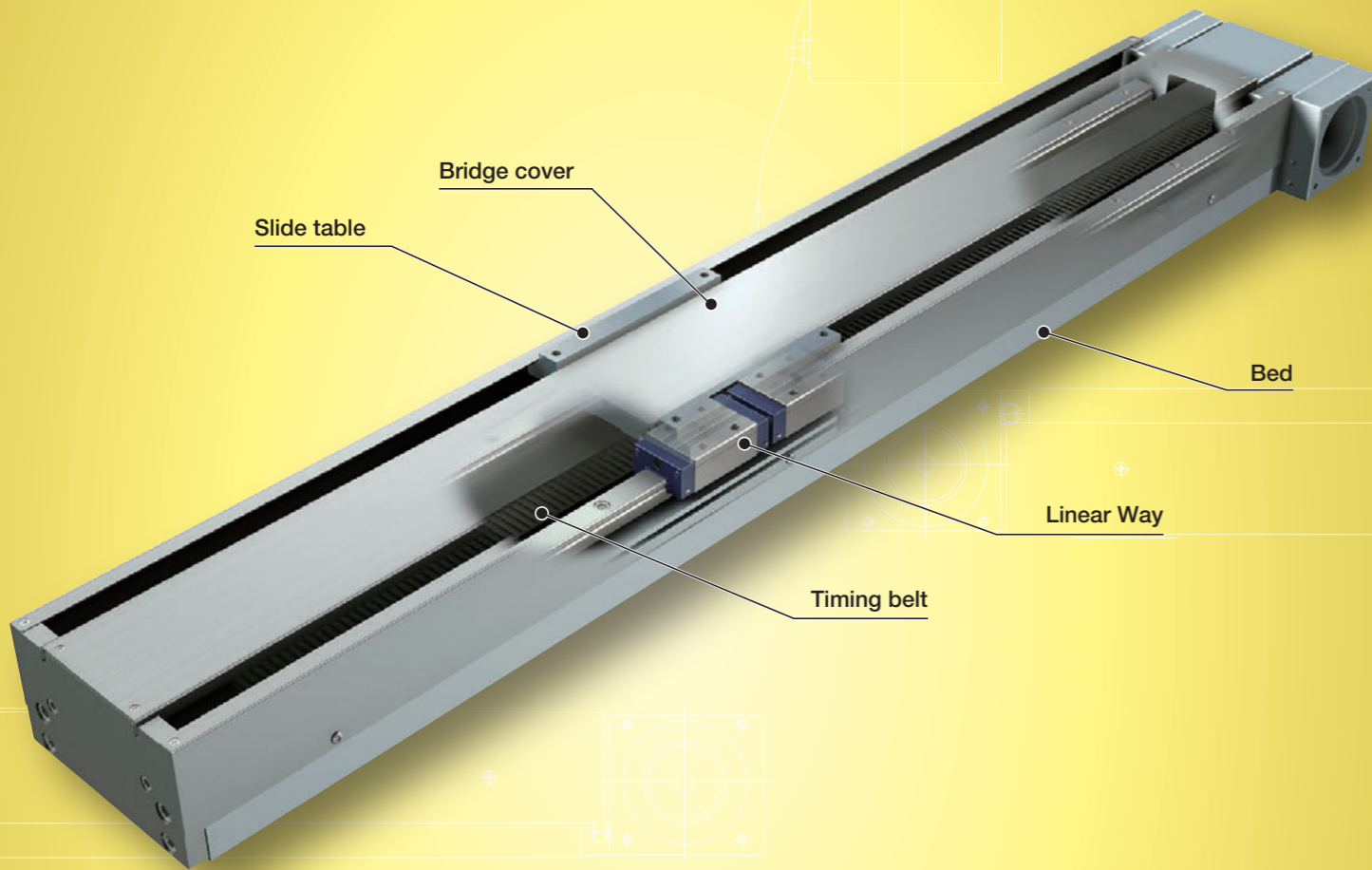
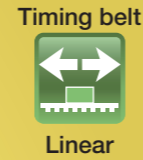


**TSLB**

TSLB

# TSLB



## Points

### ● High speed and long stroke positioning table

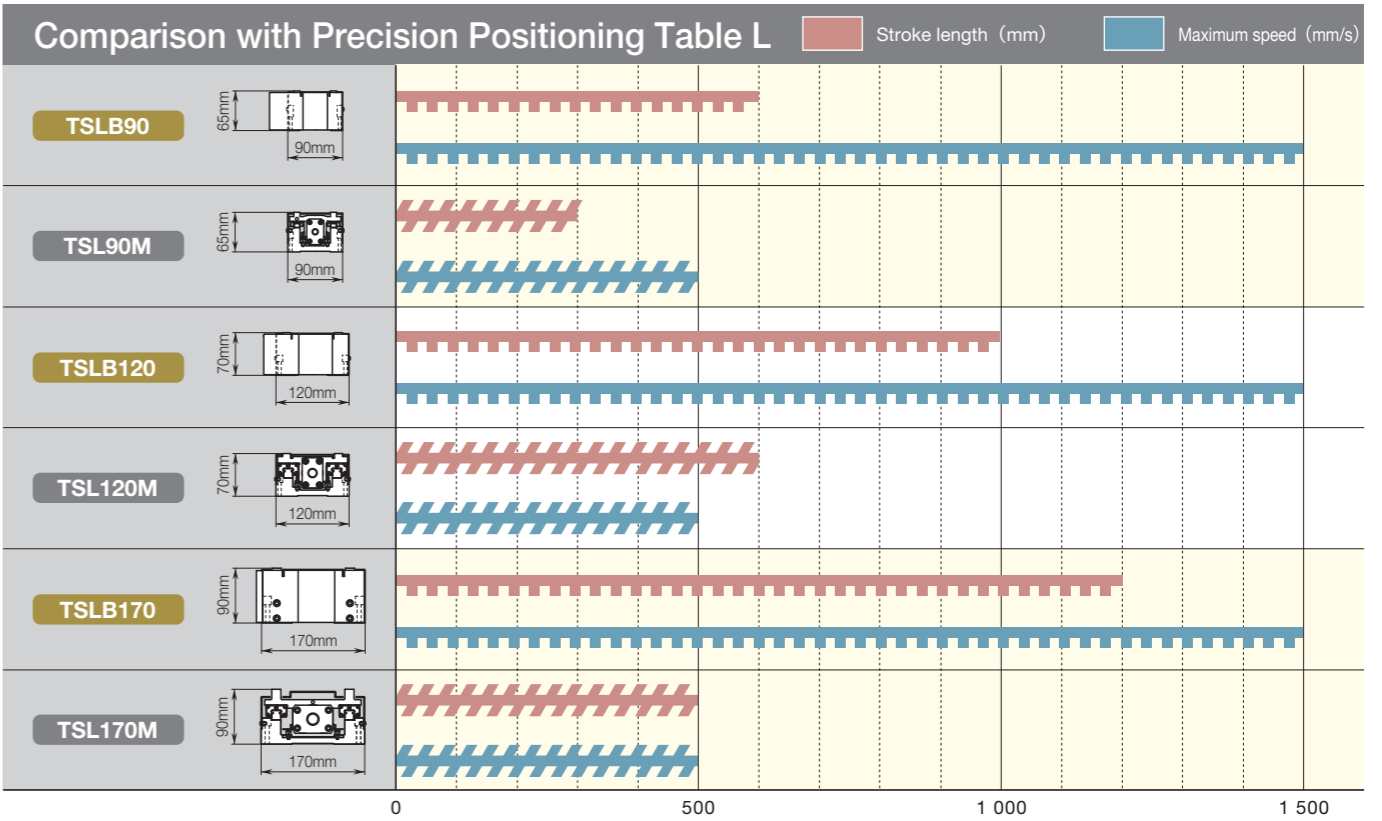
1 High speed movement-enabled and long stroke positioning table with highly durable and high-tensile steel cord-contained timing belt incorporated into the feeding mechanism of the slide table.

### ● Light weight and long stroke

2 Lightweight solution is achieved by adopting the slide table and bed made from high-strength aluminum alloy. Series of stroke length up to 1,200mm is available.

### ● Stable high running accuracy

3 Incorporation of two sets of Linear Way in parallel realized stable and high running performance.



### Major product specifications

Driving method	High-tensile timing belt
Linear motion rolling guide	Linear Way (ball type)
Built-in lubrication part	No built-in
Material of table and bed	High-strength aluminum alloy
Sensor	Provided as standard

### Accuracy

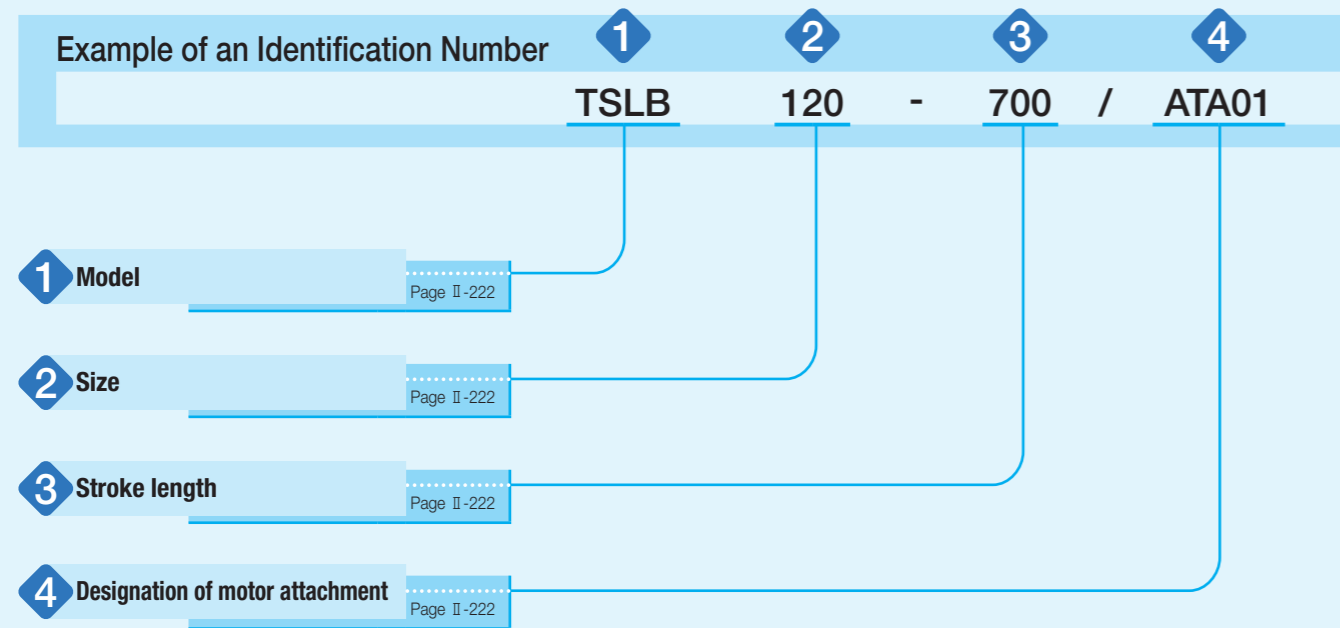
Positioning repeatability	±0.070~0.100
Positioning accuracy	-
Lost motion	-
Parallelism in table motion A	-
Parallelism in table motion B	0.050~0.070
Attitude accuracy	-
Straightness	-
Backlash	-

unit: mm

### Variation

Shape	Model and size	Table width (mm)	Stroke length (mm)								
			300	400	500	600	700	800	900	1000	1200
	TSLB 90	90	☆	☆	☆	☆	-	-	-	-	-
	TSLB120	120	-	-	-	☆	☆	☆	☆	☆	-
	TSLB170	170	-	-	-	-	-	☆	-	☆	☆

# Identification Number



# Identification Number and Specification

- 1 **Model** TSLB: Precision Positioning Table LB
- 2 **Size** Size indicates table width.  
Select a size from the list of Table 1.
- 3 **Stroke length** Select a stroke length from the list of Table 1.

**Table 1 Sizes, table width dimensions, and stroke lengths** unit: mm

Model and size	Table width	Stroke length
TSLB 90	90	300, 400, 500, 600
TSLB120	120	600, 700, 800, 900, 1 000
TSLB170	170	800, 1 000, 1 200

- 4 **Designation of motor attachment** Motor attachment shown in Table 2 is attached.
  - Motor should be prepared by customer.
  - A coupling shown in Table 3 is mounted on the main body before shipment. However, the final position adjustment should be made by customer since it is only temporarily fixed.

**Table 2 Application of motor attachment**

Type	Motor to be used			Flange size mm	Motor attachment	
	Manufacturer	Series	Model		TSLB 90 TSLB120	TSLB170
Stepper motor	ORIENTAL MOTOR Co., Ltd.	α step	AS66	□60	ATA01	—
			AS69	□60	ATA01	—
			AS98	□85	—	ATA02
			AS911	□85	—	ATA02
		RK CRK	RK56 · CRK56 <sup>(1)</sup>	□60	ATA01	—
			RK59	□85	—	ATA02

Note (1) Applicable to the outer diameter φ8 of motor output shaft.  
Remark: For detailed motor specifications, please see respective motor manufacturer's catalog.

**Table 3 Coupling models**

Model and size	Coupling models	Manufacturer	Coupling inertia $J_c$ $\times 10^{-5} \text{kg} \cdot \text{m}^2$
ATA01	MOL-32C- 8×12	Nabeya Bi-tech Kaisha	1.4
ATA02	MOL-40C-12×14	Nabeya Bi-tech Kaisha	4.1

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

# Specifications

**Table 4 Accuracy**

unit: mm

Model and size	Stroke length	Positioning repeatability	Parallelism in table motion B
TSLB 90	300	±0.070	0.050
	400		
	500		
	600		0.070
TSLB120		±0.100	0.070
TSLB170		±0.100	0.070

**Table 5 Maximum speed and resolution**

Model and size	Maximum speed <sup>(1)</sup> mm/s	Resolution <sup>(2)</sup> mm
TSLB 90 TSLB120 TSLB170	1 500	0.1

Notes <sup>(1)</sup> To measure the practical maximum speed, it is required to consider operation patterns based on the motor to be used and load conditions.

<sup>(2)</sup> This is a value given when the number of fraction sizes of the motor is 1,000 pulses/rev.

**Table 6 Maximum carrying mass**

unit: kg

Model and size	Maximum carrying mass
TSLB 90	5
TSLB120	27
TSLB170	29

Remark: Applicable in the horizontal direction.

**Table 7 Table inertia and starting torque**

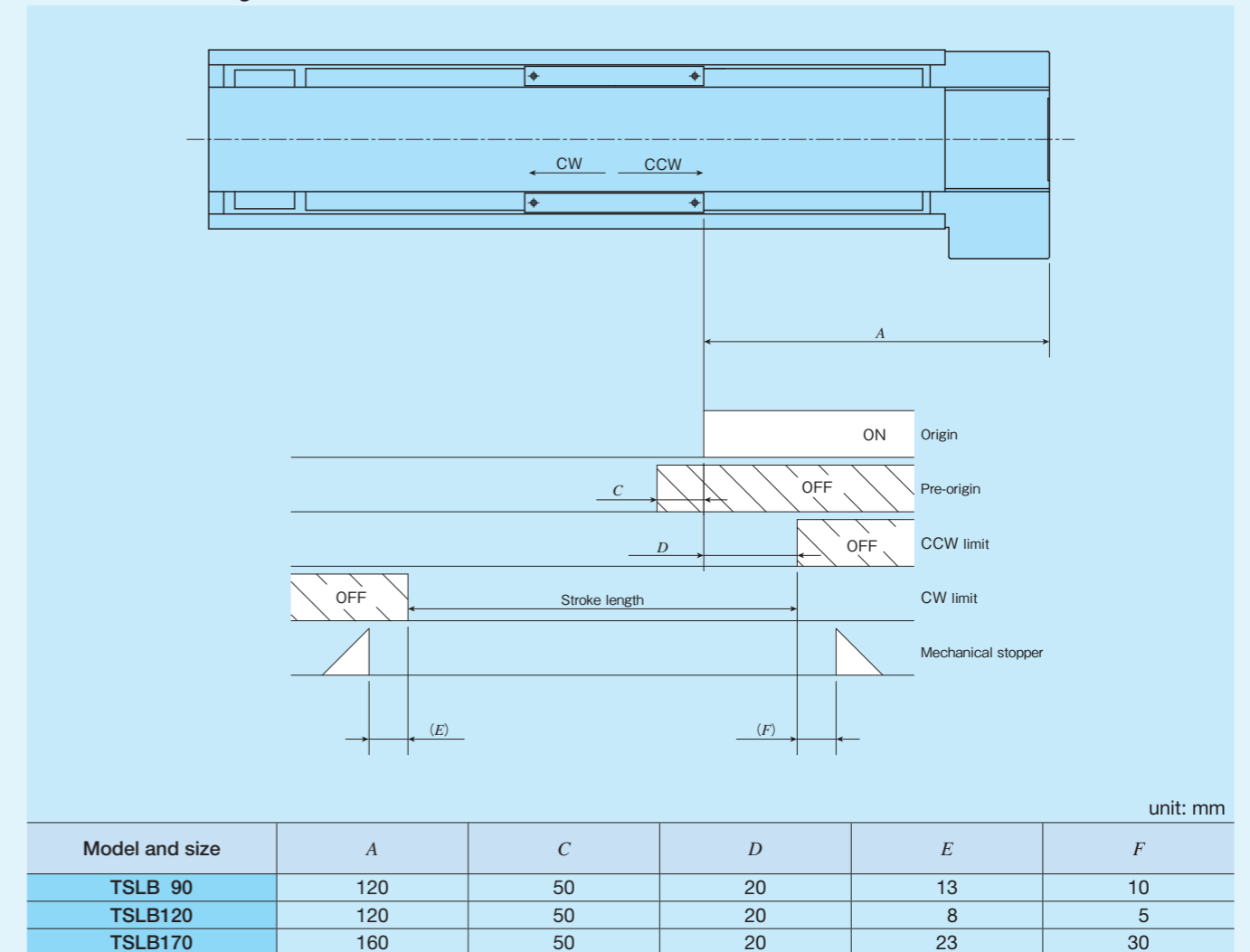
Model and size	Table inertia $J_T$ $\times 10^{-5} \text{kg} \cdot \text{m}^2$	Starting torque $T_s$ N·m
TSLB 90	19	0.3
TSLB120	42	0.5
TSLB170	64	0.6

# Mounting

For the processing accuracy of the Precision Positioning Table mounting surface and the tightening torque of the fixing screws, see page III-29.

# Sensor Specification

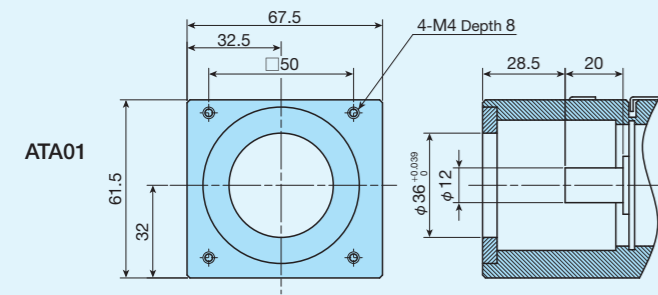
**Table 8 Sensor timing chart**



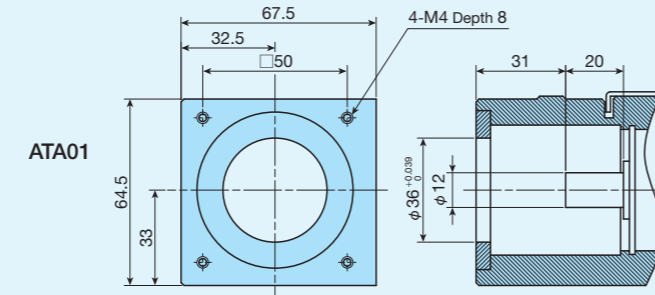
Remark: For detailed specifications of respective sensors, please see the section of sensor specification in General Explanation.

# Dimensions of Motor Attachment

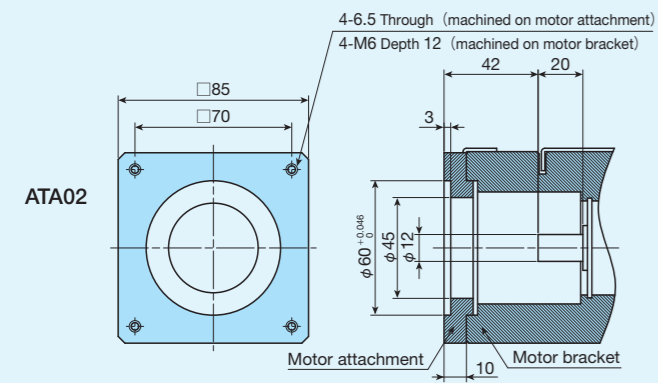
## TSLB90



## TSLB120

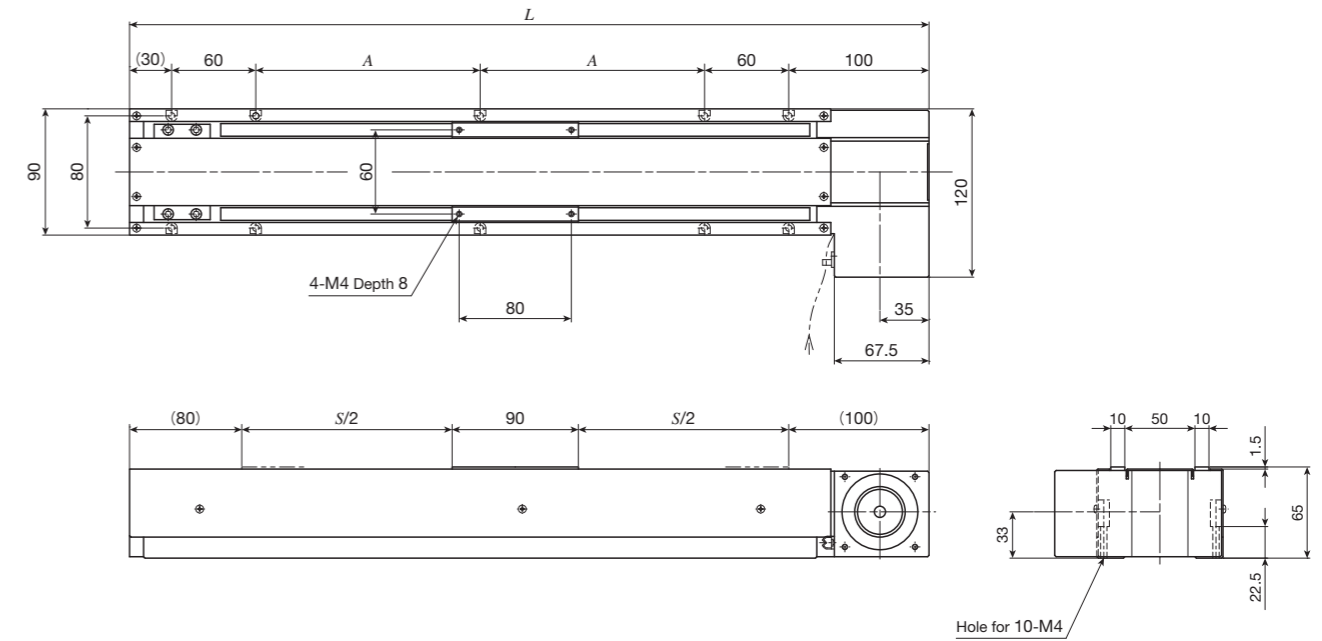


## TSLB170



# IKO Precision Positioning Table LB

## TSLB90

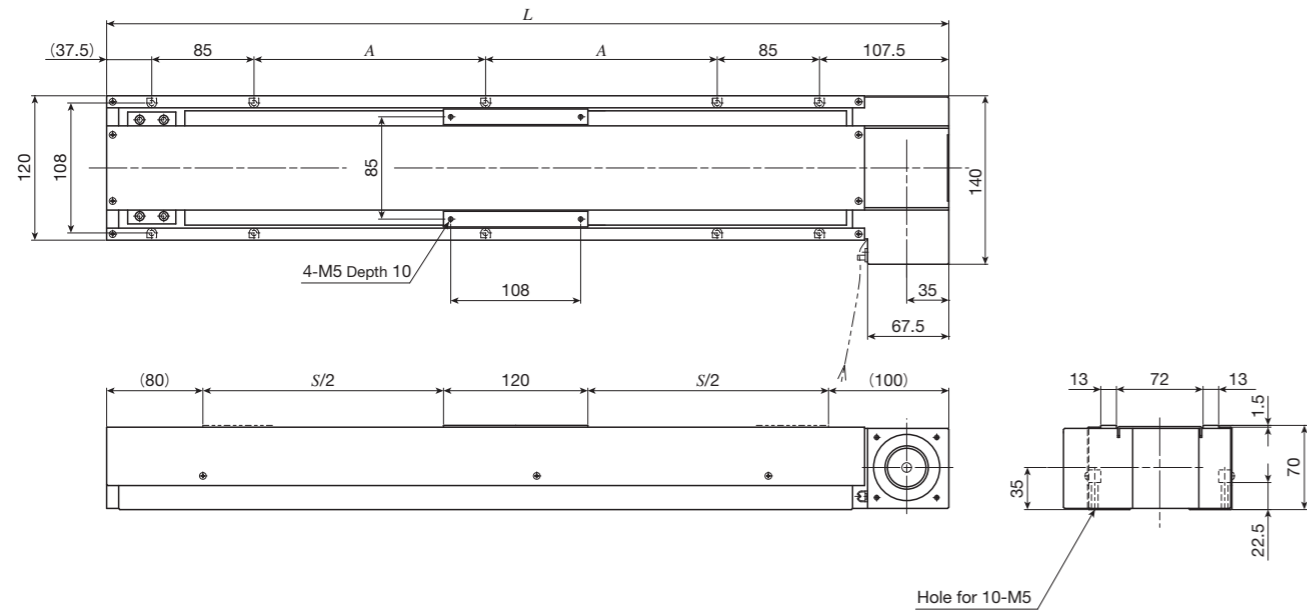


unit: mm

Identification number	Stroke length $S$	Overall length $L$	Mounting holes of bed $A$	Mass (Ref.) kg
TSLB90-300	300	570	160	7.0
TSLB90-400	400	670	210	7.5
TSLB90-500	500	770	260	8.5
TSLB90-600	600	870	310	9.5

# IKO Precision Positioning Table LB

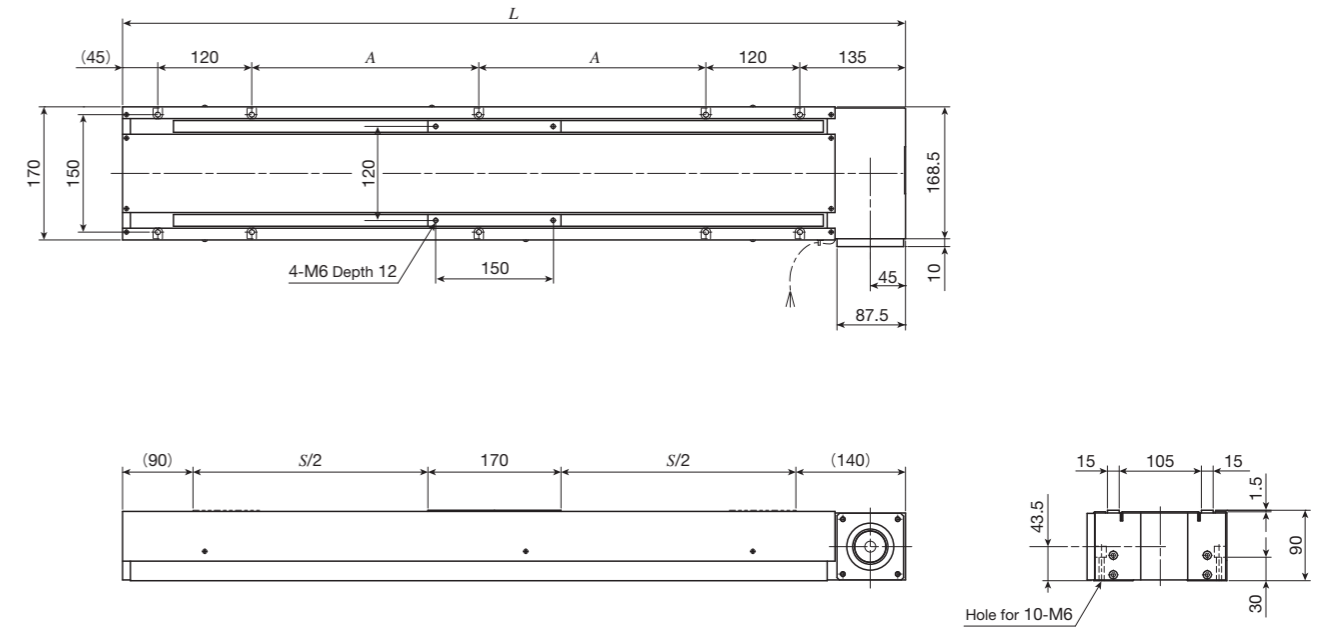
## TSLB120



unit: mm

Identification number	Stroke length <i>S</i>	Overall length <i>L</i>	Mounting holes of bed <i>A</i>	Mass (Ref.) kg
TSLB120- 600	600	900	292.5	13
TSLB120- 700	700	1 000	342.5	14
TSLB120- 800	800	1 100	392.5	15
TSLB120- 900	900	1 200	442.5	16
TSLB120-1000	1 000	1 300	492.5	17

## TSLB170



unit: mm

Identification number	Stroke length <i>S</i>	Overall length <i>L</i>	Mounting holes of bed <i>A</i>	Mass (Ref.) kg
TSLB170- 800	800	1 200	390	27
TSLB170-1000	1 000	1 400	490	31
TSLB170-1200	1 200	1 600	590	34