

## Specifications

Load Capacities		Two (2) Bearing Carriage		Four (4) Bearing Carriage	
<b>Dynamic Horizontal</b>	2 million inches (50 km) of travel	1,550 lbs	( 703 kg)	3,100 lbs	( 1406 kg)
<b>Dynamic Horizontal</b>	100 million inches (2540 km) of travel	415 lbs	( 188 kg)	840 lbs	( 381 kg)
<b>Static Horizontal</b>		2,360 lbs	( 1070 kg)	4,720 lbs	( 2140 kg)
<b>Dynamic Roll Moment</b>	2 million inches (50 km) of travel	140 ft-lbs	( 190 N-m)	280 ft-lbs	( 379 N-m)
<b>Dynamic Roll Moment</b>	100 million inches (2540 km) of travel	37 ft-lbs	( 50 N-m)	75 ft-lbs	( 101 N-m)
<b>Static Roll Moment</b>		210 ft-lbs	( 285 N-m)	425 ft-lbs	( 576 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b>	2 million inches (50 km) of travel	18 ft-lbs	( 24 N-m)	240 ft-lbs	( 325 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b>	100 million inches (2540 km) of travel	5 ft-lbs	( 7 N-m)	65 ft-lbs	( 88 N-m)
<b>Static Pitch &amp; Yaw Moment</b>		30 ft-lbs	( 41 N-m)	365 ft-lbs	( 495 N-m)
<b>Each Bearing Dyn. Capacity</b>	2 million inches (50 km) of travel	775 lbs	( 351 kg)	775 lbs	( 351 kg)
<b>Each Bearing Dyn. Capacity</b>	100 million inches (2540 km) of travel	208 lbs	( 94 kg)	208 lbs	( 94 kg)
<b>Each Bearing Static Load Capacity</b>		1,180 lbs	( 535 kg)	1,180 lbs	( 535 kg)
<b>Thrust Force Capacity</b>	10 million screw revolutions	665 lbs	( 302 kg)	665 lbs	( 302 kg)
<b>Thrust Force Capacity</b>	500 million screw revolutions	180 lbs	( 82 kg)	180 lbs	( 82 kg)
<b>Maximum Acceleration</b>		386 in/sec <sup>2</sup>	( 9,8 m/sec <sup>2</sup> )	772 in/sec <sup>2</sup>	( 19,6 m/sec <sup>2</sup> )
<b>d<sub>1</sub></b>	Center to center distance (spread) between the two rails	2.375 in	( 60,3 mm)	2.375 in	( 60,3 mm)
<b>d<sub>2</sub></b>	Center to center distance (spacing) of the bearings on a single rail		-	2.088 in	( 53,0 mm)
<b>d<sub>r</sub></b>	Center distance of the bearing to top of carriage plate surface	.750 in	( 19,1 mm)	.750 in	( 19,1 mm)

Other	For Two (2) & Four (4) Bearing Carriages
<b>Table Material</b>	Base, Carriage, End Plates, & Cover Plate option - 6061 anodized aluminum
<b>Linear Rail Material</b>	Stainless Steel
<b>Screw Material</b> (see pages C-18 to C-23)	Acme Screw - Stainless Steel
<b>Screw Material</b> (see pages C-18 to C-23)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
<b>Unidirectional Repeatability</b>	+/- 0.0001 in (2,5 microns) to +/- 0.0002 in (5 microns) - depends on selected screw
<b>Bidirectional Repeatability</b>	+/- 0.0001 in (2,5 microns) to +/- 0.0082 in (208 microns) - depends on selected screw
<b>Straightness</b>	< 0.00013 in/in (< 3,30 microns/25mm)
<b>Flatness</b>	< 0.00013 in/in (< 3,30 microns/25mm)
<b>Orthogonality</b> (multi-axis systems)	< 30 arc-seconds
<b>Friction Coefficient</b>	< 0.01
<b>Motor Mount</b>	NEMA 23 & 34 Mounts, Metric Mounts, Motor Wraps, and Hand Crank Option
<b>Coupling</b>	Three (3) different styles available
<b>Waycover Material</b>	Hypilon Polyester Bellows firmly mounted to carriage & end plates