

# Motorized Miniature Stage

◆ Classified Table

Model		축 수		Guide		재 질		Table size		Stroke		Option	
MM	Miniature	1	1 축 (x)	0	Cross Roller	A	Al	04	40	010	10mm	M	Mitsubish
		2	2 축 (xy)	1	Bushing	F	Steel	06	60	020	20mm	Y	Yaskawa
		3	3 축 (xyz)	2	Ball Guide	S	Sus	08	80	030	30mm	C	Cool Muschle
		4	z 축	3	LM Guide					050	50mm	L	Linear Motor
										060	60mm	E	Encoder
									100	100mm	R	Raydent	
												B	B/S, LM Raydent
												O	Order made
												Blank	Step Motor



# Motorized Miniature Stage



## Feature

- Travels from 10mm to 100mm
- Repeatability  $\pm 1\mu\text{m}$
- Velocity up to 20mm/sec (Step Motor)
- Resolution 0.002/Pulse (Full Step)
- Possible to servo motor and step motor
- Possible to customer order

## Product Specification

Item	Specification		
Table Dimension (mm)	40	60	80
Travel Range (mm)	10	20	30
Travel Guide	$\varnothing 8$ , Lead 1 / L2 / L2		
	Cross Roller		
Resolution (mm)	0.002 / Pulse (Full Step)		
Maximum Speed	20 mm (10kHz)		
Accuracy	5 $\mu\text{m}$	5 $\mu\text{m}$	5 $\mu\text{m}$
Uni-Repeatability	$\pm 1\ \mu\text{m}$	$\pm 1\ \mu\text{m}$	$\pm 1\ \mu\text{m}$
Bi-Repeatability	$\pm 2\ \mu\text{m}$	$\pm 2\ \mu\text{m}$	$\pm 2\ \mu\text{m}$

# Motorized Linear Stage

## ◆ Classified Table

Model		축 수		Guide		재 질		Table size		Stroke		Option	
ML	Linear	1	1 축 (x)	0	Cross Roller	A	Al	ML-C/R		010	10mm	M	Mitsubish
		2	2 축 (xy)	1	Bushing	F	Steel	10	100	020	20mm	Y	Yaskawa
				2	Ball Guide	S	Sus	15	150	030	30mm	C	Cool Muschle
				3	LM Guide			20	200	050	50mm	L	Linear Motor
								ML-LM		060	60mm	E	Encoder
								04	45x45	100	100mm	R	Raydent
								08	80x80	150	150mm	B	B/S, LM Raydent
								10	100x100	200	200mm	O	Order made
								15	150x150	300	300mm	Blank	Step Motor
								20	200x200				



# Motorized Linear Stage



## Feature

- Travels from 100mm to 300mm
- Repeatability  $\pm 3\mu\text{m}$
- Velocity up to 50mm/sec (Step Motor)
- Resolution 0.01/Pulse (Full Step)
- Possible to servo motor and step motor
- Possible to customer order

## Product Specification

Item	Specification		
Table Dimension (mm)	100 x 100	200 x 200	300 x 300
Travel Range (mm)	100	200	300
Travel Guide	Ø 12, Lead 5		
	LM Guide		
Resolution (mm)	0.01 / Pulse (Full Step)		
Maximum Speed	50 mm (10kHz)		
Accuracy	10 $\mu\text{m}$	12 $\mu\text{m}$	12 $\mu\text{m}$
Uni-Repeatability	$\pm 2.5 \mu\text{m}$	$\pm 3 \mu\text{m}$	$\pm 3 \mu\text{m}$
Bi-Repeatability	$\pm 4 \mu\text{m}$	$\pm 5 \mu\text{m}$	$\pm 5 \mu\text{m}$

# Motorized Horizontal Stage

## ◆ Classified Table

Model		축 수		Guide		재 질		Table size		Stroke		Option	
MZ	HZ	1	Horizontal	0	Cross Roller	A	Al	04	40x40	006	6mm	M	Mitsubish
		2	LabJack	1	Bushing	F	Steel	08	80x80	008	10mm	Y	Yaskawa
				2	Ball Guide	S	Sus	12	120x120	012	12mm	C	Cool Muschle
				3	LM Guide			20	200x200	020	20mm	L	Linear Motor
								30	300x300	030	30mm	E	Encoder
								40	400x400	050	50mm	R	Raydent
								50	500x500	100	100mm	B	B/S, LM Raydent
												O	Order made
												Blank	Step Motor



# Motorized Horizontal Stages



## Feature

- Travels from 4mm to 100mm
- Repeatability  $\pm 1\mu\text{m}$
- Velocity up to 3.6mm/sec (Step Motor)
- Resolution 0.00072/Pulse (Full Step)
- Possible to servo motor and step motor
- Possible to customer order

## Product Specification

Item	Specification		
Table Dimension (mm)	80 x 80	120 x 120	300 x 300
Travel Range (mm)	8	12	30
Travel Guide	$\varnothing 6/8/10$ , Lead 5		
	Cross Roller		
Resolution (mm)	0.00072 / Pulse (Full Step)		
Maximum Speed	3.6 mm (10kHz)		
Accuracy	5 $\mu\text{m}$	5 $\mu\text{m}$	10 $\mu\text{m}$
Uni-Repeatability	$\pm 2\ \mu\text{m}$	$\pm 2\ \mu\text{m}$	$\pm 2.5\ \mu\text{m}$
Bi-Repeatability	$\pm 3\ \mu\text{m}$	$\pm 3\ \mu\text{m}$	$\pm 3.5\ \mu\text{m}$
Parallelism	0.01	0.015	0.2

# Motorized Rotary Stage

◆ Classified Table

Model		축 수	Guide		재 질		Table size		Option	
MR	Rotary	Non Mean	0	Cross Roller	A	Al	060	Ø60mm	M	Mitsubish
			1	Ball Guide	F	Steel	080	Ø80mm	Y	Yaskawa
					S	Sus	090	Ø90mm	C	Cool Muschle
							120	Ø120mm	E	Encoder
							150	Ø150mm	R	Raydent
							200	Ø200mm	O	Order made
									Blank	Step Motor



# Motorized Rotary Stage



## Feature

- Travels from 90° to 360°
- Repeatability 0.02°
- Velocity up to 0.02°/sec (Step Motor)
- Resolution 0.004°/Pulse (Full Step)
- Possible to servo motor and step motor
- Possible to customer order

## Product Specification

Item	Specification		
Table Dimension (mm)	Ø 60	Ø 120	Ø 200
Travel Range (mm)	360	360	360
Travel Guide	Worm Gear 1/180		
Resolution	0.004°/ Pulse (Full Step)		
Maximum Speed	20° (5kHz)		
Accuracy	0.05°	0.025°	0.05°
Repeatability	0.02°	0.015°	0.025°
Roundness	0.03°	0.01°	0.02°
Parallelism	0.05	0.01	0.015



# Motorized Alignment Stage

◆ Classified Table

Model		축 수	Guide	재 질		Table Dim .		Option		
MA	Align	Non Mean	0	Cross Roller	A	Al	0200	200x200	M	Mitsubish
					F	Steel	0300	300x300	Y	Yaskawa
					S	Sus	0400	400x400	C	Cool Muschle
							0500	500x500	L	Linear Motor
							0700	700x700	E	Encoder
							1000	1000x1000	R	Raydent
							1500	1500x1500	B	B/S, LM Raydent
									O	Order made
									Blank	Step Motor



# Motorized Alignment Stage



## Feature

- Travels from  $\pm 10/\pm 10/\pm 1.5^\circ$
- Repeatability 1um
- Velocity up to 20mm/sec (Step Motor)
- Resolution 0.002/Pulse (Full Step)
- Possible to servo motor and step motor
- Possible to customer order

## Product Specification

Item	Specification		
Table Dimension (mm)	200 x 200	400 x 400	800 x 800
Travel Range	$\pm 5/\pm 5/\pm 2.5^\circ$	$\pm 5/\pm 5/\pm 2.5^\circ$	$\pm 5/\pm 5/\pm 2.5^\circ$
Travel Guide	$\varnothing 8/10/14$ , Lead 1 L2/L2		
	Cross Roller		
Resolution	0.002° / Pulse (Full Step)		
Maximum Speed	20 mm (10kHz)		
Accuracy	5 um	5 um	5 um
Uni-Repeatability	$\pm 1$ um	$\pm 1.5$ um	$\pm 2.5$ um
Bi-Repeatability	$\pm 1.5$ um	$\pm 3$ um	$\pm 3.5$ um
Load Capacity	20	50	100

# Manual Stage

## Dovetail Series (1, 2, 3, 4 – axis)

### Product Outline

Table Size (mm): 30x40, 40x40, 50x40, 50x50, 60x40, 60x60, 90x40, 125x40, 140x40

Travel Range (mm):  $\pm 5$ ,  $\pm 7$ ,  $\pm 15$ ,  $\pm 30$ ,  $\pm 50$

Travel Guide: Rack & Pinion, Screw

Material: Aluminum

### ◆ Classified Table

Type	Axis		Guide		Material		Table size		Feature		Motion Head		Option	
D	1	1-axis	1	Fine Screw	A	Aluminum	034	30x40	M	Middle	1	Fine Screw	W	Symmetry
	2	2-axis	2	Rack & Pinion			044	40x40			2	Warm Gear	O	Custom
	3	3-axis					054	50x40						
	4	Z-axis					064	60x40						
							066	60x60						
							094	90x40						
							124	125x40						
							144	140x40						



## Specification

Item	Specification								
	Table Size (mm)	Stroke (mm)	Guide	Resolution (mm)	Parallelism (mm)	Straightness (mm)	Load (Kg)	Material	Weight (Kg)
D12A-144M2	140x40	± 50	Dovetail	0.1	0.08	0.03	4	Aluminum	0.55
D12A-144M2W	140x40	± 50	Dovetail	0.1	0.08	0.03	4	Aluminum	0.58
D22A-144M2	140x40	± 50	Dovetail	0.1	0.08	0.03	3.5	Aluminum	1.07
D22A-144M2W	140x40	± 50	Dovetail	0.1	0.08	0.03	3.5	Aluminum	1.12
D32A-144M2	140x40	± 50	Dovetail	0.1	0.08	0.03	2	Aluminum	1.82
D32A-144M2W	140x40	± 50	Dovetail	0.1	0.08	0.03	2	Aluminum	1.82
D42A-144M2	140x40	± 50	Dovetail	0.1	0.08	0.03	2	Aluminum	0.67
D42A-144M2W	140x40	± 50	Dovetail	0.1	0.08	0.03	2	Aluminum	0.7
D11A-044M1	40x40	± 5	Dovetail	-	0.06	0.03	2.5	Aluminum	0.19
D12A-044M2	40x40	± 10	Dovetail	0.1	0.06	0.03	2.5	Aluminum	0.2
D12A-044M2W	40x40	± 10	Dovetail	0.1	0.06	0.03	2.5	Aluminum	0.22
D21A-044M1	40x40	± 5	Dovetail	-	0.06	0.03	2.5	Aluminum	0.38
D22A-044M2	40x40	± 10	Dovetail	0.1	0.06	0.03	2.5	Aluminum	0.35
D22A-044M2W	40x40	± 10	Dovetail	0.1	0.06	0.03	2.5	Aluminum	0.37
D31A-044M1	40x40	± 5	Dovetail	-	0.06	0.03	1	Aluminum	0.64
D32A-044M2	40x40	± 10	Dovetail	0.1	0.06	0.03	1	Aluminum	0.59
D32A-044M2W	40x40	± 10	Dovetail	0.1	0.06	0.03	1	Aluminum	0.63
D41A-044M1	40x40	± 5	Dovetail	-	0.06	0.03	1	Aluminum	0.26
D42A-044M2	40x40	± 10	Dovetail	0.1	0.06	0.03	1	Aluminum	0.24
D42A-044M2W	40x40	± 10	Dovetail	0.1	0.06	0.03	1	Aluminum	0.26
D11A-055M1	50x50	± 7	Dovetail	-	0.06	0.03	5	Aluminum	0.25
D21A-055M1	50x50	± 7	Dovetail	-	0.06	0.03	4.5	Aluminum	0.5
D31A-055M1	50x50	± 7	Dovetail	-	0.06	0.03	1.5	Aluminum	1.26
D41A-055M1	50x50	± 7	Dovetail	-	0.06	0.03	1.5	Aluminum	0.45
D12A-064M2	60x60	± 15	Dovetail	0.1	0.06	0.03	3	Aluminum	0.31
D12A-064M2W	60x60	± 15	Dovetail	0.1	0.06	0.03	3	Aluminum	0.33
D22A-064M2	60x60	± 15	Dovetail	0.1	0.06	0.03	2.7	Aluminum	0.54
D22A-064M2W	60x60	± 15	Dovetail	0.1	0.06	0.03	2.7	Aluminum	0.59
D32A-064M2	60x60	± 15	Dovetail	0.1	0.06	0.03	2	Aluminum	0.93

## Specification

Item	Specification								
	Table Size (mm)	Stroke (mm)	Guide	Resolution (mm)	Parallelism (mm)	Straightness (mm)	Load (Kg)	Material	Weight (Kg)
D32A-064M2W	60x40	± 15	Dovetail	0.1	0.06	0.03	2	Aluminum	0.98
D42A-064M2	60x40	± 15	Dovetail	0.1	0.06	0.03	2	Aluminum	0.38
D42A-064M2W	60x40	± 15	Dovetail	0.1	0.06	0.03	2	Aluminum	0.38
D11A-066M1	60x60	± 7	Dovetail	-	0.06	0.03	5	Aluminum	0.5
D21A-066M1	60x60	± 7	Dovetail	-	0.06	0.03	4.5	Aluminum	1
D31A-066M1	60x60	± 7	Dovetail	-	0.06	0.03	2	Aluminum	1.56
D41A-066M1	60x60	± 7	Dovetail	-	0.06	0.03	2	Aluminum	0.56
D12A-094M2	90x40	± 30	Dovetail	0.1	0.06	0.03	4	Aluminum	0.4
D12A-094M2W	90x40	± 30	Dovetail	0.1	0.06	0.03	4	Aluminum	0.42
D22A-094M2	90x40	± 30	Dovetail	0.1	0.06	0.03	3.6	Aluminum	0.73
D22A-094M2W	90x40	± 30	Dovetail	0.1	0.06	0.03	3.6	Aluminum	0.78
D32A-094M2	90x40	± 30	Dovetail	0.1	0.06	0.03	2	Aluminum	1.27
D32A-094M2W	90x40	± 30	Dovetail	0.1	0.06	0.03	2	Aluminum	1.27
D42A-094M2	90x40	± 30	Dovetail	0.1	0.06	0.03	2	Aluminum	0.47
D42A-094M2W	90x40	± 30	Dovetail	0.1	0.06	0.03	2	Aluminum	0.5