

Specifications

Load Capacities		6 inch (2 bearing) Carriage		12 inch (4 bearing) Carriage	
Dynamic Horizontal	2 million inches (50 km) of travel	8,300 lbs	(3765 kg)	16,600 lbs	(7530 kg)
Dynamic Horizontal	100 million inches (2540 km) of travel	2,225 lbs	(1009 kg)	4,455 lbs	(2020 kg)
Static Horizontal		13,600 lbs	(6169 kg)	27,200 lbs	(12338 kg)
Dynamic Roll Moment	2 million inches (50 km) of travel	1,655 ft-lbs	(2244 N-m)	3,310 ft-lbs	(4488 N-m)
Dynamic Roll Moment	100 million inches (2540 km) of travel	445 ft-lbs	(603 N-m)	895 ft-lbs	(1213 N-m)
Static Roll Moment		2,715 ft-lbs	(3681 N-m)	5,425 ft-lbs	(7355 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	455 ft-lbs	(617 N-m)	3,930 ft-lbs	(5328 N-m)
Dyn. Pitch & Yaw Moment	100 million inches (2540 km) of travel	121 ft-lbs	(164 N-m)	1,065 ft-lbs	(1444 N-m)
Static Pitch & Yaw Moment		635 ft-lbs	(861 N-m)	6,450 ft-lbs	(8745 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	4,150 lbs	(1882 kg)	4,150 lbs	(1882 kg)
Each Bearing Dyn. Capacity	100 million inches (2540 km) of travel	1,115 lbs	(505 kg)	1,115 lbs	(505 kg)
Each Bearing Static Load Capacity		6,800 lbs	(3084 kg)	6,800 lbs	(3084 kg)
Thrust Force Capacity	10 million screw revolutions	1,685 lbs	(764 kg)	1,685 lbs	(764 kg)
Thrust Force Capacity	500 million screw revolutions	455 lbs	(206 kg)	455 lbs	(206 kg)
Maximum Acceleration		386 in/sec ²	(9,8 m/sec ²)	772 in/sec ²	(19,6 m/sec ²)
d₁	Center to center distance (spread) between the two rails	6.000 in	(152,4 mm)	6.000 in	(152,4 mm)
d₂	Center to center distance (spacing) of the bearings on a single rail		-	6.730 in	(170,9 mm)
d_r	Center distance of the bearing to top of carriage plate surface	2.180 in	(55,4 mm)	2.180 in	(55,4 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 I-18 to I-21)	Acme Screw - Stainless Steel
Screw Material (see pages I-18 to I-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