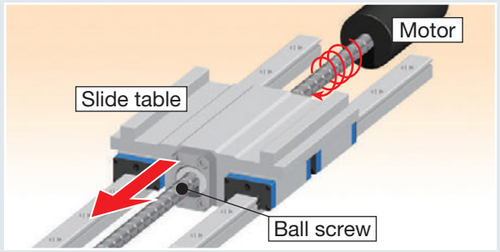
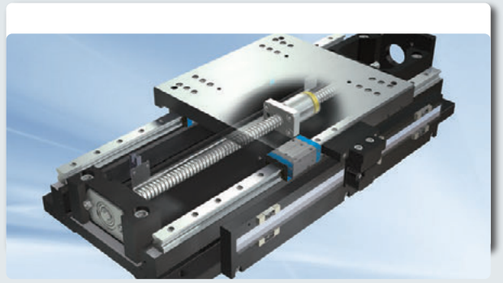
IKO Types and Characteristics of Mechatronics Series

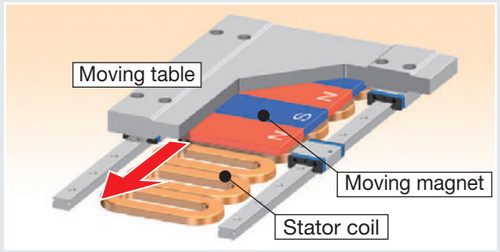
Types of Mechatronics Series

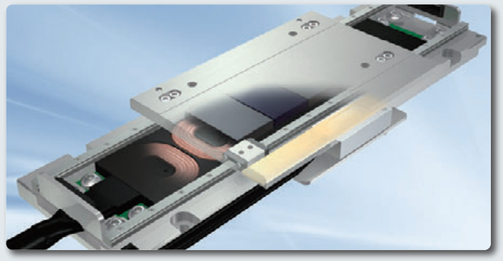
Ball screw drive



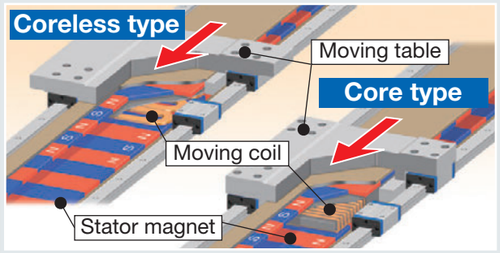


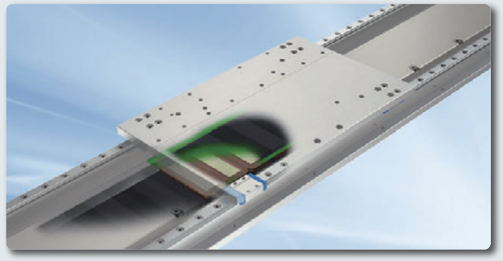
Linear motor drive — Moving magnet



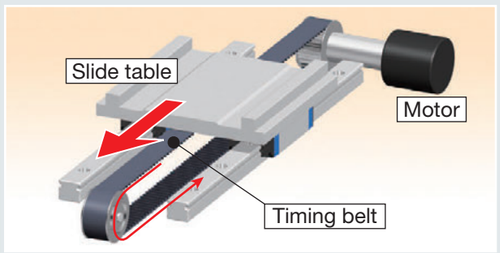


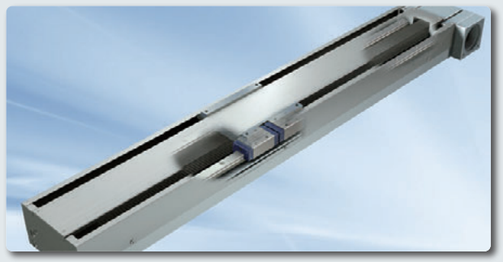
Linear motor drive — Moving coil





Timing belt drive





Characteristics of Mechatronics Series

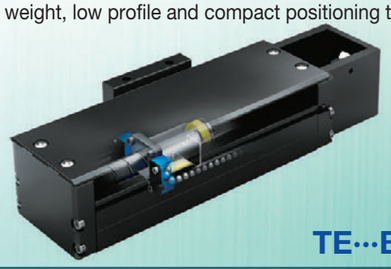
		Motion direction	Stroke length	Thrust force	Speed	Acceleration	Positioning accuracy
Ball screw drive	Linear / Vertical / Alignment		○	◎	○	△	○
Linear motor drive — Moving magnet	Linear		△	△	◎	◎	◎
	Alignment						
Linear motor drive — Moving coil	Linear		◎	△	◎	◎	◎
Timing belt drive	Linear		◎	○	◎	◎	△

Code description ◎Excellent ○Good △Fair

IKO Mechatronics Series Lineup

Precision Positioning Table TE

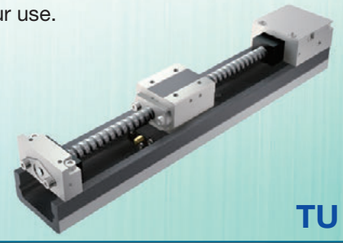
- High-strength aluminum alloy is used for main components
- Light weight, low profile and compact positioning table



TE···B

Precision Positioning Table TU

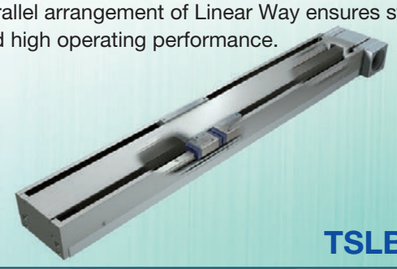
- High rigidity U-shaped track rail adopted
- Various table specifications are available according to your use.



TU

Precision Positioning Table LB

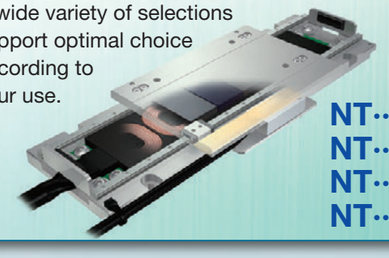
- High-speed type using a timing belt drive
- Parallel arrangement of Linear Way ensures stable and high operating performance.



TSLB

Nano Linear NT

- Pursuing ultimate compactification
- Very low profile of NT38V: only 11mm
- A wide variety of selections support optimal choice according to your use.



NT···V
NT···H
NT···XZ
NT···XZH

Precision Positioning Table L

- Standard type highly-proven in various fields
- Parallel arrangement of Linear Ways with stable performance

TSL···M

Precision Positioning Table LH

- Component parts from rigorous selection ensure high accuracy and reliability.
- High rigidity and large carrying mass

TSLH···M CTLH···M

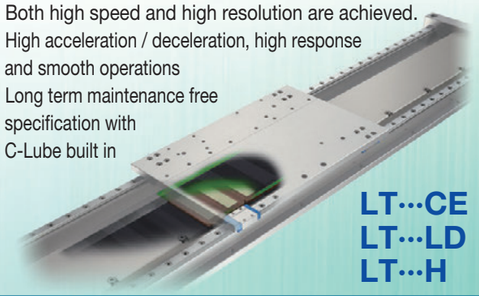
Alignment Stage SA

- Sectional height of 3 axes X, Y and θ is only 52mm (SA65DE).
- X- and Y-axis: 0.1μm, θ-axis: excellent resolution as high as 0.36 sec (SA120DE)

SA···DE

Linear Motor Table LT

- Both high speed and high resolution are achieved.
- High acceleration / deceleration, high response and smooth operations
- Long term maintenance free specification with C-Lube built in



LT···CE
LT···LD
LT···H

Super Precision Positioning Table TX

- Achieved ultimate positioning performance with rolling guide type
- High accuracy attained by fully-closed loop control

TX···M CTX···M

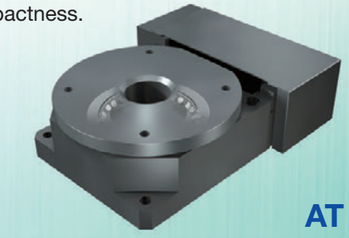
Cleanroom Precision Positioning Table TC

- Optional for use in high cleanliness environment for semiconductor and LCD manufacturing machines
- Light weight, low profile and compact positioning table

TC···EB

Alignment Table AT

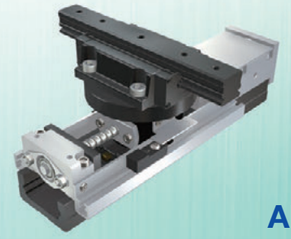
- High accuracy positioning ensuring precise angle correction
- Crossed Roller Bearing ensures high rigidity and compactness.



AT

Alignment Module AM

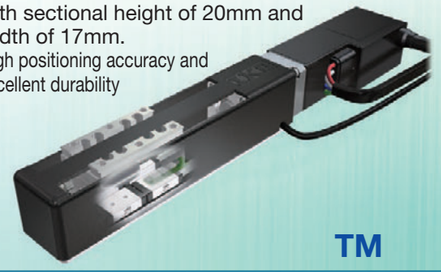
- Supports free designing of stage according to your use
- Control tolerance of height within ±10μm



AM

Micro Precision Positioning Table TM

- Ground ball screw drive realizes ultra-small size with sectional height of 20mm and width of 17mm.
- High positioning accuracy and excellent durability



TM

Precision Positioning Table TS/CT

- Compact structure with low profile
- Crossed Roller Way guaranteeing high reliability and high accuracy

TS CT

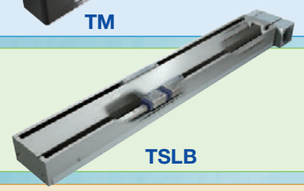
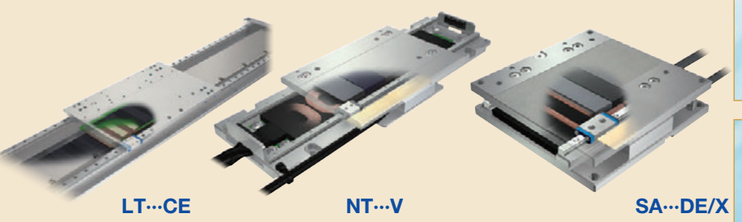
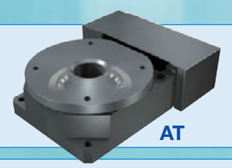
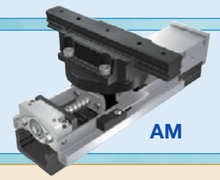
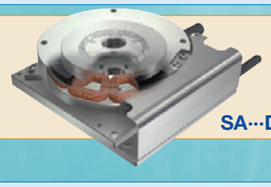
Precision Elevating Table TZ

- Unique wedge mechanism ensures compact and high accuracy vertical positioning.
- TZ···X achieving high accuracy and high rigidity through adoption of C-Lube Linear Roller Way Super MX

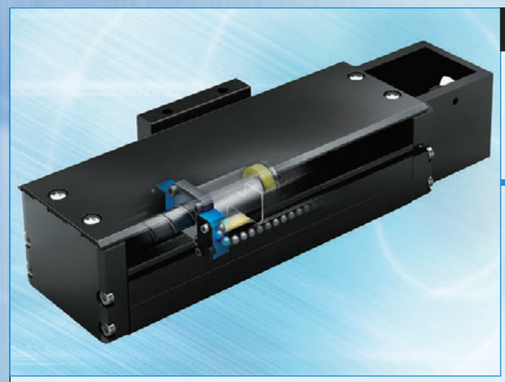
TZ
TZ···H
TZ···X

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

IKO Mechatronics Series INDEX

Motion direction and feeding mechanism		Shape	Series	Models of single-axis specification	Models of multi-axis specification	Reference page
Linear	Ball screw drive	 TE···B TSL···M TC···EB TM CT TX···M	Precision Positioning Table TE	TE···B	–	Page Ⅱ-4
			Precision Positioning Table TU	TU	–	Page Ⅱ-30
			Precision Positioning Table L	TSL···M	–	Page Ⅱ-96
			Precision Positioning Table LH	TSLH···M	CTLH···M	Page Ⅱ-116
			Super Precision Positioning Table TX	TX···M	CTX···M	Page Ⅱ-144
			Cleanroom Precision Positioning Table TC	TC···EB	–	Page Ⅱ-164
			Micro Precision Positioning Table TM	TM	–	Page Ⅱ-180
			Precision Positioning Table TS/CT	TS	CT	Page Ⅱ-196
Linear	Timing belt drive	 TSLB	Precision Positioning Table LB	TSLB	–	Page Ⅱ-218
Linear	Linear motor drive	 LT···CE NT···V SA···DE/X	Nano Linear NT	NT···V NT···H	NT···XZ NT···XZH	Page Ⅱ-230
			Alignment Stage SA	SA···DE/X	SA···DE/XY SA···DE/XS SA···DE/XYS	Page Ⅱ-260
			Linear Motor Table LT	LT···CE LT···LD LT···H	–	Page Ⅱ-276
Alignment	Ball screw drive	 AT	Alignment Table AT	AT	–	Page Ⅱ-304
Alignment	Ball screw drive	 AM	Alignment Module AM	AM	–	Page Ⅱ-316
Alignment	Linear motor drive	 SA···DE/S	Alignment Stage SA	SA···DE/S	SA···DE/XS SA···DE/XYS	Page Ⅱ-260
Vertical	Ball screw drive	 TZ	Precision Elevating Table TZ	TZ TZ···H TZ···X	–	Page Ⅱ-330

A Variety of Models and Variations



Precision Positioning Table TE

Ball screw drive

TE···B

Linear

- High-strength aluminum alloy is used for main components
- Light weight, low profile and compact positioning table
- High accuracy positioning
- Long term maintenance free specification with C-Lube built in
- Excellent cost performance

Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TE50B	210	800	4, 8
TE60B	500	1 000	5, 10
TE86B	800	1 860	10, 20

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	○
Attitude accuracy	—
Straightness	—
Backlash	○

See page Ⅱ–4

Precision Positioning Table L

Ball screw drive

TSL···M

Linear

- Standard type highly-proven in various fields
- Parallel arrangement of Linear Ways with stable performance
- High running accuracy and positioning accuracy
- Many size variations support easy multi-axis system configurations.
- Long term maintenance free specification with C-Lube built in

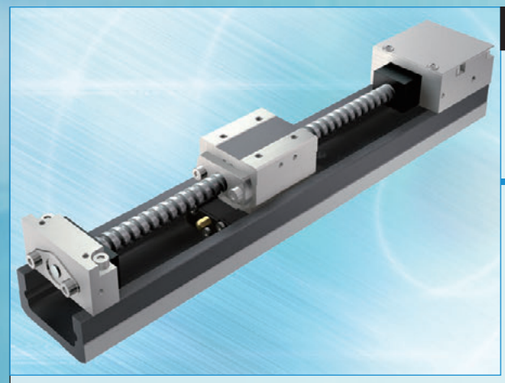
Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TSL 90 M	300	500	5, 10
TSL 120 M	600	500	5, 10
TSL 170 M	500	500	5, 10
TSL 170S M	1 000	500	5, 10
TSL 220 M	1 000	500	5, 10

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	○
Attitude accuracy	—
Straightness	—
Backlash	○

See page Ⅱ–96



Precision Positioning Table TU

Ball screw drive

TU

Linear

- Original high rigidity U-shaped track rail adopted
- Various table specifications are available according to your use.
- Slide table with high accuracy and high rigidity in a single structure
- Easy ordering just by specifying the identification number for the required functions and performance

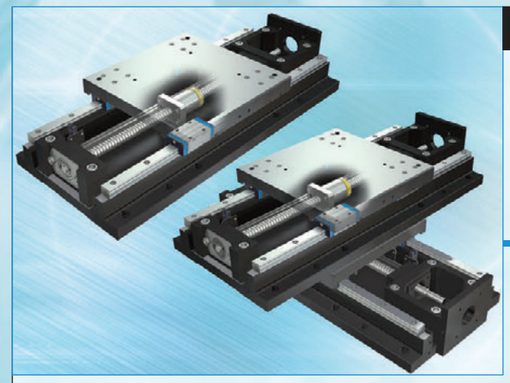
Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TU 25	100	400	4
TU 30	230	500	5
TU 40	285	800	4, 8
TU 50	560	1 000	5, 10
TU 60	1 010	1 860	5, 10, 20
TU 86	1 400	1 480	10, 20
TU100	1 140	1 110	20
TU130	1 260	1 110	25

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	○
Attitude accuracy	—
Straightness	—
Backlash	○

See page Ⅱ–30



Precision Positioning Table LH

Ball screw drive

TSLH···M (Single-axis specification)

CTLH···M (Two-axis specification)

Linear

- Component parts from rigorous selection ensure high accuracy and reliability.
- High rigidity and large carrying mass
- High running accuracy and positioning accuracy
- The series including ultra large size with table width of 420mm
- Long term maintenance free specification with C-Lube built in

Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TSLH120M	300	500	5, 10
TSLH220M	400	500	5, 10
TSLH320M	500	448	5, 10
TSLH420M	800	448	5, 10
CTLH120M	300 × 300	500	5, 10
CTLH220M	400 × 400	500	5, 10
CTLH320M	500 × 500	448	5, 10

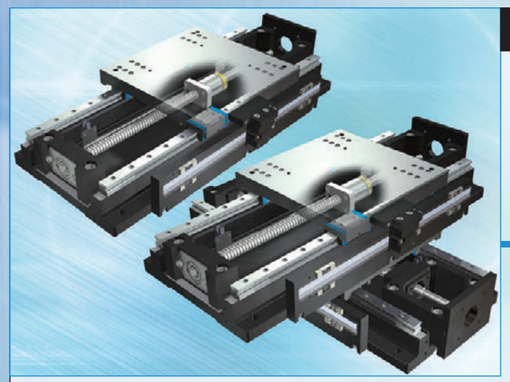
Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	○
Parallelism in table motion B	—
Attitude accuracy	—
Straightness	◎
Backlash	◎

See page Ⅱ–116

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

A Variety of Models and Variations



Super Precision Positioning Table TX

Ball screw drive

TX···M (Single-axis specification)

CTX···M (Two-axis specification)

Linear

- Achieved ultimate positioning performance with rolling guide type
- Fully-closed loop control equipped with super high accuracy linear encoder ensuring high accuracy
- Control method selectable according to needs
- Long term maintenance free specification with C-Lube built in

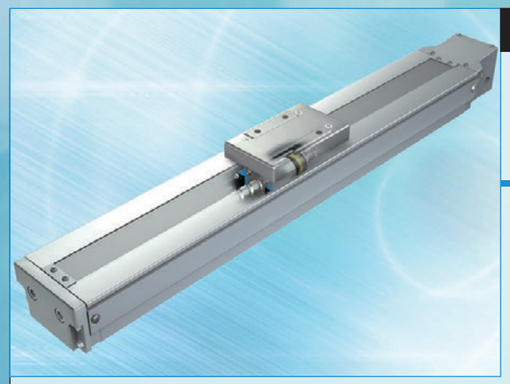
Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TX 120M	300	500	5, 10
TX 220M	400	500	5, 10
TX 320M	500	448	5, 10
TX 420M	800	448	5, 10
CTX120M	300 × 200	500	5, 10
CTX220M	400 × 300	500	5, 10

Accuracy

Positioning repeatability	◎
Positioning accuracy	◎
Lost motion	◎
Parallelism in table motion A	◎
Parallelism in table motion B	—
Attitude accuracy	◎
Straightness	◎
Backlash	◎

See page Ⅱ–144



Cleanroom Precision Positioning Table TC

Ball screw drive

TC···EB

Linear

- Optional for use in high cleanliness environment for semiconductor and LCD manufacturing machines
- Light weight, low profile and compact positioning table
- Compatible with cleanliness class 3
- Long term maintenance free specification with C-Lube built in

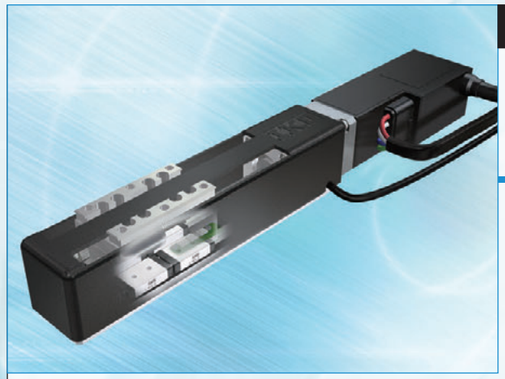
Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TC50EB	200	800	4, 8
TC60EB	500	1 000	5, 10
TC86EB	800	1 860	10, 20

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	○
Attitude accuracy	—
Straightness	—
Backlash	○

See page Ⅱ–164



Micro Precision Positioning Table TM

Ball screw drive

TM

Linear

- Ground ball screw drive realizes ultra-small size with sectional height of 20mm and width of 17mm.
- High positioning accuracy and excellent durability
- Two types of slide table shapes selectable according to needs
- Super-miniature sensor can be built in.

Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TM15	60	150	0.5, 1.0, 1.5
TM15G	50	150	0.5, 1.0, 1.5

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	—
Attitude accuracy	—
Straightness	—
Backlash	—

See page Ⅱ–180

Precision Positioning Table TS/CT

Ball screw drive

TS (Single-axis specification)

CT (Two-axis specification)

Linear

- Compact structure with low profile
- Crossed Roller Way guaranteeing high reliability and high accuracy positioning
- Compact design achieved by utilizing wide area of slide table

Specification

Model and size	Maximum stroke (mm) X-axis	Maximum stroke (mm) Y-axis	Maximum speed (mm/s)	Ball screw lead (mm)
TS 55/ 55	± 7.5		30	1
TS 75/ 75	± 12.5		30	1
TS125/125	± 25		250	1, 2, 5
TS125/220	± 60		250	2, 5
TS220/220	± 60		250	2, 5
TS220/310	± 90		250	2, 5
TS260/350	±125		250	2, 5
CT 55/ 55	± 7.5	± 7.5	30	1
CT 75/ 75	± 12.5	± 12.5	30	1
CT125/125	± 25	± 25	250	1, 2, 5
CT220/220	± 60	± 60	250	2, 5
CT260/350	± 75	±125	250	2, 5
CT350/350	±125	±125	250	2, 5

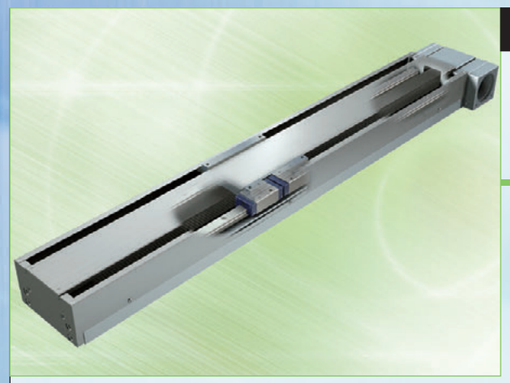
Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	◎
Parallelism in table motion B	○
Attitude accuracy	—
Straightness	—
Backlash	○

See page Ⅱ–196

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

A Variety of Models and Variations



Precision Positioning Table LB

Timing belt drive

TSLB

Linear

- Timing belt drive achieves high speed travel at 1,500mm/s.
- Parallel arrangement of Linear Way ensures stable and high operating performance.
- Long stroke up to 1,200mm

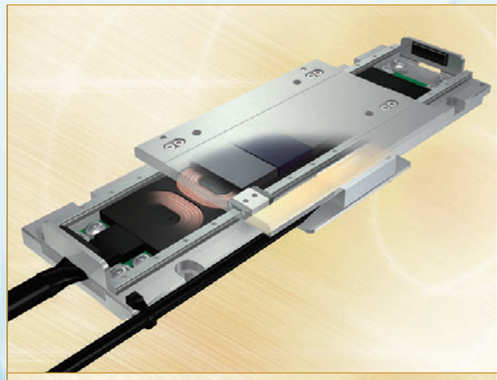
Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Resolution (mm)
TSLB 90	600	1 500	0.1
TSLB120	1 000	1 500	0.1
TSLB170	1 200	1 500	0.1

Accuracy

Positioning repeatability	△
Positioning accuracy	—
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	△
Attitude accuracy	—
Straightness	—
Backlash	—

See page Ⅱ–218



Nano Linear NT

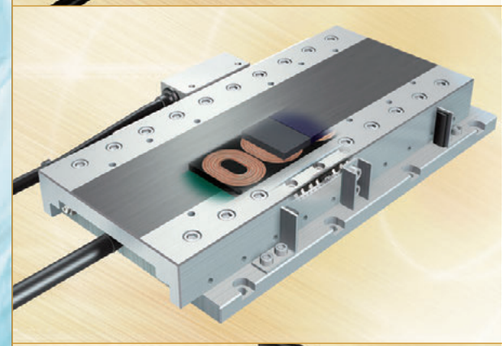
Standard Type

NT…V

Linear motor drive

Linear

- Pursuing ultimate compactification
- Very low profile of NT38V: only 11mm
- A wide variety of selections support optimal choice according to your use.
- High acceleration / deceleration ensuring highly responsive positioning
- Two-axis combination of X and Y



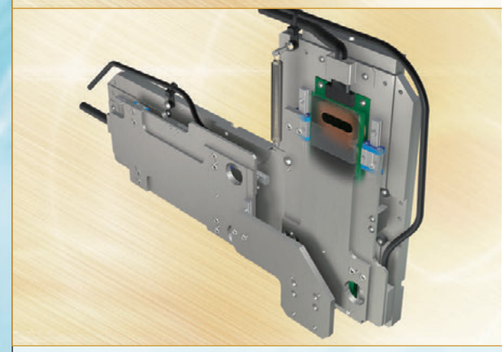
High Accuracy Type

NT…H

Linear motor drive

Linear

- Pursuing ultimate compactification
- High attitude accuracy
- High speed stability
- Simple system configuration



Pick and Place Unit

NT…XZ
NT…XZH

Linear motor drive

Linear

- Pursuing ultimate compactification
- High-tact positioning
- Ultrathin and space saving
- Operation monitoring function

Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Resolution (μm)
NT38V	18	500	0.1, 0.5
NT55V	65	1 300	0.1, 0.5
NT80V	120	1 300	0.1, 0.5
NT88H	65	400	0.01, 0.05
NT80XZ	45	1 300	0.1, 0.5
NT90XZH	25	1 300	0.1, 0.5

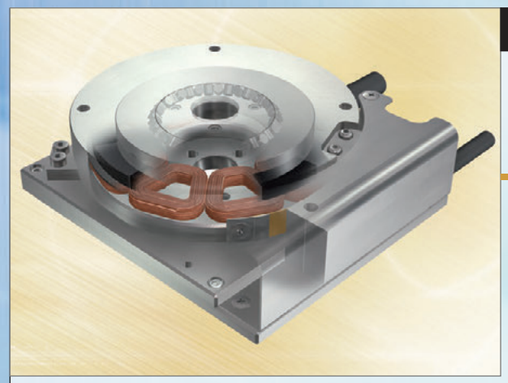
Accuracy

Item	NT…V	NT…H	NT…XZ
Positioning repeatability	◎	◎	◎
Positioning accuracy	—	◎	—
Lost motion	—	—	—
Parallelism in table motion A	—	◎	—
Parallelism in table motion B	—	—	—
Attitude accuracy	—	◎	—
Straightness	—	◎	—
Backlash	—	—	—

See page Ⅱ–230

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

A Variety of Models and Variations



Alignment Stage SA

Linear motor drive

SA···DE

Linear Alignment

- Slim and compact design with sectional height of 3 axes, X, Y and θ being only 52mm (SA65DE)
- X- and Y-axis: 0.1μm, θ-axis: excellent resolution as high as 0.36 sec (SA120DE)
- Free and independent combination of X, Y and θ

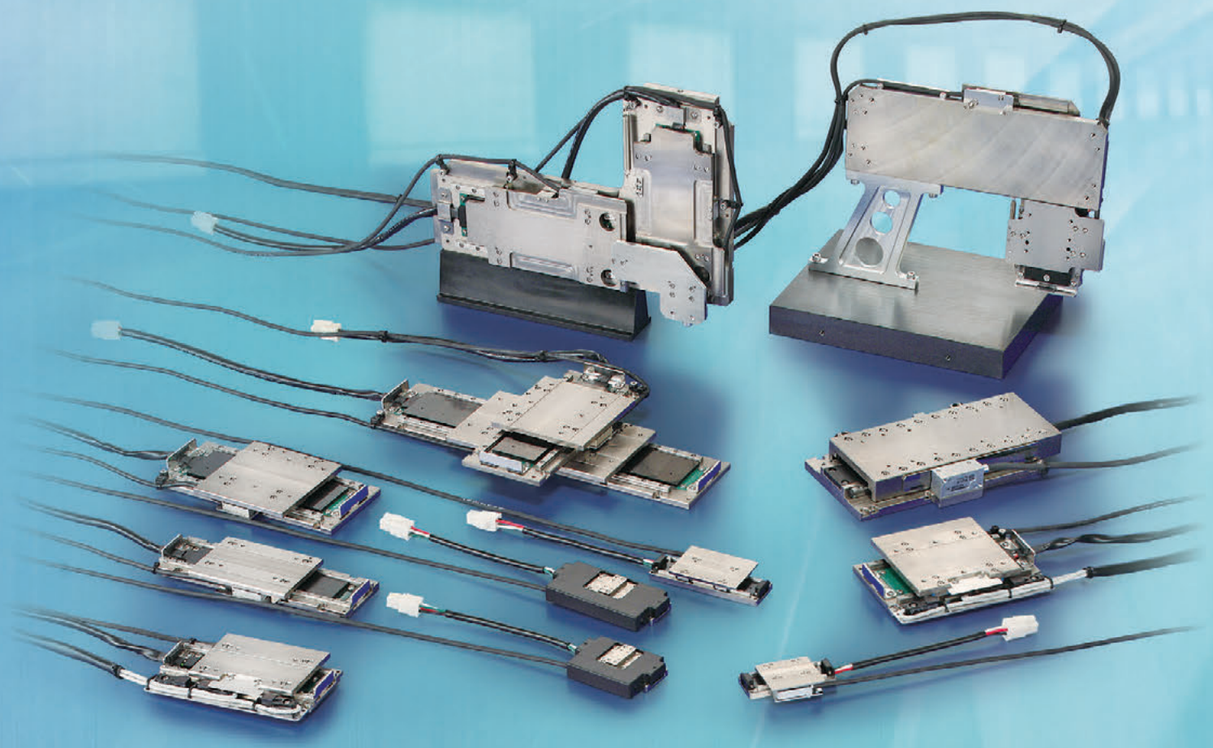
Specification

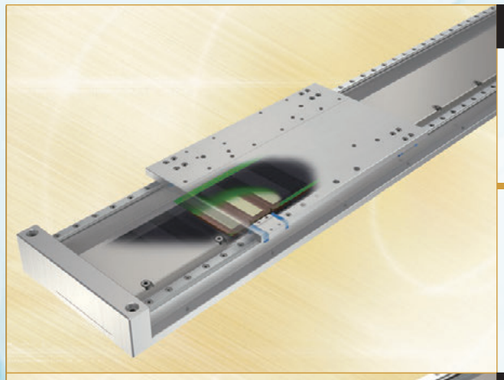
Model and size	Maximum stroke Maximum operating angle	Maximum speed	Resolution
SA 65 DE/X	10 (mm)	500 (mm/s)	0.1, 0.5 (μm)
SA120 DE/X	20 (mm)	800 (mm/s)	0.1, 0.5 (μm)
SA 65 DE/S	50 (degree)	720 (degree/s)	0.64 (s)
SA120 DE/S	60 (degree)	420 (degree/s)	0.36 (s)
SA200 DE/S	280 (degree)	270 (degree/s)	0.25 (s)

Accuracy

Positioning repeatability	◎
Positioning accuracy	—
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	—
Attitude accuracy	—
Straightness	—
Backlash	—

See page Ⅱ–260





Linear Motor Table LT

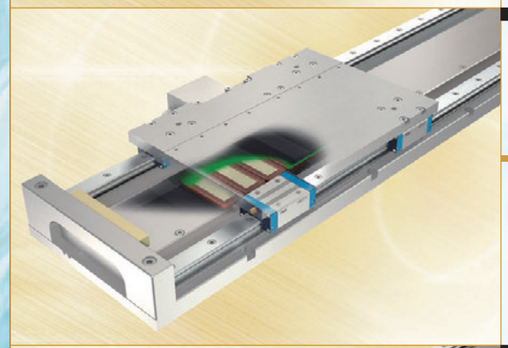
Compact Type

Linear motor drive

LT···CE

Linear

- Compact
- High static stability
- High speed stability
- High acceleration / deceleration and high response
- Long term maintenance free specification with C-Lube built in



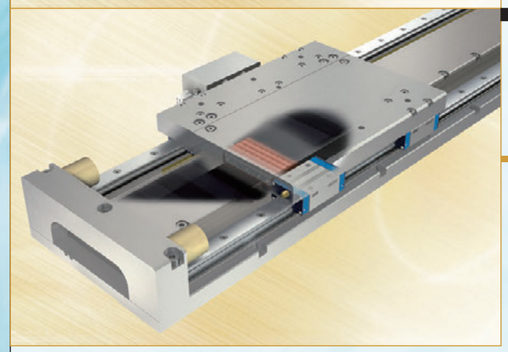
Long Stroke Type

Linear motor drive

LT···LD

Linear

- Super long stroke
- High static stability
- High speed stability
- Both high speed and high resolution are achieved.
- Long term maintenance free specification with C-Lube built in



High Thrust Type

Linear motor drive

LT···H

Linear

- High thrust
- High acceleration / deceleration, high response and smooth operations
- High static stability
- Air-cooling capable
- Long term maintenance free specification with C-Lube built in

Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Resolution (μm)
LT100CE	1 000	2 000	0.1, 0.5, 1.0
LT150CE	1 200	2 000	0.1, 0.5, 1.0
LT130LD	2 760	3 000	0.1, 0.5, 1.0
LT170LD	2 720	3 000	0.1, 0.5, 1.0
LT170H	2 670	1 500	0.1, 0.5, 1.0

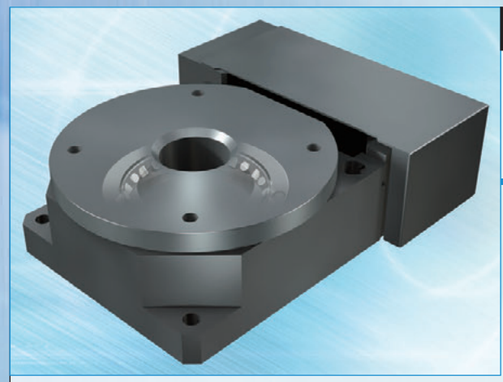
Accuracy

Item	LT···CE	LT···LD	LT···H
Positioning repeatability	◎	◎	◎
Positioning accuracy	—	—	—
Lost motion	—	—	—
Parallelism in table motion A	—	—	—
Parallelism in table motion B	—	—	—
Attitude accuracy	—	—	—
Straightness	—	—	—
Backlash	—	—	—

See page Ⅱ–276

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

A Variety of Models and Variations



Alignment Table AT

AT

Ball screw drive

Alignment

- High accuracy positioning ensuring precise angle correction
- Crossed Roller Bearing ensures high rigidity and compactness.
- High positioning repeatability
- A series of 3 sizes

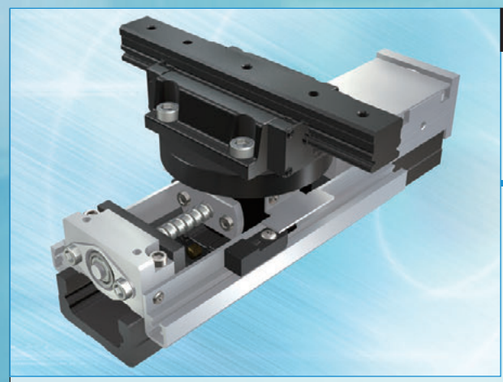
Specification

Model and size	Maximum operating angle (degree)	Ball screw lead (mm)	Rotator resolution (μm)
AT120	± 5	1	1
AT200	± 5	1	1
AT300	±10	2	2

Accuracy

Positioning repeatability	◎
Positioning accuracy	—
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	—
Attitude accuracy	—
Straightness	—
Backlash	—

See page Ⅱ–304



Alignment Module AM

AM

Ball screw drive

Alignment

- Supports free designing of stage according to your use
- Control tolerance of height within ±10μm
- Variety of positioning operations in combination of X, Y, and θ
- Ideal for large size equipment
- High accuracy, high rigidity, and high reliability

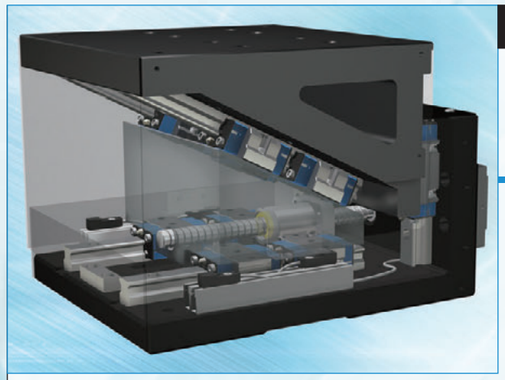
Specification

Model and size	Maximum stroke (mm)	Length of track rail (mm)	Ball screw lead (mm)
AM25	30	130	4
AM40	30	180	4
AM60	90	290	5
AM86	120	390	5

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	—
Parallelism in table motion A	—
Parallelism in table motion B	○
Attitude accuracy	—
Straightness	—
Backlash	○

See page Ⅱ–316



Precision Elevating Table TZ

TZ

Ball screw drive

Linear

- Unique wedge mechanism ensures compact and high accuracy vertical positioning.
- TZ···X achieving high accuracy and high rigidity through adoption of C-Lube Linear Roller Way Super MX
- Linear encoder mountable
- Long term maintenance free with C-Lube built in
- A series of two types of reduction ratios

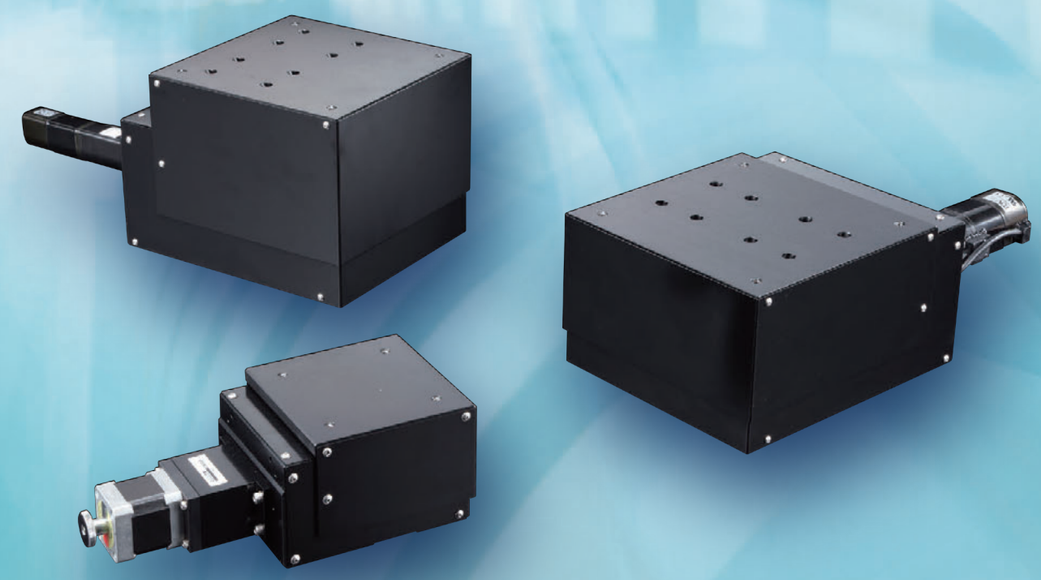
Specification

Model and size	Maximum stroke (mm)	Maximum speed (mm/s)	Ball screw lead (mm)
TZ120	10	100	4
TZ120X	10	100	4
TZ200H	24	125	5
TZ200X	24	125	5

Accuracy

Positioning repeatability	○
Positioning accuracy	○
Lost motion	○
Parallelism in table motion A	—
Parallelism in table motion B	—
Attitude accuracy	○
Straightness	—
Backlash	—

See page Ⅱ–330



1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

For light weight and low profile innovative tables

Precision Positioning Table TE

TE···B

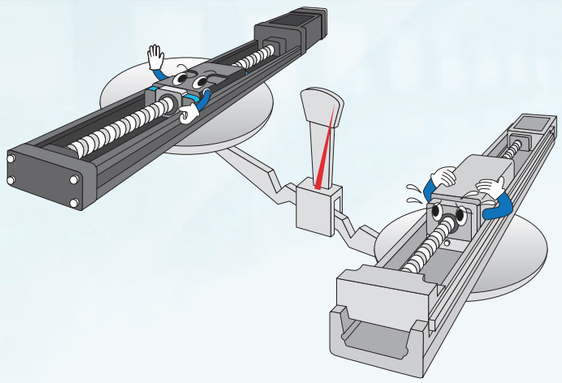
High-strength aluminum alloy is used for main components. Light weight and compact structure with slide table assembled inside the U-shaped bed!

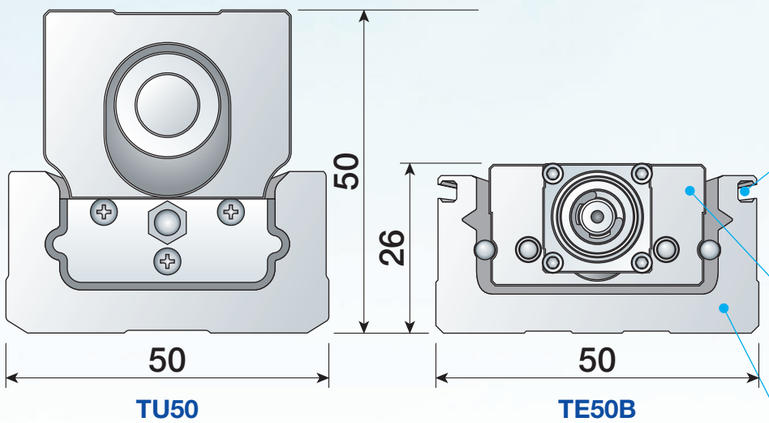
● Mass

unit: kg

Bed width(mm)	TU	TE···B
50	1.8	0.52
60	3.3	1.0
86	10.9	3.7

The value shows the mass of the entire table with 1 standard table.





Respective sensors to be attached directly into the mounting groove

Slide table and linear motion rolling guide integrated in a single structure to ensure low profile and compact design!

Ultra light weight achieved through the use of slide table and bed made of high-strength aluminum alloy!

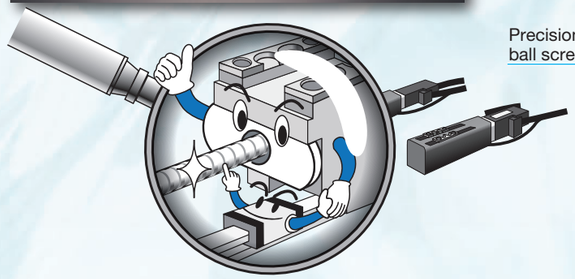
For ultimate compactification

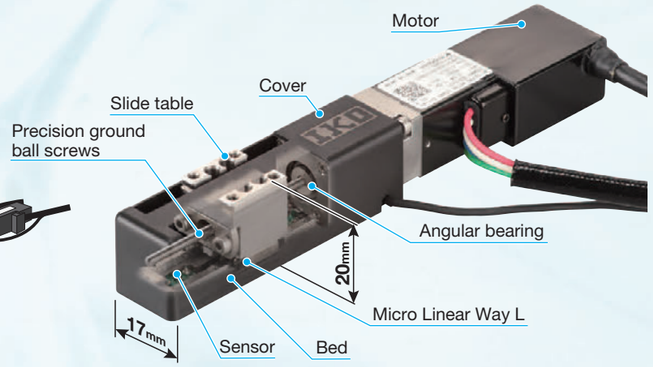
Micro Precision Positioning Table TM

TM

Ground ball screw specification realizes ultra-small size with sectional height of 20mm and width of 17mm.

Micro Linear Way L with track rail width of 2mm is adopted in the table guiding parts, and miniature ball screw with screw diameter of 2mm is used in the feeding mechanism. The unparalleled low cross sectional height in the ground ball screw drive is achieved.



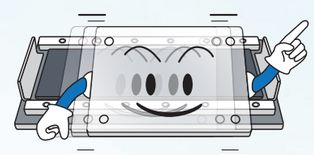


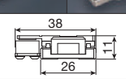
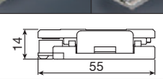
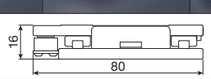
Nano Linear NT

NT···V

Pursuing ultimate compactification NT38V10, the smallest in the series, is only 11mm in sectional height, 38mm in table width and 62mm in entire length.

The occupied space is not increased even when tables are layered in X and Y, so further miniaturization of the positioning mechanism is promoted.



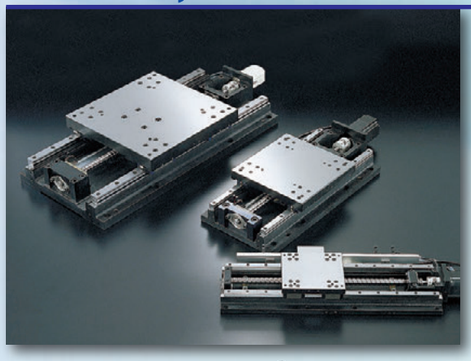
Model	NT···V						
	NT38V10	NT38V18	NT55V25	NT55V65	NT80V25	NT80V65	NT80V120
Model and size							
Sectional dimension							

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

For higher accuracy

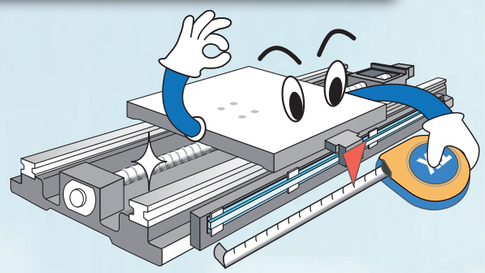
Super Precision Positioning Table TX

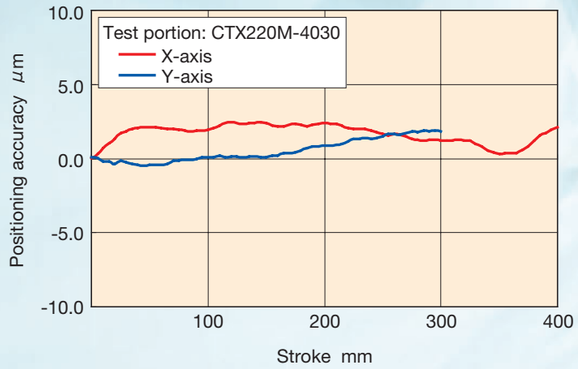
TX···M, CTX···M



Super high positioning accuracy and resolution guaranteed with an onboard super high accuracy linear encoder!

Adoption of C-Lube Linear Roller Way Super MX ensures ultimate running performance. Fully-closed loop control is established by super high resolution linear encoder to ensure high positioning accuracy over the whole stroke length.



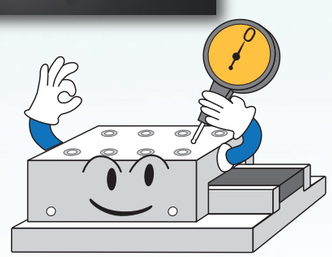


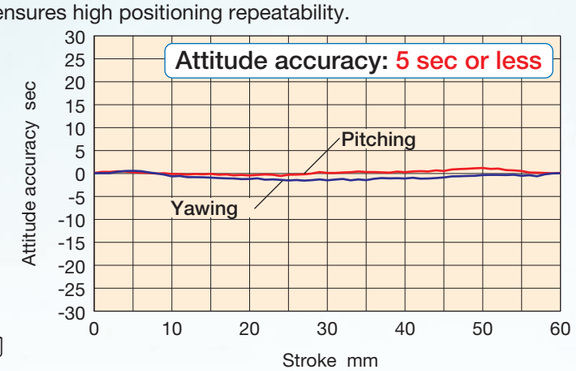
Nano Linear NT

NT···H

High attitude accuracy is realized!

Combination of parts processed with high accuracy and Anti-Creep Cage Crossed Roller Way realizes attitude accuracy of 5 sec or less. Variations in attitude due to movement is minimized, which ensures high positioning repeatability.

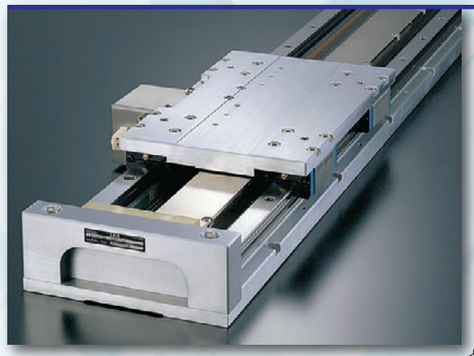




For attaining both high accuracy positioning and high speed

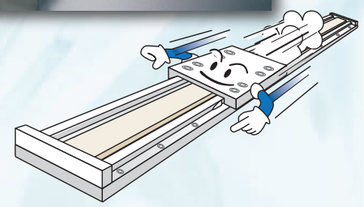
Linear Motor Table LT

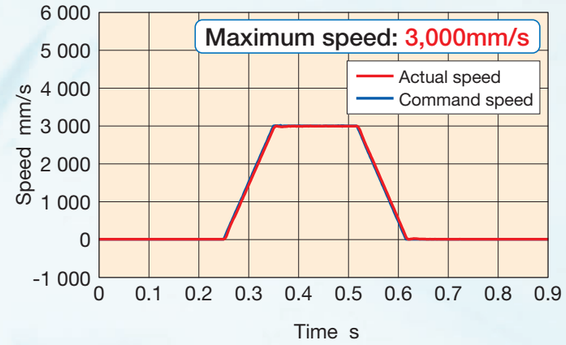
LT···LD



Direct drive enables both high-precision positioning and high speed.

Supports high speed operation required for long stroke motion
It is possible to perform high-speed motion of up to 3,000mm/s.



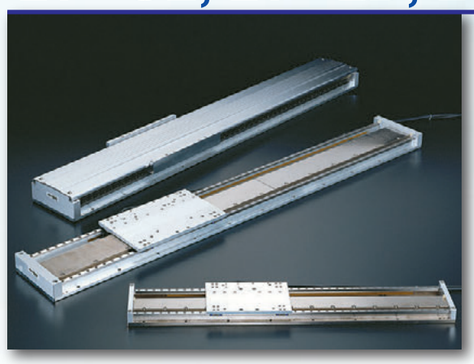


* Value when using ADVA driver.

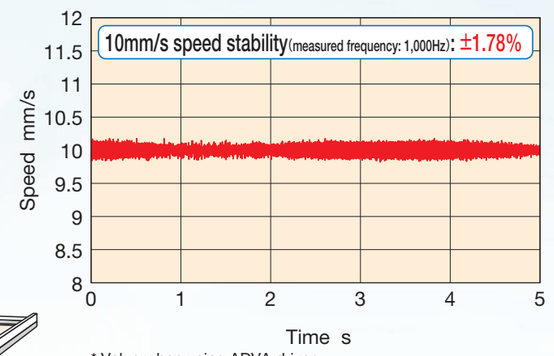
For high speed stability

Linear Motor Table LT

LT···CE, LT···LD, LT···H



Direct drive and advanced servo technology has achieved high speed stability.



* Value when using ADVA driver.

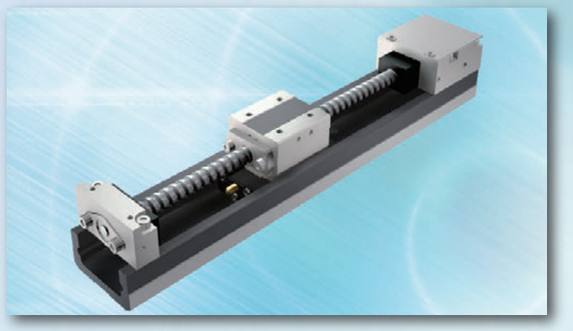
1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

For choosing from a wide variety of options

Easy ordering is possible right now just by specifying the identification number for the required functions and performance!

Precision Positioning Table TU

TU

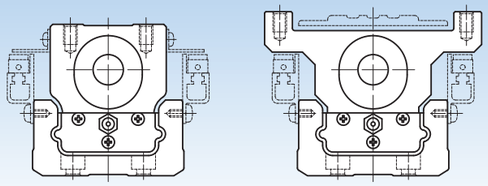


Precision Positioning Table TE

TE···B

Shape of slide table

Two types of shape are available according to needs.



Standard
Short, standard, long

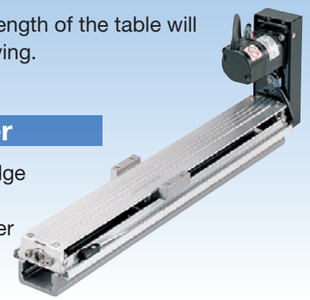
With flange
Short, standard, long

Motor folding back specification

Shortening the overall length of the table will contribute to space-saving.

With bridge cover

A specification with bridge cover is available for preventing foreign matter from falling onto the table.



Number of slide tables

Two slide tables can be mounted on the track rail depending on the applied load and the moment.

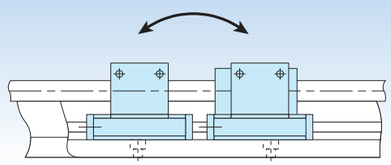


Table with bellows

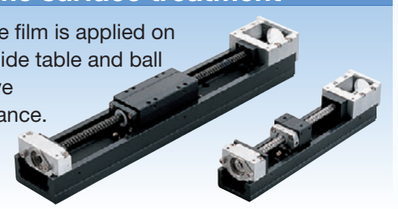
A specification with bellows is available for preventing foreign matter from intruding into the inside of the table.

Type and lead of ball screw

Rolled ball screw or ground ball screw can be selected according to the required accuracy. Ball screw lead is also selectable.

Black chrome surface treatment

Black permeable film is applied on the surface of slide table and ball screw to improve corrosion resistance.



For clean environment applications

Cleanroom Precision Positioning Table TC

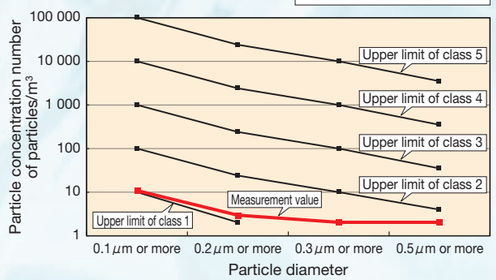
TC···EB

Cleanliness class 3 is achieved!

Stainless sheet with excellent corrosion resistance and side cover seal up drive parts and slide table guiding parts. Stainless sheet is pressed onto the side cover by resin roller within the slide table. The structure which ensures proper attraction by the strong magnet sheet prevents dust from generating to the surrounding of the table by air suction from the sealed internal space.

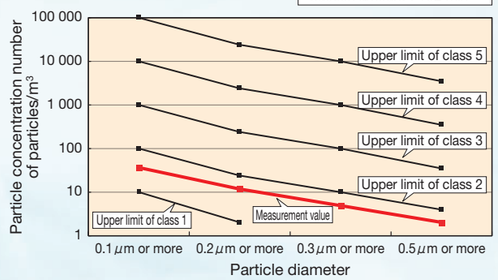
TC50EB150
(Ball screw lead: 4mm)

Stroke length : 50mm
Speed : 200mm/s
Suction amount : 5L/min



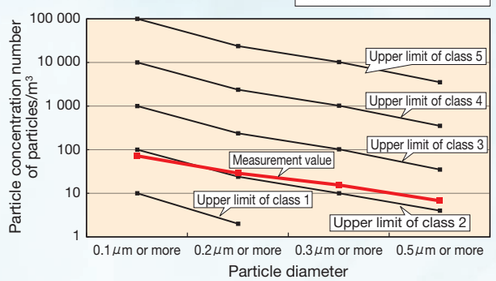
TC50EB300
(Ball screw lead: 8mm)

Stroke length : 200mm
Speed : 400mm/s
Suction amount : 10L/min



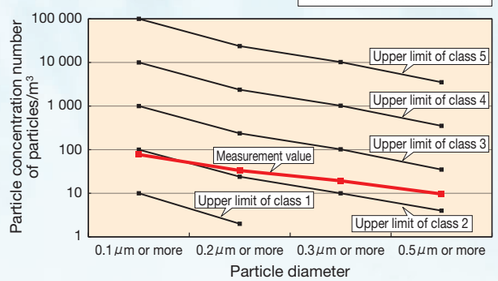
TC60EB300
(Ball screw lead: 10mm)

Stroke length : 200mm
Speed : 500mm/s
Suction amount : 30L/min



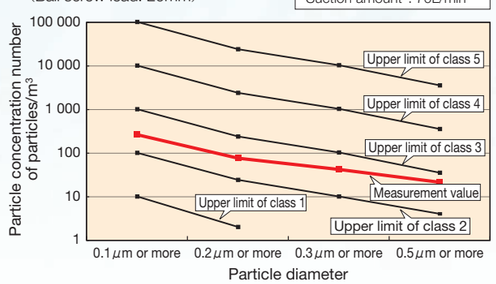
TC60EB600
(Ball screw lead: 10mm)

Stroke length : 500mm
Speed : 500mm/s
Suction amount : 30L/min



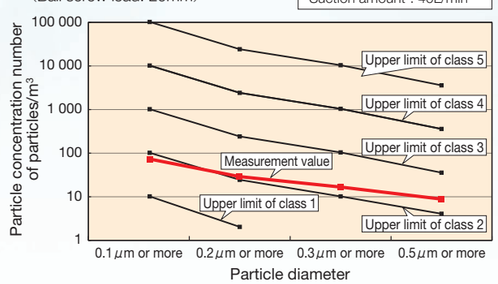
TC86EB640
(Ball screw lead: 20mm)

Stroke length : 200mm
Speed : 1 000mm/s
Suction amount : 70L/min



TC86EB940
(Ball screw lead: 20mm)

Stroke length : 800mm
Speed : 560mm/s
Suction amount : 40L/min



1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

For maintenance free

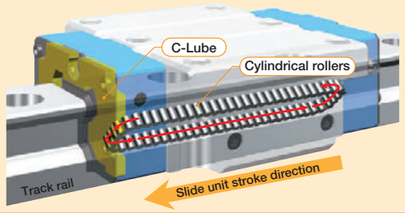
Oil Minimum
Gentle to The Earth IKO

Original and world's first structure with 【C-Lube】

C-Lube integrated

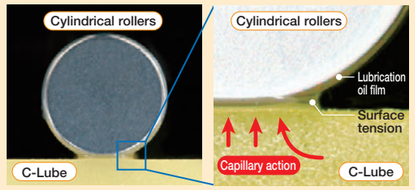
Lubrication oil is carried through circulation of rolling elements

The lubrication oil is supplied directly to the rolling elements, not to the track rail.
When rolling elements make contact with the capillary lubricating element integrated with the circulation path of slide unit rolling elements, the lubrication oil is supplied to surfaces of rolling elements and carried to the loading area through circulation of rolling elements.
This results in adequate lubrication oil being properly maintained in the loading area and lubrication performance will last for a long time.

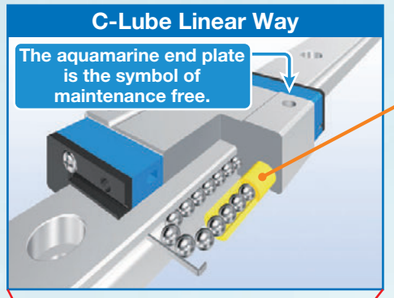


Lubrication oil is directly supplied to surfaces of the rolling elements

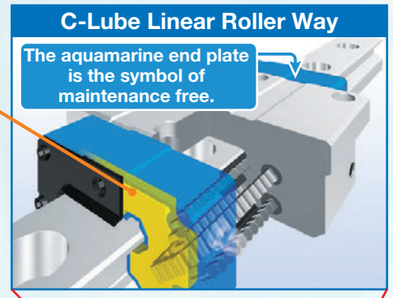
The surface of capillary lubricating element is always covered with the lubrication oil.
Lubrication oil is continuously supplied to the surface of rolling elements by surface tension in the contact of capillary lubricating element surface and rolling elements.
On the surface of capillary lubricating element with which the rolling elements make contact, new lubrication oil is always supplied from the other sections.

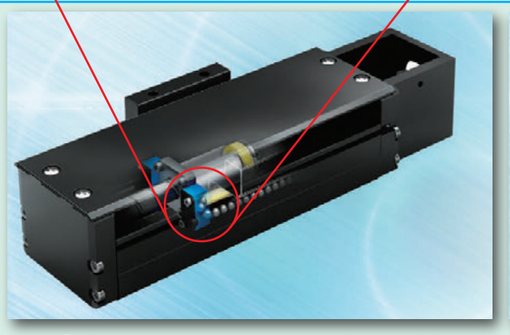


C-Lube Linear Way

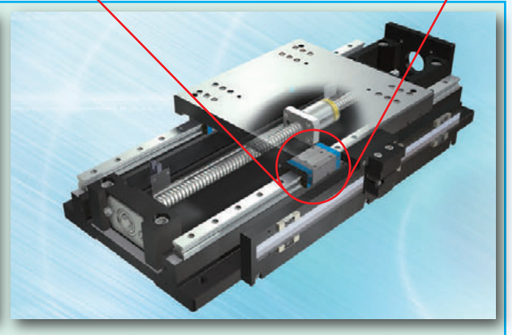


C-Lube Linear Roller Way





- Precision Positioning Table TE
- Precision Positioning Table L
- Precision Positioning Table LH
- Cleanroom Precision Positioning Table TC
- Precision Elevating Table TZ

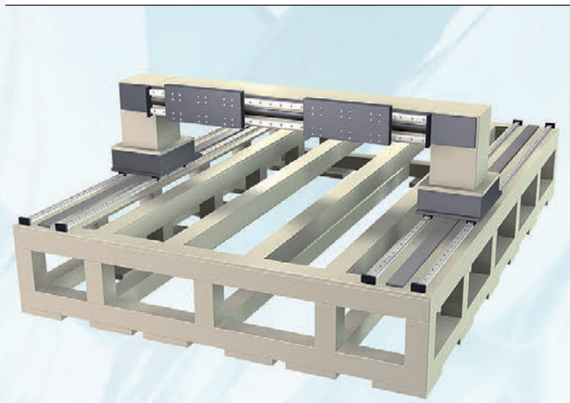


- Super Precision Positioning Table TX
- Nano Linear NT
- Alignment Stage SA
- Linear Motor Table LT

Series with 【C-Lube】 built in

For a wider variety of needs

Extensive experience in special stages will help us precisely address your particular needs such as stages related to various axis configurations. If needed, please contact IKO.



▲ Liquid crystal substrate manufacturing equipment

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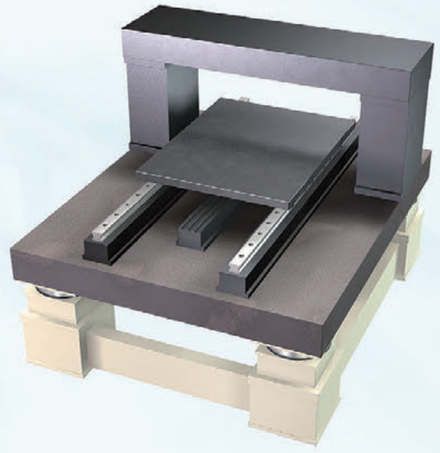
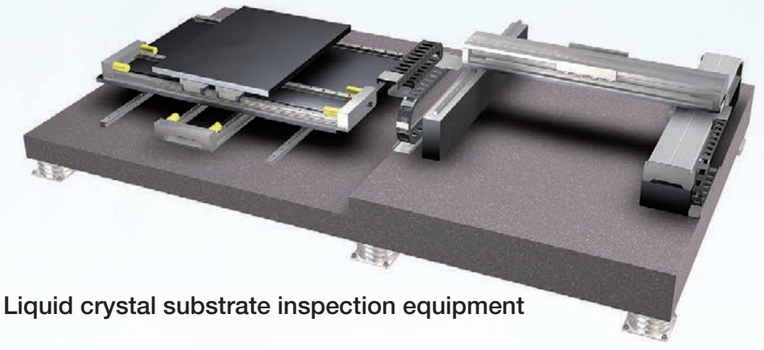
▲ Electronic parts inspection equipment



▲ Liquid crystal substrate inspection equipment



▲ Liquid crystal substrate inspection equipment