MOTUS LABS

Orbital Flex™ Design

ML2000

KEY FEATURES

- High Torque
- High Rigidity
- High Positional Accuracy
- Linear Torsional Stiffness
- Integrated Cross Roller Output Bearing

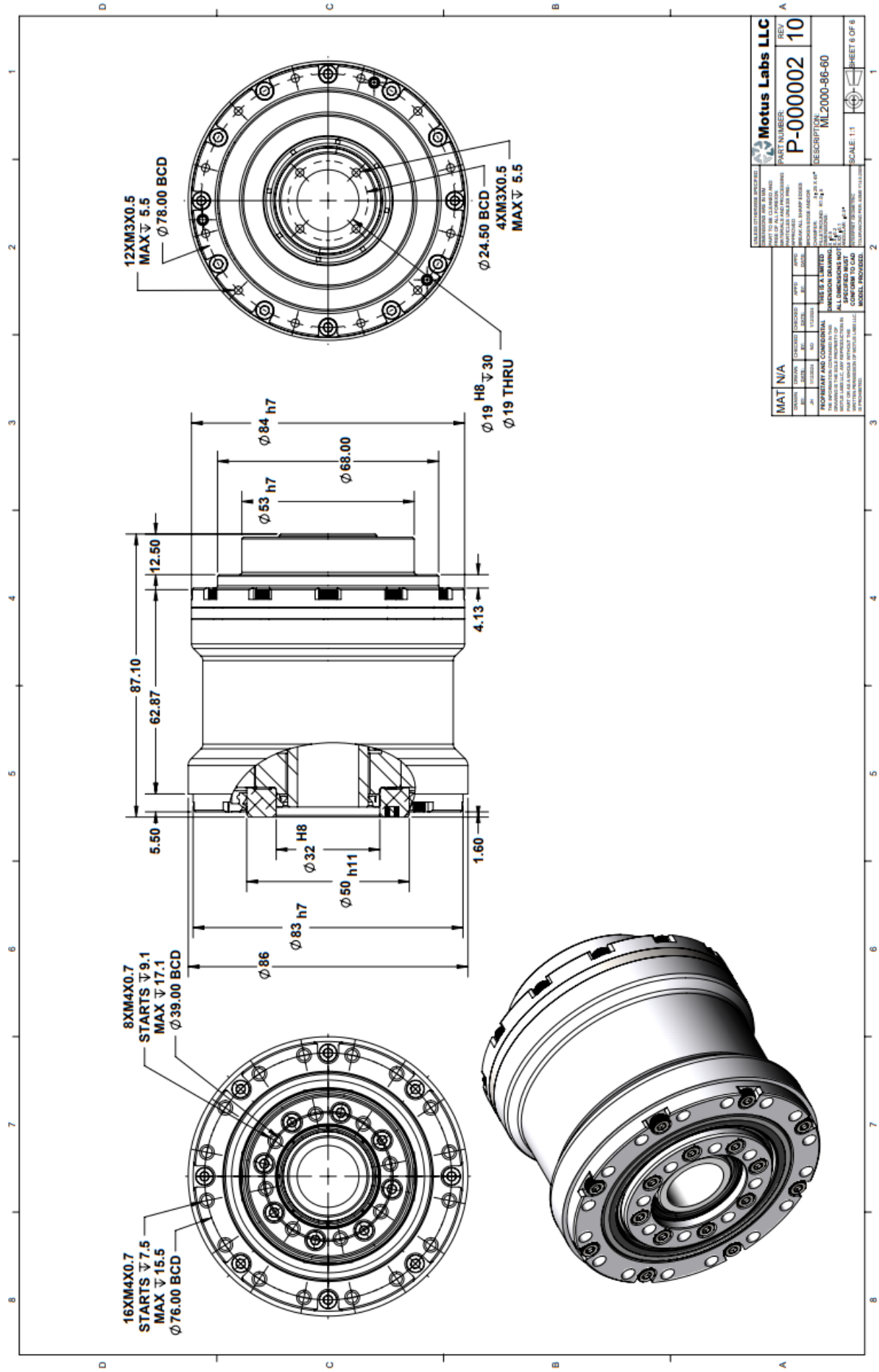
All of this, while maintaining zero backlash for 10,000 hours.

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

ML2000 Life Testing has demonstrated that the ML2000 gear series sustains critical specifications, such as zero backlash, **over a span of 10,000 hours** without experiencing any gear failures. Our thorough life testing procedure evaluates both gear degradation and failure, providing customers with insights into the degradation and eventual failure of our gears.

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 high torque, high rigidity, and zero backlash for 10,000 hours. We create solutions for emerging robotics applications that require the most sophisticated engineering and performance.


12XM3X0.5
MAX↧ 5.5
⌀78.00 BCD
⌀24.50 BCD
4XM3X0.5
MAX↧ 5.5
⌀19 H8↧30
⌀19 THRU
⌀84 h7
⌀68.00
⌀53 h7
12.50
4.13
87.10
62.87
5.50
1.60
H8
⌀32
⌀50 h11
⌀83 h7
⌀86
8XM4X0.7
STARTS ↧9.1
MAX ↧17.1
⌀39.00 BCD
16XM4X0.7
STARTS ↧7.5
MAX ↧15.5
⌀76.00 BCD
Motus Labs LLC
PART NUMBER
P-000002
REV
10
DESCRIPTION
ML2000-86-60
MAT N/A
SCALE: 1:1
SHEET 6 OF 6