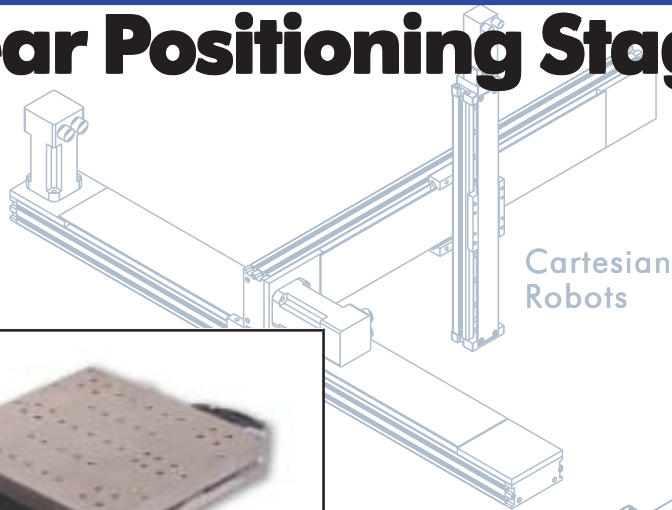


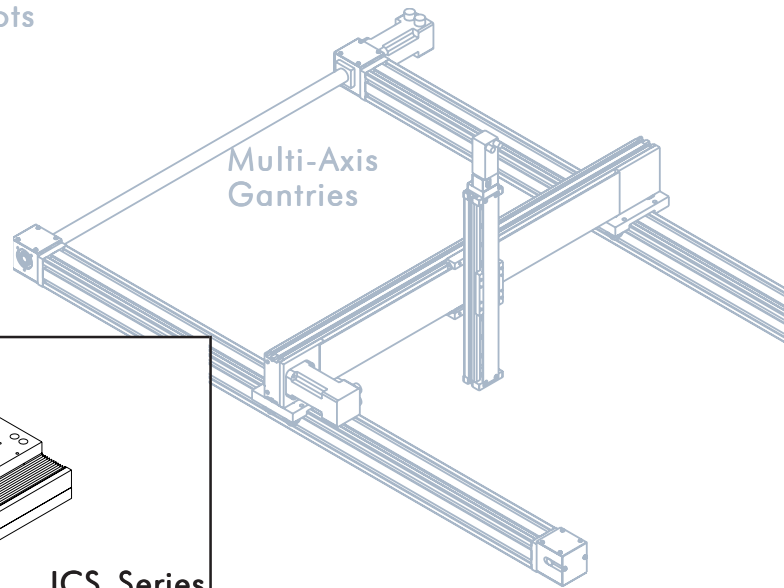


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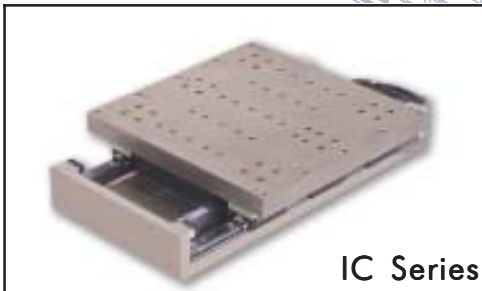
Linear Positioning Stages and Systems



Cartesian
Robots



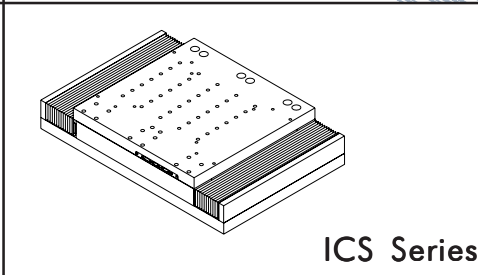
Multi-Axis
Gantries



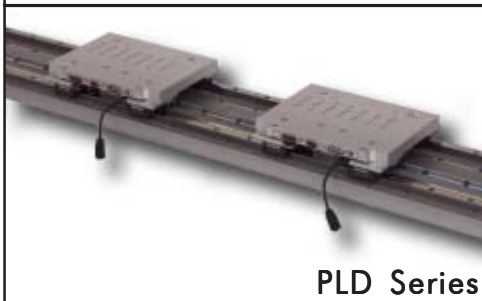
IC Series



IL Series



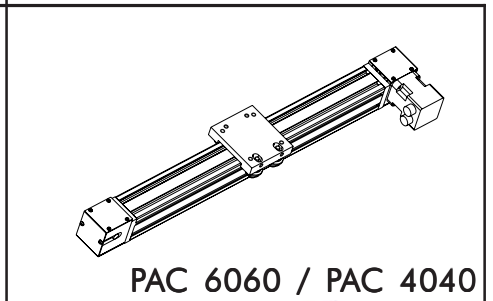
ICS Series



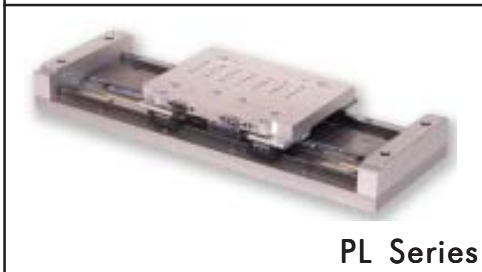
PLD Series



PR95F Series



PAC 6060 / PAC 4040



PL Series



PR50 Series



PAC 2856

Linear Motor

Screw Drive

Belt Drive

Series	Drive/ Bearing	Travel/ Load	Size	Key Features & Applications
Screw Drive - Extruded Aluminum Structure - "T" Slot Mounting				
PR50	Stainless Steel Lead Screw, Composite Nut, (Opt. Ball Screw) / Steel Linear Guide	Up to 24" Up to 100 lbs.	2.3"W x 1.6" Tall 58.4 mm x 40.6 mm	Short Travels Typically Light Loads 10-25 lbs. Low Cost - Medium Precision
PR95-F	Stainless Steel Lead Screw, Composite Nut / Composite Bearing (Pat. Pending)	Up to 36" Option to 78" Up to 50 lbs.	3.74"W x 1.81" Tall 95.0 mm x 46.0 mm	Medium Travel Typically Light Loads 10-25 lbs. Low Cost for Longer Travels Medium Precision
PR95-IR	Rolled Ball Screw, Optional Composite or Bronze Nut / Steel Linear Guide	Up to 36" Option to 78" Up to 600 lbs.	3.74"W x 2.25" Tall 95.0 mm x 57.0 mm	Medium Travel Typically Heavy Vertical Loads 300 lbs.
PR95	Precision Ball Screw Optional Composite or Bronze Nut / Dual Steel Linear Guides	Up to 24" Up to 400 lbs.	3.74" W x 1.81" Tall 95.0 mm x 46.0 mm	Short Travel Typically Medium Loads 100-200 lbs. Medium Cost High Precision
ICS	Heavy Duty Ball Screw Optional Bronze Nut / Heavy Duty Dual Steel Linear Guides	Up to 8 Ft Up to 2300 lbs. Specials to 20,000 lbs.	8" (203mm) Wide 12" (304mm) Wide 18" (457mm) Wide Specials to 10 ft (3000mm)	Medium to Long Travels Typically Large Loads 500 lbs. and up Medium to High Cost Medium to High Precision
Belt Drive- Extruded Aluminum Structure - "T" Slot Mounting				
PAC4040	Steel Reinforced Timing Belt / Composite Bearings (Pat. Pending)	Up to 20 ft Opt to 50 Ft Load to 200 lbs	Base 1.57" W x 1.57" Tall 40mm x 40mm	Long Travels up to 50 ft High Speed Applications 200 in/sec Typically Loads about 50 lbs. Low Cost - Low Repeatability +/- 0.008
PAC2856	Steel Reinforced Timing Belt / Composite Bearings (Pat. Pending)	Up to 20 ft Opt to 50 Ft Load to 200 lbs	Base 1.10" W x 2.20" Tall 28mm x 56mm	Longest Travels up to 50 ft High Speed Applications 200 in/sec Typically Loads about 50 lbs. Low Cost - Low Repeatability +/- 0.008
PAC6060	Steel Reinforced Timing Belt / Composite Bearings (Pat. Pending)	Up to 20 ft Opt to 50 ft Load to 400 lbs	Base 2.36" W x 2.36" Tall 60mm x 60mm	Long Travels up to 50 ft High Speed Applications 200 in/sec Typically Loads about 100-200 lbs. Low Cost , Repeatability +/- 0.008
PR95-B	Steel Reinforced Timing Belt / Steel Recirculating Bearings	Up to 36" Opt to 78" ft Load to 600 lbs	3.74" W x 2.25" Tall 95.0 mm x 57.0 mm	Heavy Duty , Long Travels High Speed Applications 200 in/sec Typically Loads about 100-200 lbs. Low Cost, Repeatability +/- 0.005
Linear Motor Drive - Anodized or Nickel Plated Aluminum Structure				
IC	Brushless Linear Motor / Steel Recirculating Bearings	Up to 19 ft Thrust to 3500 lbs	8" (203mm) Wide 12" (304mm) Wide 18" (457mm) Wide Specials to 10 ft (3000mm)	High Speed - Long Travels Up to 10 G's Acceleration High Accuracies Resolution to 0.000,003"
ICI	Iron Core Brushless Linear Motor No Moving Wires / Steel Recirculating Bearings	Up to 12" Thrust to 3500 lbs	8" (203mm) Wide 12" (304mm) Wide 18" (457mm) Wide Specials to 10 ft (3000mm)	High Speed - Short Travels Up to 10 G's Acceleration High Accuracies Resolution to 0.000,003" Dirty Environment OK
IL	Ironless Core Brushless Linear Motor / Steel Recirculating Bearings	Up to 6 ft Thrust to 330 lbs	3.78" W x 4.96" Tall 96mm x 125mm 3.98" W x 5.90" Tall 100 mm x 150mm	Lowest Moving Mass Up to 20 G's Acceleration High Accuracies Resolution to 0.000,003"
PL	Brushless Linear Motor Steel Recirculating Bearings	Up to 6 ft Thrust to 330 lbs	4.8" W x 2.1" Tall 121.9 mm x 53.3 mm 7.3" W x 2.8" Tall 185.4 mm x 71.1 mm	Low Mass -High Speed-Long Travels Up to 7 G's Acceleration High Accuracies Resolution to 0.000,003"
PLD	Brushless Linear Motor Steel Recirculating Bearings	Up to 19 ft Thrust to 126 lbs	Same as PL	Same as PL except with Dual Carriages

Precision Automation Corporation Linear Stages

Leadscrew and Ball Screw Drive

PAC offers two major classes of screw driven stages. The PR series are constructed with extruded aircraft alloy aluminum bases and carriages and either hardened steel recirculating linear bearings or PAC's new low cost composite roller bearings (Patent Pending). Depending upon the model, the PR series offer travels to 78" (2 meters), normal load ratings of up to 600 lbs (272 kg), and accuracies to 0.000 080 inch per inch (2 microns / 25mm). Available options include: stainless steel lead screws with composite nuts or precision ball screws, covers, adjustable limit and home switches, and wash down and clean room versions.

The ICS series offers a higher level of precision with hardened steel recirculating linear bearings and either anodized or electrolysis nickel plated machined aluminum structures. Travels to 10' (3 meters) are available. Options include bellows covers, limit and home switches, and linear encoder feedback.

Belt Drive

All of Precision Automation's belt drive stages are constructed from extruded aircraft alloy aluminum. The PAC series offers profile widths from 28 mm to 60 mm, travel to 15 meters, speeds to 5 meters per second and optional multiple moving carriages. The PR95 belt drive stage offer higher load capacities utilizing recirculating linear bearings.

Brushless Linear Motor

Precision Automation Corporation offers one of the widest ranges of brushless linear motor positioning stages in the industry. Whether your application calls for high thrust or low velocity ripple, PAC has a linear stage for you. All linear motor stages utilize hardened steel recirculating linear bearings and either anodized or electrolysis nickel plated, machined, aluminum structures. PAC tables offer peak thrust of 3500 pounds, speeds to 5 meters per second, acceleration rates of up to 20 G's, and virtually unlimited travels. PAC stages are ideal for applications requiring sub-micron precision positioning or increased throughput with high speed and continuous operation.

**No Moving
Wires**



**Linear Motor Stage
ICI Series**

Our Products Include:

Micrometer and Free Travel Stages - Cross roller bearings, up to 200 mm travel

Belt, Screw and Linear Motor Stages - Standard and OEM designs

Multi-Axis Systems - XY, XYZ, or Rotary

Gantry Designs - Belt, screw, or linear motor up to 19 feet of travel

Turn Key Systems - Stepper and servo motor options

Vision Systems - Turn key motion systems with
integrated vision inspection
or alignment systems

Turn Key Motion Systems



Our Company

Precision Automation Corporation (PAC) incorporates state-of-the-art engineering and experience with world class manufacturing to deliver cost-effective performance excellence to linear positioning applications. Precision Automation's staff has had extensive experience with literally hundreds of single and multi-axis manufacturing, test and inspection applications in the electronics, imaging, semiconductor, medical and automation industries. We can provide a standard low-cost belt drive stage suitable for use with many commercially available stepping and servo motors and controls or a turnkey high precision motion and vision controlled system. We have a wide range of standard designs for most end-users and can provide custom designs for the Original Equipment Manufacturer. In 2005 PAC became part of Multiline Technology of New York.

From its inception over 70 years ago, Multiline Technology has become a leader in *Equipment Manufacturing and Precision Contract Machining*. The full service facility in Farmingdale, New York provides hardware and software development engineering, system integration, precision machining and assembly including machinery with vision based and X-ray capability. Multiline provides specialty equipment to both the electronics and printing industries.



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