

## Specifications

Load Capacities		4 inch (2 bearing) Carriage		8 inch (4 bearing) Carriage	
<b>Dynamic Horizontal</b>	2 million inches (50 km) of travel	1,900 lbs	( 862 kg)	3,800 lbs	( 1724 kg)
<b>Dynamic Horizontal</b>	100 million inches (2540 km) of travel	510 lbs	( 231 kg)	1,020 lbs	( 463 kg)
<b>Static Horizontal</b>		3,400 lbs	( 1542 kg)	6,800 lbs	( 3084 kg)
<b>Dynamic Roll Moment</b>	2 million inches (50 km) of travel	285 ft-lbs	( 386 N-m)	575 ft-lbs	( 780 N-m)
<b>Dynamic Roll Moment</b>	100 million inches (2540 km) of travel	77 ft-lbs	( 104 N-m)	155 ft-lbs	( 210 N-m)
<b>Static Roll Moment</b>		515 ft-lbs	( 698 N-m)	1,030 ft-lbs	( 1396 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b>	2 million inches (50 km) of travel	56 ft-lbs	( 76 N-m)	700 ft-lbs	( 949 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b>	100 million inches (2540 km) of travel	15 ft-lbs	( 20 N-m)	190 ft-lbs	( 258 N-m)
<b>Static Pitch &amp; Yaw Moment</b>		100 ft-lbs	( 136 N-m)	1,255 ft-lbs	( 1702 N-m)
<b>Each Bearing Dyn. Capacity</b>	2 million inches (50 km) of travel	950 lbs	( 431 kg)	950 lbs	( 431 kg)
<b>Each Bearing Dyn. Capacity</b>	100 million inches (2540 km) of travel	255 lbs	( 115 kg)	255 lbs	( 115 kg)
<b>Each Bearing Static Load Capacity</b>		1,700 lbs	( 771 kg)	1,700 lbs	( 771 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>		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	4.300 in	(109,2 mm)	4.300 in	(109,2 mm)
<b>d<sub>2</sub></b>	Center to center distance (spacing) of the bearings on a single rail		-	4.900 in	(124,5 mm)
<b>d<sub>r</sub></b>	Center distance of the bearing to top of carriage plate surface	1.250 in	( 31,8 mm)	1.250 in	( 31,8 mm)

Other	For 4 inch (2 bearing) & 8 inch (4 bearing) 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 G-18 to G-23)	Acme Screw - Stainless Steel
<b>Screw Material</b> (see pages G-18 to G-23)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
<b>Straightness</b>	< 0.00004 in/in (< 1,02 microns/25mm)
<b>Flatness</b>	< 0.00004 in/in (< 1,02 microns/25mm)
<b>Orthogonality</b> (multi-axis systems)	< 15 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