STH04  Slide table type

### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead (mm)</th>
<th>Model</th>
<th>Lead (mm)</th>
<th>Brake</th>
<th>Origin position</th>
<th>Stroke (mm)</th>
<th>Cam length (mm)</th>
<th>Robot position (mm)</th>
<th>Controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>STH04</td>
<td>D</td>
<td>S</td>
<td>D</td>
<td>Without brake</td>
<td>Standard</td>
<td>15</td>
<td>50/100</td>
<td>100 / 150</td>
<td>S2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100 / 150</td>
<td>No plate</td>
<td>100</td>
<td>200 / 300</td>
<td>50 / 75</td>
<td>SH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50 / 75</td>
<td></td>
<td>50</td>
<td>100 / 150</td>
<td>20 / 40</td>
<td>1</td>
</tr>
</tbody>
</table>

**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 5.** The robot with the brake cannot use the TS-SD.

**Note 6.** The robot cable is flexible and resists bending.

**Note 7.** Select this selection when using the gateway function. For details, see P.60.

### Basic specifications

- **Motor:** 28 [Step motor](#)
- **Resolution (Pulse/rotation):** 4000
- **Drive method:** Straight [Slide screw](#)
- **Ball screw lead (mm):** 5, 10
- **Maximum speed (mm/sec):** 200, 400
- **Maximum payload (kg):** 6, 4
- **Max. pressing force (N):** 55, 30

**Stroke (mm):** 50/100

**Maximum outside dimension (mm):**
- **W45 × H46**
- **W74.5 × H51**

**Cable length (mm):**
- **Standard:** 1000
- **X, Y, Z:** 1500

**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.

### Motor installation (Space-saving model)

- **Type:** Motor installed on right
- **Type:** Motor installed on left

### Allowable overhang

#### Horizontal installation (Unit: mm)

<table>
<thead>
<tr>
<th>Payload (kg)</th>
<th>Lead 5</th>
<th>Lead 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>2kg</td>
<td>1534</td>
<td>1615</td>
</tr>
<tr>
<td>3kg</td>
<td>1644</td>
<td>1726</td>
</tr>
<tr>
<td>4kg</td>
<td>1754</td>
<td>1836</td>
</tr>
</tbody>
</table>

#### Wall installation (Unit: mm)

<table>
<thead>
<tr>
<th>Payload (kg)</th>
<th>Lead 5</th>
<th>Lead 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>2kg</td>
<td>455</td>
<td>537</td>
</tr>
<tr>
<td>3kg</td>
<td>565</td>
<td>647</td>
</tr>
<tr>
<td>4kg</td>
<td>675</td>
<td>757</td>
</tr>
</tbody>
</table>

#### Vertical installation (Unit: mm)

<table>
<thead>
<tr>
<th>Payload (kg)</th>
<th>Lead 5</th>
<th>Lead 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>2kg</td>
<td>335</td>
<td>417</td>
</tr>
<tr>
<td>3kg</td>
<td>445</td>
<td>527</td>
</tr>
<tr>
<td>4kg</td>
<td>555</td>
<td>637</td>
</tr>
</tbody>
</table>

**Note.** Overhang all travelling service life of 3000km.

(Service life is calculated for 75mm stroke models.)

### Static loading moment

- **Stroke (mm):** 50, 100
- **My:** 2000, 2000
- **Mx:** 1558, 1558
- **Mr:** 1165, 1164
- **Mz:** 771, 771

### Controller

- **Operation method:**
  - TS-S2: TC point trace / Remote command
  - TS-SH: Remote command
  - TS-S2: Puls trs control

**Note.** The robot with the brake cannot use the TS-SD.
Articulated robots
YA
Compact single-axis robots
TRANSERVO
Single-axis robots
FLIP-X
Linear motor single-axis robots
PHASER
Cartesian robots
XY-X
SCARA robots
YK-X
Pick & place robots
YP-X
CLEAN
CONTROLLER
INFORMATION
Linear conveyor modules
LCM100

Controller
TS-S2 > 490
TS-SH > 490
TS-SD > 500

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 the same as those shown above.
Note 6. The specifications with the brake are applicable only to 100 strokes.
Note 7. Models with a brake will be 0.11kg heavier.