

**Feature Summary:**

- Very stiff rotational correction stage for heavy payloads
- +/- 5 degrees of rotation
- Class 3 preloaded precision ball-screw with a brushless motor drivetrain for high precision.
- Options for encoder on drive motor and/or encoder on output
- Resolution to 0.5 arc-seconds
- Precision cross-roller bearings deliver high capacity, excellent rigidity and long life.
- Aluminum or cast iron base available.
- N.O. or N.C. Limit & Home switches.
- Class 10 cleanroom option

**Overview**

Primatics PLR77 Series rotary positioning tables offer a variety of options for systems in need of small, stiff angular corrections. An innovative drive system creates arc-second accuracy and fast settling times, making the PLR77 ideal for point to point indexing, assembly and optical applications where worm drives don't provide the necessary accuracy, throughput or life.

**More Durable Drivetrain**

Unlike worm drivetrains that can wear prematurely and develop backlash, our unique tangential drive system uses a precision grade ballscrew that circumvents these problems. The low friction of a ballscrew drivetrain delivers significantly less backlash than a worm drive and ensures quality positioning for millions of cycles, even in high speed, high acceleration applications.

**Performance Verification**

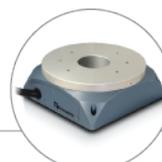
All PLR77 performance specifications are verified and a full set of accuracy & repeatability plots are included with each stage. Additionally, each unit undergoes extensive burn-in and testing. These steps ensure that the stage will deliver optimal performance over a long period of time.

For more information and a complete datasheet, go to [www.primatics.com](http://www.primatics.com)

Performance Specifications	PLR77
Travel (degrees)	+/- 5
Table Diameter (mm)	77
Mechanical Drive System	Class 3, 1mm lead ballscrew
Max Speed (rps)	2.8
Axial Runout (microns)	+/- 0.35
Radial Runout (microns)	+/- 0.35
Accuracy (arc-sec)	+/- 2
Bi-directional Repeatability (arc-sec)	+/- 0.5
Minimum Resolution (arc-sec)	0.5
Acceleration (deg-sec <sup>2</sup> ) <sup>2</sup>	1000
Axial Load Capacity (kg)	10
Radial Load Capacity (kg)	5
Weight (kg)	1.5



Linear Positioning



Rotary Positioning



Motion Controls



OEM Solutions