

# SS05H

**Slider type**
**High lead: Lead 20**
**CE compliance**
**Origin on the non-motor side is selectable**


## Ordering method

| Model | Lead                            | Model                                                                                                                          | Brake                             | Origin position                  | Grease option                              | Stroke                    | Cable length                           |
|-------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------|--------------------------------------------|---------------------------|----------------------------------------|
| SS05H | 20: 20mm<br>12: 12mm<br>06: 6mm | S: Straight model<br>R: Space-saving model<br>(motor installed on right)<br>L: Space-saving model<br>(motor installed on left) | N: With no brake<br>B: With brake | N: Standard<br>Z: Non-motor side | N: Standard grease<br>C: Clean room grease | 50 to 800<br>(50mm pitch) | 1K: 1m<br>3K: 3m<br>5K: 5m<br>10K: 10m |

Note 1. Brake-equipped models can be selected only when the lead is 12mm or 6mm.

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. The robot cable is flexible and resists bending.

Note 4. See P.600 for DIN rail mounting bracket.

Note 5. Select this selection when using the gateway function.

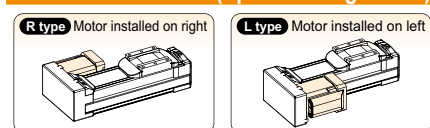
## Basic specifications

|                                                      |                                               |
|------------------------------------------------------|-----------------------------------------------|
| Motor                                                | 42 □ Step motor                               |
| Resolution (Pulse/rotation)                          | 20480                                         |
| Repeatability (mm)                                   | +/- 0.02                                      |
| Deceleration mechanism                               | Ball screw $\phi 12$                          |
| Maximum motor torque (N·m)                           | 0.47                                          |
| Ball screw lead (mm)                                 | 20 12 6                                       |
| Maximum speed (mm/sec)                               | Horizontal 1000 600 300<br>Vertical - 500 250 |
| Maximum payload (kg)                                 | Horizontal 6 8 12<br>Vertical - 2 4           |
| Max. pressing force (N)                              | 36 60 120                                     |
| Stroke (mm)                                          | 50 to 800 (50pitch)                           |
| Overall length (mm)                                  | Horizontal Stroke+286<br>Vertical Stroke+306  |
| Maximum outside dimension of body cross-section (mm) | W55 × H56                                     |
| Cable length (m)                                     | Standard: 1 / Option: 3, 5, 10                |

Note 1. Positioning repeatability in one direction.

Note 2. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

## Motor installation (Space-saving model)



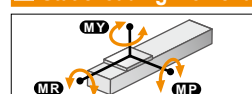
## Allowable overhang



| Horizontal installation (Unit: mm) |      |     |     |     | Wall installation (Unit: mm) |         |        |      |     |     |
|------------------------------------|------|-----|-----|-----|------------------------------|---------|--------|------|-----|-----|
|                                    | A    | B   | C   |     |                              | A       | B      | C    |     |     |
| Lead 20                            | 2kg  | 599 | 225 | 291 | Lead 20                      | 2kg     | 262    | 203  | 554 |     |
|                                    | 4kg  | 366 | 109 | 148 |                              | Lead 12 | 4kg    | 118  | 88  | 309 |
|                                    | 6kg  | 352 | 71  | 104 |                              |         | Lead 6 | 6kg  | 71  | 49  |
| Lead 12                            | 4kg  | 500 | 118 | 179 | Lead 12                      |         |        | 4kg  | 146 | 96  |
|                                    | 6kg  | 399 | 79  | 118 |                              | Lead 6  |        | 6kg  | 85  | 55  |
|                                    | 8kg  | 403 | 56  | 88  |                              |         | Lead 6 | 8kg  | 55  | 34  |
| Lead 6                             | 6kg  | 573 | 83  | 136 | Lead 6                       |         |        | 6kg  | 101 | 62  |
|                                    | 8kg  | 480 | 61  | 100 |                              | Lead 6  |        | 8kg  | 64  | 39  |
|                                    | 10kg | 442 | 47  | 78  |                              |         | Lead 6 | 10kg | 43  | 26  |
|                                    | 12kg | 465 | 39  | 64  | Lead 6                       |         |        | 12kg | 28  | 17  |

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km (Service life is calculated for 600mm stroke models).

## Static loading moment

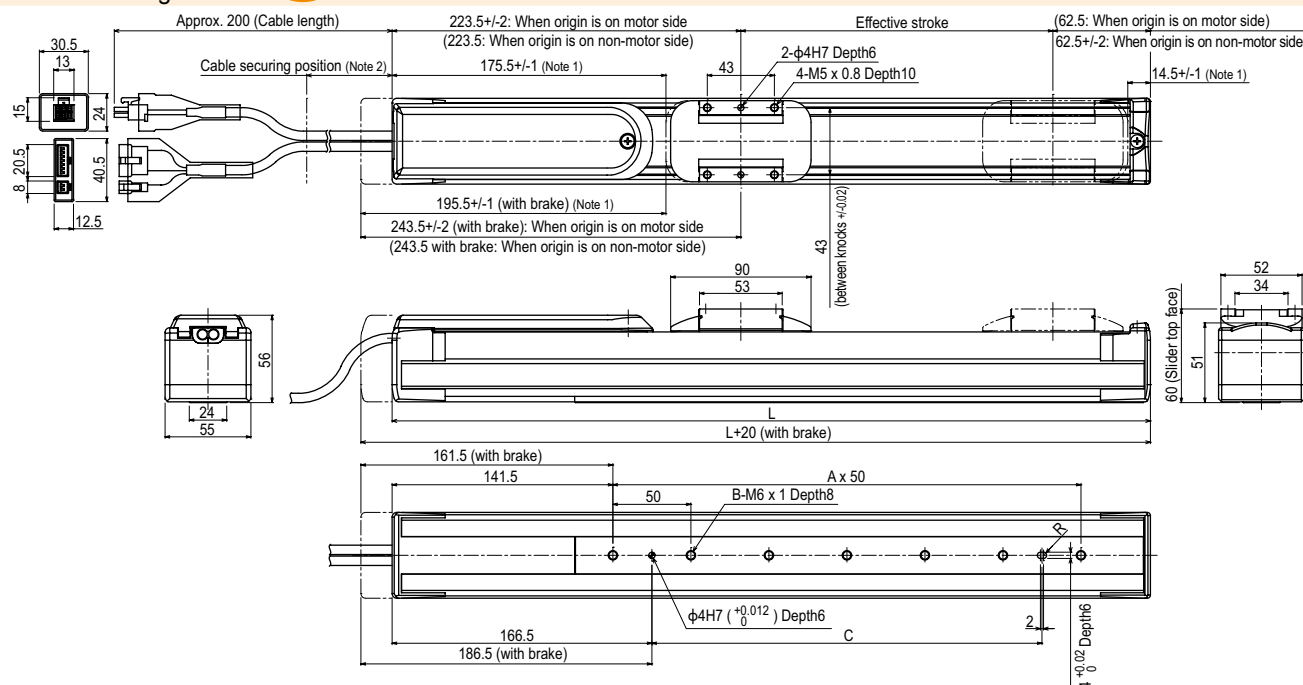


|    | MY | MP | MR |
|----|----|----|----|
| 32 | 32 | 38 | 34 |

## Controller

| Controller | Operation method                 |
|------------|----------------------------------|
| TS-S2      | I/O point trace / Remote command |
| TS-SH      | Pulse train control              |
| TS-SD      |                                  |

## SS05H Straight model

**S**


| Effective stroke     | 50   | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750  | 800  |
|----------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| L                    | 336  | 386 | 436 | 486 | 536 | 586 | 636 | 686 | 736 | 786 | 836 | 886 | 936 | 986 | 1036 | 1086 |
| A                    | 3    | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   |
| B                    | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18   | 19   |
| C                    | 100  | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 500 | 500 | 500 | 500 | 500 | 500  | 500  |
| Weight (kg)          | 2.4  | 2.6 | 2.8 | 3.0 | 3.2 | 3.4 | 3.6 | 3.8 | 4.0 | 4.2 | 4.4 | 4.5 | 4.7 | 4.9 | 5.1  | 5.3  |
| Lead 20              | 1000 |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |
| Lead 12 (Horizontal) | 600  |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |
| Lead 12 (Vertical)   | 500  |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |
| Lead 6 (Horizontal)  | 300  |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |
| Lead 6 (Vertical)    | 250  |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |
| Speed setting        | -    |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. Secure the cable with a tie-band 100mm or less from unit's end face to prevent the cable from being subjected to excessive loads.

Note 3. The cable's minimum bend radius is R30.

Note 4. These are the weights without a brake. The weights are 0.2kg heavier when equipped with a brake.

Note 5. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.