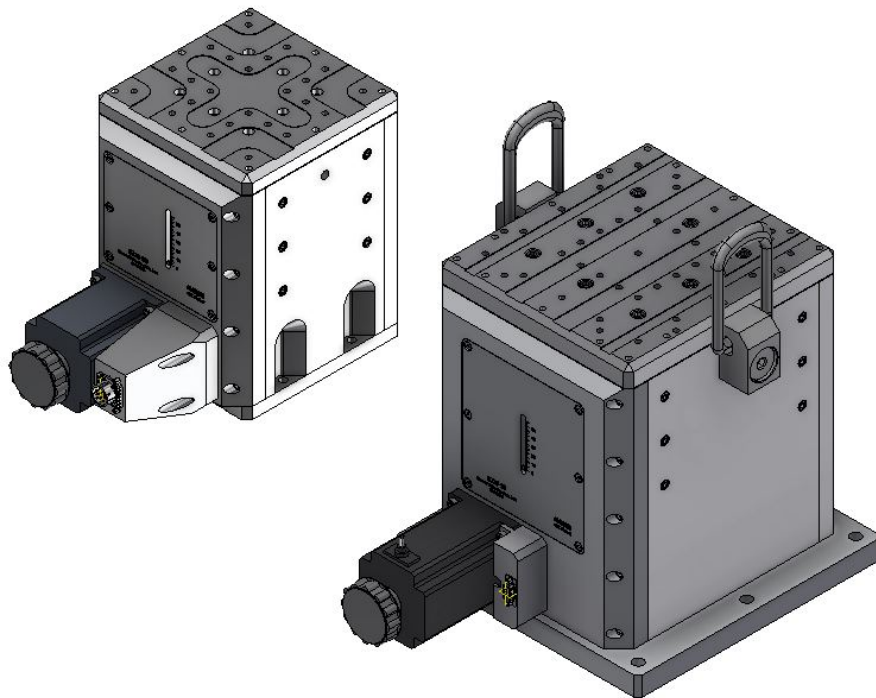




# High Precision, Heavy Duty Lift Stages

---

BJ10 & BJ25 Series



August 2023



## SPECIFICATIONS

The lift stages are driven by a high class preloaded ballscrew coupled to a high torque electric motor. Maximum rigidity is assured through the use of preloaded crossed roller linear bearings. Resolution requirements may be met using a gearbox. Each jack also features two fully adjustable, normally closed limit switches to define the extents of travel.

## MECHANICAL

Specification	BJ10 Series	BJ25 Series
Travel (mm)	50, 100, 150	50, 150, 235
Lead Accuracy (um/25mm)	8.3	8.3
Travel Resolution (mm/rev)	0.254	0.260
Maximum Speed (mm/sec)	1.9	3

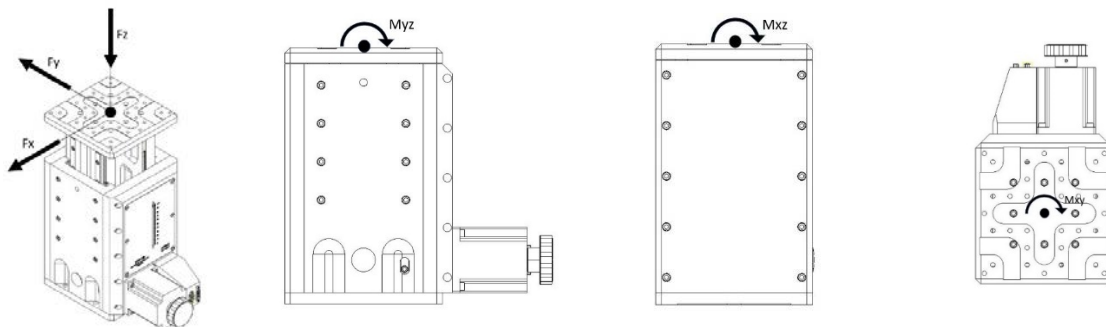
## ELECTRICAL

Specification	BJ10 Series	BJ25 Series
Motor	2-Phase; 5-Phase Stepper; DC	
Limit Switches	Mechanical, Normally Closed	
Optical Encoder	Renishaw Tonic ( <a href="http://www.renishaw.com">http://www.renishaw.com</a> )	

## LOAD CHARACTERISTICS

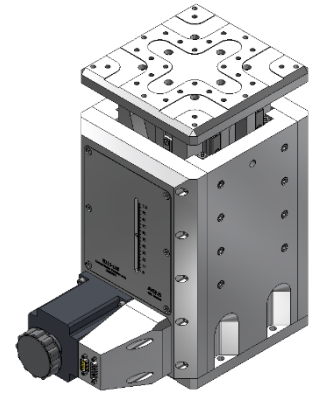
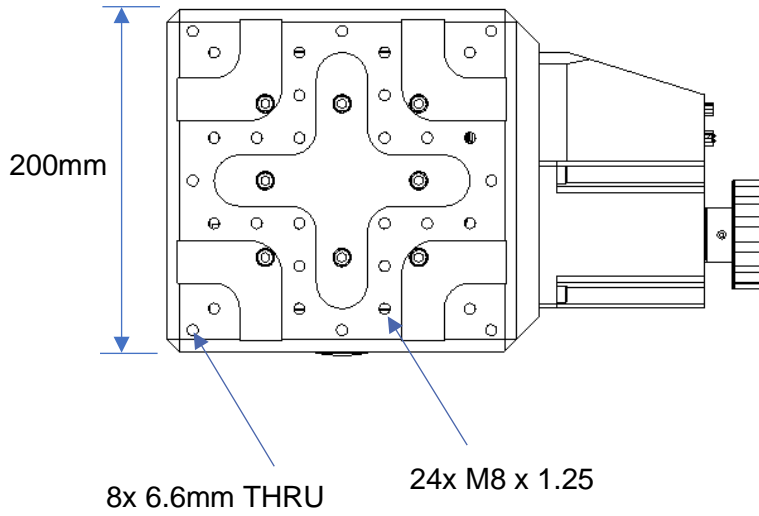
Stage	F <sub>x</sub> (N)	F <sub>y</sub> (N)	F <sub>z</sub> (N)	M <sub>xz</sub> (Nm)	M <sub>yz</sub> (Nm)	M <sub>xy</sub> (Nm)
BJ10-50	2671	1335	36190	368.5	184	2475
BJ10-100	3211.5	1605.5	36190	536	268	3506.5
BJ10-150	TBD	TBD	TBD	TBD	TBD	TBD
BJ25-50	2560	1280	53855	368.5	184	2475
BJ25-150	2812.5	1406	53855	603	301.5	5792.5
BJ25-235	7980.5	3990	57000	1049	524.5	8206.5

\*Loads are not simultaneous

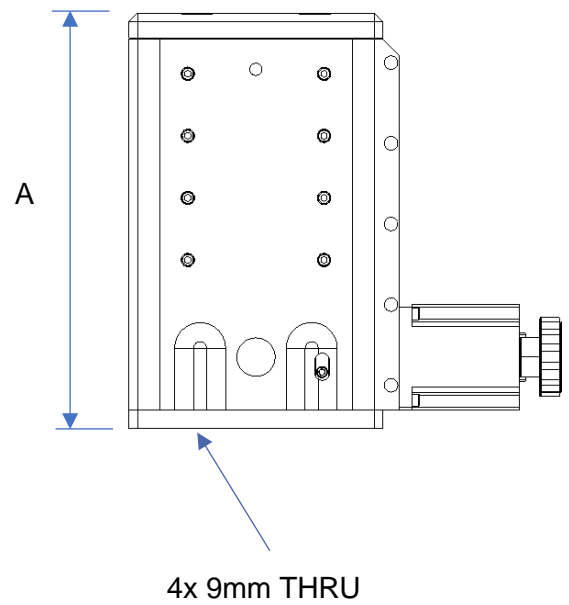


# BJ10

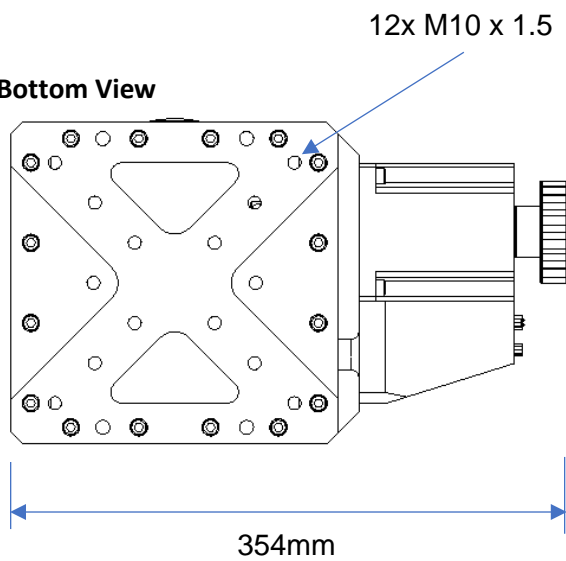
Top View



Side View

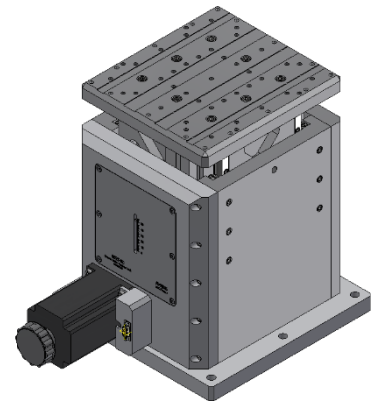


Bottom View

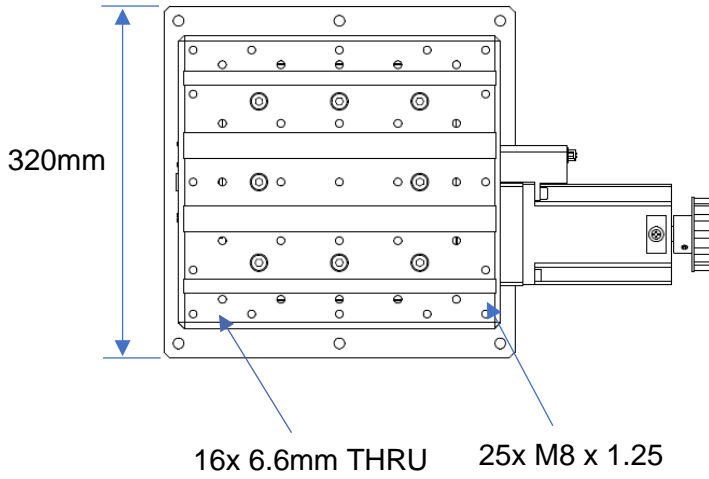


Model	50	100	150
A- Closed Height (mm)	275	335	395

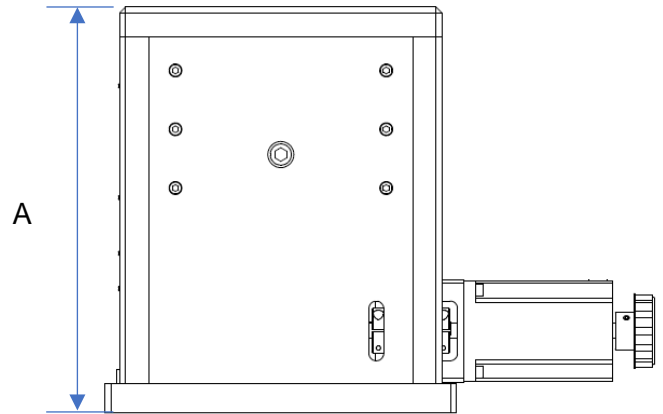
# BJ25



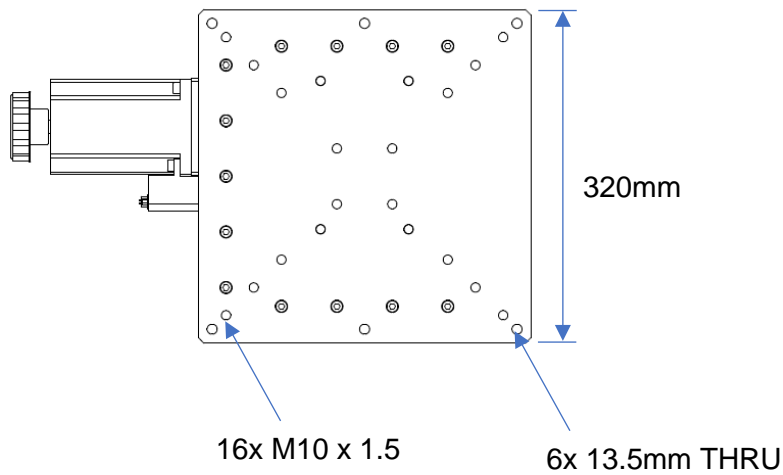
Top View



Side View



Bottom View



Model	50	150	235
A- Closed Height (mm)	346	476	578

## ORDERING INFORMATION

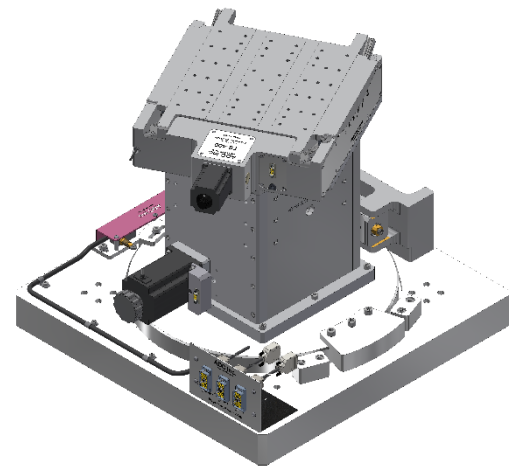
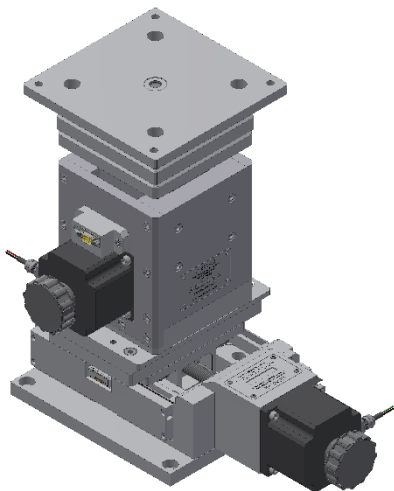
Jacks can be ordered with different configurations. Please use the codes provided below when ordering. Please call or e-mail to ask about any other customization required.

BJ (Big Jack)	10 Series	25 Series
Travel Options (mm)	-50 -100 -150	-50 -150 -235
Encoder Options	-R (With Incremental Optical Encoder) -A (With Absolute Optical Encoder) -N (Without Encoder)	
Brake Options	-B (With Brake, 24VDC) -N (Without Brake)	
Motor Options	-2PH (Standard 2 Phase Bi-Polar Stepper Motor) -5PH (5 Phase Stepper Motor) -DC (DC Motor)	
Gearbox Option	-GB (customer to enter desired ratio; 3:1 to 100:1 available)	

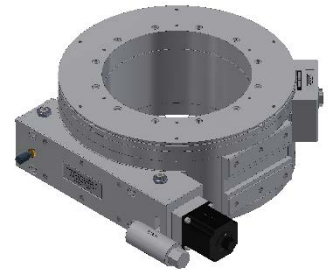
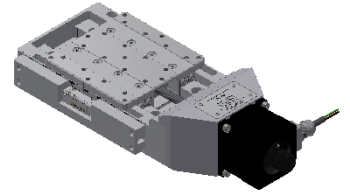
**Example Order:**  
**BJ25-50-N-N-2PH**

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

## OTHER STAGES



Linear Stages	Lift Stages
DS210	DJ210
DS310	DJ310
DS410	DJ410
DS510	BJ10
	BJ25
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
TS-565	
TS-700	



# CONTACT US



---

## QVS

Pol. Ind. Sigma, Xixilion kalea 2, Bajo,  
Pabellón 10  
20870 Elgoibar, Gipuzkoa, SPAIN  
T +34 943 821 841  
F +34 943 821 842  
[avs@a-v-s.es](mailto:avs@a-v-s.es)

---

## QVS | UK

Rutherford Appleton Laboratory  
Harwell Campus  
OX11 0QX Didcot, Oxfordshire, UK  
T +44 (0) 1235 567095  
[avs@a-v-s.uk](mailto:avs@a-v-s.uk)

---

## QVS | US

126 Ridge Rd  
Lansing, NY 14882, USA  
T +1 607 533 3531  
F +1 607 533 3618  
[avsus@a-v-s.us](mailto:avsus@a-v-s.us)

---

## UFG

Westcott Venture Park  
Aylesbury HP18 0XB  
Buckinghamshire, UK  
T +44 (0) 1235 567095  
[agarbayo@a-v-s.uk](mailto:agarbayo@a-v-s.uk)



Parque Empresarial Tactica  
Calle Velluters 17  
46988 Paterna, Valencia, SPAIN  
T +34 961 344 831  
F +34 961 344 830  
[comercial@vacuum-projects.net](mailto:comercial@vacuum-projects.net)

---

## SCIENTIFICA

Pol. Ind. Sigma, Xixilion kalea 2, Bajo,  
Pabellón 10  
20870 Elgoibar, Gipuzkoa, SPAIN  
T +34 943 127 285  
[scientifica@scientifica.es](mailto:scientifica@scientifica.es)

---

126 Ridge Rd, Lansing NY, 14882

[www.a-v-s.us](http://www.a-v-s.us) / [www.adc9001.com](http://www.adc9001.com)

1-607-533-3531

[avsus@a-v-s.us](mailto:avsus@a-v-s.us)

---