MOTUS LABS

Orbital Flex™ Design

ML2000

KEY FEATURES

- Zero Backlash
- High Torque
- High Torsional Rigidity
- Linear Torsional Stiffness
- Cross Roller Output Bearing

Specification	ML2000-86-60
Ratio	60:1
Rated Output Torque	45 Nm
Repeatable Peak Output Torque*	75 Nm
Rated Input Speed	2000 RPM
Repeatable Peak Input Speed*	4000 RPM
Efficiency*	64%
Backlash**	0 Arcsec
Starting Torque	0.3 Nm
Positional Accuracy (One-Way)	2 Arcmin
Mass	<1500 g
Input Inertia	0.662x10^-4 kg-m^2
Torsional Stiffness	7 Nm/Arcmin
Operating Temperature (Ambient)	0-40 C
IP Rating ***	54
Noise****	<70 dB
Output Bearing Maximum Dynamic Moment Load	100 Nm
Output Bearing Moment Stiffness	13.5x10^4 Nm/rad

* Under defined conditions ** Measured at less than 18 Arcsec *** Awaiting third party verification **** Noise at rated speed in ambient room

Motus Labs designs and builds precision gear solutions for robotic and motion control applications to enable superior actuator performance. Our innovative, patent pending Orbital Flex™ gear design offers zero backlash, high torque and high torsional rigidity. We create solutions for emerging robotics applications that require the most sophisticated engineering and performance.

ML2000 gears are completing an extensive testing process to determine both gear degradation and gear life. To date, testing efforts have shown the ML2000 to maintain key specifications, including zero backlash, for 10,000 hours without any gear failure.