

Specifications

Load Capacities		Two (2) Bearing Carriage		Four (4) Bearing Carriage	
Dynamic Horizontal	2 million inches (50 km) of travel	3,890 lbs	(1765 kg)	7,780 lbs	(3530 kg)
Dynamic Horizontal	100 million inches (2540 km) of travel	1,045 lbs	(474 kg)	2,090 lbs	(948 kg)
Static Horizontal		5,820 lbs	(2640 kg)	11,640 lbs	(5280 kg)
Dynamic Roll Moment	2 million inches (50 km) of travel	510 ft-lbs	(690 N-m)	1,025 ft-lbs	(1390 N-m)
Dynamic Roll Moment	100 million inches (2540 km) of travel	137 ft-lbs	(185 N-m)	275 ft-lbs	(370 N-m)
Static Roll Moment		915 ft-lbs	(1240 N-m)	1,830 ft-lbs	(2480 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	71 ft-lbs	(96 N-m)	930 ft-lbs	(1260 N-m)
Dyn. Pitch & Yaw Moment	100 million inches (2540 km) of travel	19 ft-lbs	(26 N-m)	250 ft-lbs	(339 N-m)
Static Pitch & Yaw Moment		126 ft-lbs	(170 N-m)	1,670 ft-lbs	(2260 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	1,945 lbs	(882 kg)	1,945 lbs	(882 kg)
Each Bearing Dyn. Capacity	100 million inches (2540 km) of travel	525 lbs	(238 kg)	525 lbs	(238 kg)
Each Bearing Static Load Capacity		2,910 lbs	(1320 kg)	2,910 lbs	(1320 kg)
Maximum Belt Tensile Force		350 lbs	(159 kg)	350 lbs	(159 kg)
Maximum Carriage Thrust Force		230 lbs	(104 kg)	230 lbs	(104 kg)
Maximum Speed		118 in/sec	(3 m/sec)	118 in/sec	(3 m/sec)
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	3.660 in	(92,96 mm)	3.660 in	(92,96 mm)
d₂	Center to center distance (spacing) of the bearings on a single rail		-	3.290 in	(83,57 mm)
d_r	Center distance of the bearing to top of carriage plate surface	1.320 in	(33,53 mm)	1.320 in	(33,53 mm)

Other	For Two (2) & Four (4) Bearing Carriages
Table Material	Base, Carriage, End Plates, & Cover Plate - 6061 anodized aluminum
Linear Rail Material	Case Hardened Steel
Belt Properties	Black, 32 mm wide, Polyurethane, Steel reinforced belt
Drive Pulley Weight	0.39 lbs (0,18 kg)
Drive Pulley Diameter	1.128 in (28,65 mm)
Drive Lead	3.543 in (90,00 mm)
Belt Stretch - x Load (lbs or N)	0.00011 in/ft per lbs (0,00212 mm/m per N)
Unidirectional Repeatability	+/- 0.001 in (+/- 0,0254 mm)
Bidirectional Repeatability	+/- 0.004 in (+/- 0,1016 mm)
Position Accuracy (Belt) ⁽¹⁾	< 0.010 in/ft (< 0,254 mm/300mm)
Orthogonality (multi-axis systems)	< 30 arc-seconds
Friction Coefficient	< 0.01
Breakaway Torque	< 75 oz-in (0,530 N-m)
Motor Mount	NEMA 23 & 34 Mounts, Metric Mounts, and Gearheads
Coupling	Two (2) different styles available
Waycover Material	Hypilon Polyester Bellows mounted to carriage & end plates

Footnotes:

(1) Position accuracy varies based on belt stretch. The given rating is based upon a carriage speed of 5 inches/sec (127 mm/sec) and a no load condition.