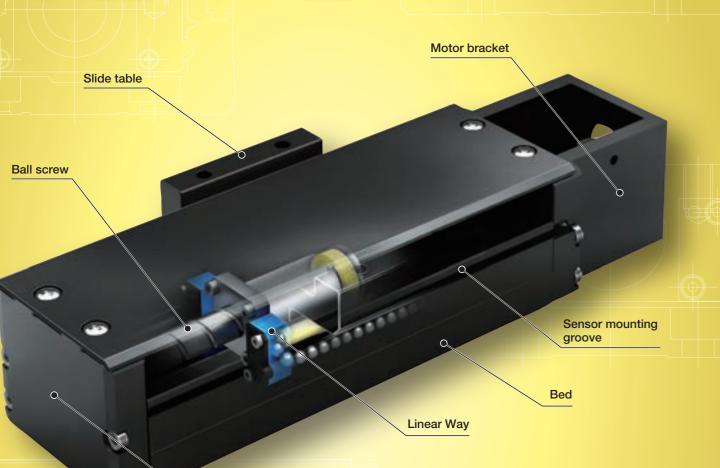


Ⅱ-3







Major product specifications

End bracket

IKU Precision Positioning Table TE

Driving method	Precision ball screw
Linear motion rolling guide	Linear Way (ball type)
Built-in lubrication part	Lubrication part "C-Lube" is built-in
Material of table and bed	High-strength aluminum alloy
Sensor	Select by identification number

Accuracy

	unit: mm
Positioning repeatability	±0.002~0.020
Positioning accuracy	0.035~0.065
Lost motion	-
Parallelism in table motion A	-
Parallelism in table motion B	0.008~0.016
Attitude accuracy	-
Straightness	-
Backlash	0.005

Points

Light weight, low profile and highprecision positioning table

Light weight, low profile and compact positioning table using high-strength aluminum alloy for its main components with a slide table assembled inside a U-shaped bed.

The mass of the entire table is reduced to about 40% of TU

The mass of the entire table is reduced to about 40% of TU series. Low cross sectional height (26mm for TE50B, 33mm for TE60B, and 46mm for TE86B). Moreover, the structure of various sensors directly installable on sensor mounting groove of the bed contributes to the miniaturization.

Table specification is selectable according to your use

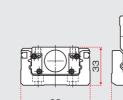
There are two types in the shape of slide table: standard and with flange. The number of slide tables, motor folding back specification, ball screw lead, with or without a dust protection cover, installation of various sensors can be selected, you can select an optimal product for the specifications of your machine and device.

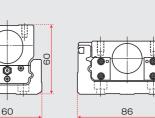
Excellent cost performance

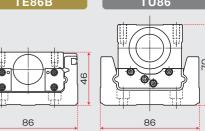
The excellent cost performance is realized by reducing the number of parts, and optimizing the part shapes.

Comparison with Precision Positioning Table TU

Sectional height







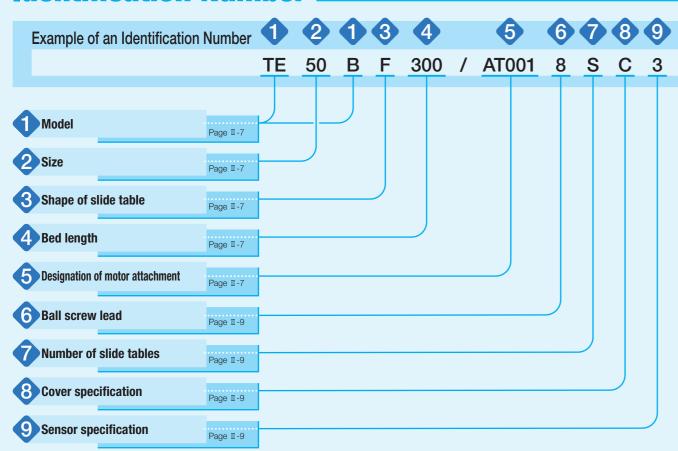
Mass

Model and size	Stroke length (mm)	Overall length(mm)	Mass(kg)	Mass / 100mm(kg)
TE50B	60	218	0.52	0.24
TU50	60	226	1.8	0.80
TE60B	100	269	1.0	0.37
TU60	100	298	3.3	1.11
TE86B	300	523	3.7	0.71
TU86	250	498	10.9	2.19

Variation

Shape	Model	Bed width (mm)			
Snape	Model	50	60	86	
Standard	TE···BS	☆	☆	☆	
With flange	TE···BF	\Rightarrow	☆	☆	

Identification Number



Identification Number and Specification

Model	TEB: Precision Positioning Table TE		
2 Size	Size indicates bed width. Select a size from the list of Table 1.		
3 Shape of slide table	S: Standard table F: Flange type standard table		
4 Bed length	Select a bed length from the list of Table 1.		

Table 1 Sizes and bed lengths unit: mm					
Model and size	Bed width	Bed length			
TE50B	50	150, 200, 250, 300, 400, 500			
TE60B	60	150, 200, 300, 400, 500, 600, 700			
TE86B	86	340, 440, 540, 640, 740, 840, 940			

Remark: For stroke length, please see the dimension tables shown in pages of II-19 or later.

5 Designation of motor attachment

AT000 : Motor inline specification Without motor attachment
AT001 to AT011 : Motor inline specification With motor attachment
AR000 : Motor folding back specification Without motor attachment
AR001 to AR008 : Motor folding back specification With motor attachment
To specify the motor attachment, select it from the list of Table 2.1 and Table 2.2.

- · Please specify motor folding back specification and motor attachment applicable to motor for use.
- If motor inline specification with motor attachment is specified, the main body is shipped with a coupling indicated in the Table 3 mounted. However, the final position adjustment should be made by customer since it is only temporarily fixed. For a product without motor attachment (AT000), no coupling is attached.
- If motor folding back specification with motor attachment is specified, "housing applicable to the specified motor, pulley (on motor side and ball screw side), cover, motor bracket, belt and bolts necessary for assembly" are supplied. Motor mounting bolts should be prepared by customer.

Identification Number and Specification

Table 2.1 Application of motor attachment (motor inline specification)

	Motor to be used			Flange	Motor attachment			
Туре	Manufacturer	Series	Model	Rated output W	size mm	TE50B	TE60B	TE86B
			SGM7J-A5A	50		AT001	AT002	_
	V/A O1/ A14/A		SGM7A-A5A	30	□40	AT001	AT002	_
	YASKAWA ELECTRIC	Σ-7	SGM7J-01A	100	□40	_	AT002	_
	CORPORATION	2-1	SGM7A-01A	100		_	AT002	_
			SGM7J-02A	200	□60	_	1	AT003
			SGM7A-02A	200		_	-	AT003
			HG-MR053	50		AT001	AT002	_
			HG-KR053/HK-KT053W	50	□40	AT001	AT002	_
AC servo	Mitsubishi Electric	J4/J5	HG-MR13	100	40	_	AT002	_
motor	Corporation	J4/J5	HG-KR13/HK-KT13W			_	AT002	_
			HG-MR23	200	□60	_	_	AT003
			HG-KR23/HK-KT23W			_	_	AT003
	Panasonic Corporation		MSMF5A	50	□38	AT004	AT005	_
		MINAS A6	MSMF01	100		_	AT005	_
			MSMF02	200	□60	_	_	AT006
	Hitachi Industrial		ADMA-R5L	50	□40	AT001	AT002	_
	Equipment	AD	ADMA-01L	100	□40	_	AT002	_
	Systems Co., Ltd		ADMA-02L	200	□60	_	-	AT003
			ARM46		□42	AT007	_	_
Ctonnor	ORIENTAL	α step	ARM66		□60	_	1	AT008
Stepper motor	MOTOR		ARM69		□60	_	_	AT008
motor	Co., Ltd.	CRK	CRK54		□42	AT009	_	_
	CRK56 (¹)		1)	□60	_	AT010	AT011	

Note (1) Applicable to the outer diameter ϕ 8 of motor output shaft.

Remark: For detailed motor specifications, please see respective motor manufacturer's catalog.

Table 2.2 Application of NEMA motor attachment (motor inline specification)

		Motor to be us	sed		Flange	Me	otor attachme	ent
Туре	Manufacturer	Series	Model	Rated output W	size	TE50B	TE60B	TE86B
			TLY-A110(AA type)	41	□40	AT001	AT002	_
AC servo motor			TLY-A120(AA type)	86	□40	AT001	AT002	_
		TLY(metric)	TLY-A130(AA type)	140	□40	AT001	AT002	_
			TLY-A220(AA type)	350	□60	_	_	AT003 (3)
			TLY-A230(AA type)	440	□60	_	_	AT003 (3)
			TLY-A120(AN type)	86	□42	TAE9043- ATE137 (1)	_	-
	Allen-Bradley	TLY(NEMA)	TLY-A130(AN type)	140	□42	TAE9043- ATE137 (1)	_	_
			TLY-A220(AN type)	350	□56.4	-	_	TAE9017- ATE135 (1)
			TLY-A230(AN type)	440	□56.4	_	_	TAE9017- ATE135 (1)
			TLY-A2530(AN type)	690	□86	_	_	TAE9056- ATE134 (1)
			TLY-A2540(AN type)	860	□86	_	_	TAE9056- ATE134 (1)
Servo or Stepper	NEMA17C					TAE9043- ATE110 (1) (2)	_	_
	NEMA23D					TAE9017-	TAE9017- ATE096 (1) (2)	-
	INCIVIAZOD					ATE096 (1)	TAE9017- ATE097 (1) (2)	-
	NEMA34D					_	_	TAE9056- ATE095 (1) (2

Note (1) The TAE part numbers are the part number of motor attachment component sold separately. In the TE part number, please choose motor attachment code AT000. No Coupling is included. It is required to consider customer's operation patterns for these motor attachment.

- (2) Please confirm the length and the diameter of the motor shaft etc., and check the usability of the motor attachment with your motor beforehand.
- (3) It is required to change the delivered coupling to XGS-30C-8×12 which is for the 12mm motor shaft by customer.

Remark: For detailed motor specifications, please see respective motor manufacturer's catalog.

unit: mm

Table 2.3 Application of motor attachment (motor folding back specification)

		Motor to b	e used		Flange	M	otor attachme	nt
Type	Manufacturer	Series	Model	Rated output W	size mm	TE50B	TE60B	TE86B
			SGM7J-A5A	50		AR001	AR002	_
	YASKAWA		SGM7A-A5A	50	□40	AR001	AR002	_
	ELECTRIC	Σ-7	SGM7J-01A	100	□40	_	AR002	_
	CORPORATION	2-1	SGM7A-01A	100		_	AR002	_
	CONFORMION		SGM7J-02A	200	□60	_	_	AR003
			SGM7A-02A	200		_	_	AR003
	Mitsubishi Electric Corporation		HG-MR053	50	- □40	AR001	AR002	_
		J4/J5	HG-KR053/HK-KT053W] 50		AR001	AR002	_
AC servo			HG-MR13	100		_	AR002	_
motor			HG-KR13/HK-KT13W			_	AR002	_
			HG-MR23	200	□60	_	_	AR003
			HG-KR23/HK-KT23W			_	_	AR003
	Panasonic		MSMF5A	50		AR004	AR005	_
	Corporation	MINAS A6 MS	MSMF01	100	□38	_	AR005	_
	Corporation		MSMF02	200	□60	_	_	AR006
	Hitachi Industrial		ADMA-R5L	50	□40	AR001	AR002	_
	Equipment Systems	AD	ADMA-01L	100	□40	_	AR002	_
	Co., Ltd		ADMA-02L	200	□60	_	_	AR003
Stepper	ORIENTAL MOTOR	α step	ARM46		□42	AR007	_	_
motor	Co., Ltd.	CRK	CRK54		□42	AR008	_	_

Remark: For detailed motor specifications, please see respective motor manufacturer's catalog.

Table 3 Coupling models (motor inline specification)

Motor attachment	Coupling models	Manufacturer	Coupling inertia J _c ×10 ⁻⁵ kg · m²
AT001	XGS-19C- 5× 8	Nabeya Bi-tech Kaisha	0.062
AT002	XGS-19C- 5× 8	Nabeya Bi-tech Kaisha	0.062
AT003	XGS-30C- 8×14	Nabeya Bi-tech Kaisha	0.55
AT004	XGS-19C- 5× 8	Nabeya Bi-tech Kaisha	0.062
AT005	XGS-19C- 5× 8	Nabeya Bi-tech Kaisha	0.062
AT006	XGS-30C- 8×11	Nabeya Bi-tech Kaisha	0.55
AT007	XGS-19C- 5× 6	Nabeya Bi-tech Kaisha	0.062
AT008	XGS-30C- 8×10	Nabeya Bi-tech Kaisha	0.55
AT009	XGS-19C- 5× 5	Nabeya Bi-tech Kaisha	0.062
AT010	XGS-19C- 5× 8	Nabeya Bi-tech Kaisha	0.062
AT011	XGS-30C- 8× 8	Nabeya Bi-tech Kaisha	0.55
TAE9043-ATE137	XGS-19C- 5× 6.35	Nabeya Bi-tech Kaisha	0.062
TAE9017-ATE135	XGS-30C- 8×12.7	Nabeya Bi-tech Kaisha	0.55
TAE9056-ATE134	XGS-34C- 8×15.875	Nabeya Bi-tech Kaisha	1.0

Remark: For detailed coupling specification, please see the manufacturer's catalog.

6 Ball	screw	lead
--------	-------	------

0 - 1 1 (and the state of t	alla Ala Ala a Santa a san al la	and the south of the com-	Annalis of April 19 to a Lance
Select from among ball	screw leads applicat	ole to the sizes and D	dea lenaths shown	in the table below.

Model	Bed length mm	Ball screw lead mm					
and size	bed leligtii IIIIII	4	5	8	10	20	
TE50B	300 or less	0	_	0	_	_	
IEOUD	400 or more	_	_	0	_	_	
TE60B	600 or less	_	0	_	0	_	
IEOUD	700	_	_	_	_	0	
TE86B	All	_	_	_	0	0	



S: One unit C: Two units



8 Cover specification

0: Without cover

C: With bridge cover (applied to TE···BF)

9 Specification of sensor

0: Without sensor

2: Two units of sensor mounted (limit)

3: Three units of sensor mounted (limit, pre-origin)

4: Four units of sensor mounted (limit, pre-origin, origin)

5: Two sensors attached (limit)

6: Three sensors attached (limit, pre-origin)

7: Four sensors attached (limit, pre-origin and origin sensors)

If sensor mounting (symbol 2, 3, or 4) is specified, the sensor is mounted into the mounting groove on the side of bed, and two detecting plates are attached onto the slide table.

If sensor attachment (symbol 5, 6, or 7) is specified, specified number of sensors are attached including

mounting screws for sensors, nuts, two detecting plates, and mounting screws for the detecting plates.

Specifications

Table 4 Accuracy

Model and size	Bed length	Positioning repeatability	Positioning accuracy (1)	Parallelism in table motion B	Backlash (1)		
	150		0.035				
	200		0.033	0.008			
TE50B	250	±0.002	0.040	0.000	0.005		
TESOB	300	(±0.020)	0.040		0.000		
	400		0.045	0.010			
	500		0.045	0.012			
	150		0.035		0.005		
	200			0.008			
	300	±0.002 (±0.020)	0.040	0.000			
TE60B	400		0.045				
	500			0.010			
	600		0.050				
	700		0.060	0.012			
	340		0.040	0.008			
	440		0.045	0.010			
	540	±0.002	0.050	0.010			
TE86B	640	(±0.020)		0.012	0.005		
	740	(±0.020)	0.055				
	840		0.065	0.014			
	940		0.300	0.016			

Note (¹) This does not apply to table of motor folding back specification.

Remark: The values in () are reference values provided that the timing belt tension is properly adjusted in motor folding back specification table.

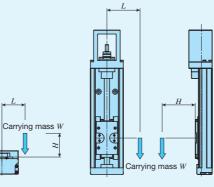
Table 5 Maximum carrying mass

		Carrying mass center of gravity	Maximum carrying mass kg							
	Ball screw lead mm	mm		Horizonta	l direction		Vertical direction			
Model and size		Length L Height H	0	100	200	300	0	100	200	300
		0	12	12	7	5	11	7	3.8	2.6
		100	12	12	7	4.9	6	4.4	2.9	2.1
	4	200	12	11	6	4.7	3.6	2.8	2.3	1.8
TE50B		300	12	10	6	4.6	2.5	2.1	1.8	1.6
I EOUB		0	12	10	5	3.9	7	5	2.9	2.0
		100	12	8	5	3.6	5	3.4	2.3	1.7
	8	200	12	7	4.6	3.3	2.8	2.2	1.8	1.4
		300	11	6	4.1	3.1	1.9	1.6	1.4	1.2
	5	0	17	17	11	8	13	10	5	3.8
		100	17	17	11	7	9	6	4.4	3.2
		200	17	16	10	7	5	4.2	3.5	2.8
		300	17	14	9	7	3.7	3.1	2.7	2.4
	10	0	17	15	8	5	8	8	4.3	3.0
		100	17	11	7	5	7	5	3.4	2.5
TE60B		200	17	9	6	4.8	4.1	3.3	2.7	2.1
		300	13	8	5	4.4	2.8	2.4	2.1	1.8
		0	17	9	5	3.8	7	5	3.2	2.2
		100	13	6	4.3	3.2	5	3.7	2.5	1.8
	20	200	7	4.9	3.5	2.7	3.0	2.4	1.9	1.5
		300	5	3.9	3.0	2.4	2.1	1.7	1.5	1.3
		0	36	36	25	18	18	18	13	9
	10	100	36	35	22	16	18	15	10	7
	10	200	36	29	20	15	12	10	8	6
		300	36	24	17	13	9	7	6	5
TE86B		0	29	28	16	11	10	10	10	6
		100	29	19	13	10	10	10	7	5
	20	200	23	15	11	8	9	7	6	5
		300	17	12	9	7	6	5	4.8	4.3

Remarks 1. The value is for one flange type standard table.

2. The maximum carrying mass is adjusted by the mass when the rating life of the linear motion rolling guide, ball screws, or bearings is 18,000 hours during continuous operation at a number of revolutions of the motor of 3000min⁻¹ and an acceleration/deceleration time of 0.2s. The mass calculated is based upon the basic static load rating of the linear motion rolling guide.

3. Please also check the maximum load mass on page III-18.



Carrying mass center of gravity Carrying mass center of gravity (horizontal direction)

(vertical direction)

■ Allowable moment

Allowable moment refers to the maximum static moment that can be used without affecting functions or performance. Therefore, do not exceed the allowable moment value during operation.

Table 6 Allowable moment

Model and size		Allowable moment (¹) N ⋅ m					
Model and Size	T_{0}	T_{x}	$T_{\scriptscriptstyle Y}$				
TE50B	9.8 (19.6)	9.8 (48.4)	9.8 (48.4)				
TE60B	16.7 (33.4)	16.7 (88.1)	16.7 (88.1)				
TE86B	49.0 (98.0)	49.0 (247.0)	49.0 (247.0)				

Note (1) The value in (1) represents two slide tables in close contact.

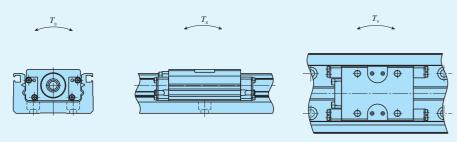


Table 7 Load rating of linear motion rolling guide

Model	Basic dynamic load rating C	Basic static load rating C_0	Static moment rating (1) N · m			
and size	N	N	T_{0}	T_{x}	$T_{\scriptscriptstyle m Y}$	
TE50B	8 490	12 500	211 (422)	99.5 (508)	99.5 (508)	
TE60B	12 400	17 100	354 (708)	151 (795)	151 (795)	
TE86B	26 800	35 900	1 110 (2 220)	472 (2 400)	472 (2 400)	

Note (1) In directions indicated in the above figures, the value in (1) is for two slide tables in close contact.

Table 8 Maximum speed

		Dod loosth		Maximum speed mm/s					
Motor type	Model and size	Bed length mm	Lead 4mm	Lead 5mm	Lead 8mm	Lead 10mm	Lead 20mm		
		300 or less	400	_	800	_	_		
	TE50B	400	_	_	800	_	_		
		500	_	_	620	_	_		
		500 or less	_	500	_	1 000	_		
AC	TE60B	600	_	350	_	710	_		
		700	_	_	_	_	960		
servomotor		540 or less	_	_	_	930	1 860		
		640	_	_	_	830	1 630		
	TE86B	740	_	_	_	590	1 170		
		840	_	_	_	440	880		
		940	_	_	_	340	690		
		300 or less	120	_	240	_	_		
	TE50B	400	_	_	240	_	_		
Stepper		500	_	_	240	_	_		
motor	TEGOD	600 or less	_	150	_	300	_		
	TE60B	700	_	_	_	_	600		
	TE86B	940 or less	_	_	_	300	600		

Remark: To measure the practical maximum speed, it is required to consider operation patterns based on the motor to be used and load conditions.

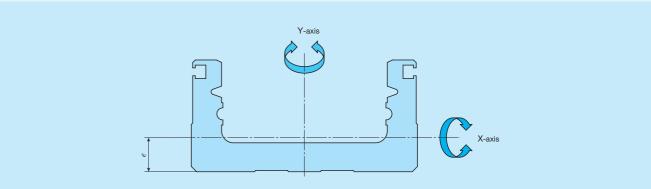
Table 9.1 Specifications of ball screw 1

Model and size	Lead mm	Shaft dia. mm	Basic dynamic load rating C	Basic static load rating C_0
TE50B	TEFOR 4		2 290	3 575
I EOUB	8	8	1 450	2 155
	5		2 730	4 410
TE60B	10	10	1 720	2 745
	20		1 636	2 790
TEOGD	10	12	3 820	6 480
TE86B	20	12	2 300	3 920

Table 9.2 Specifications of ball screw 2

Model and size	Bed length	Shaft dia.	Overall length
	150		192.5
	200		242.5
TE50B	250	8	292.5
I EOOB	300	8	342.5
	400		442.5
	500 150	542.5	
	150		194
	200		244
	300	10	344
TE60B	400		444
	500		544
	600		644
	700		744
	340		395
	440		495
	540		595
TE86B	640	12	695
	740		795
	840		895
	940		995

Table 10 Moment of inertia of sectional area of bed



	Model and size	Moment of inertia of	Center of gravity	
		I_{x}	$I_{\scriptscriptstyle Y}$	e mm
	TE50B	1.3×10 ⁴	1.2×10⁵	6.4
	TE60B	4.7×10 ⁴	3.2×10⁵	8.8
	TE86B	2.0×10⁵	1.3×10 ⁶	13.0

Table 11 Table inertia and starting torque

		Table inertia J_{τ} (2) $\times 10^{-5} \text{kg} \cdot \text{m}^2$								Starting		
Model and size	Bed length mm	gth Standard table						Flange type standard table				torque $T_s(1)$
	111111			Lead					Lead			N·m
		4mm	5mm	8mm	10mm	20mm	4mm	5mm	8mm	10mm	20mm	
	150	0.057	_	0.071	_	_	0.060	_	0.084	_	_	
	200	0.069	_	0.083	_	_	0.072	_	0.096	_	_	
TE50B	250	0.085	_	0.099	_	_	0.088	_	0.112	_	_	0.03
IEOUD	300	0.097	_	0.111	_	_	0.100	_	0.124	_	_	0.03
	400	_	_	0.139	_	_	_	_	0.152	_	_	
	500	_	_	0.167	_	_	_	_	0.180	_	_	
	150	_	0.13	_	0.17	_	_	0.14	_	0.20	_	
	200	_	0.19	_	0.23	_	_	0.20	_	0.26	_	
	300	_	0.26	_	0.30	_	_	0.27	_	0.33	_	
TE60B	400	_	0.33	_	0.36	_	_	0.34	_	0.40	_	0.03
	500	_	0.40	_	0.44	_	_	0.41	_	0.47	_	
	600	_	0.47	-	0.51	_	_	0.48	-	0.54	_	
	700	_	_	_	_	0.76	_	_	_	_	0.88	
	340	_	_	_	0.73	1.19	_	_	_	0.81	1.50	
	440	_	_	_	0.88	1.35	_	_	_	0.95	1.64	
	540	_	_	-	1.03	1.50	_	_	-	1.11	1.80	
TE86B	640	_	_	_	1.18	1.64	_	_	_	1.25	1.95	0.05
	740	_	_	_	1.33	1.79	_	_	_	1.41	2.10	
	840	_	_	_	1.48	1.94	_	_	_	1.56	2.25	
	940	_	_	_	1.63	2.10	_	_	_	1.71	2.40	

Notes (1) When two units of slide table are used, it is about 1.5 times as long as that of one unit, and when table of motor folding back specification is used, it is about twice.

Mounting

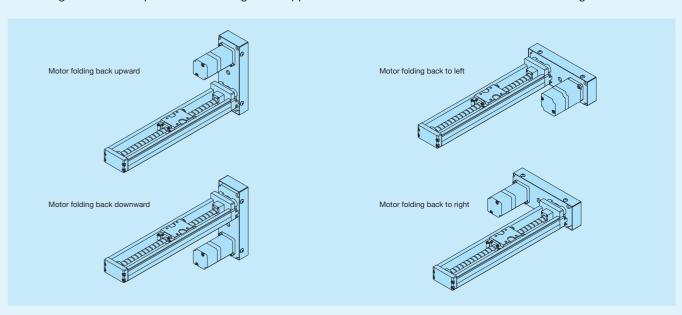
For the processing accuracy of the Precision Positioning Table mounting surface and the tightening torque of the fixing screws, see page II-36.

Motor Folding Back Specification

Motor folding back specification is available for Precision Positioning Table TE, space can be saved by folding back the motor and reducing the overall length of the table. For dimensions of motor folding back specification, please refer to respective dimension table.

For motor folding back specification, assembly should be made by customer since "housing applicable to the specified motor, pulley (on motor side and ball screw side), cover, motor bracket, belt and bolts necessary for assembly" are supplied. However, motor mounting bolts should be prepared by customer. The motor attachment can be attached in 4 directions as indicated in the following figure.

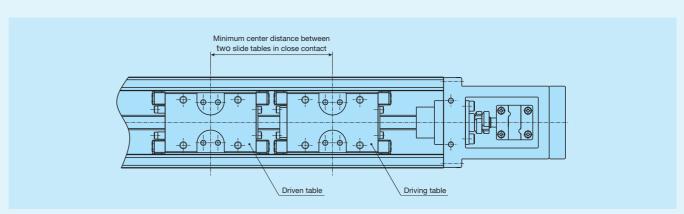
There is difference in dimension between where the motor attachment or the motor is lower than the bottom of the bed depending on the motor folding back direction. Do the design ensuring that the peripheral components do not interfere and that enough allowance is provided according to the approximate values in the dimension table shown in Page II-25 to II-30.



Two Slide Table Specification

Two slide table specification is available for Precision Positioning Table TE. Ball screw nuts are mounted on slide table at the motor side, and it can be driven by the motor (driving table). Ball screw nuts are not mounted on slide table at the opposite motor side, and it is free condition (driven table).

It is possible to make the structure resistant to moment load by using two slide tables in combination (Table 7). When combining slide tables, allow more clearance than "Minimum center distance between two slide tables in close contact" described in the dimension table shown in pages II-19 to II-30. (Enlarging the span will shorten the stroke.)



⁽²⁾ For motor folding back specification, please add the following value to the value in the table. TE50B: 0.17×10⁻⁵kg·m², TE60B: 0.39×10⁻⁵kg·m², TE86B: 0.86×10⁻⁵kg·m²

Sensor Specification

Table 12 Sensor timing chart

Motor inline specification 14 Pre-origin OFF CCW limit OFF Stroke length CW limit Mechanical stopper Motor folding back specification Origin C OFF CW limit OFF CCW limit Stroke length (E) Mechanical stopper unit: mm Ball screw $D(^{1})$ lead 33 10 6 (9) 8 6 5 3 44 10 20 9.5(8.5) 20 12 10 50 20 11 (11)

Note (1) The value in (1) represents dimensions for two slide tables.

20

Remarks 1. Mounting a sensor is specified using the corresponding identification number.

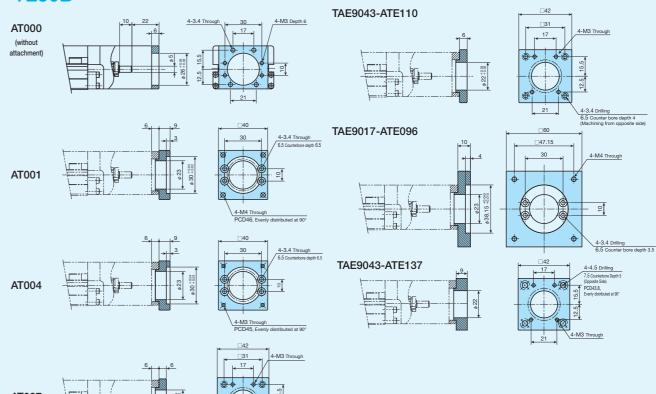
- 2. For the specifications of respective sensors, please see the section of sensor specification in General Explanation.
- 3. For the motor folding back specification, CW and CCW will invert.

Dimensions of Motor Attachment

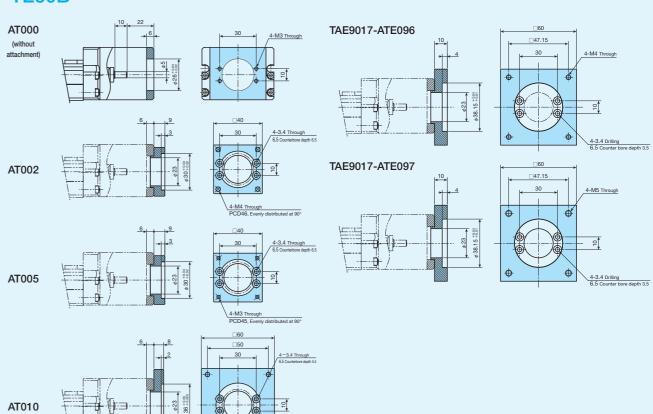
■ Motor inline specification

Remark: Motor attachment for NEMA, please see the pages II-32 or later.

TE50B



TE60B



Model

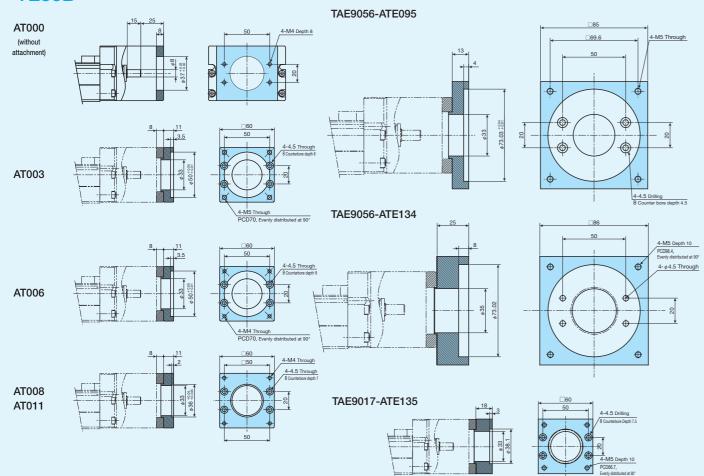
and size

TE50B

TE60B

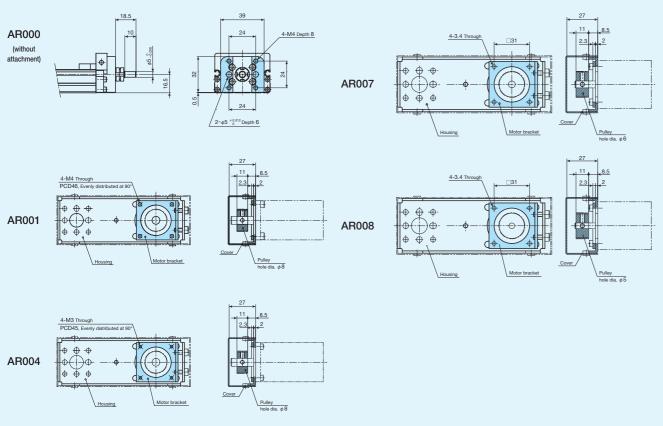
TE86B

TE86B

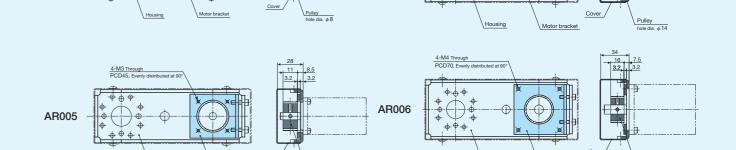


■ Motor folding back specification

TE50B



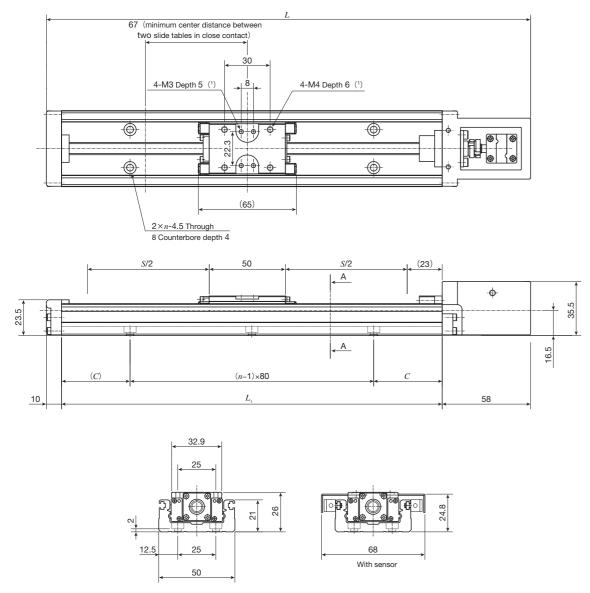
TE60B AR000 (without attachment) AR000 (without attachment) Solve of the second of



AR002

AR003

TE50BS (Motor inline specification)



A-A Sectional dimension

unit:	mm

Bed length	Overall length	Stroke length	Mounting holes of bed		Mass (Ref.)
$L_{_1}$	L	S(2)	C	n	kg(3)
150	218	60(-)	35	2	0.52
200	268	110(40)	20	3	0.62
250	318	160(90)	45	3	0.72
300	368	210(140)	30	4	0.82
400	468	310(240)	40	5	1.02
500	568	410(340)	10	7	1.22

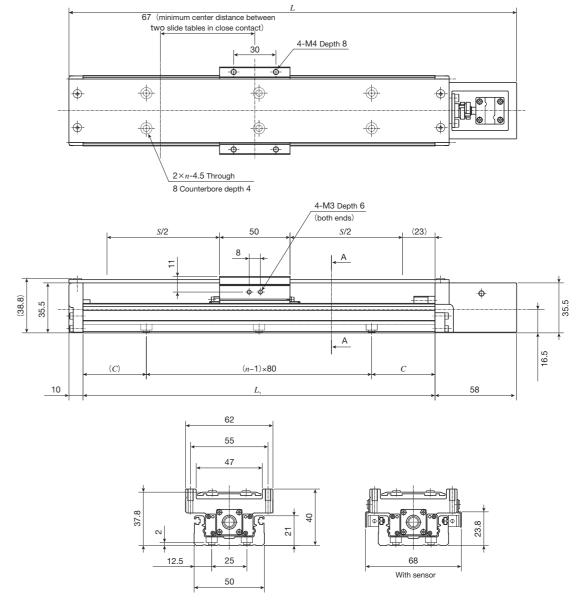
Notes (1) Too deep insertion depth of the mounting bolt may affect the running performance of the slide table, so never insert a bolt longer than the depth of the through hole.

- (2) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in close contact.
- (3) The value shows the mass of the entire table with one slide table, and it is 0.07kg heavier with two slide tables.

Remarks 1. Motor attachment for AC servomotor is 3.5mm lower than the bottom of the bed.

2. Motor attachment for stepper motor is 4.5mm lower than the bottom of the bed.

TE50BF (Motor inline specification)



A-A Sectional dimension

 Bed length
 Overall length
 Stroke length
 Mounting holes of bed
 Mass (Ref.)

 L_1 L_2 L_3 L_4 L_4

200	268	110(40)	20	3	0.75	
250	318	160(90)	45	3	0.85	
300	368	210(140)	30	4	0.94	
400	468	310(240)	40	5	1.14	
500	568	410(340)	10	7	1.33	
Notes (1) The value indicates the allowable stroke when limit concern are mounted. The value in (1) represents dimension for two clids tables						

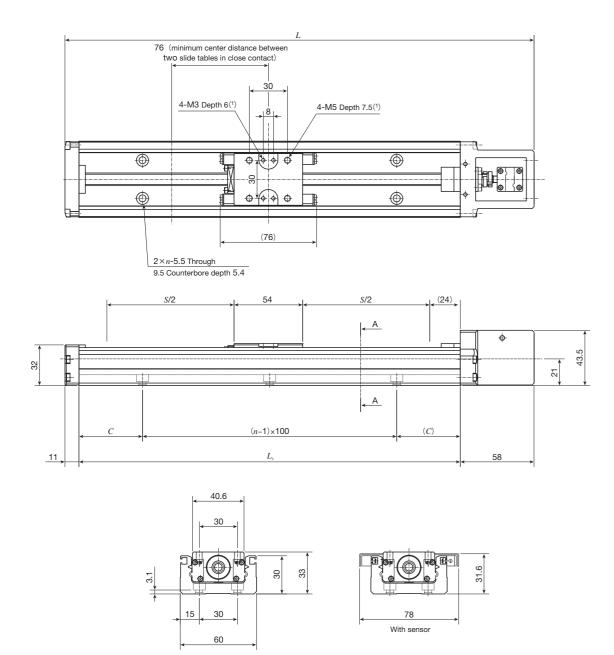
Notes (1) The value indicates the allowable stroke when limit sensors are mounted. The value in (1) represents dimension for two slide tables in close contact.

(2) The value shows the mass of the entire table with one slide table, and it is 0.16kg heavier with two slide tables.

Remarks 1. Motor attachment for AC servomotor is 3.5mm lower than the bottom of the bed.

2. Motor attachment for stepper motor is 4.5mm lower than the bottom of the bed.

TE60BS (Motor inline specification)



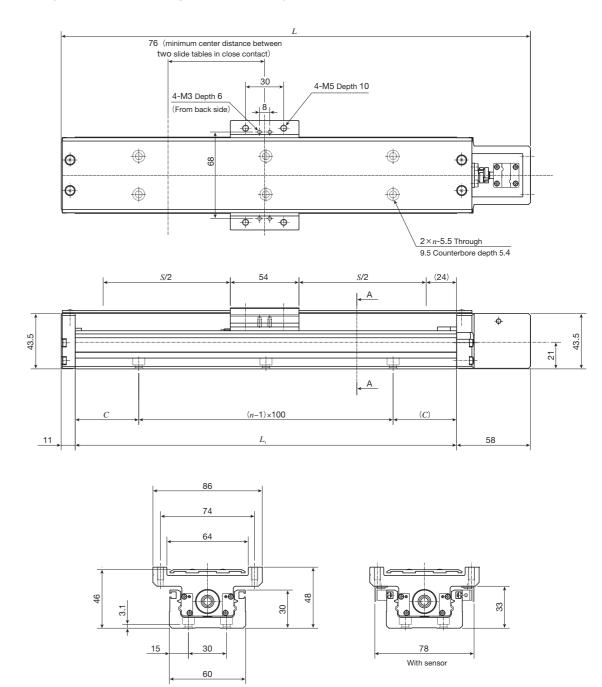
A-A Sectional dimension

	μ.		
un	IL.	ш	m

					dint. iiiii
Bed length	Overall length	Stroke length	Mounting ho	les of bed	Mass (Ref.)
$L_{_1}$	L	$S(^{2})$	C	n	kg(³)
150	219	50(-)	25	2	0.9
200	269	100(-)	50	2	1.0
300	369	200(125)	50	3	1.3
400	469	300(225)	50	4	1.6
500	569	400(325)	50	5	1.9
600	669	500(425)	50	6	2.2
700	769	600(525)	50	7	2.5

Notes (1) Too deep a fixing thread depth of the mounting bolt may affect the running performance of the slide table, so never insert a bolt longer than the depth of the tapped hole.

TE60BF (Motor inline specification)



A-A Sectional dimension

unit: mm

II-22

Bed length	Overall length	Stroke length	Mounting ho	les of bed	Mass (Ref.)
$L_{_1}$	L	S(1)	C	n	kg(2)
150	219	50(-)	25	2	1.1
200	269	100(-)	50	2	1.2
300	369	200(125)	50	3	1.5
400	469	300(225)	50	4	1.9
500	569	400(325)	50	5	2.2
600	669	500(425)	50	6	2.5
700	769	600(525)	50	7	2.8

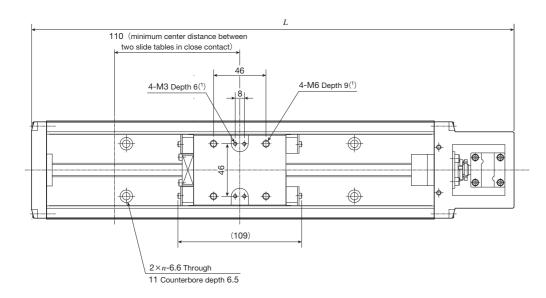
Notes (1) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables

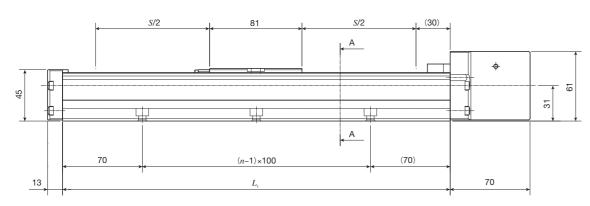
⁽²⁾ The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables

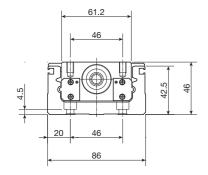
⁽³⁾ The value shows the mass of the entire table with one slide table, and it is 0.1kg heavier with two slide tables. Remark: Motor attachment for stepper motor is 9mm lower than the bottom of the bed.

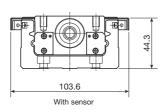
⁽²⁾ The value shows the mass of the entire table with one slide table, and it is 0.2kg heavier with two slide tables. Remark: Motor attachment for stepper motor is 9mm lower than the bottom of the bed.

TE86BS (Motor inline specification)









A-A Sectional dimension

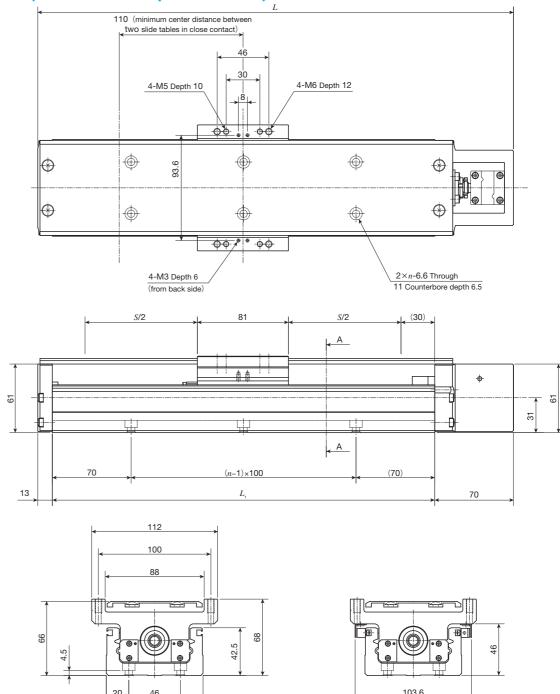
unit: mm

Bed length	Overall length	Stroke length	Mounting holes of bed	Mass (Ref.)
$L_{\scriptscriptstyle 1}$	L	S(2)	n	kg (³)
340	423	200(90)	3	3.1
440	523	300(190)	4	3.7
540	623	400(290)	5	4.2
640	723	500(390)	6	4.7
740	823	600(490)	7	5.2
840	923	700(590)	8	5.7
940	1 023	800(690)	9	6.3

Notes (1) Too deep a fixing thread depth of the mounting bolt may affect the running performance of the slide table, so never insert a bolt longer than the depth of the tapped hole.

- (2) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in class contact.
- (3) The value shows the mass of the entire table with one slide table, and it is 0.3kg heavier with two slide tables.

TE86BF (Motor inline specification)



A—A Sectional dimension

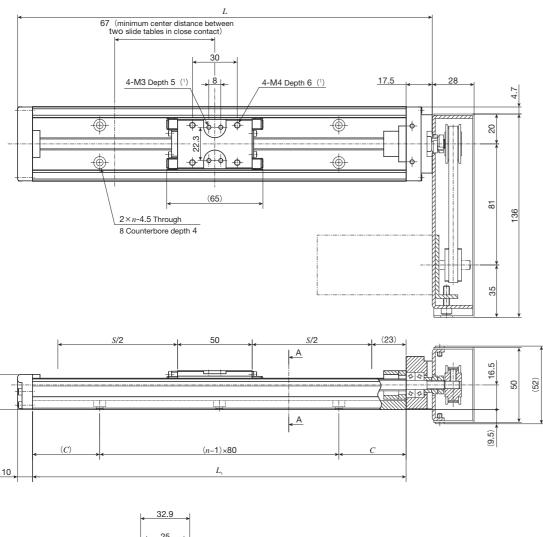
With sensor

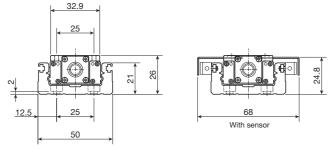
Bed length	Overall length	Stroke length	Mounting holes of bed	Mass (Ref.)
$L_{\scriptscriptstyle 1}$	L	S(1)	n	kg (²)
340	423	200(90)	3	3.7
440	523	300(190)	4	4.3
540	623	400(290)	5	4.9
640	723	500(390)	6	5.5
740	823	600(490)	7	6.1
840	923	700(590)	8	6.7
940	1 023	800(690)	9	7.2

Notes (1) The value indicates the allowable stroke when limit sensors are mounted. The value in (1) represents dimension for two slide tables in close contact.

(2) The value shows the mass of the entire table with one slide table, and it is 0.6kg heavier with two slide tables.

TE50BS (Motor folding back specification)





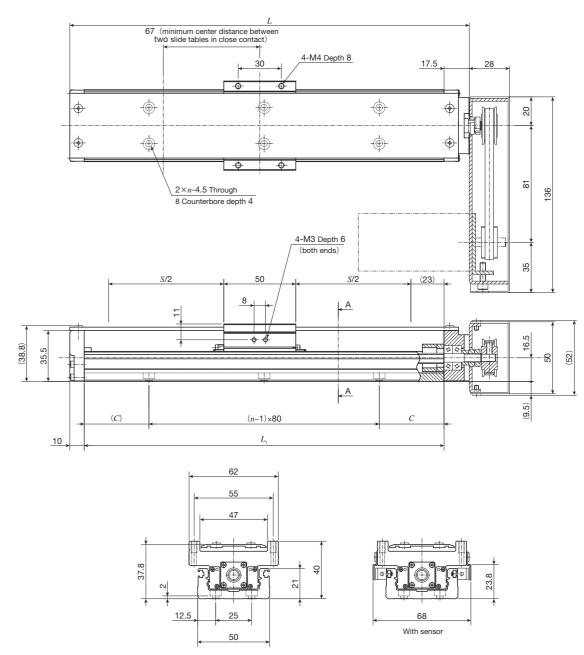
A-A Sectional dimension

unit:	mm

Bed length	Overall length	Stroke length	Mounting holes of bed		Mass (Ref.)
$L_{_{1}}$	L	S(2)	C	n	kg(³)
150	177.5	60(-)	35	2	0.72
200	227.5	110(40)	20	3	0.82
250	277.5	160(90)	45	3	0.92
300	327.5	210(140)	30	4	1.02
400	427.5	310(240)	40	5	1.22
500	527.5	410(340)	10	7	1.42

- Notes (1) Too deep insertion depth of the mounting bolt may affect the running performance of the slide table, so never insert a bolt longer than the depth of the through hole.
 - (2) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in
 - (3) The value shows the mass of the entire table with one slide table, and it is 0.07kg heavier with two slide tables.
- Remarks 1. Parts for motor attachment are appended, and this figure indicates a finished state after assembled by the customer.
 - 2. If folded back to right and left, motor attachment is about 9.5mm lower than the bottom of the bed. In addition, it is about 2.5 to 3.5mm lower than the bottom of the bed if AC servomotor is mounted by customers, and about 4.5mm lower if stepper motor is mounted.
 - 3. If folded back upward, motor attachment is about 3.5mm lower than the bottom of the bed.

TE50BF (Motor folding back specification)



A-A Sectional dimension

unit: mm

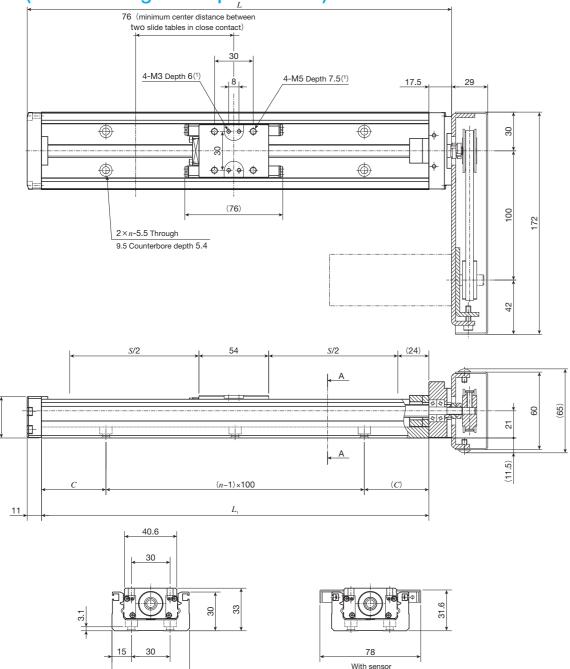
Ⅱ-26

Bed length	Overall length	Stroke length	Mounting holes of bed		Mass (Ref.)
$L_{_{1}}$	L	S(1)	C	n	kg(²)
150	177.5	60(-)	35	2	0.85
200	227.5	110(40)	20	3	0.95
250	277.5	160(90)	45	3	1.05
300	327.5	210(140)	30	4	1.15
400	427.5	310(240)	40	5	1.35
500	527.5	410(340)	10	7	1.55

Notes (1) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables

- (2) The value shows the mass of the entire table with one slide table, and it is 0.16kg heavier with two slide tables.
- Remarks 1. Parts for motor attachment are appended, and this figure indicates a finished state after assembled by the customer.
 - 2. If folded back to right and left, motor attachment is about 9.5mm lower than the bottom of the bed. In addition, it is about 2.5 to 3.5mm lower than the bottom of the bed if AC servomotor is mounted by customers, and about 4.5mm lower if stepper motor is mounted.
 - 3. If folded back upward, motor attachment is about 3.5mm lower than the bottom of the bed.

TE60BS (Motor folding back specification)



A-A Sectional dimension

unit: mm

Bed length	Overall length	Stroke length	Mounting holes of bed		Mass (Ref.)
$L_{_1}$	L	S(2)	С	n	kg(3)
150	178.5	50(-)	25	2	1.2
200	228.5	100(-)	50	2	1.3
300	328.5	200(125)	50	3	1.6
400	428.5	300(225)	50	4	1.9
500	528.5	400(325)	50	5	2.2
600	628.5	500(425)	50	6	2.5
700	728.5	600(525)	50	7	2.8

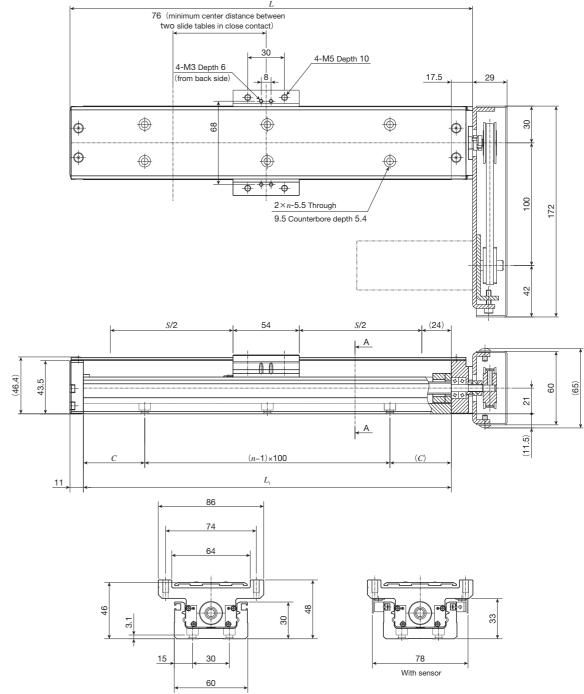
Notes (1) Too deep a fixing thread depth of the mounting bolt may affect the running performance of the slide table, so never insert a bolt longer than the depth of the tapped hole.

- (2) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in close contact.
- (3) The value shows the mass of the entire table with one slide table, and it is 0.1kg heavier with two slide tables.

Remarks 1. Parts for motor attachment are appended, and this figure indicates a finished state after assembled by the customer.

- 2. If folded back to right and left, motor attachment is about 11.5mm lower than the bottom of the bed.
- 3. If folded back upward, motor attachment is about 9mm lower than the bottom of the bed.

TE60BF (Motor folding back specification)



A-A Sectional dimension

unit: mm

Bed length	Overall length	Stroke length	Mounting holes of bed		Mass (Ref.)
$L_{\scriptscriptstyle 1}$	L	S(1)	C	n	kg (2)
150	178.5	50(-)	25	2	1.4
200	228.5	100(-)	50	2	1.5
300	328.5	200(125)	50	3	1.8
400	428.5	300(225)	50	4	2.2
500	528.5	400(325)	50	5	2.5
600	628.5	500(425)	50	6	2.8
700	728.5	600(525)	50	7	3.1

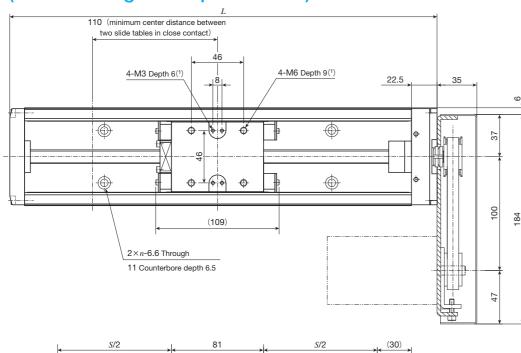
Notes (1) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in close contact.

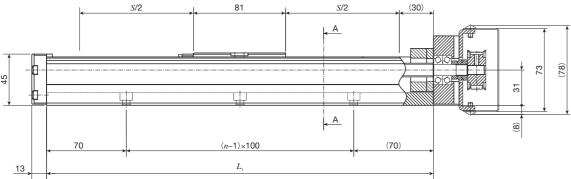
(2) The value shows the mass of the entire table with one slide table, and it is 0.2kg heavier with two slide tables.

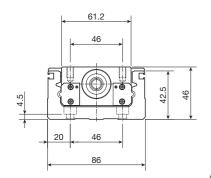
Remarks 1. Parts for motor attachment are appended, and this figure indicates a finished state after assembled by the customer.

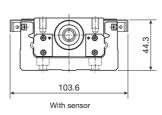
- 2. If folded back to right and left, motor attachment is about 11.5mm lower than the bottom of the bed.
- 3. If folded back upward, motor attachment is about 9mm lower than the bottom of the bed.

TE86BS (Motor folding back specification)









A-A Sectional dimension

unit: mm

Bed length	Overall length	Stroke length	Mounting holes of bed	Mass (Ref.)
$L_{_{1}}$	L	S(2)	n	kg(3)
340	375.5	200(90)	3	4.0
440	475.5	300(190)	4	4.6
540	575.5	400(290)	5	5.1
640	675.5	500(390)	6	5.6
740	775.5	600(490)	7	6.1
840	875.5	700(590)	8	6.6
940	975.5	800(690)	9	7.2

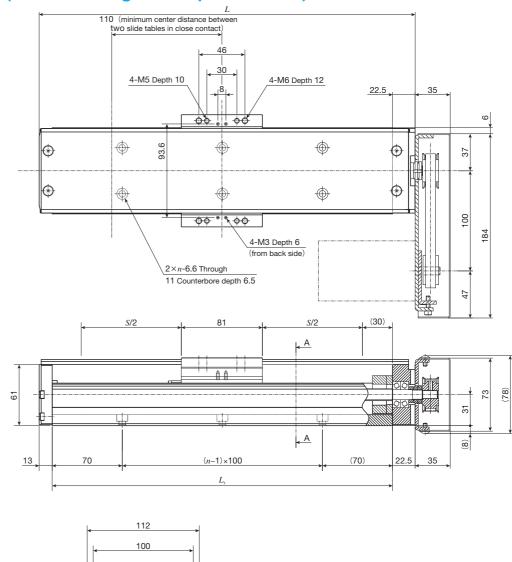
Notes (1) Too deep a fixing thread depth of the mounting bolt may affect the running performance of the slide table, so never insert a bolt longer than the depth of the tapped hole.

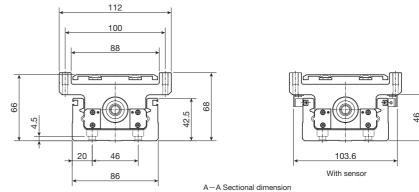
- (2) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in close contact.
- (3) The value shows the mass of the entire table with one slide table, and it is 0.3kg heavier with two slide tables.

Remarks 1. Parts for motor attachment are appended, and this figure indicates a finished state after assembled by the customer.

- 2. If folded back to right and left, motor attachment is about 8mm lower than the bottom of the bed.
- 3. If folded back upward, motor attachment is about 6mm lower than the bottom of the bed.

TE86BF (Motor folding back specification)





Bed length	Overall length	Stroke length	Mounting holes of bed	Mass (Ref.)
$L_{_1}$	L	S(1)	n	kg(²)
340	375.5	200(90)	3	4.6
440	475.5	300(190)	4	5.2
540	575.5	400(290)	5	5.8
640	675.5	500(390)	6	6.4
740	775.5	600(490)	7	7.0
840	875.5	700(590)	8	7.6
940	975.5	800(690)	9	8.1

Notes (1) The value indicates the allowable stroke when limit sensors are mounted. The value in () represents dimension for two slide tables in close contact.

- (2) The value shows the mass of the entire table with one slide table, and it is 0.6kg heavier with two slide tables.
- Remarks 1. Parts for motor attachment are appended, and this figure indicates a finished state after assembled by the customer.
 - 2. If folded back to right and left, motor attachment is about 8mm lower than the bottom of the bed.
 - 3. If folded back upward, motor attachment is about 6mm lower than the bottom of the bed.