

## Specifications

Load Capacities		6 inch (4 bearing) Carriage		12 inch (4 bearing) Carriage	
<b>Dynamic Horizontal</b> <sup>(1)</sup>	2 million inches (50 km) of travel	3,300 lbs	( 1496 kg)	3,300 lbs	( 1496 kg)
<b>Dynamic Horizontal</b> <sup>(1)</sup>	100 million inches (2540 km) of travel	885 lbs	( 401 kg)	885 lbs	( 401 kg)
<b>Static Horizontal</b> <sup>(1)</sup>		5,000 lbs	( 2268 kg)	5,000 lbs	( 2268 kg)
<b>Dynamic Roll Moment</b> <sup>(1)</sup>	2 million inches (50 km) of travel	380 ft-lbs	( 515 N-m)	380 ft-lbs	( 515 N-m)
<b>Dynamic Roll Moment</b> <sup>(1)</sup>	100 million inches (2540 km) of travel	102 ft-lbs	( 138 N-m)	102 ft-lbs	( 138 N-m)
<b>Static Roll Moment</b> <sup>(1)</sup>		575 ft-lbs	( 780 N-m)	575 ft-lbs	( 780 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b> <sup>(1)</sup>	2 million inches (50 km) of travel	150 ft-lbs	( 203 N-m)	525 ft-lbs	( 712 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b> <sup>(1)</sup>	100 million inches (2540 km) of travel	41 ft-lbs	( 55 N-m)	141 ft-lbs	( 191 N-m)
<b>Static Pitch &amp; Yaw Moment</b> <sup>(1)</sup>		225 ft-lbs	( 305 N-m)	790 ft-lbs	( 1071 N-m)
<b>Each Bearing Dyn. Cap.</b> <sup>(1)</sup>	2 million inches (50 km) of travel	825 lbs	( 374 kg)	825 lbs	( 374 kg)
<b>Each Bearing Dyn. Cap.</b> <sup>(1)</sup>	100 million inches (2540 km) of travel	222 lbs	( 100 kg)	222 lbs	( 100 kg)
<b>Each Bearing Static Load Capacity</b> <sup>(1)</sup>		1,250 lbs	( 567 kg)	1,250 lbs	( 567 kg)
<b>Thrust Force Capacity</b>	10 million screw revolutions	895 lbs	( 406 kg)	895 lbs	( 406 kg)
<b>Thrust Force Capacity</b>	500 million screw revolutions	240 lbs	( 109 kg)	240 lbs	( 109 kg)
<b>Maximum Acceleration</b>		772 in/sec <sup>2</sup>	( 19,6 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	4.500 in	(114,3 mm)	4.500 in	(114,3 mm)
<b>d<sub>2</sub></b>	Center to center distance (spacing) of the bearings on a single rail	2.500 in	( 63,5 mm)	8.620 in	(218,9 mm)
<b>d<sub>r</sub></b>	Center distance of the bearing to top of carriage plate surface	1.437 in	( 36,5 mm)	1.437 in	( 36,5 mm)

Other	For Six (6) & Twelve (12) inch Carriages
<b>Table Material</b>	Base, Carriage, End Plates, & Cover Plate option - 6061 anodized aluminum
<b>Linear Rail Material</b>	Case Hardened Steel
<b>Screw Material</b> (see pages D-18 to D-25)	Acme Screw - Stainless Steel
<b>Screw Material</b> (see pages D-18 to D-25)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
<b>Straightness</b>	< 0.00016 in/in (< 4,06 microns/25mm)
<b>Flatness</b>	< 0.00016 in/in (< 4,06 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

### Footnotes:

(1) Derate value by 50 % when load is applied to the open end of the bearing (such as in moment loads and inverted configurations).