

Specifications

| Load Capacities | | Four (4) Bearing Carriage | | Six (6) Bearing Carriage | |
|--|--|---------------------------|----------------------------|--------------------------|----------------------------|
| Dynamic Horizontal | 2 million inches (50 km) of travel | 7,780 lbs | (3530 kgf) | 11,670 lbs | (5290 kgf) |
| Dynamic Horizontal | 100 million inches (2540 km) of travel | 2,090 lbs | (948 kgf) | 3,135 lbs | (1420 kgf) |
| Static Horizontal | | 11,640 lbs | (5280 kgf) | 17,460 lbs | (7920 kgf) |
| Dynamic Roll Moment | 2 million inches (50 km) of travel | 1,025 ft-lbs | (1390 N-m) | 1,540 ft-lbs | (2085 N-m) |
| Dynamic Roll Moment | 100 million inches (2540 km) of travel | 275 ft-lbs | (370 N-m) | 410 ft-lbs | (555 N-m) |
| Static Roll Moment | | 1,830 ft-lbs | (2480 N-m) | 2,750 ft-lbs | (3725 N-m) |
| Dyn. Pitch & Yaw Moment | 2 million inches (50 km) of travel | 2,160 ft-lbs | (2925 N-m) | 2,235 ft-lbs | (3030 N-m) |
| Dyn. Pitch & Yaw Moment | 100 million inches (2540 km) of travel | 580 ft-lbs | (785 N-m) | 600 ft-lbs | (810 N-m) |
| Static Pitch & Yaw Moment | | 3,860 ft-lbs | (5230 N-m) | 3,980 ft-lbs | (5395 N-m) |
| Each Bearing Dyn. Capacity | 2 million inches (50 km) of travel | 1,945 lbs | (882 kgf) | 1,945 lbs | (882 kgf) |
| Each Bearing Dyn. Capacity | 100 million inches (2540 km) of travel | 525 lbs | (238 kgf) | 525 lbs | (238 kgf) |
| Each Bearing Static Load Capacity | | 2,910 lbs | (1320 kgf) | 2,910 lbs | (1320 kgf) |
| 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 | | 772 in/sec ² | (19,6 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 | 9.290 in | (235,97 mm) | 4.645 in | (117,98 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 Four (4) & Six (6) 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.