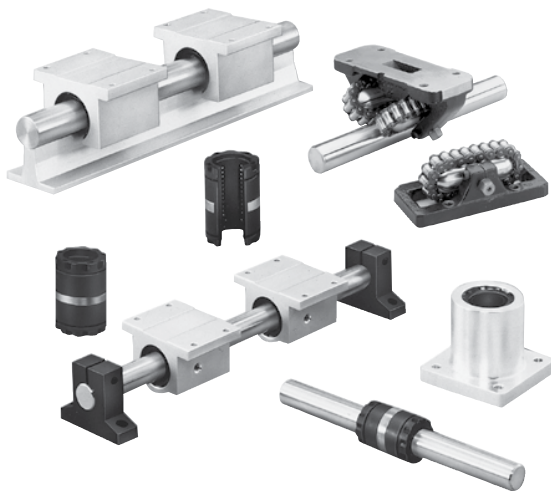
A wealth of product and application information as well as 3D models, software tools, our distributor locator and global contact information is available at www.thomsonlinear.com/contact_us. Talk to us early in the design process to see how Thomson can help identify the optimal balance of performance, life and cost for your next application. And, call us or any of our 2000+ distribution partners around the world for fast delivery of replacement parts.

Local Support Around the Globe





Ball Bushing Bearings



Thomson offers an extensive family of linear bearings. Super Smart Ball Bushing® Bearings are available in inch and metric sizes. Thomson uses the latest technology - universally self-aligning bearings. These bearings are offered in a dual-track design and offer load capacities up to 7,760 lb_f (30,000N). The Super Smart Ball Bushing Bearings are available in sizes 0.5 to 1.5" (8 to 40mm). Super Ball Bushing pillow blocks are available in closed, adjustable and open styles in both single and twin versions. These are the original, self-aligning, precision, anti-friction linear bearing with load capacities up to 4,000 lb_f and speed up to 10 ft./sec (3 m/s). Thomson offers the largest selection of sizes. A Bearings are the original, precision, anti-friction linear bearing with all-steel construction, load capacities up to 5,000 lb_f and high operating temperature capabilities. Thomson Die Set Ball

Bushing Bearings offer high operating temperature capabilities, all-steel construction and load capacities up to 1100 lb_f. RoundWay® bearings are capable of load capacities up to 24,000 lb_f with travel speeds up to 100 ft./sec. These bearings offer high performance in highly contaminated environments.

Metric Super Ball Bushing Bearings offer high performance from superior design. A coefficient of friction as low as 0.001. This allows the use of smaller, less expensive motors, belts, gears and ball screws, when replacing high-friction, plain bearings. A self-aligning capability up to 0.5° compensates for inaccuracies in base flatness or carriage machining. Achieved with Thomson Super Bearing plates, which have defined radius crowns for maximized self-alignment accuracy. Accelerations as high as 150 m/s² and steady state travel speeds up to 3 m/s without the derating factors commonly required with linear guides. Quick-to-ship, drop-in replacement parts for existing applications.

Stainless Steel MultiTrac and A Ball Bushing Bearings are ideal for harsh environments. Stainless steel (440) components resist rust and corrosion. A Bearings withstand up to 600°F (315°C). MultiTrac Ball Bushing Bearings are rated at a maximum of 180°F (82°C). MultiTrac has wear-resistant, engineered-polymer retainers to reduce inertia and noise levels. Quick-to-ship, drop-in replacement parts for existing applications.

FluoroNyliner® and Polymer Bushing Bearings

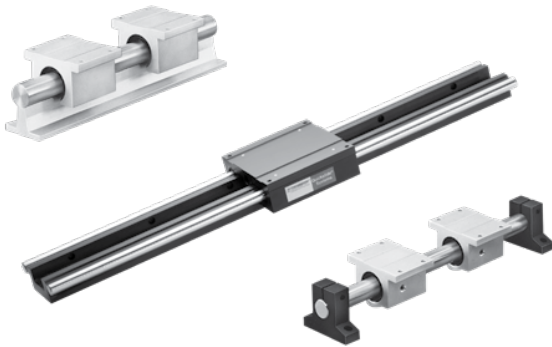


FluoroNyliner® Bushing Bearings are recommended for washdown and contaminated environments. These bearings and pillow blocks offer load capacities up to 14,000 lb_f. Polymer Bushing Bearings, which handle loads up to 2000 lb_f, are ideal for machines in which moment load is non-critical or contamination is a concern.

Polymer bushing bearings offer linear motion designers a reliable, yet economical, option for machines in which alignment and moment load are non-critical or those that require shafting that is incompatible with traditional ball bushings. Polymer bushings are a corrosion-resistant option for low-load, low-speed applications.

Thomson RoundRail Linear Guides and Components

Shafting



While shafts may appear the same, there are significant performance differences due to the manufacturer's selected standards, and the manufacturing processes used to achieve them. The linear inner race demands the highest levels of material cleanliness, surface topography, surface hardening, diameter, taper and roundness, surface finish and straightness to provide optimum performance, minimal maintenance and long life. Unlike common shafting, Thomson 60 Case® LinearRace® shafting is manufactured to the highest quality standards. Our techniques are continuously upgraded with proprietary know-how gained from more than 70 years of linear bearing design and manufacturing. Using 60 Case LinearRace shafting with Thomson Ball Bushing Bearings ensures optimal bearing performance and travel life.

RoundRail Linear Guides



Pre-assembled, ready-to-install stages providing low friction, smooth, accurate motion for a wide range of moment or normal loading configurations. Market applications include factory automation, medical, packaging, machine tool, semiconductor, printing, automotive assembly, aerospace and food processing. Slide tables are available as customizable RoundRail linear guides to multi-axis, turnkey systems complete with motors, drives, controls and electromechanical accessories.

- Applications typically on factory machinery where accurate, smooth linear positioning is required
- Available with servo/stepper motor and drive packages
- Max thrust to 3,100 lb.
- Strokes to 120"
- Loads from 5 - 2,000 lb.
- Repeatability to 0.0002"