

Specifications

Load Capacities		One (1) Bearing Carriage	Two (2) Bearing Carriage
Dynamic Horizontal	2 million inches (50 km) of travel	100 lbs (45 kg)	200 lbs (90 kg)
Dynamic Horizontal	100 million inches (2540 km) of travel	27 lbs (12 kg)	54 lbs (24 kg)
Static Horizontal		200 lbs (90 kg)	400 lbs (180 kg)
Dynamic Roll Moment	2 million inches (50 km) of travel	8 ft-lbs (11 N-m)	16 ft-lbs (22 N-m)
Dynamic Roll Moment	100 million inches (2540 km) of travel	2 ft-lbs (3 N-m)	4 ft-lbs (6 N-m)
Static Roll Moment		14 ft-lbs (19 N-m)	28 ft-lbs (38 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	4 ft-lbs (5,4 N-m)	15 ft-lbs (20 N-m)
Dyn. Pitch & Yaw Moment	100 million inches (2540 km) of travel	1 ft-lbs (1,9 N-m)	4 ft-lbs (6 N-m)
Static Pitch & Yaw Moment		8 ft-lbs (10 N-m)	30 ft-lbs (40 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	100 lbs (45 kg)	100 lbs (45 kg)
Each Bearing Dyn. Capacity	100 million inches (2540 km) of travel	27 lbs (12 kg)	27 lbs (12 kg)
Each Bearing Static Load Capacity		200 lbs (90 kg)	200 lbs (90 kg)
Maximum Belt Tensile Force		250 lbs (113 kg)	250 lbs (113 kg)
Maximum Carriage Thrust Force		115 lbs (52 kg)	115 lbs (52 kg)
Maximum Speed		78 in/sec (2 m/sec)	78 in/sec (2 m/sec)
Maximum Acceleration		193 in/sec ² (4,9 m/sec ²)	386 in/sec ² (9,8 m/sec ²)
d₂	Center to center distance (spacing) of each bearing on a single rail	-	2.088 in (53,0 mm)
d_r	Center distance of the bearing to top of carriage plate surface	1.375 in (34,9 mm)	1.375 in (34,9 mm)

Other	For One (1) & Two (2) Bearing Carriages
Table Material	Base, Carriage, End Plates, & Cover Plate - 6061 anodized aluminum
Linear Rail Material	Stainless Steel
Belt Properties	Black, 16 mm wide, Polyurethane, Steel reinforced belt
Drive Pulley Weight	0.21 lbs (0,10 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)	0.00025 in/ft per lbs (0,00476 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	< 40 oz-in (0,282 N-m)
Motor Mount	NEMA 23 & 34 Mounts, Metric Mounts, and Gearheads
Coupling	Two (2) different styles available

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.