

Linear Motor Stages offered in travels from 100 mm to 1.5 m



Aerotech's PRO LM series of high performance, cost-effective and versatile linear motor stages are offered in four different series with 38 different models in travels from 100 mm to 1.5 m. The PRO165LM, PRO225LM, PRO280LM, and PRO560LM make up the Aerotech PRO LM series of linear motor stages. They all feature a linear motion guide bearing system and high-performance brushless linear servomotor to make them the stage of choice in industrial applications such as laser machining, medical component manufacturing, and other applications requiring precise, smooth motion in a production environment.

Ultra-Smooth, Precise Motion

Aerotech's high-power, cog-free linear motors drive the PRO LM series. The non-magneticforcer coil provides high force with zero cogging for ultra-smooth velocity and position control. This zero-cogging design is ideal for applications requiring outstanding contour accuracy and smooth velocity profiling. Aerotech's linear motor stages have zero backlash, no windup, and outstanding system responsiveness. The magnetic field of the linear motor is totally self-contained within the U-channel design, making these stages well-suited for high-performance applications that cannot tolerate the stray magnetic fields generated by flat motor magnet tracks.

Noncontact linear encoders with micron-level repeatabilities are standard on all PRO LM series stages. Either a line-driver output or amplified sine-wave output encoder is available. The optional HALAR factory calibration further increases the standard accuracy and repeatability.

Construction Features

Linear Motor Stages offered in travels from 100 mm to 1.5 m

Published on Electronic Component News (<http://www.ecnmag.com>)

Sealed linear motion guide bearings with integral wipers are incorporated to provide excellent payload capacity and long life. Both the metal waycover and tabletop are treated with a hardcoat that is scratch-resistant and provides outstanding protection in the harshest applications, while the tabletop utilizes stainless steel Helicoil™ inserts to protect mounting holes against thread wear. Several tabletop options are available for metric or English mounting, as well as for direct interface with our popular ADRS, ADRT, and AGR rotary stages. In addition, configurable cable management options are available for single- or multi-axis systems.

Aerotech manufactures a wide range of matching drives and controls to provide a fully integrated and optimized motion solution.

For further information, please contact Steve McLane at 412-967-6854 (direct), or via e-mail at smclane@aerotech.com [1].

The PRO165LM series data sheet is available at:
<http://www.aerotech.com/products/stages/pro165lm.html> [2]

The PRO225LM series data sheet is available at:
<http://www.aerotech.com/products/stages/pro225lm.html> [3]

The PRO280LM series data sheet is available at:
<http://www.aerotech.com/products/stages/pro280lm.html> [4]

The PRO560LM series data sheet is available at:
<http://www.aerotech.com/products/stages/pro560lm.html> [5]

Source URL (retrieved on 09/21/2014 - 9:32am):

<http://www.ecnmag.com/products/2010/08/linear-motor-stages-offered-travels-100-mm-15-m>

Links:

[1] <mailto:smclane@aerotech.com>

[2] <http://www.aerotech.com/products/stages/pro165lm.html>

[3] <http://www.aerotech.com/products/stages/pro225lm.html>

[4] <http://www.aerotech.com/products/stages/pro280lm.html>

[5] <http://www.aerotech.com/products/stages/pro560lm.html>