Specifications

Load Capacities		6 inch (2 bearing) Carriage	12 inch (4 bearing) Carriage
Dynamic Horizontal	2 million inches (50 km) of travel	4,400 lbs (1996 kg)	8,800 lbs (3992 kg)
Dynamic Horizontal	100 million inches (2540 km) of travel	1,180 lbs (535 kg)	2,360 lbs (1070 kg)
Static Horizontal		7,600 lbs (3447 kg)	15,200 lbs (6895 kg)
Dynamic Roll Moment	2 million inches (50 km) of travel	790 ft-lbs (1071 N-m)	1,580 ft-lbs (2142 N-m)
Dynamic Roll Moment	100 million inches (2540 km) of travel	210 ft-lbs (285 N-m)	425 ft-lbs (576 N-m)
Static Roll Moment		1,365 ft-lbs (1851 N-m)	2,730 ft-lbs (3701 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	175 ft-lbs (237 N-m)	2,485 ft-lbs (3369 N-m)
Dyn. Pitch & Yaw Moment	100 million inches (2540 km) of travel	47 ft-lbs (64 N-m)	670 ft-lbs (908 N-m)
Static Pitch & Yaw Moment		300 ft-lbs (407 N-m)	4,300 ft-lbs (5830 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	2,200 lbs (998 kg)	2,200 lbs (998 kg)
Each Bearing Dyn. Capacity	100 million inches (2540 km) of travel	590 lbs (265 kg)	590 lbs (265 kg)
Each Bearing Static Load Capacity		3,800 lbs (1724 kg)	3,800 lbs (1724 kg)
Thrust Force Capacity	10 million screw revolutions	1,050 lbs (476 kg)	1,050 lbs (476 kg)
Thrust Force Capacity	500 million screw revolutions	270 lbs (122 kg)	270 lbs (122 kg)
Maximum Acceleration		386 in/sec^2 (9,8 m/sec^2)	772 in/sec^2 (19,6 m/sec^2)
d_1	Center to center distance (spread) between the two rails	5.280 in (134,1 mm)	5.280 in (134,1 mm)
d_2	Center to center distance (spacing) of the bearings on a single rail	-	7.870 in (199,9 mm)
d_r	Center distance of the bearing to top of carriage plate surface	1.900 in (48,3 mm)	1.900 in (48,3 mm)

Other	For 6 inch (2 bearing) & 12 inch (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 H-18 to H-21)	Acme Screw - Stainless Steel
Screw Material (see pages H-18 to H-21)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
Straightness	< 0.00004 in/in (< 1,02 microns/25mm)
Flatness	< 0.00004 in/in (< 1,02 microns/25mm)
Orthogonality (multi-axis systems)	< 15 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
Waycover Material	Hypilon Polyester Bellows firmly mounted to carriage & end plates