

## Orbital Flex™ Design

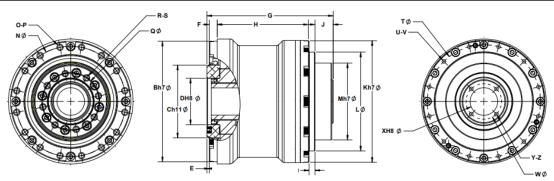




## **KEY FEATURES**

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

|                                  | ML2000-75-50<br>OD 75, Ratio-50:1  | ML2000-86-60<br>OD 86, Ratio-60:1        | ML2000-97-70<br>OD-97, Ratio-70:1 |  |  |  |  |
|----------------------------------|------------------------------------|--|-----------------------------------|--|--|--|--|
|                                  | Available                          | Available                                | Available                         |  |  |  |  |
| Rated Output Torque              | 15 Nm                              | 45 Nm                                    | 75 Nm                             |  |  |  |  |
| Repeatable Peak Output Torque*   | 40 Nm                              | 75 Nm                                    | 120 Nm                            |  |  |  |  |
| Rated Input Speed*               | 2000 RPM                           | 2000 RPM                                 | 2000 RPM                          |  |  |  |  |
| Repeatable Peak<br>Input Speed*  | 4000 RPM                           | 4000 RPM                                 | 4000 RPM                          |  |  |  |  |
| Efficiency*                      | 65%                                | 64%                                      | 65%                               |  |  |  |  |
| Backlash**                       | 0 Arcsec                           | 0 Arcsec                                 | 0 Arcsec                          |  |  |  |  |
| Torsional Stiffness              | 3.5 Nm/Arcmin                      | 7 Nm/Arcmin                              | 24 Nm/Arcmin                      |  |  |  |  |
| Positional Accuracy<br>(one-Way) | 3 Arcmin                           | 2 Arcmin                                 | 2 Arcmin                          |  |  |  |  |
| Mass                             | 1200 g                             | 1500 g                                   | 1950 g                            |  |  |  |  |
| Noise***                         | <70 dB                             | <70 dB                                   | <70 dB                            |  |  |  |  |
| * Under defined conditions       | ** Measured at less than 18 Arcsec | *** Noise at rated speed in ambient room |                                   |  |  |  |  |



| ML2000 - | Α  | B h7 | C h11 | D <sub>H8</sub> | E   | F   | G     | Н     | -1   | J    | K <sub>h7</sub> | L <sub>h7</sub> | М    | N    | О      |           | Р  | Q     | R      |           | S | Т    | U      | v  | w    | X <sub>H8</sub> | Υ      | Z |
|----------|----|------|-------|-----------------|-----|-----|-------|-------|------|------|-----------------|-----------------|------|------|--------|-----------|----|-------|--------|-----------|---|------|--------|----|------|-----------------|--------|---|
| 75       | 75 | 73   |       | 23              |     | 5.5 | 81    | 64.5  | 3    | 10   | 75              | 60              | 47.5 | 65.5 | M4x0.7 | φ4.5x13.5 | 16 | 30    | M3x0.5 | φ3.5x10.5 | 8 | 69.4 | M3x0.5 | 12 | 20   | 14              | M3x0.5 | 4 |
| 86       | 86 | 83   | 50    | 32              | 1.6 | 5.5 | 87.1  | 63.37 | 4.13 | 12.5 | 84              | 68              | 53   | 76   | M4x0.7 | φ4.5x7.5  | 16 | 39    | M4x7.0 | φ4.5x9.1  | 8 | 78   | M3x0.5 | 12 | 24.5 | 19              | M3x0.5 | 4 |
| 97       | 97 | 94   |       | 32              |     | 7   | 98.84 | 72.44 | 4.91 | 13.5 | 97              | 82              | 62   | 86   | M4x0.7 | φ4.5x15.0 | 16 | 42.75 | M4x7.0 | φ4.5x15.0 | 8 | 91   | M3x0.5 | 16 | 25   | 21              | M3x0.5 | 4 |

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.