



CROSSED ROLLER RAIL SETS

and Anti-Creep Crossed Roller Rail Sets

CROSSED ROLLER RAIL SETS

SERIES	LOAD CAPACITY, LB.	TRAVEL	LENGTH	ACCURACY
MINI NB1	44-184	0.473-1.969	0.788-3.150	0.000080"/"
NB2-NB6 (49 MODELS)	66-2816	0.709-11.614	1.181-15.748	0.000080"/"to 0.000200"/"

Stainless steel available.

Crossed Roller Linear Bearings are compact, precision bearings that can support and guide high loads with high accuracy and repeatability, low friction, and low starting force. A complete range of sizes is supplied for use in precision machine tools, measuring instruments, assembly fixtures, medical instruments, and anywhere linear or reciprocating motion with high reliability and long life is required.

Construction

Each bearing consists of a pair of hardened steel ways containing 90° vee grooves, and a row of alternately crossed cylindrical rollers. The hardened steel rollers are captive in a stainless steel cage for easy handling and assembly and permanent alignment. The ways are installed face to face by the user, with the rollers between the vee grooves.

400 series Stainless Steel also available.

Application

Bearings are normally supplied and installed in sets of two to form an assembly that can support their rated load in any direction or orientation, and can be preloaded to eliminate side play.

Mounting and banking surfaces must be smooth and flat, and accurately parallel, coplanar, or perpendicular respectively to achieve maximum accuracy. Preload forces must be evenly distributed. Dirt and dust must be excluded. Lubrication required depends on the application, ranging from light grease or oil at the time of installation for low speeds (less than 50 inches/min.) and occasional movement to continuous oil bath or mist at 1200 inches/min.

ANTI-CREEP CROSSED ROLLER RAIL SETS

SERIES	LOAD CAPACITY, LB.	TRAVEL	LENGTH	ACCURACY
NB2-AC/NB6-AC (32 MODELS)	66-2816	0.709-11.614	1.181-15.748	0.000.20"/"to 0.000240"/"

The Anti-Creep crossed roller rail system is based on a new concept to prevent roller cage slippage during operation. This system allows you to mount the rail set in any orientation while maintaining direct roller contact to the rail surface eliminating roller cage creep. This system is ideal for vertical applications and where high acceleration and deceleration forces are present.

Construction

Each bearing set contains four V-grooved Rails, eight end screws, and two Anti-Creep crossed roller retainers. The Anti-Creep crossed roller retainers utilize a studded roller and detented rail to prevent the migration of the retainer due to vertical and cantilevered load applications.

Application

Bearings are normally supplied and installed in sets of two to form an assembly that can support their rated load in any direction or orientation, and can be preloaded to eliminate side play.

Mounting and banking surfaces must be smooth and flat, and accurately parallel, coplanar, or perpendicular respectively to achieve maximum accuracy. Preload forces must be evenly distributed. Dirt and dust must be excluded. Lubrication required depends on the application, ranging from light grease or oil at the time of installation for low speeds (less than 50 inches/min.) and occasional movement to continuous oil bath or mist at 1200 inches/min.

For more information on Del-Tron's Crossed Roller Rail Sets, [click here](#).



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