

STH04

Slide table type

- CE compliance
- Origin on the non-motor side is selectable

Ordering method

STH04

Model	Lead 05: 5mm 10: 10mm	Model S: Straight model R: Space-saving model (motor installed on right) L: Space-saving model (motor installed on left)	Brake ^{Note 1} N: With no brake B: With brake	Origin position ^{Note 2} N: Standard Z: Non-motor side	Bracket plate ^{Note 3} N: No plate H: With plate	Stroke 50: 50mm 100: 100mm	Cable length ^{Note 4} 1K: 1m 3K: 3m 5K: 5m 10K: 10m
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S2

Robot positioner S2: TS-S2 ^{Note 5}	I/O NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 7}
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SH

Robot positioner SH: TS-SH	I/O NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 7}	Battery B: With battery (Absolute) N: None (Incremental)
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SD

Robot driver SD: TS-SD ^{Note 6}	I/O cable I: 1m
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- Note 1. For the space saving models (R and L), the specifications with brake are applicable to only 100mm strokes.
 Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 3. Space-saving models (R and L) with the plate cannot be selected.
 Note 4. The robot cable is flexible and resists bending.
 Note 5. See P.498 for DIN rail mounting bracket.
 Note 6. The robot with the brake cannot use the TS-SD.
 Note 7. Select this selection when using the gateway function. For details, see P.60.

Basic specifications

Motor	28 □ Step motor
Resolution (Pulse/rotation)	4096
Repeatability ^{Note 1} (mm)	+/-0.05
Drive method	Straight Slide screw
	Space-saving Slide screw + belt
Ball screw lead (mm)	5 10
Maximum speed ^{Note 2} (mm/sec)	200 400
Maximum payload (kg)	Horizontal 6 4
	Vertical 2 1
Max. pressing force (N)	55 30
Stroke (mm)	50/100
Maximum outside dimension of body cross-section (mm)	Straight W45 × H46
	Space-saving W74.5 × H51
Cable length (m)	Standard: 1 / Option: 3, 5, 10

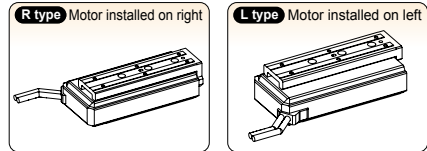
- Note 1. Positioning repeatability in one direction.
 Note 2. The maximum speed needs to be changed in accordance with the payload.
 See the "Speed vs. payload" graph shown on the right. For details, see P. 128.

Allowable overhang

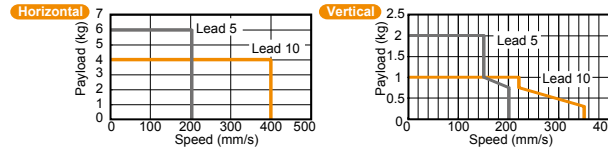
Horizontal installation (Unit: mm)	Note			Wall installation (Unit: mm)	Note			Vertical installation (Unit: mm)	Note						
	A	B	C		A	B	C		A	C					
Lead 10	2kg	1534	611	415	Lead 10	2kg	435	595	1504	Lead 10	0.5kg	2000	2000		
	3kg	949	374	255		Lead 5	3kg	263	359		920	Lead 5	0.75kg	1558	1558
	4kg	656	255	175			Lead 5	4kg	177		241		629	Lead 5	1kg
Lead 5	2kg	1534	611	415	Lead 5			2kg	435	595	1504		Lead 5		1kg
	4kg	656	255	175		Lead 5		4kg	177	241	629	Lead 5			1.5kg
	6kg	364	137	95			Lead 5	6kg	91	123	337			Lead 5	2kg

- Note. Overhang at travelling service life of 3000km.
 (Service life is calculated for 75mm stroke models.)

Motor installation (Space-saving model)



Speed vs. payload



STH04 Straight model S

Effective stroke	50	100
B	40	44
C	6	8
D	116.5	191.5
E	65	85
G	39.5	88.5
L	122	191
Weight (kg) ^{Note 6}	1.25	1.7

Option: Installation plate
 Contents of option: Plate, 4 pcs.
 * For additional settings, contact your distributor.

Cross-sectional drawing A-A
 Detailed drawing of installation hole

Note 1. Return-to-origin position.
Note 2. Table movable range during return-to-origin operation. The values in [] show those when the return-to-origin direction is changed.
Note 3. The minimum bending radius of the motor cable is R30.
Note 4. When installing the mechanical main unit using the back facing holes, use the hex socket head cap M5 bolts.
Note 5. The installation hole positions of the main unit with the specifications with the brake are common to those shown above.
Note 6. Models with a brake will be 0.11kg heavier.

STH04 Space-saving model (motor installed on right) **R**

Approx. 160 (Cable length without brake)
Approx. 120 (Cable length with brake)

(C/2-1)xB 19

5^{+0.03}/_{-0.01} Depth 5

6

B

24

C-M5x0.8 Depth 7.5

φ5^{+0.03}/_{-0.01} Depth 5

2.5 45 3-M5x0.8 Depth 8

29

13 5.5 17.2 3.5 0.3

72.5 (2)

1+/-0.5 (Note 2)

13

Origin on motor side (Note 1)

Effective stroke

1+/-0.5 (Note 2)

Origin on non-motor side (Note 1)

Effective stroke	50	100
B	40	44
C	6	8
D	45	44
E	2	4
F	45	88
G	116.5	191.5
L	106	181
Weight (kg) ^{Note 7}	1.15	1.6

Note 1. Return-to-origin position.
Note 2. Table movable range during return-to-origin operation. The values in [] show those when the return-to-origin direction is changed.
Note 3. The minimum bending radius of the motor cable is R30.
Note 4. When installing the mechanical main unit using the back facing holes, push the slider toward the origin position on the motor side and insert the hex socket head cap (M5) bolt.
Note 5. The dimensions of the specifications with the brake are common to those shown above.
Note 6. The specifications with the brake are applicable to only 100 strokes.
Note 7. Models with a brake will be 0.11kg heavier.

φ10.5 (Note 4)

φ9.5

φ5.3 (M6)

9 35.5

Cross-sectional drawing A-A
Detailed drawing of installation hole

(12)

E-M6x1.0 Depth 12
See the cross-sectional drawing of A-A.

D

A

(25)

40

4H9^{+0.030}/₀ Depth 4

5

F

φ4H9^{+0.030}/₀ Depth 4

(E-1)xD 18

(2.3)

16.5

37

G

8

1+/-0.5 (Note 2)

13

Origin on motor side (Note 1)

Effective stroke

1+/-0.5 (Note 2)

Origin on non-motor side (Note 1)

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STH04 Space-saving model (motor installed on left) **L**

Approx. 160 (Cable length without brake)
Approx. 120 (Cable length with brake)

(C/2-1)xB 19

5^{+0.03}/_{-0.01} Depth 5

6

B

24

C-M5x0.8 Depth 6.5

φ5^{+0.03}/_{-0.01} Depth 5

2.5 45 3-M5x0.8 Depth 8

29

13 5.5 17.2 3.5 0.3

72.5 (2)

1+/-0.5 (Note 2)

13

Origin on motor side (Note 1)

Effective stroke

1+/-0.5 (Note 2)

Origin on non-motor side (Note 1)

Effective stroke	50	100
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C	6	8
D	45	44
E	2	4
F	45	88
G	116.5	191.5
L	106	181
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Note 3. The minimum bending radius of the motor cable is R30.
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Note 5. The dimensions of the specifications with the brake are common to those shown above.
Note 6. The specifications with the brake are applicable to only 100 strokes.
Note 7. Models with a brake will be 0.11kg heavier.

φ10.5 (Note 4)

φ9.5

φ5.3 (M6)

9 35.5

Cross-sectional drawing A-A
Detailed drawing of installation hole

(12)

E-M6x1.0 Depth 12
See the cross-sectional drawing of A-A.

D

A

(25)

40

4H9^{+0.030}/₀ Depth 4

5

F

φ4H9^{+0.030}/₀ Depth 4

(E-1)xD 18

(2.3)

16.5

37

G

8

1+/-0.5 (Note 2)

13

Origin on motor side (Note 1)

Effective stroke

1+/-0.5 (Note 2)

Origin on non-motor side (Note 1)

Effective stroke	50	100
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