

SS05

Slider type

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



Ordering method

SS05

Model	Lead	Model	Brake ^{Note 1}	Origin position	Grease option	Stroke	Cable length ^{Note 2}	Robot positioner	I/O	Battery ^{Note 5}
	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 Z: Non-motor side	N: Standard grease C: Clean room grease	50 to 800 (50mm pitch)	1L: 1m 3L: 3m 5L: 5m 10L: 10m	S2: TS-S2 ^{Note 3} SH: TS-SH	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board ^{Note 4}	B: With battery (Absolute) N: None (Incremental)
								SD	1	
								Robot driver	I/O cable	
								SD: TS-SD	t: 1m	

Note 1. Brake-equipped models can be selected only when the lead is 12mm or 6mm.
 Note 2. The robot cable is flexible and resists bending.
 Note 3. See P.446 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.439.
 Note 5. Select whether or not the battery is provided only when using the TS-SH.

Basic specifications

Motor	42 □ Step motor	
Resolution (Pulse/rotation)	20480	
Repeatability ^{Note 1} (mm)	±0.02	
Deceleration mechanism	Ball screw φ12 (Class C10)	
Maximum motor torque (N·m)	0.27	
Ball screw lead (mm)	20	12
Maximum speed ^{Note 2} (mm/sec)	1000	600
Maximum payload (kg)	Horizontal	Vertical
	4	6
	1	2
Max. pressing force (N)	27	45
	90	90
Stroke (mm)	50 to 800 (50mm pitch)	
Overall length (mm)	Horizontal	Vertical
	Stroke+230	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.

Allowable overhang ^{Note}

	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)
Lead 20	A: 413, B: 139, C: 218	A: 192, B: 123, C: 372	A: 578, C: 579
Lead 12	A: 334, B: 67, C: 120	A: 92, B: 51, C: 265	A: 286, C: 286
Lead 6	A: 347, B: 72, C: 139	A: 109, B: 57, C: 300	A: 312, C: 312
	A: 335, B: 47, C: 95	A: 63, B: 31, C: 263	A: 148, C: 148
	A: 503, B: 78, C: 165	A: 134, B: 63, C: 496	
	A: 332, B: 37, C: 79	A: 76, B: 35, C: 377	
	A: 344, B: 29, C: 62	A: 47, B: 22, C: 355	

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

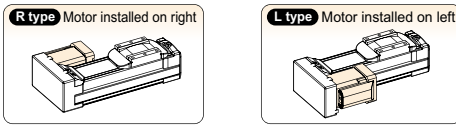
	MY	MP	MR
	25	33	30

(Unit: N·m)

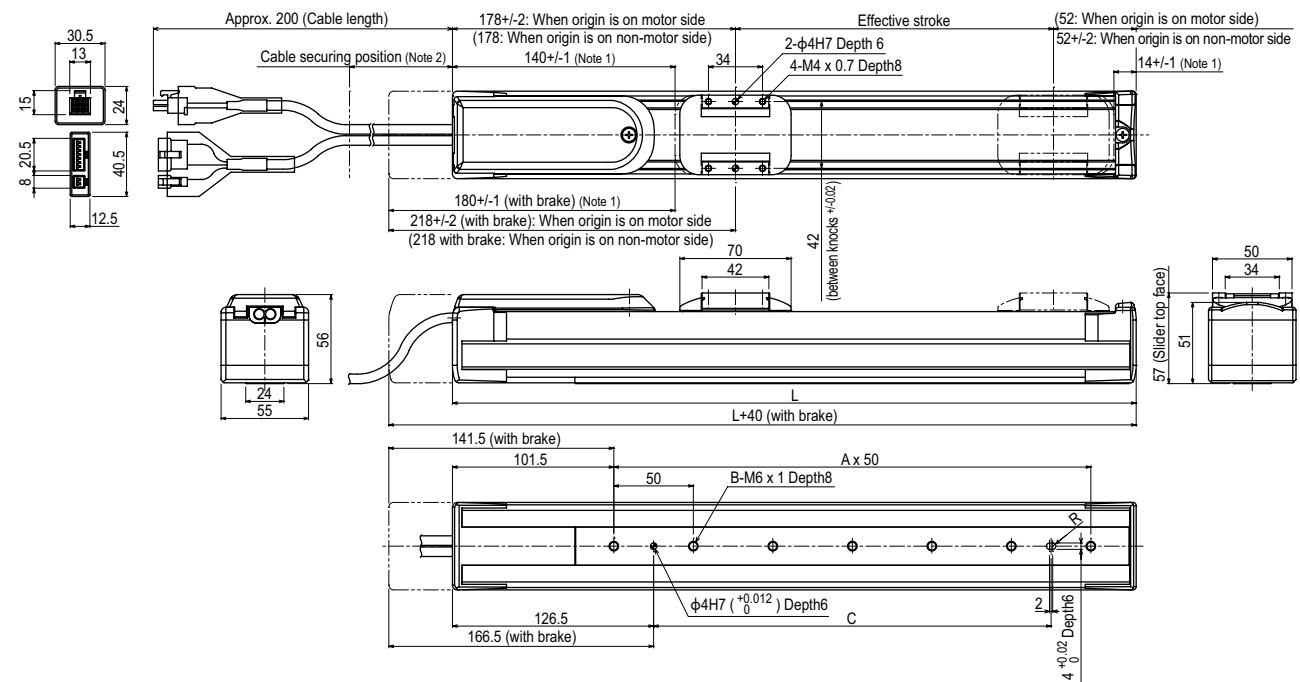
Controller

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

Motor installation (Space-saving model)



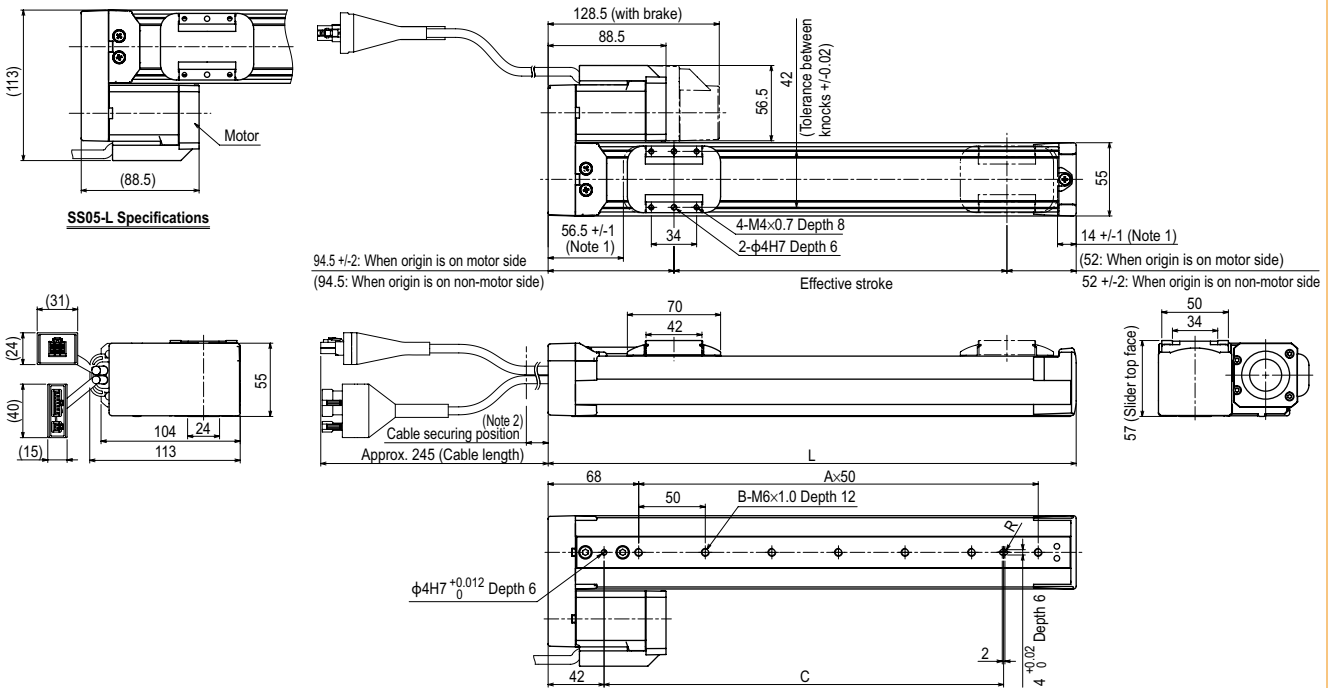
SS05 Straight model S



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) ^{Note 4}	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 ^{Note 5} (mm/sec)	Lead 20	1000															
	Lead 12	600															
	Lead 6	300															
	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.

SS05 Space-saving model **R** **L**



Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
L	196.5	246.5	296.5	346.5	396.5	446.5	496.5	546.5	596.5	646.5	696.5	746.5	796.5	846.5	896.5	946.5	
A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
B	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
C	100	150	200	250	300	350	400	450	500	500	500	500	500	500	500	500	
Weight (kg) ^{Note 4}	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.1	4.3	4.5	
Maximum speed for each stroke ^{Note 5} (mm/sec)	Lead20	1000															
	Lead12	600															
	Lead6	300															
	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 80mm 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.
- Note 6. The belt cover's left and right sides are asymmetrical. Therefore, if the motor mounting orientation is changed, the cover cannot be attached.