

# STH04 Slide table type

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

## Ordering method

**STH04**

<b>Model</b>	<b>Lead</b> 05: 5mm 10: 10mm	<b>Model</b> S: Straight model R: Space-saving model (motor installed on right) L: Space-saving model (motor installed on left)	<b>Brake</b> <sup>Note 1</sup> N: With no brake B: With brake	<b>Origin position</b> N: Standard Z: Non-motor side	<b>Bracket plate</b> <sup>Note 2</sup> N: No plate H: With plate	<b>Stroke</b> 50: 50mm 100: 100mm	<b>Cable length</b> <sup>Note 3</sup> 1L: 1m 3L: 3m 5L: 5m 10L: 10m	<b>Robot positioner</b> S2: TS-S2 <sup>Note 4</sup> SH: TS-SH	<b>I/O</b> NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board <sup>Note 5</sup>	<b>Battery</b> <sup>Note 7</sup> B: With battery (Absolute) N: None (Incremental)
								<b>SD</b>	<b>1</b>	
								<b>Robot driver</b> SD: TS-SD <sup>Note 5</sup>	<b>I/O cable</b> t: 1m	

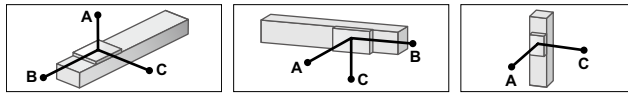
Note 1. For the space saving models (R and L), the specifications with brake are applicable to only 100mm strokes.  
 Note 2. Space-saving models (R and L) with the plate cannot be selected.  
 Note 3. The robot cable is flexible and resists bending.  
 Note 4. See P.446 for DIN rail mounting bracket.  
 Note 5. The robot with the brake cannot use the TS-SD.  
 Note 6. Select this selection when using the gateway function. For details, see P.439.  
 Note 7. Select whether or not the battery is provided only when using the TS-SH.

## Basic specifications

<b>Motor</b>	28 <input type="checkbox"/> Step motor	
<b>Resolution (Pulse/rotation)</b>	4096	
<b>Repeatability</b> <sup>Note 1</sup> (mm)	+/-0.05	
<b>Drive method</b>	Straight	Slide screw
	Space-saving	Slide screw + belt
<b>Ball screw lead (mm)</b>	5      10	
<b>Maximum speed</b> <sup>Note 2</sup> (mm/sec)	Horizontal	200      400
	Vertical	6      4
<b>Maximum payload (kg)</b>	Horizontal	2      1
	Vertical	55      30
<b>Max. pressing force (N)</b>	55      30	
<b>Stroke (mm)</b>	50/100	
<b>Maximum outside dimension of body cross-section (mm)</b>	Straight	W45 × H46
	Space-saving	W74.5 × H51
<b>Cable length (m)</b>	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. 84.

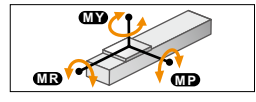
## Allowable overhang <sup>Note</sup>



Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)				
	A	B	C	A	B	C	A	C			
Lead 10	2kg	1534	611	415	2kg	435	595	1504	0.5kg	2000	2000
	3kg	949	374	255	3kg	263	359	920	0.75kg	1558	1558
	4kg	656	255	175	4kg	177	241	629	1kg	1165	1164
Lead 5	2kg	1534	611	415	2kg	435	595	1504	1kg	1165	1164
	4kg	656	255	175	4kg	177	241	629	1.5kg	771	771
	6kg	364	137	95	6kg	91	123	337	2kg	574	574

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

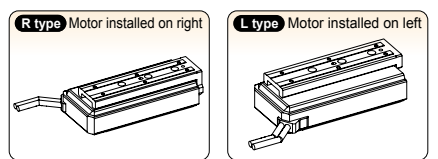
## Static loading moment



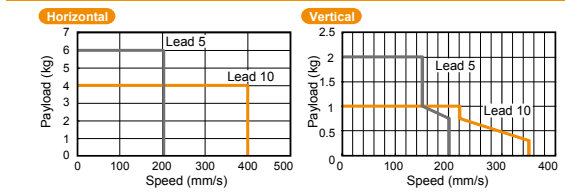
Stroke	MY	MP	MR
50mm	26	26	48
100mm	43	43	48

(Unit: N-m)

## Motor installation (Space-saving model)



## Speed vs. payload

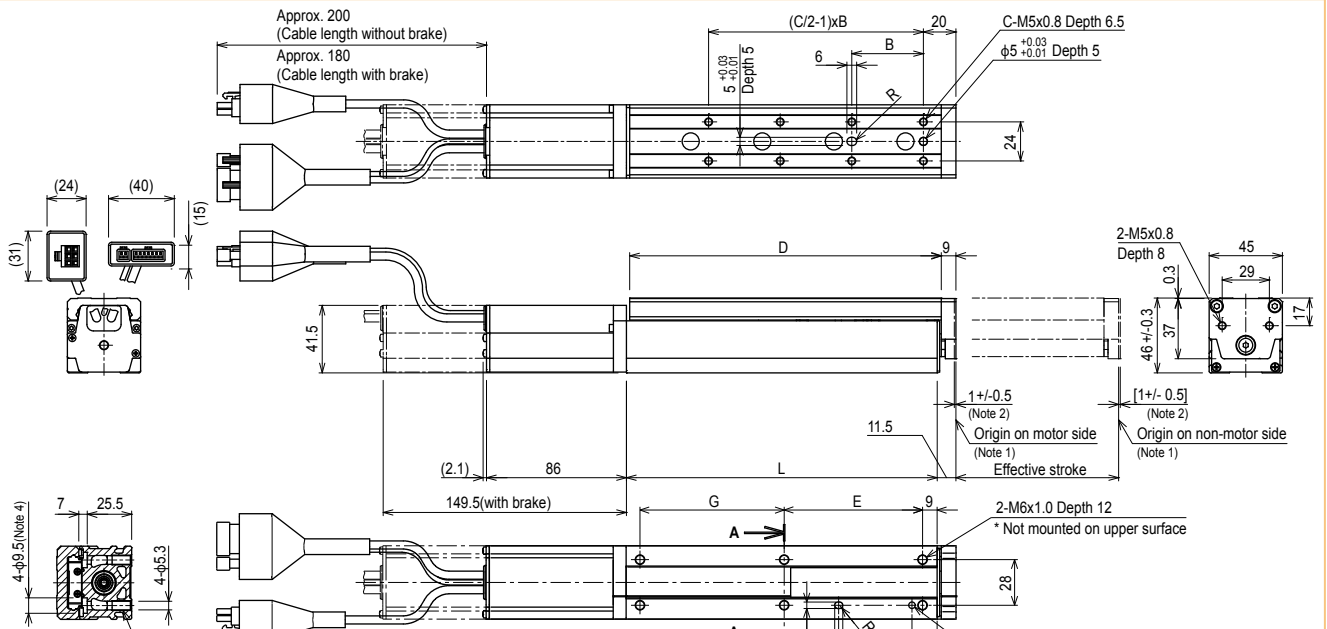


## Controller

Controller	Operation method
TS-S2	I/O point trace / Remote command
TS-SH	Remote command
TS-SD <sup>Note</sup>	Pulse train control

Note. The robot with the brake cannot use the TS-SD.

## STH04 Straight model S



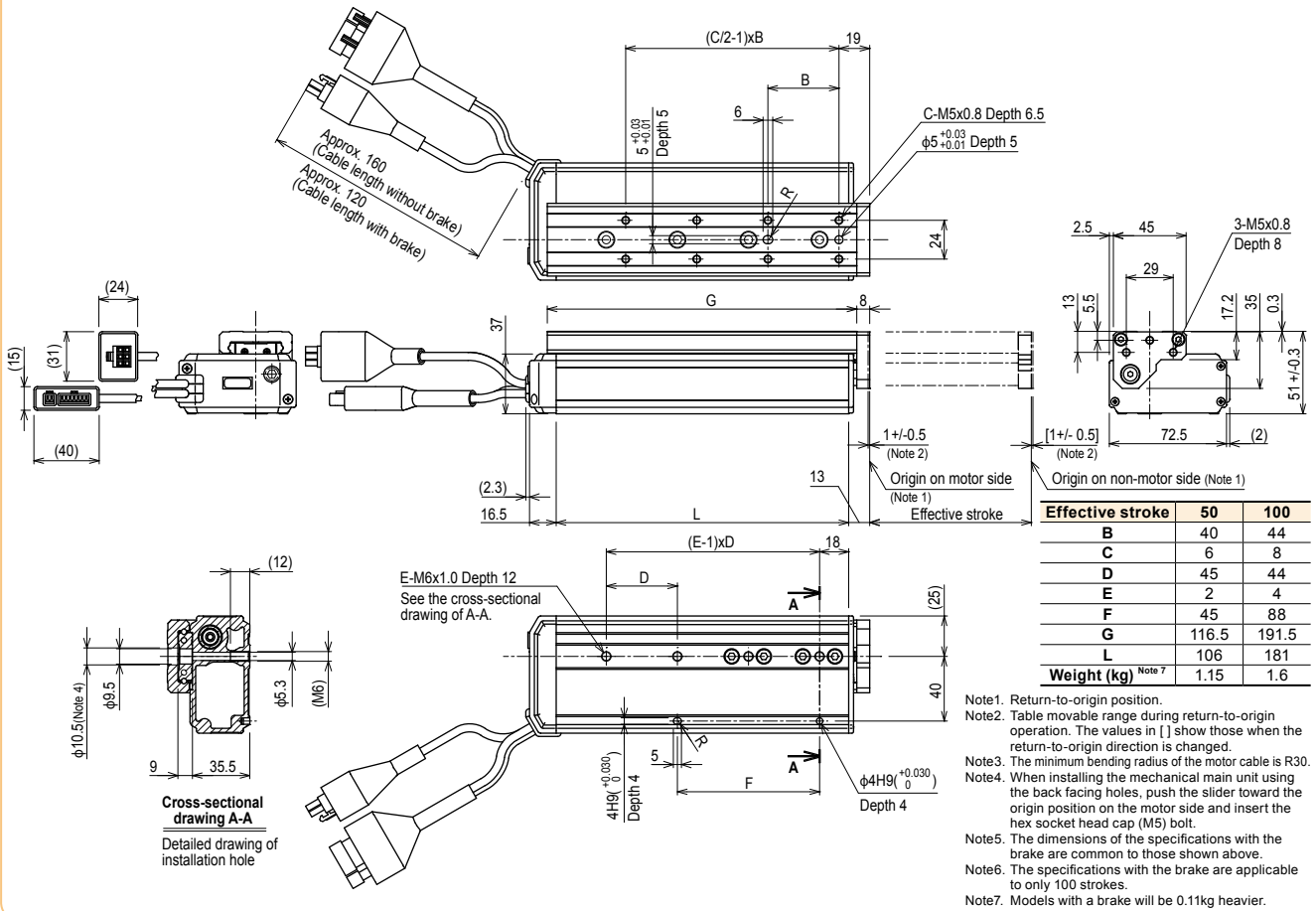
Approx. 200 (Cable length without brake)  
 Approx. 180 (Cable length with brake)

Effective stroke: 50, 100

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) <sup>Note 6</sup>	1.25	1.7

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

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



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

