SSC05H

High lead: Lead 20 **CE compliance**

Ordering method

SSC05H - [ ] - **S** - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead	Type	Brake Note 1	Direction of air coupler installation	Origin position	Stroke	Cable length Note 2	Robot positioner	I/O	Battery Note 5
	20: 20mm 12: 12mm 6: 6mm	S: Straight	N: With no brake B: With brake	RJ: Right (Standard) LJ: Left	N: Standard Z: Non-motor side	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)

Robot driver	I/O cable
SD	**1**
SD: TS-SD	1: 1m

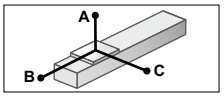
Note 1. Only the model with a lead of 12mm or 6mm can select specifications with brake.
Note 2. The robot cable is flexible and resists bending.
Note 3. See P.446 for DIN rail mounting bracket.
Note 4. Select this selection when using the gateway function. For details, see P.439.
Note 5. Select whether or not the battery is provided only when using the TS-SH.

Basic specifications

Motor		42 □ Step motor		
Repeatability Note 1 **(mm)**		+/-0.02		
Deceleration mechanism		Ball screw ϕ12 (Class C10)		
Maximum motor torque (N·m)		0.47		
Ball screw lead (mm)		20	12	6
Maximum speed Note 2 **(mm/sec)**	**Horizontal**	1000	600	300
	Vertical	–	500	250
Maximum payload (kg)	**Horizontal**	6	8	12
	Vertical	–	2	4
Max. pressing force (N)		36	60	120
Stroke (mm)		50 to 800 (50mm pitch)		
Overall length (mm)	**Horizontal**	Stroke+286		
	Vertical	Stroke+306		
Maximum outside dimension of body cross-section (mm)		W55 × H56		
Cable length (m)		Standard: 1 / Option: 3, 5, 10		
Degree of cleanliness		CLASS 10 Note 3		
Intake air (Nℓ/min)		Lead 20	Lead 12	Lead 6
		80	50	30

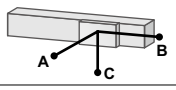
Note 1. Positioning repeatability in one direction.
Note 2. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
Note 3. Per 1cf (0.1μm base), when suction blower is used.

Allowable overhang Note



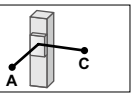
Horizontal installation (Unit: mm)

		A	B	C
Lead 20	2kg	599	225	291
	4kg	366	109	148
	6kg	352	71	104
Lead 12	4kg	500	118	179
	6kg	399	79	118
	8kg	403	56	88
Lead 6	6kg	573	83	136
	8kg	480	61	100
	10kg	442	47	78
	12kg	465	39	64



Wall installation (Unit: mm)

		A	B	C
Lead 20	2kg	262	203	554
	4kg	118	88	309
	6kg	71	49	262
Lead 12	4kg	146	96	449
	6kg	85	55	334
	8kg	55	34	305
Lead 6	6kg	101	62	519
	8kg	64	39	413
	10kg	43	26	355
	12kg	28	17	338

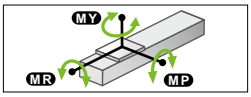


Vertical installation (Unit: mm)

		A	C
Lead 12	1kg	458	459
	2kg	224	224
Lead 6	2kg	244	245
	4kg	113	113

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

Static loading moment



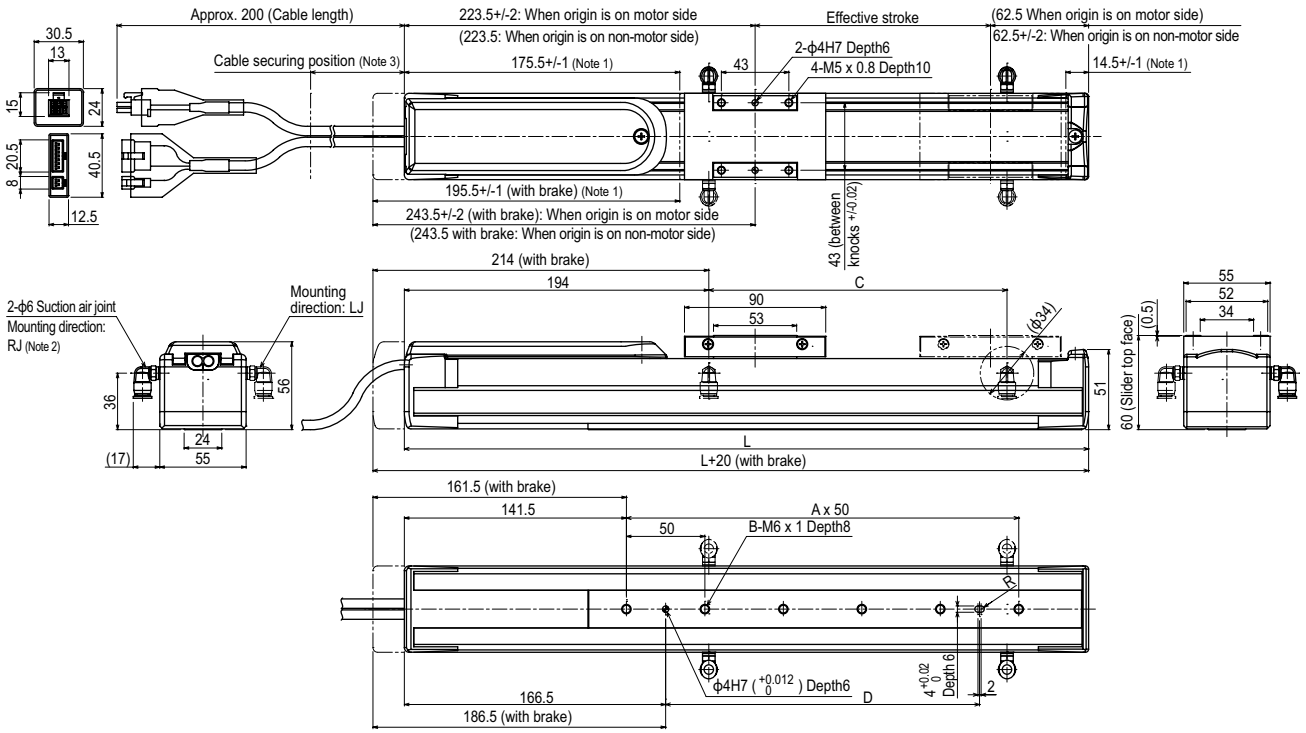
(Unit: N·m)

MY	MP	MR
32	38	34

Controller

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

SSC05H



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) Note 5		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
Maximum speed for each stroke (mm/sec) Note 6	Lead 20	1000												933	833	733	633
	Lead 12 (Horizontal)	600												560	500	440	380
	Lead 12 (Vertical)	500														440	380
	Lead 6 (Horizontal)	300												280	250	220	190
	Lead 6 (Vertical)	250														220	190

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Either right or left can be selected for the suction air joint mounting direction. This drawing shows the RJ (standard) direction.
Note 3. 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 4. The cable's minimum bend radius is R30.
Note 5. These are the weights without a brake. The weights are 0.2kg heavier when equipped with a brake.
Note 6. When the stroke is longer than 650mm, 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.

Controller **TS-S2 ▶ 438** **TS-SH ▶ 438** **TS-SD ▶ 451**