

Specifications

Load Capacities		Four (4) Bearing Carriage	
Dynamic Horizontal	2 million inches (50 km) of travel	7,780 lbs	(3530 kgf)
Dynamic Horizontal	100 million inches (2540 km) of travel	2,090 lbs	(948 kgf)
Static Horizontal		11,640 lbs	(5280 kgf)
Dynamic Roll Moment	2 million inches (50 km) of travel	920 ft-lbs	(1247 N-m)
Dynamic Roll Moment	100 million inches (2540 km) of travel	247 ft-lbs	(335 N-m)
Static Roll Moment		1,680 ft-lbs	(2277 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	980 ft-lbs	(1328 N-m)
Dyn. Pitch & Yaw Moment	100 million inches (2540 km) of travel	263 ft-lbs	(356 N-m)
Static Pitch & Yaw Moment		1,770 ft-lbs	(2400 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	1,945 lbs	(882 kgf)
Each Bearing Dyn. Capacity	100 million inches (2540 km) of travel	525 lbs	(238 kgf)
Each Bearing Static Load Capacity		2,910 lbs	(1320 kgf)
Thrust Force Capacity	10 million screw revolutions	895 lbs	(406 kgf)
Thrust Force Capacity	500 million screw revolutions	240 lbs	(109 kgf)
Maximum Acceleration		772 in/sec ²	(19,6 m/sec ²)
d₁	Center to center distance (spread) between the two rails	3.228 in	(81,99 mm)
d₂	Center to center distance (spacing) of the bearings on a single rail	3.476 in	(88,29 mm)
d_r	Center distance of the bearing to top of carriage plate surface	1.299 in	(32,99 mm)

Other	Four (4) Bearing Carriages
Table Material	Base, Carriage, End Plates & Cover Plate Option - 6061 anodized aluminum
Linear Rail Material	Case Hardened Steel
Screw Material (see pages F-13 to F16)	Acme Screw - Stainless Steel
Screw Material (see pages F-13 to F16)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
Unidirectional Repeatability	+/- 0.0002 in (5 microns)
Bidirectional Repeatability	+/- 0.0002 in (5 microns) to +/- 0.0082 in (208 microns) - depends on selected screw
Straightness	< 0.00016 in/in (< 4,06 microns/25mm)
Flatness	< 0.00016 in/in (< 4,06 microns/25mm)
Orthogonality (multi-axis systems)	< 30 arc-seconds
Friction Coefficient	< 0.01
Motor Mount	NEMA 23 & 34 Mounts, Metric Mounts, Motor Wraps, and Hand Crank Option
Coupling	Three (3) different styles available
Belt Cover Strip Material	Black - Polyurethane

Specifications subject to change without notice