### Ordering method

**STH04**

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead screw (mm)</th>
<th>Model</th>
<th>Lead screw (mm)</th>
<th>Brake</th>
<th>Origin position</th>
<th>Stroke</th>
<th>Cable length (m)</th>
<th>Robot position</th>
<th>Controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Straight</td>
<td>S</td>
<td>Straight</td>
<td>SL</td>
<td>Optional</td>
<td>100</td>
<td>3</td>
<td>Optional</td>
<td>CC</td>
</tr>
<tr>
<td>L</td>
<td>Space-saving</td>
<td>L</td>
<td>Space-saving</td>
<td>SL</td>
<td>Optional</td>
<td>100</td>
<td>3</td>
<td>Optional</td>
<td>CC</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. 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. 152.

### Basic specifications

- **Motor**: 28 [Step motor]
- **Resolution (Pulse/rotation)**: 4608
- **Repeatability (mm)**: +/- 0.05
- **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)**: Space-saving (W145 × H46), Straight (W74.5 × H51)
- **Cable length (m)**: 25.5
- **Allowable overhang**: (Type 1: Motor installed on right, Type 2: Motor installed on left)
- **Linear conveyor modules** (LCM100)
- **Compact single-axis robots** (TRANSERVO)
- **Motor-less single-axis robots** (PHASER)
- **Cartesian robots** (XY-X)
- **SCARA robots** (YK-X)
- **Pick & place robots** (YP-X)
- **Controller**
  - **TS-S2**: 514 (Controller and Operation method)
  - **TS-SH**: 514 (Remote command)
  - **TS-SD**: 524 (Pulse travel control)

### Allowable overhang

- **Horizontal installation** (Unit: mm)
  - Slide table type: 1kg, 2kg, 3kg, 4kg
  - Lead 5: 1534, 1568
  - Lead 10: 3174, 3374
- **Wall installation** (Unit: mm)
  - Slide table type: 1kg, 2kg, 3kg, 4kg
  - Lead 5: 1534, 1568
  - Lead 10: 3174, 3374
- **Vertical installation** (Unit: mm)
  - Slide table type: 1kg, 2kg, 3kg, 4kg
  - Lead 5: 1534, 1568
  - Lead 10: 3174, 3374

### Static loading moment

- **Stroke**
  - MY: 100mm
  - MP: 200mm
  - MR: 500mm
- **Wall installation (Unit: mm)**
  - MY: 1915, 1930
  - MP: 1915, 1930
  - MR: 1915, 1930
- **Vertical installation (Unit: mm)**
  - MY: 1915, 1930
  - MP: 1915, 1930
  - MR: 1915, 1930

### Controller

- **Operation method**
  - TS-S2: PVC point trace / Remote command
  - TS-SH: Remote command
  - TS-SD: Pulse travel control

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

### Motor installation (Space-saving model)

- **Motor installation (Space-saving model)**
  - **Type 1**: Motor installed on right
  - **Type 2**: Motor installed on left

### Speed vs. payload

- **Graph**
  - **Horizontal**
  - **Vertical**

### Controller

- **Ordering method**
- **Model**
- **Motor**
- **Resolution (Pulse/rotation)**
- **Drive method**
- **Ball screw lead (mm)**
- **Maximum speed (mm/sec)**
- **Maximum payload (kg)**
- **Max. pressing force (N)**
- **Stroke (mm)**
- **Maximum outside dimension (mm)**
- **Cable length (m)**
- **Allowable overhang**
- **Static loading moment**
- **Controller**

### Notes

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