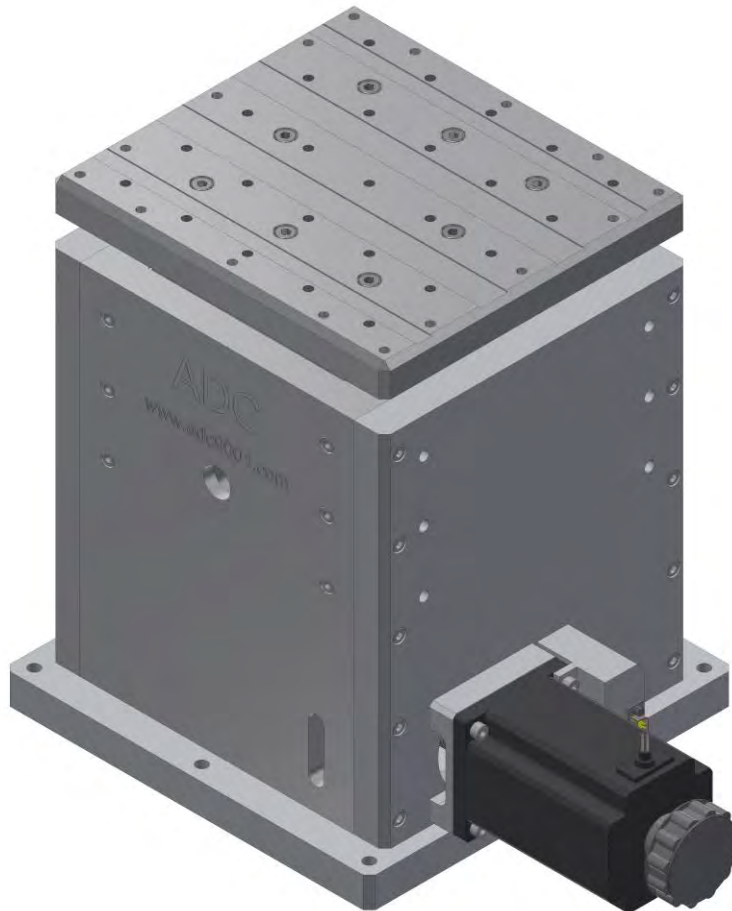


# BJ25 Series

Large Precision Mechanical Lift Stages



**HIGH RESOLUTION**

**25 KN WORM DRIVE**

**LARGE LOAD CAPACITY**

**LONG-LIFE LINEAR GUIDE BEARING SYSTEM**

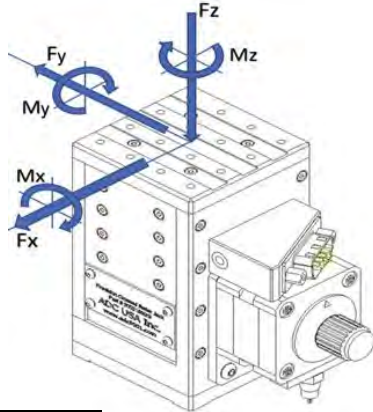
126 Ridge Rd, Lansing NY, 14882  
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ADVANCED DESIGN  
CONSULTING USA, INC.

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## BJ25 SERIES SPECIFICATIONS

The BJ25 series jacks provide an accurate and rigid platform for use in any positioning system. The rugged anodized aluminum housing features a precision ground base and top plate, each with multiple utility holes for easy integration into the users' system. The vertical stage is driven by a high class preloaded ball screw coupled to a high torque 200 step per revolution stepper motor, which can be run in full, half, or micro stepping mode to meet your resolution requirements. Maximum rigidity is assured using preloaded crossed roller linear bearings. Each jack also features two adjustable, normally closed limit switches at the end of travel.



### KEY FEATURES

- Travels 50-200mm
- 3  $\mu$ m Repeatability
- Various Motor Options
- High Resolution
- High Dynamic Performance

### LOAD CHARACTERISTICS

Description	Fx (kN)	Fy (kN)	Fz (kN)	Mx (Nm)	My (Nm)	Mz (Nm)
BJ25-50	20	20	24.5	745	745	1000
BJ25-100	26.7	26.7	24.5	745	745	1335
BJ25-150	33.5	33.5	24.5	745	745	1675
BJ25-200	40.1	40.1	24.5	745	745	2005

\*Loads are not simultaneous

### MECHANICAL

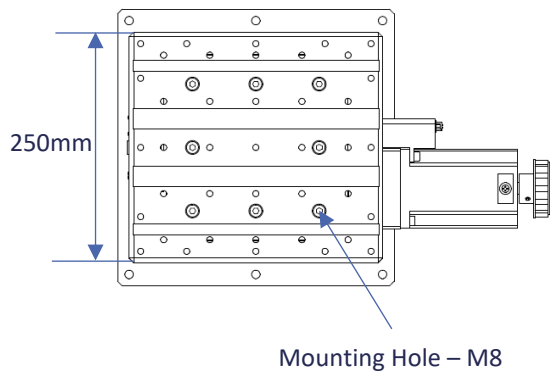
Description	50	100	150	200
Travel (mm)	50	100	150	200
Optional Linear Encoder	Yes	Yes	Yes	Yes
Repeatability ( $\mu$ m RMS)	3	3	3	3
Lead Accuracy ( $\mu$ m/25mm)	8.3	8.3	8.3	8.3
Trajectory Straightness ( $\mu$ m/25mm)	10	15	15	20
Travel Resolution (mm/rev)	6.35	6.35	6.35	6.35
Maximum Speed (mm/sec)	5	5	5	5
Load Capacity (kg)	2268	2268	2268	2268
Mass (kg)	76.2	85.4	94.6	103.8

### ELECTRICAL

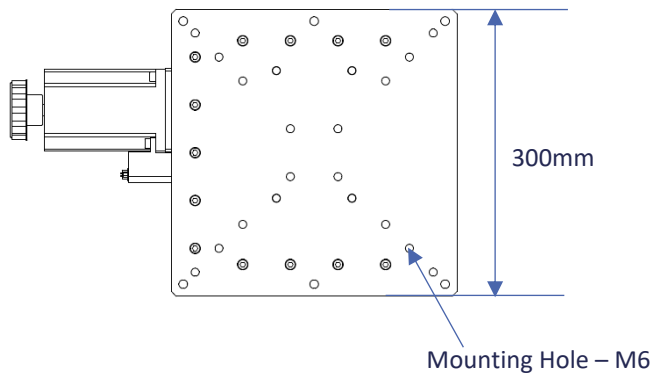
Description	
Motor	2-Phase, 5-Phase Stepper; DC
Limit Switches	Mechanical, Normally Closed
Optical Encoder Type	Renishaw Tonic ( <a href="http://www.renishaw.com">http://www.renishaw.com</a> )
2-Phase Current (Amps/Phase)	6.3

## BJ25 SERIES DIMENSIONS AND INFORMATION

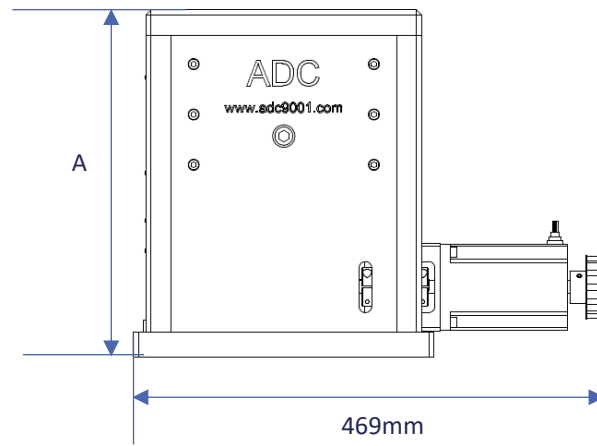
Top View



Bottom View

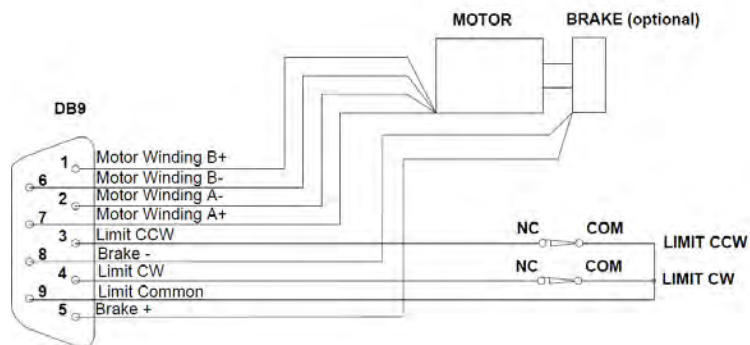


Side View



Model	50	100	150	200
Travel (mm)	50	100	150	200
A- Closed Height (mm)	345	410	475	540

### ELECTRICAL CONNECTOR



ADC uses a standard male DB-9 Connector for both the motor and limit switches.

## BJ25 ORDERING INFORMATION

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BJ25	-50	-N	-2PH	-G
Series	Model	Encoder	Motor	Gearbox
BJ25	-50	-E	-2PH	3:1
	-100	-N	-5PH	to
	-150		-DC	100:1
	-200			ratio

### Travel Options

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-50	50mm Stage Travel
-100	100mm Stage Travel
-150	150mm Stage Travel
-200	200mm Stage Travel

### Optical Encoder Options

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-E	With Optical Encoder
-N	Without Optical Encoder

### Motor Options

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-2PH	Standard 2 Phase Bi-Polar Stepper Motor
-5PH	5 Phase Stepper Motor
-DC	DC Motor

### Gearbox Option

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Available from 3:1 to 100:1 ratios

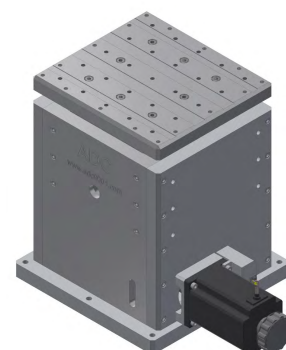
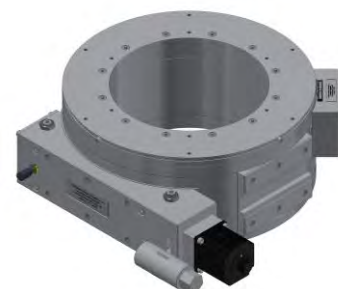
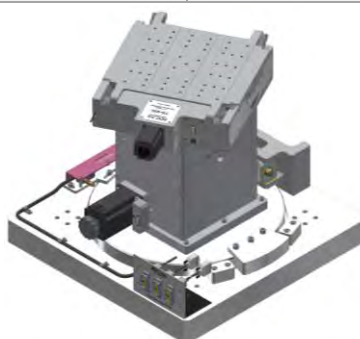
### Example Order

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#### BJ25-50-N-2PH

This is an order for a BJ25 Precision Crossed Roller Jack with 50 mm travel, with no encoder, and a 2-phase motor.

## Similar ADC Products



Linear Stages	Lift Stages
DS210	DJ210
DS310	DJ310
DS410	DJ410
DS510	
Tilt Stages/ Goniometers	Rotation Stages
TS-50	RS-100
TS-90	RS-200
TS-160	RS-300
TS-300	RS-400
TS-400	RS-500
Mounting Brackets	Big Jacks (Shown)
MB200	BJ25-50
MB300	BJ25-100
MB400	BJ25-150
	BJ25-200

## Custom Complex Motion Systems

For custom complex motion systems, contact ADC at [adc@adc9001.com](mailto:adc@adc9001.com) or visit our website [www.adc9001.com](http://www.adc9001.com)



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