

Specifications

Load Capacities	300 series ⁽¹⁾	400 series ⁽¹⁾
Dynamic Horizontal (1 million revs)	225 lbs (102 kg)	1000 lbs (453 kg)
Dynamic Inverted (1 million revs)	100 lbs (45 kg)	1000 lbs (453 kg)
Static Horizontal	250 lbs (113 kg)	1000 lbs (453 kg)
Dynamic Moment (1 million revs)	20 ft-lbs (27 N-m)	225 ft-lbs (305 N-m)
Static Moment	25 ft-lbs (34 N-m)	250 ft-lbs (339 N-m)
Maximum Input Speed	30 rev/sec	9 rev/sec
Maximum Input Acceleration	75 rev/sec ²	50 rev/sec ²
Maximum Input Torque	125 oz-in (0,88 N-m)	1,000 oz-in (7,06 N-m)

Other	300 series	400 series
Table Material	Base & Table Top - 6061 black anodized aluminum	
Worm Wheel Type	Bronze (AGMA - class 10)	
Worm Gear Type	Steel (AGMA - class 10)	
Duty Cycle	60 %	
(gear ratio)	45:1 90:1 180:1	30:1 90:1 180:1 270:1 360:1
Maximum Table Top Speed	40 rpm 20 rpm 10 rpm	18 rpm 6 rpm 3 rpm 2 rpm 1.5 rpm
Worm Gear Efficiency	50 % 60 % 70 %	50 % 60 % 60 % 60 % 60 %
Worm Gear Inertia (oz-in ²)	11.5 11.5 11.5	38.6 38.6 50.2 61.7 73.3
Accuracy	< 150 arc-sec	
Unidirectional Repeatability	< 10 arc-sec	
Bidirectional Repeatability	< 40 arc-sec	
Backlash	< 30 arc-sec	
Runout (vertical runout)	Standard < 0.003 in (0,076 mm) ⁽²⁾ Precision < 0.001 in (0,025 mm) ⁽²⁾	< 0.002 in (0,05 mm) ⁽³⁾
Concentricity (radial runout)	Standard < 0.003 in (0,076 mm) ⁽⁴⁾ Precision < 0.001 in (0,025 mm) ⁽⁴⁾	< 0.002 in (0,05 mm) ⁽⁵⁾
Wobble (axis runout)	Standard < 80 arc-sec ⁽⁶⁾ Precision < 40 arc-sec ⁽⁶⁾	< 60 arc-sec ⁽⁶⁾
Breakaway Torque	< 20 oz-in (0,141 N-m)	
	< 60 oz-in (0,424 N-m)	

Footnotes:

- (1) Dynamic load capacities & life are limited by the stresses exerted upon the worm gear assembly.
- (2) Measured at 6 inches (152,4 mm) from table top center. Total indicator runout.
- (3) Measured at 5.5 inches (139,7 mm) from table top center. Total indicator runout.
- (4) Measured at 0.75 inches (19,1 mm) from table top center. Total indicator runout.
- (5) Measured at 4.5 inches (114,3 mm) from table top center. Total indicator runout.
- (6) Based on the centerline of the table top.