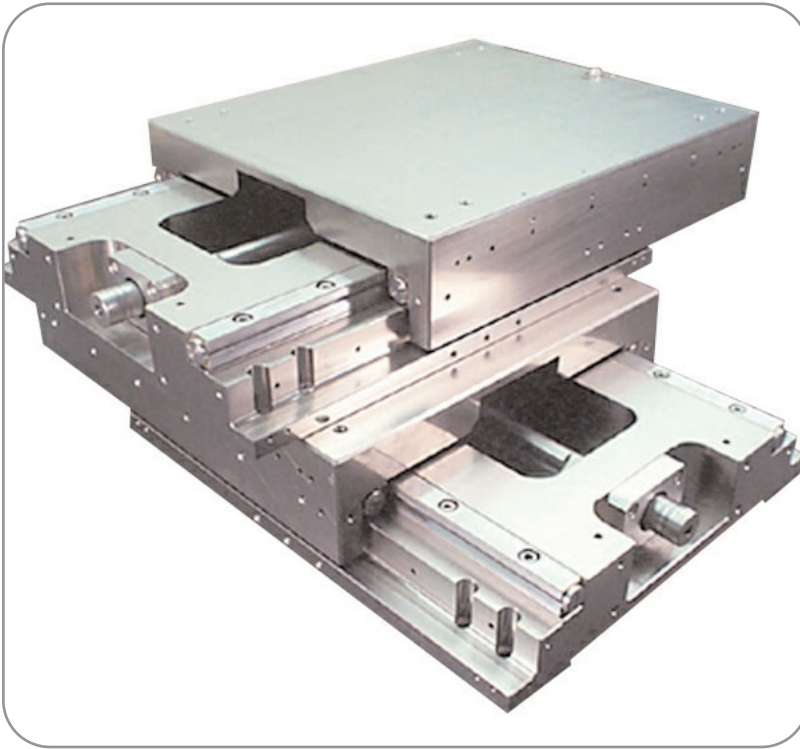


# CRS-1012 XY Linear Cross Roller Slide

## High Precision Linear Motion



CRS-1012 X-Y Vacuum compatible slide shown here

ABTech, Inc. offers a precision cross roller slide design ideal for single axis or stacked stage applications.

ABTech's attention to detail through out manufacturing and assembly result in a superior performing mechanical bearing stage.

High precision crossroller linear guide rails are incorporated into the slides providing high accuracy travel straightness, smoothness of motion and high stiffness.

The CRS-1012 X-Y stages are available in anodized, hard anodized or electroless nickel plated aluminum. The nickel plated version features fully vented holes and vacuum compatible hardware and lubricants ideal for demanding vacuum environment applications such as in semi-conductor mask repair or etching.

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:

- *High-precision crossroller linear guide bearings*
- *High load capacity and stiffness*
- *10.00" x 12.00" worktable*
- *Precision lead screw drive*
- *Precision duplex bearing support*
- *Position repeatability: 50 $\mu$ " (1.25 $\mu$ m)*
- *X-Y Orthogonality: 15 arc-sec*
- *Vacuum rated versions available*
- *Motor drives, encoders, drive amplifiers and controls*
- *Modular design - custom systems can be provided for O.E.M.*

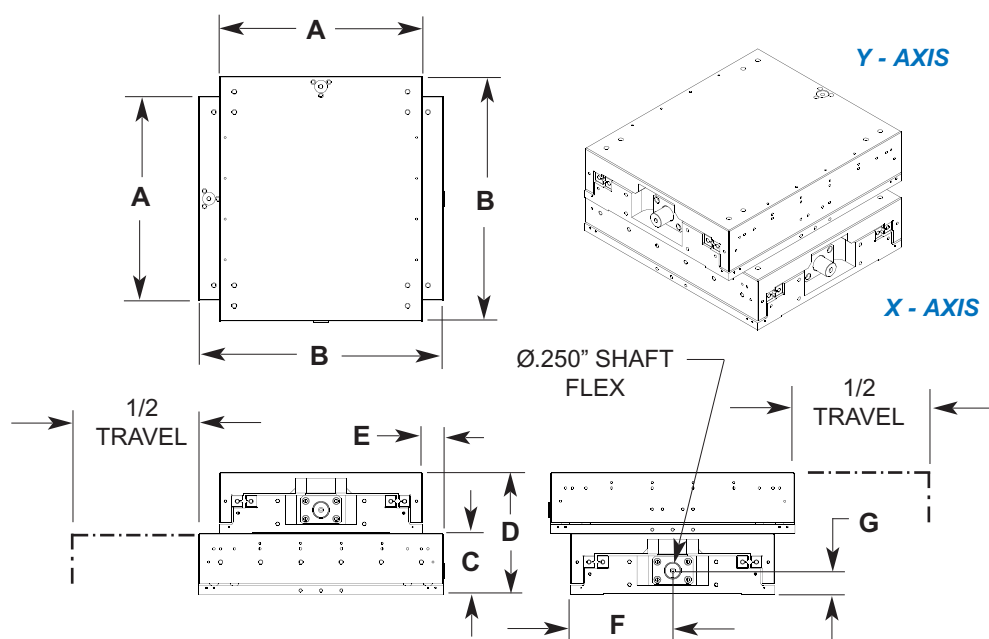
# Specifications

## CRS Series

Precision Cross roller  
Linear Slides

Consult ABTech for:

- Special sizes and travels
- Custom hole pattern on carriage faces
- Ball screw drives
- Linear motor drives
- High accuracy linear encoders
- Higher accuracies



### CRS-1012 X - Y

#### TRAVEL

2.00" TO 24.00"

A

10.00"

B

12.00"

C

2.98"

D

5.96"

E

1.00"

F

5.00"

G

1.157"

Vertical Load  
Capacity (\*\*)

200LBS

Horizontal Load  
Capacity (\*\*)

200LBS

#### Accuracy

Positional repeatability: 0.00005"  
Linear accuracy: 0.0001"/In.  
Orthogonality: 15 arc-sec or less  
Lost motion: 0.00005" Max.  
Travel flatness of motion:  $\pm 0.0001$ "  
Lead screw: zero backlash, .200" lead  
Precision duplex support bearings  
Breakaway torque (full travel):  $\pm 2.0$  oz-in.

All of the above accuracy and performance specifications are for the X-Y stage only. Any motors, position feed back encoders and motion control systems interfaced may effect final performance.

Slide performance can be effected by method of mounting the rail and loading. Consult ABTech's applications engineering.

\*\* - Load capacities are tested at the center of the carriage in both directions. O.E.M. interfaced motors, encoders and motion controls may effect final performance. Specifications are subject to change without notification.

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