

## SS05

Slider type

● High lead: Lead 20

● CE compliance

● Origin on the non-motor side is selectable



## Ordering method

## SS05

Model	Lead	Model	Brake <sup>Note 1</sup>	Origin position	Grease option	Stroke	Cable length <sup>Note 3</sup>
	20: 20mm 12: 12mm 06: 6mm	S: Straight model R: Space-saving model (motor installed on right) L: Space-saving model (motor installed on left)	N: With no brake B: With brake	N: Standard <sup>Note 2</sup> Z: Non-motor side	N: Standard grease C: Clean room grease	50 to 800 (50mm pitch)	1K: 1m 3K: 3m 5K: 5m 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.

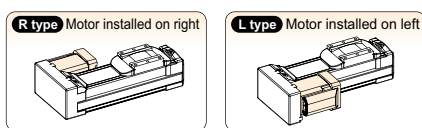
## Basic specifications

Motor	42 □	Step motor
Resolution (Pulse/rotation)	20480	
Repeatability <sup>Note 1</sup> (mm)	+/-0.02	
Deceleration mechanism	Ball screw $\phi 12$	
Maximum motor torque (N·m)	0.27	
Ball screw lead (mm)	20 12 6	
Maximum speed <sup>Note 2</sup> (mm/sec)	1000 600 300	
Maximum payload (kg)	Horizontal 4 6 10 Vertical - 1 2	
Max. pressing force (N)	27 45 90	
Stroke (mm)	50 to 800 (50mm pitch)	
Overall length (mm)	Horizontal Stroke+230 Vertical Stroke+270	
Maximum outside dimension of body cross-section (mm)	W55 × H56	
Cable length (m)	Standard: 1 / Option: 3, 5, 10	

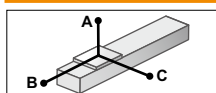
Note 1. Positioning repeatability in one direction.

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.

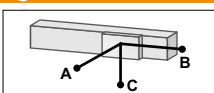
## Motor installation (Space-saving model)



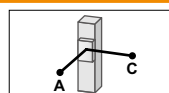
S2	I/O
Robot positioner S2: TS-S2 <sup>Note 4</sup>	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <sup>Note 5</sup>
SH	Battery
Robot positioner SH: TS-SH	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <sup>Note 5</sup>
SD	I/O cable
Robot driver SD: TS-SD	1: 1m

Allowable overhang <sup>Note</sup>

Horizontal installation (Unit: mm)	A	B	C
Lead 20	2kg 413	139	218
4kg	334	67	120
Lead 12	4kg 347	72	139
6kg	335	47	95
4kg 503	78	165	
Lead 6	8kg 332	37	79
10kg	344	29	62

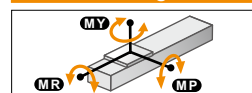


Wall installation (Unit: mm)	A	B	C
Lead 20	2kg 192	123	372
4kg	92	51	265
Lead 12	4kg 109	57	300
6kg	63	31	263
4kg 134	63	496	
Lead 6	8kg 76	35	377
10kg	47	22	355



Vertical installation (Unit: mm)	A	C
Lead 12	0.5kg 578	579
1kg	286	286
Lead 6	1kg 312	312
2kg	148	148

## Static loading moment

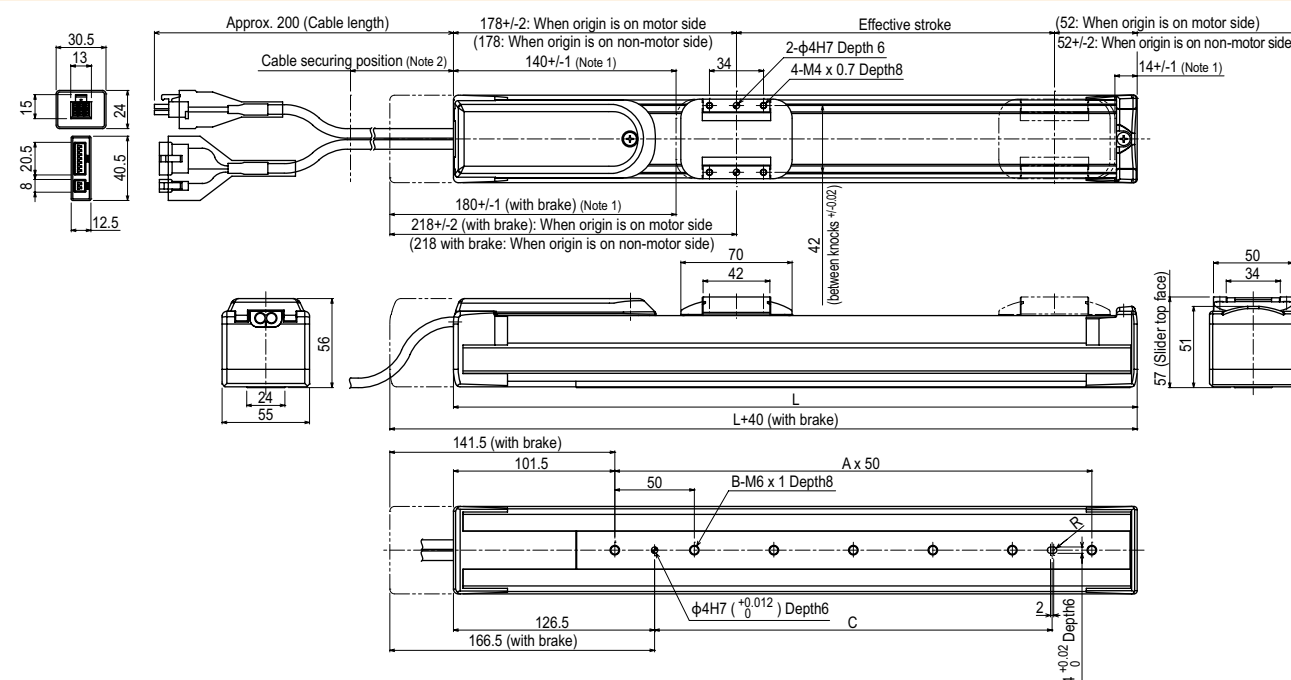


(Unit: N·m)	MY	MP	MR
25	33	30	

## Controller

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

## SS05 Straight model S



Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030
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) <sup>Note 4</sup>	2.1	2.3	2.5	2.7	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0
Maximum speed for each stroke <sup>Note 5</sup> (mm/sec)	Lead20												933	833	733	633
	Lead12												560	500	440	380
	Lead6												280	250	220	190
	Speed setting												93%	83%	73%	63%

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.