

ADC Products

DJ SERIES

-High Precision Lift Stages-

March 2020



SPECIFICATIONS

ADC's 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 maybe met using a gearbox. Each jack also features two fully adjustable, normally closed limit switches to define the extents of travel.

MECHANICAL

Specification	210 Series	310 Series	410 Series
Travel (mm)	10, 25, 35, 50	25, 50, 75, 100	50, 100, 150, 200
Lead Accuracy (um/25mm)	2.5	5	5
Trajectory Straightness (um/25mm)	2.5	3	4
Travel Resolution (mm/rev)	0.5	0.5	1
Maximum Speed (mm/sec)	25	12.5	20
Load Capacity (kg)	31	46	280

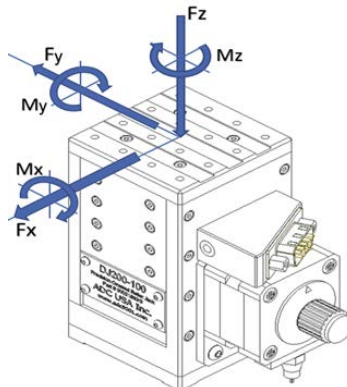
ELECTRICAL

Specification	DS210 Series	DS310 Series	DS410 Series
Motor	2-Phase; 5-Phase Stepper; DC		
Limit Switches	Mechanical, Normally Closed		
Optical Encoder	NOT AVAILABLE ON 210 SERIES	Renishaw Tonic (http://www.renishaw.com)	

LOAD CHARACTERISTICS

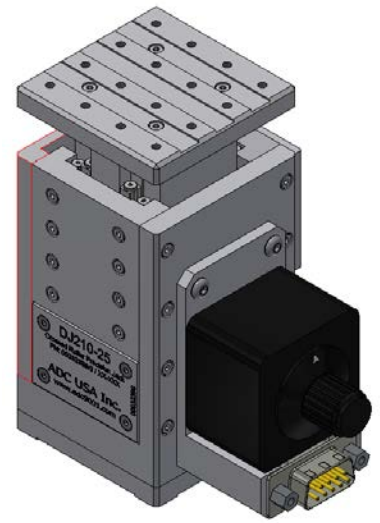
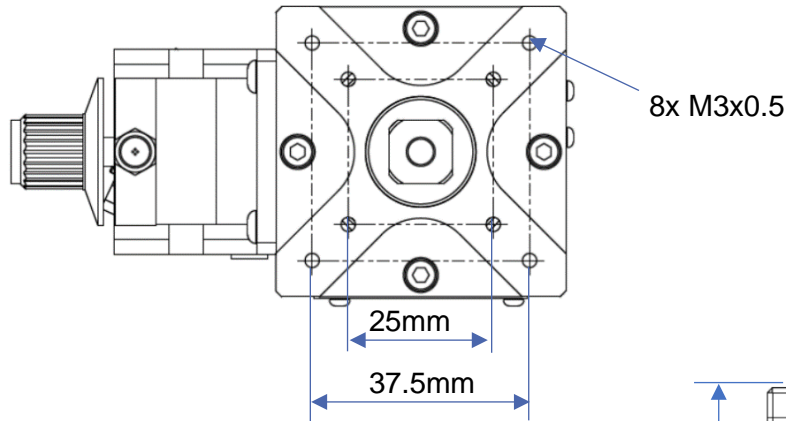
Series	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)
DJ210	160	135	310	1.47	1.79	3.22
DJ310	430	365	460	22.2	19.4	26.3
DJ410	1970	1675	2815	230	260	400

*Loads are not simultaneous

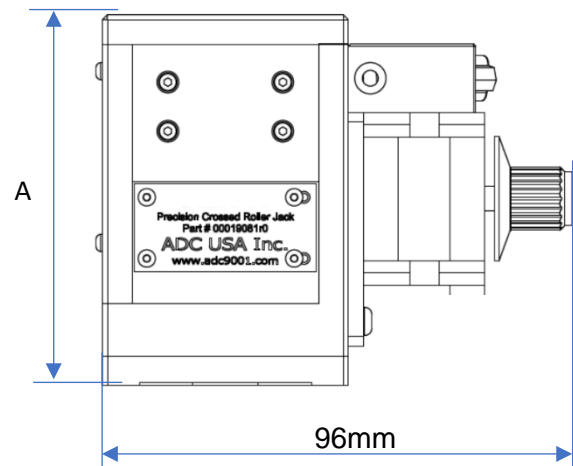


DJ210

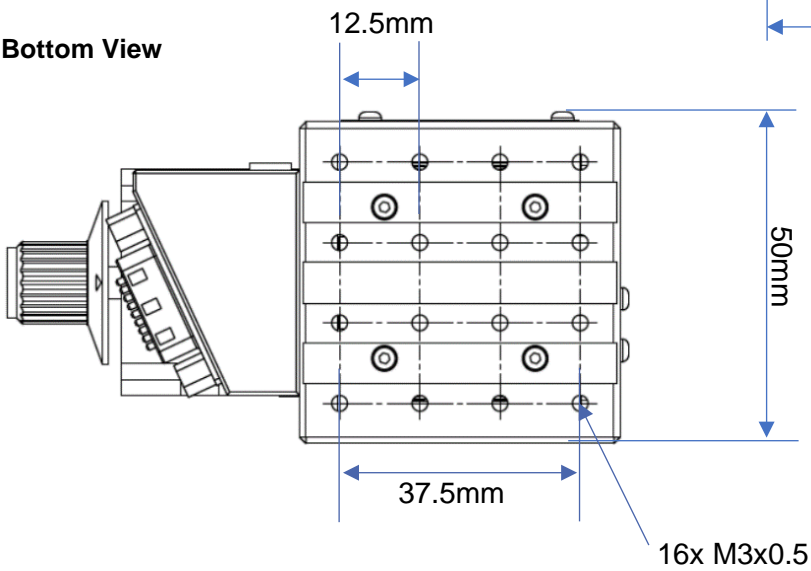
Top View



Side View



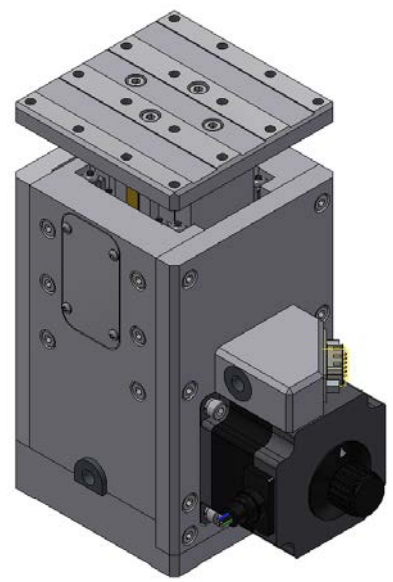
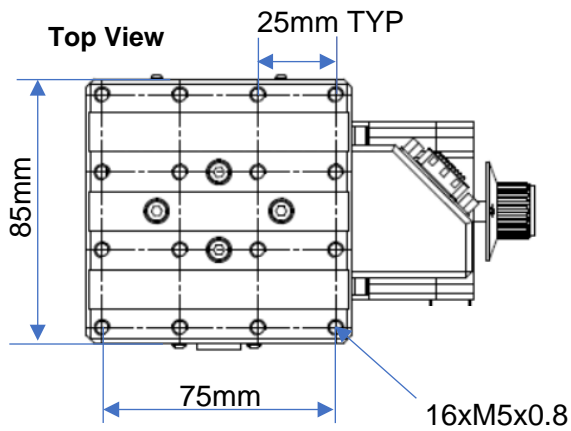
Bottom View



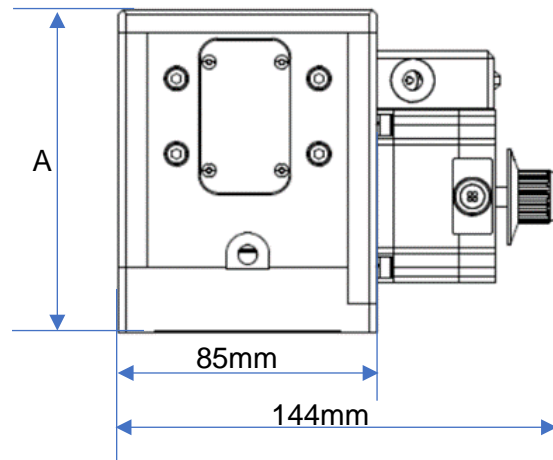
Model	10	25	35	50
A- Closed Height (mm)	75.5	89.4	113.9	137.4

DJ310

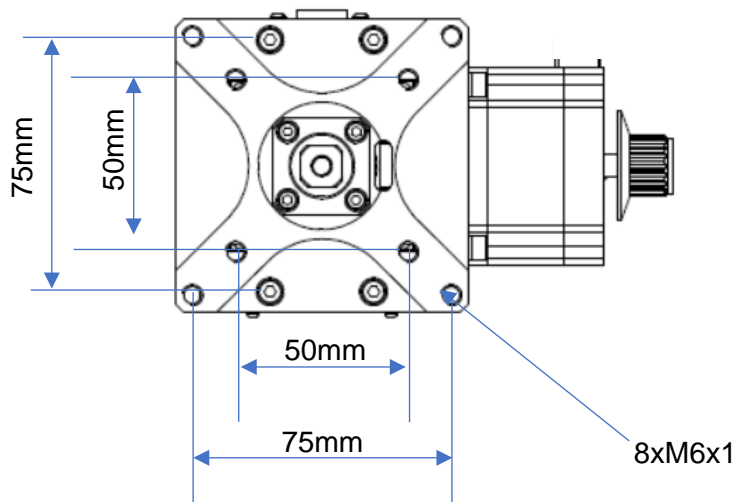
Top View



Side View



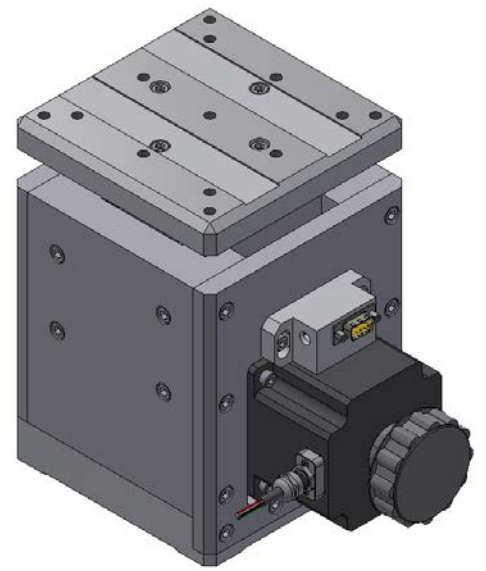
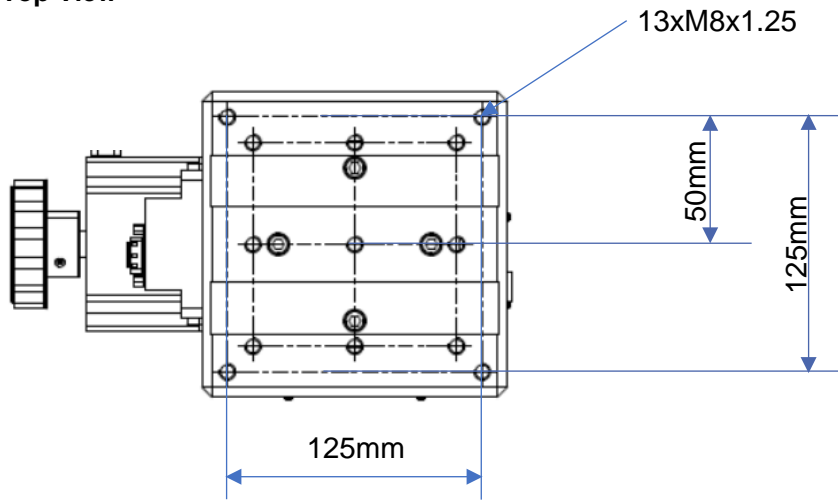
Bottom View



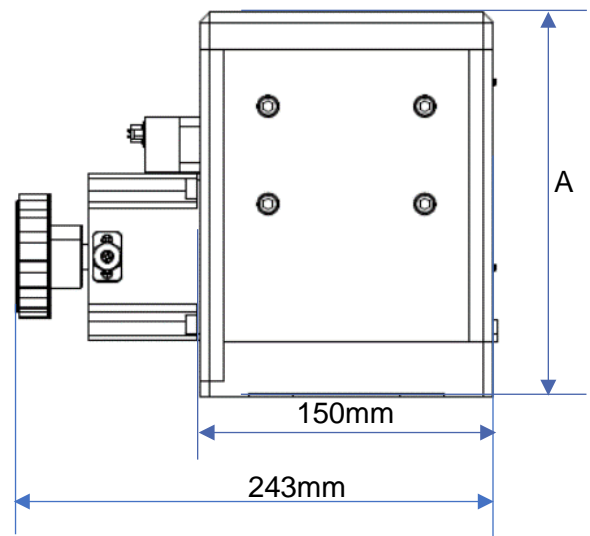
Model	25	50	75	100
A- Closed Height (mm)	107.5	148.5	170	245

DJ410

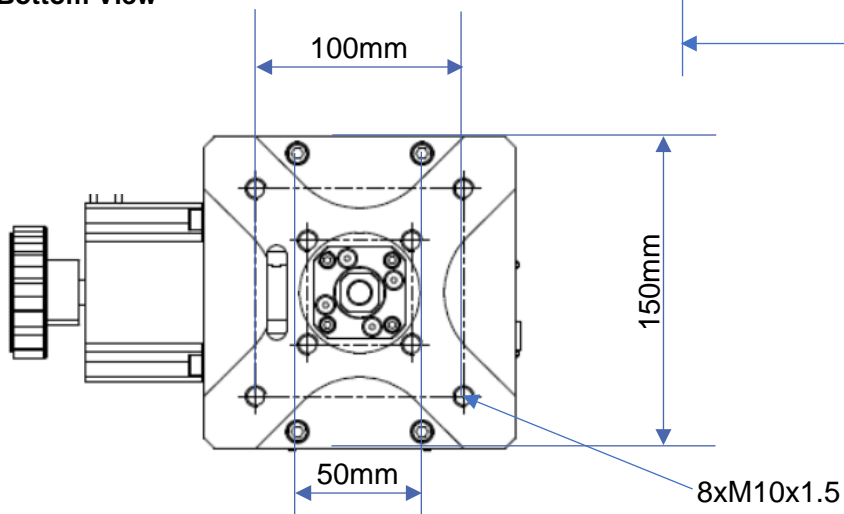
Top View



Side View



Bottom View



Model	50	100	150	200
A- Closed Height (mm)	196.5	319	394	519

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.

DJ (Lift Jack)	210 Series	310 Series	410 Series
Travel Options (mm)	-10 -25 -35 -50	-25 -50 -75 -100	-50 -100 -150 -200
Air Preparation Options	-A (Standard Air Stage) -V (Vacuum Stage; ask about options when placing order)		
Encoder Options	-E (With 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:

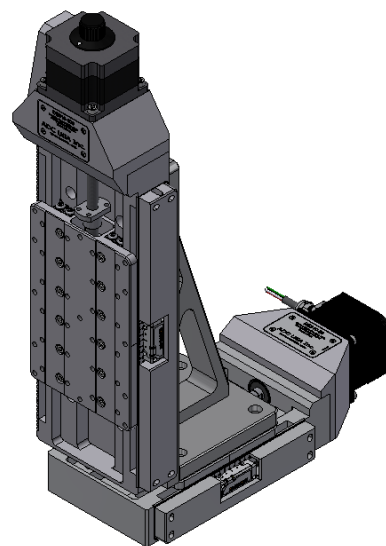
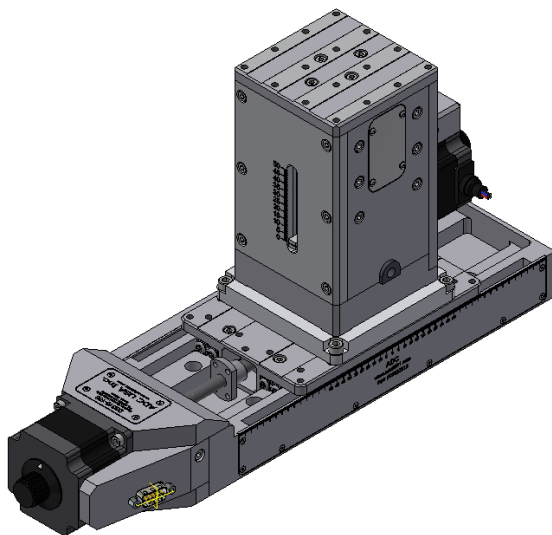
DJ210-50-A-N-B-2PH

This is an order for a DJ210 Precision Crossed Roller Jack with 50 mm travel, in air, with an encoder, with no brake, a 2-phase motor, and no gearbox.

MOUNTING PLATES AND BRACKETS

The chart below shows the corresponding part number per slide and jack combination.

	Mounting Bracket				Mounting Plate
	DS210-30	DS210-50	DS210-75	DS210-100	DJ210-X
DS210-30	MB-200-1	MB-200-2	N/A	N/A	MP-200-6
DS210-50	MB-200-1	MB-200-3	N/A	N/A	MP-200-7
DS210-75	MB-200-1	MB-200-3	MB-200-4	MB-200-5	MP-200-8
DS210-100	MB-200-1	MB-200-3	MB-200-4	MB-200-5	MP-200-7
	DS310-50	DS310-100	DS310-150	DS310-200	DJ310-X
DS310-50	MB-300-1	MB-300-2	N/A	N/A	MP-300-5
DS310-100	MB-300-1	MB-300-2	N/A	N/A	MP-300-5
DS310-150	MB-300-1	MB-300-2	MB-300-3	MB-300-4	MP-300-5
DS310-200	MB-300-1	MB-300-2	MB-300-3	MB-300-4	MP-300-5
	DS410-75	DS410-150	DS410-225	DS410-300	DJ410-X
DS410-75	MB-400-1	MB-400-2	N/A	N/A	MP-400-5
DS410-150	MB-400-1	MB-400-2	N/A	N/A	MP-400-6
DS410-225	MB-400-1	MB-400-2	MB-400-3	MB-400-4	MP-400-7
DS410-300	MB-400-1	MB-400-2	MB-400-3	MB-400-4	MP-400-7



OTHER ADC 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	

