

SS04

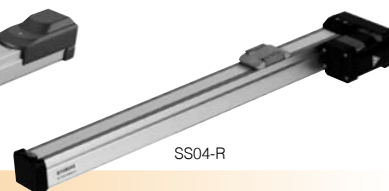
Slider type

CE compliance

Origin on the non-motor side is selectable



SS04-S



SS04-R

Ordering method

SS04

Model	Lead	Model	Brake	Origin position	Grease option	Stroke	Cable length
	12: 12mm 06: 6mm 02: 2mm	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 400 (50mm pitch)	1K: 1m 3K: 3m 5K: 5m 10K: 10m

S2

Robot positioner	I/O
S2: TS-S2	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board

SH

Robot positioner	I/O	Battery
SH: TS-SH	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board	B: With battery (Absolute) N: None (Incremental)

SD

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

Note 1. 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 2. The robot cable is flexible and resists bending.

Note 3. See P.600 for DIN rail mounting bracket.

Note 4. Select this selection when using the gateway function.

Basic specifications

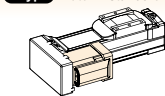
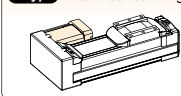
Motor	42 Step motor
Resolution (Pulse/rotation)	20480
Repeatability (mm)	+/-0.02
Deceleration mechanism	Ball screw $\phi 8$
Maximum motor torque (N-m)	0.27
Ball screw lead (mm)	12 6 2
Maximum speed (mm/sec)	600 300 100
Maximum payload (kg)	Horizontal 2 4 6 Vertical 1 2 4
Max. pressing force (N)	45 90 150
Stroke (mm)	50 to 400 (50mm pitch)
Overall length (mm)	Horizontal Stroke+216 Vertical Stroke+261
Maximum outside dimension of body cross-section (mm)	W49 x H59
Cable length (m)	Standard: 1 / Option: 3, 5, 10

Note 1. Positioning repeatability in one direction.

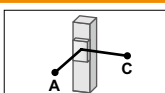
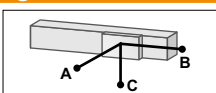
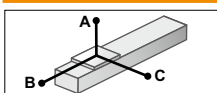
Motor installation (Space-saving model)

R type Motor installed on right

L type Motor installed on left



Allowable overhang

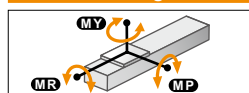


Horizontal installation (Unit: mm)				
	A	B	C	
Lead 12	1kg 807	218	292	
Lead 6	2kg 667	107	152	
Lead 6	2kg 687	116	169	
Lead 6	3kg 556	76	112	
Lead 6	4kg 567	56	84	
Lead 2	4kg 869	61	92	
Lead 2	6kg 863	40	60	

Wall installation (Unit: mm)				
	A	B	C	
Lead 12	1kg 274	204	776	
Lead 6	2kg 133	93	611	
Lead 6	2kg 149	102	656	
Lead 6	3kg 92	62	516	
Lead 6	4kg 63	43	507	
Lead 2	4kg 72	48	829	
Lead 2	6kg 39	29	789	

Vertical installation (Unit: mm)			
	A	C	
Lead 12	0.5kg 407	408	
Lead 6	1kg 204	204	
Lead 6	1kg 223	223	
Lead 6	2kg 107	107	
Lead 2	2kg 118	118	
Lead 2	4kg 53	53	

Static loading moment

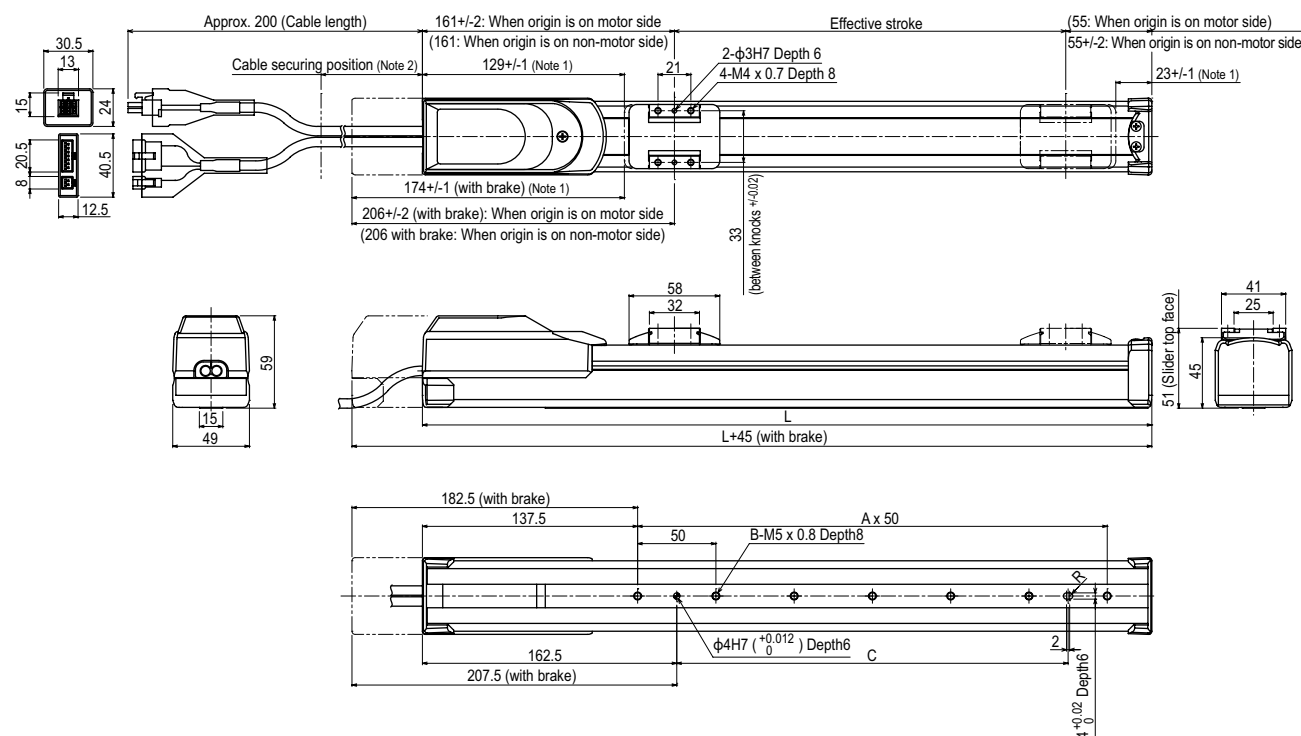


(Unit: N-m)		
MY	MP	MR
16	19	17

Controller

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

SS04 Straight model S



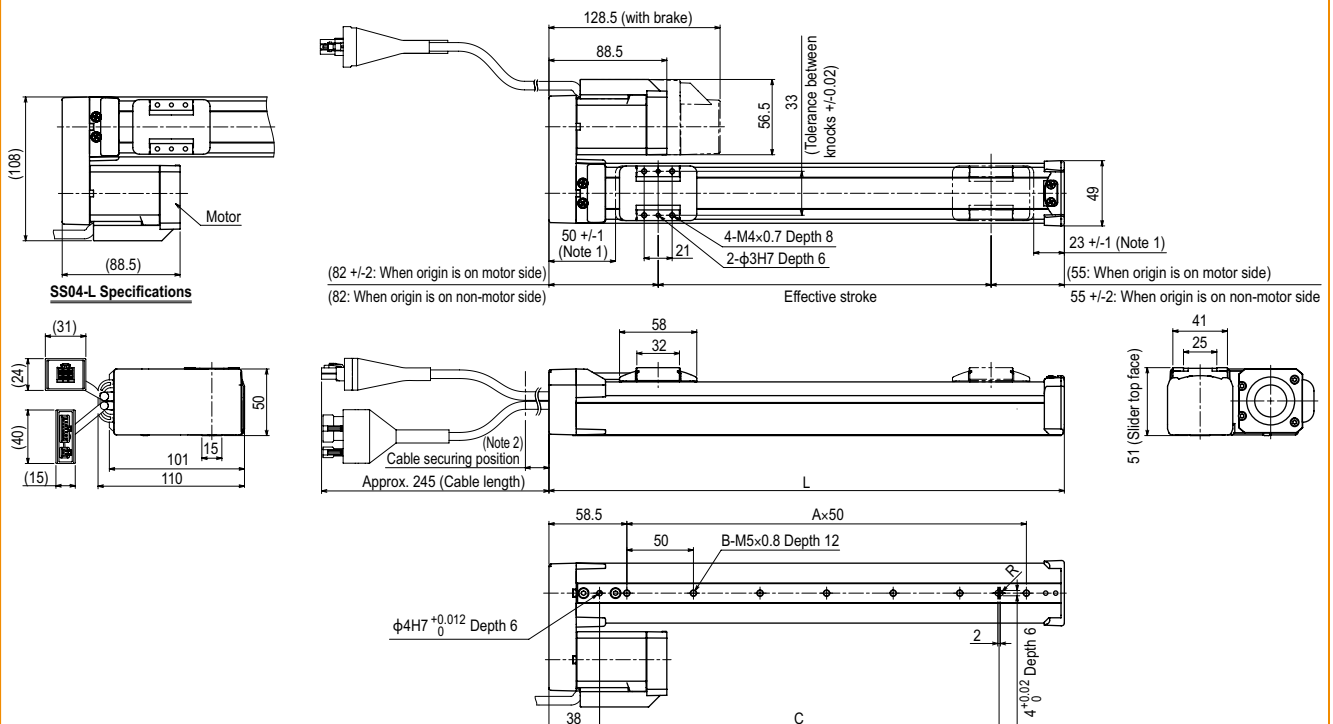
Effective stroke	50	100	150	200	250	300	350	400
L	266	316	366	416	466	516	566	616
A	2	3	4	5	6	7	8	9
B	3	4	5	6	7	8	9	10
C	50	100	150	200	250	300	350	400
Weight (kg)	1.5	1.6	1.7	1.8	2.0	2.1	2.2	2.3

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.

SS04 Space-saving model **R** **L**

Effective stroke	50	100	150	200	250	300	350	400
L	187	237	287	337	387	437	487	537
A	2	3	4	5	6	7	8	9
B	3	4	5	6	7	8	9	10
C	100	150	200	250	300	350	400	450
Weight (kg) ^{Note 4}	1.2	1.4	1.5	1.6	1.7	1.8	1.9	2.1

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. The belt cover's left and right sides are asymmetrical. Therefore, if the motor mounting orientation is changed, the cover cannot be attached.

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 3}
	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 ^{Note 2} 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.

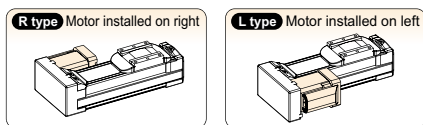
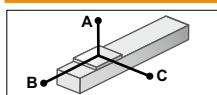
Basic specifications

Motor	42 □	Step motor
Resolution (Pulse/rotation)	20480	
Repeatability ^{Note 1} (mm)	±0.02	
Deceleration mechanism	Ball screw φ12	
Maximum motor torque (N·m)	0.27	
Ball screw lead (mm)	20 12 6	
Maximum speed ^{Note 2} (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	

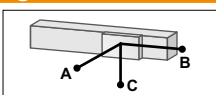
Note 1. Positioning repeatability in one direction.

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.

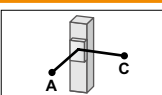
Motor installation (Space-saving model)

Allowable overhang ^{Note}

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
Lead 6	4kg 503	78	165
8kg	332	37	79
10kg	344	29	62

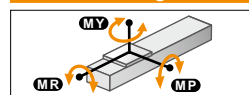


Wall installation (Unit: mm)			
	A	B	C
Lead 20	2kg 192	123	372
4kg	92	51	265
Lead 12	4kg 109	57	300
6kg	63	31	263
Lead 6	4kg 134	63	496
8kg	76	35	377
10kg	47	22	355



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

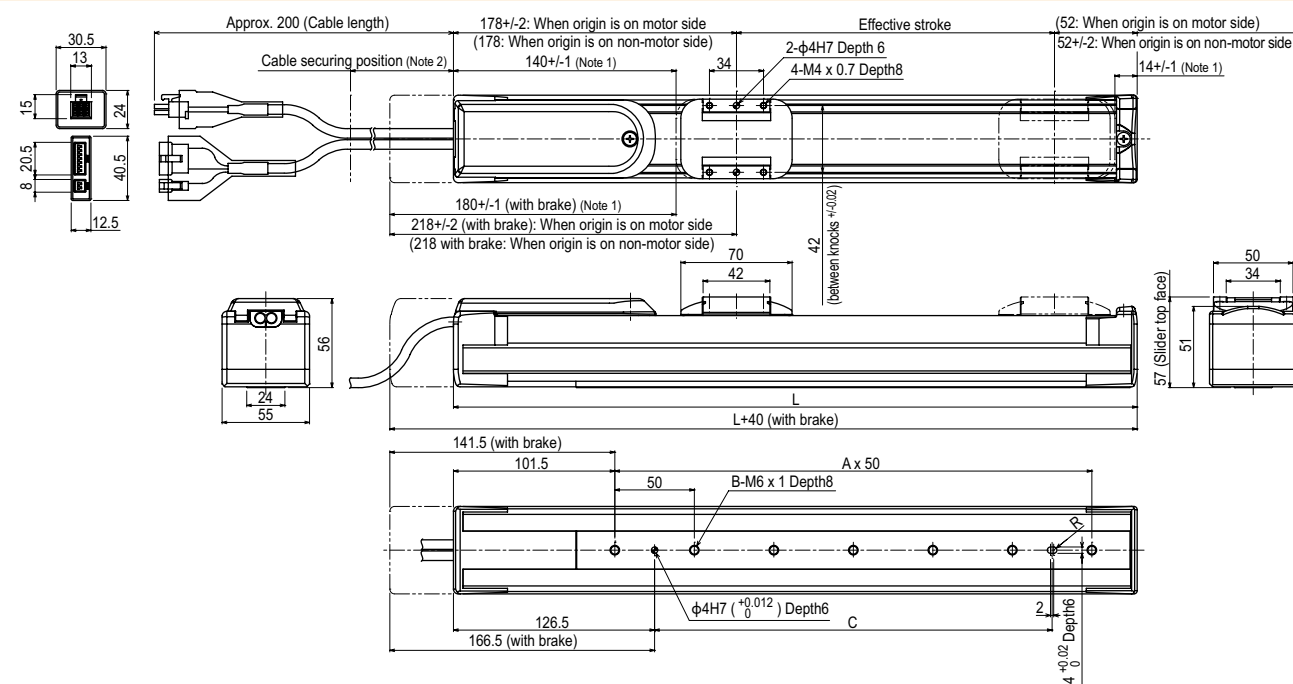


(Unit: N·m)		
MY	MP	MR
25	33	30

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) ^{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)	Lead20												933	833	733	633
	Lead12												560	500	440	380
	Lead6												280	250	220	190
	Speed setting												93%	83%	73%	63%

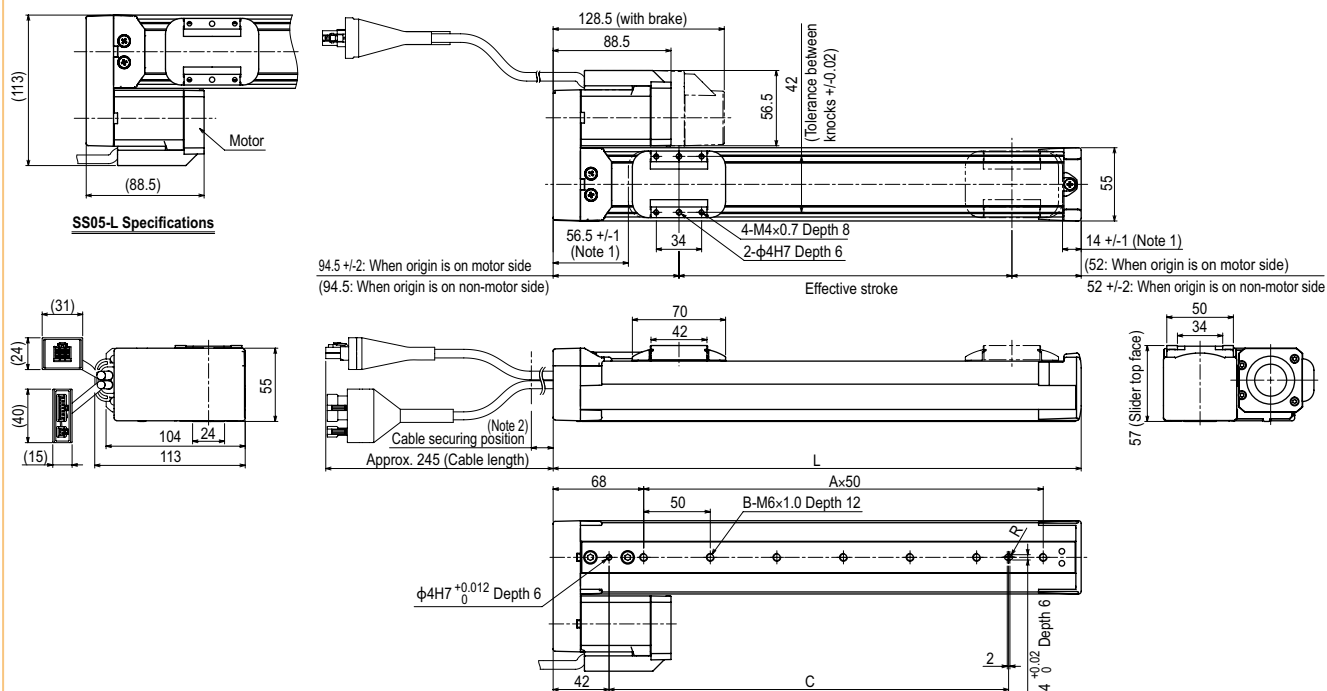
Note 1. Stop positions are determined by the mechanical stoppers at both ends.

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.

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}	1000												933	833	733	633
Lead20	600												560	500	440	380
Lead12	300												280	250	220	190
Lead6	-												93%	83%	73%	63%
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.

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 12: 12mm 06: 6mm	S: Straight model R: Space-saving model (motor installed on right) L: Space-saving model (motor installed on left)	Notes 1 N: With no brake B: With brake	Notes 2 N: Standard Z: Non-motor side	N: Standard grease C: Clean room grease	50 to 800 (50mm pitch)	Notes 3 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

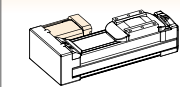
Motor	42 □ Step motor
Resolution (Pulse/rotation)	20480
Repeatability (mm)	±0.02
Deceleration mechanism	Ball screw $\phi 12$
Maximum motor torque (N·m)	0.47
Ball screw lead (mm)	20 12 6
Maximum speed (mm/sec)	Horizontal 1000 600 300 Vertical — 500 250
Maximum payload (kg)	Horizontal 6 8 12 Vertical — 2 4
Max. pressing force (N)	36 60 120
Stroke (mm)	50 to 800 (50pitch)
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

Note 1. Positioning repeatability in one direction.

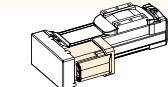
Note 2. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

Motor installation (Space-saving model)

R type Motor installed on right

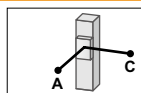
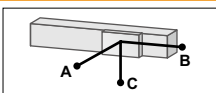
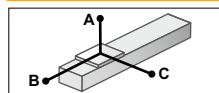


L type Motor installed on left



S2	I/O
Robot positioner S2: TS-S2	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board
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
SD	1
Robot driver SD: TS-SD	I/O cable 1: 1m

Allowable overhang

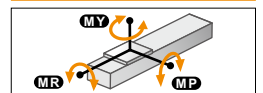


Horizontal installation (Unit: mm)	A	B	C
Lead 20	2kg 599	225	291
4kg	366	109	148
6kg	352	71	104
4kg	500	118	179
6kg	399	79	118
8kg	403	56	88
6kg	573	83	136
8kg	480	61	100
10kg	442	47	78
12kg	465	39	64

Wall installation (Unit: mm)	A	B	C
Lead 20	2kg 262	203	554
4kg	118	88	309
6kg	71	49	262
4kg	146	96	449
6kg	85	55	334
8kg	55	34	305
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
4kg	244	245
6kg	113	113

Static loading moment



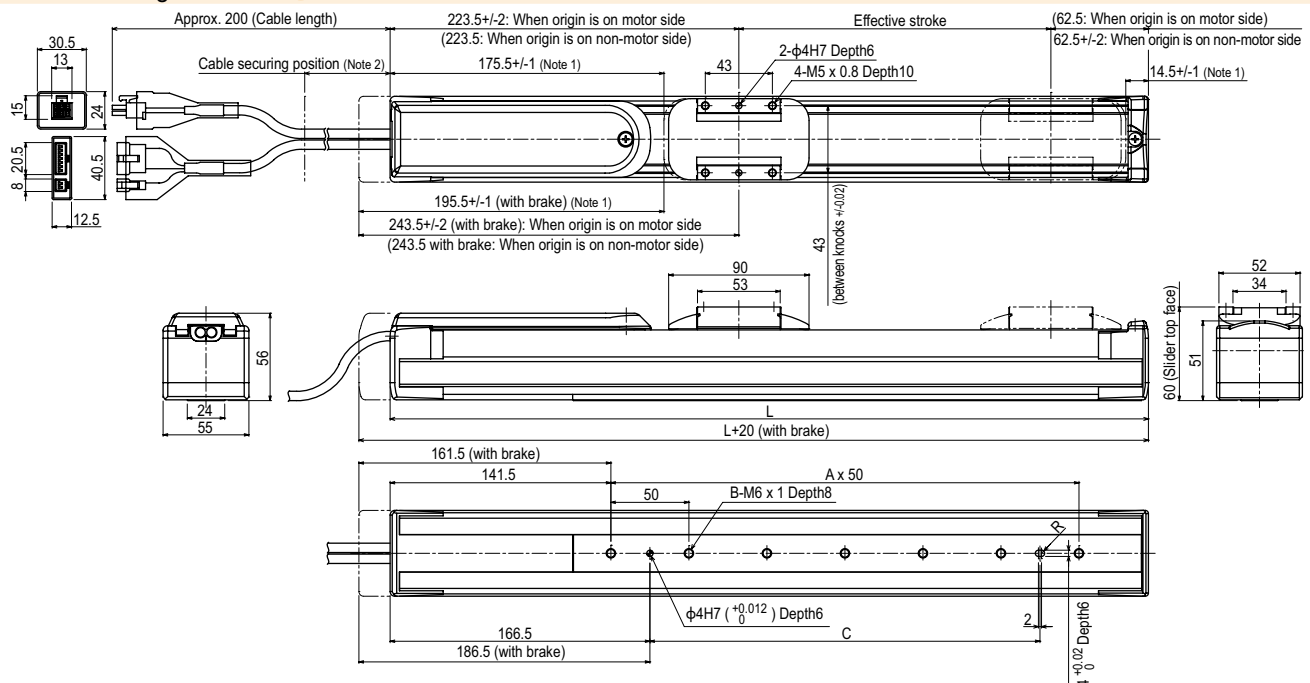
(Unit: N·m)	MY	MP	MR
32	38	34	

Controller

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

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).

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	—															

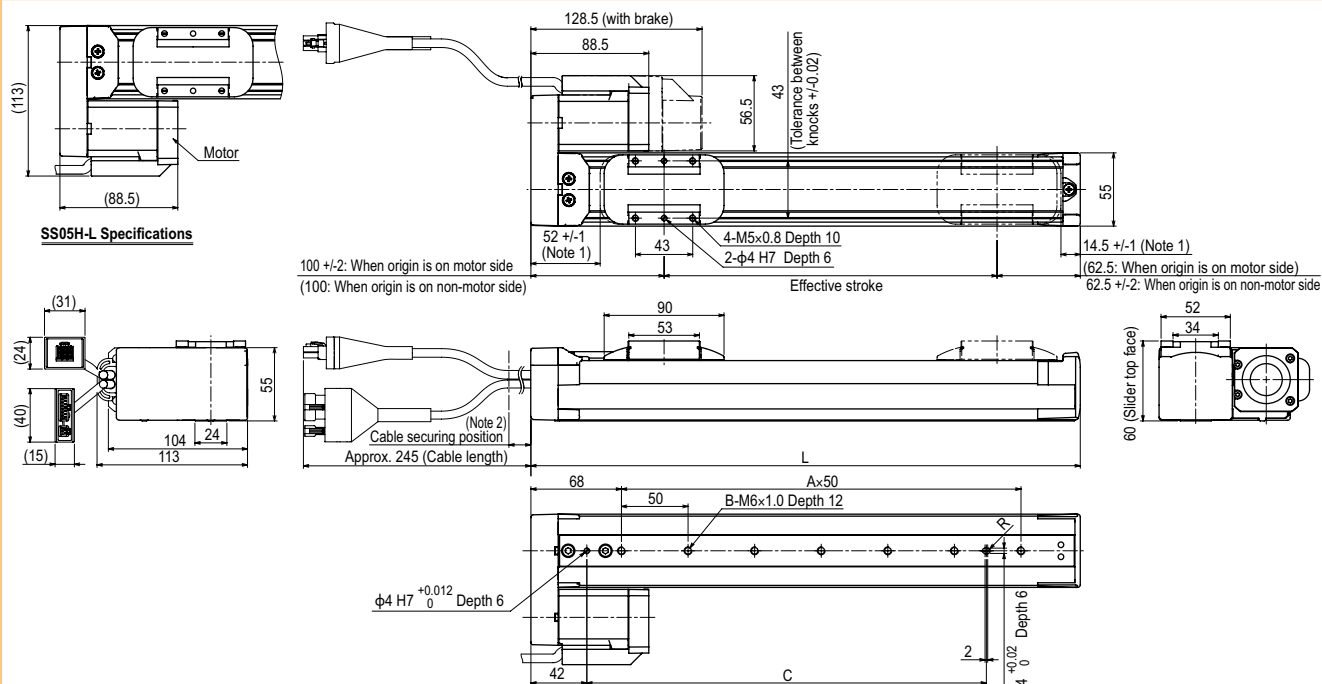
Note 1. Stop positions are determined by the mechanical stoppers at both ends.

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.

SS05H Space-saving model **R** **L**

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	212.5	262.5	312.5	362.5	412.5	462.5	512.5	562.5	612.5	662.5	712.5	762.5	812.5	862.5	912.5	962.5
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}	1.7	1.9	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
Maximum speed for each stroke ^{Note 5} (mm/sec)																
Lead20							1000						933	833	733	633
Lead12 (Horizontal)							600						560	500	440	380
Lead12 (Vertical)							500								440	380
Lead6 (Horizontal)							300						280	250	220	190
Lead6 (Vertical)							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 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.