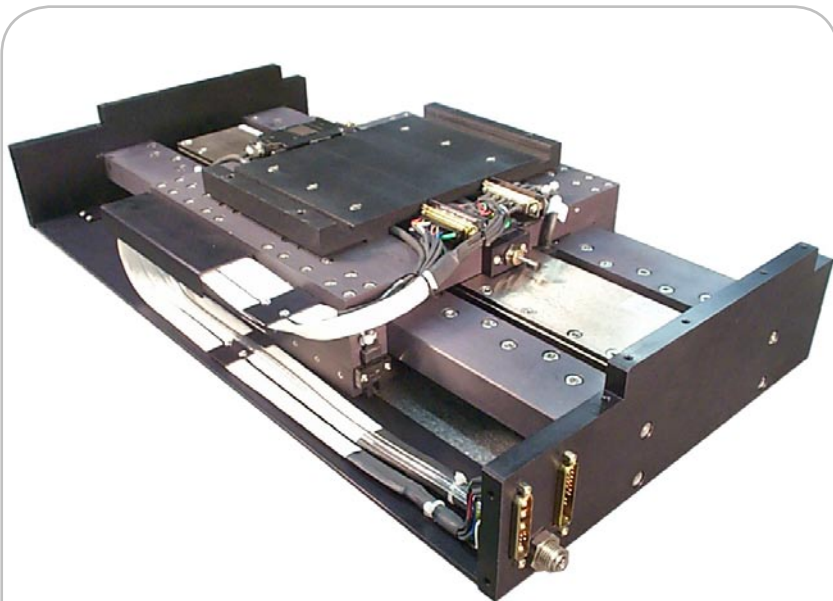


C-LAB1012 - Linear Air Bearing Box Slides

Ultra-Precision, High Stiffness Motorized Linear Stages



ABTech, Inc. offers the **C-LAB** Series ultra-precision constrained box way linear air bearing slides.

The constrained box way design provides a fully preloaded air bearing carriage for high stiffness and resistance to off-set loading while maintaining a low profile. High accuracy is achieved through tight form geometry control of the linear box rails and central placement of the linear drive which minimizes offset errors. High torque brushless DC linear motors and high resolution encoders along with amplifiers complete the drives. These stages are designed specifically for linear straightness measurement, linear positioning, constant velocity and linear systems requiring no static friction and high accuracy.

The **C-LAB** Series stages are ideal for X-Y stacking, wafer scanning systems, computer-to-plate systems, linear measurement systems, high precision machining and vision system positioning stages.

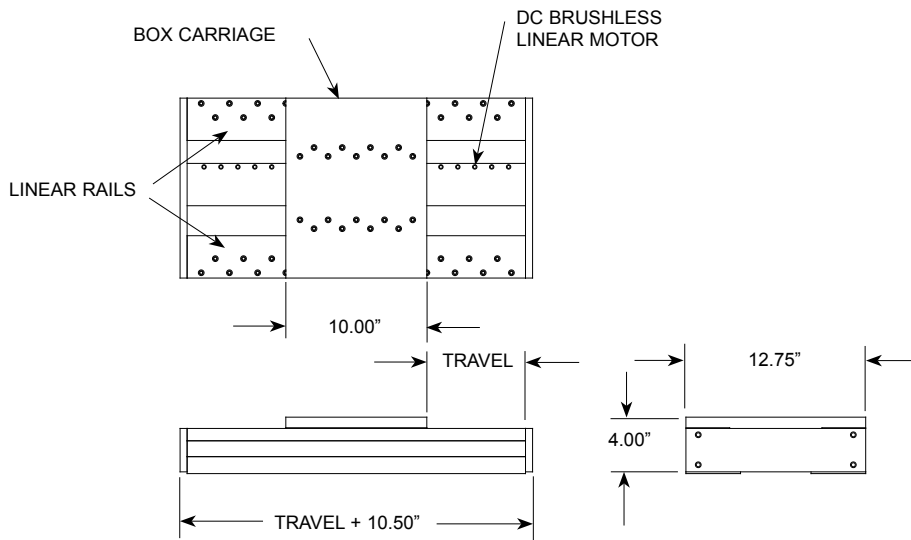
ABTech's modular design approach and full engineering services can respond quickly to provide a solution to your O.E.M. needs for Ultra-Precision linear motion.

Features:

- Fully constrained air bearing box way design
- Ultra-smooth motion, no static friction (no stick slip)
- Total noncontact component design
- Linear motor drives, Noncontact Linear encoders
- High load capacity and stiffness
- X-Y Stackable
- Low air consumption
- Custom systems can be provided for O.E.M.
- Custom tooling and fixturing design and manufacturing

Specifications

C-LAB 1012 Series air bearing linear slides



Custom sizes and configurations of the CLAB constrained box way slides can be provided. Consult ABTech, Inc with your specifications.

Available with bellows protective covers, end of travel limits and overtravel protection.

Complete turn-key multi-axis stages with machine bases, and operator controllers can be provided. Consult ABTech, Inc. with your specifications.

Specifications

| | |
|-------------------------------|---|
| Travel | 2.00in - 48.00in. (2.00in. increments) |
| Motor | Linear Brushless DC Servo Motors |
| Max. Velocity | > 1 m/sec |
| Peak Force | 152 lbs (676 N) |
| Cont. Stall Force | 48 lbs (213.5 N) |
| Resolutions (microns) | 5.0, 1.0, 0.5, 0.2, 0.1 & 0.05 |
| Position Repeatability | ± 5.0μ" (0.125μm) Encoder, Motor & Control dependent |
| Straightness of Travel | A1 = 5.0μ"/Inch & 30.0μ"/6.00" or A2 = 15.0μ"/Inch & 90.0μ"/6.00" |
| Load Capacity | 225lb Vertical - 112lb Horizontal |
| Air Consumption | 1.5 scfm @50psi |

Slide performance can be effected by method of mounting the rail and loading. Consult ABTech's applications engineering. Specifications are at 50psi
Consult ABTech's applications engineering for moment loading and stiffness considerations.
Specifications are subject to change without notification. Special accuracies can be supplied.

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ABTech inc.
Pride In Precision

On Line: www.abtechmfg.com