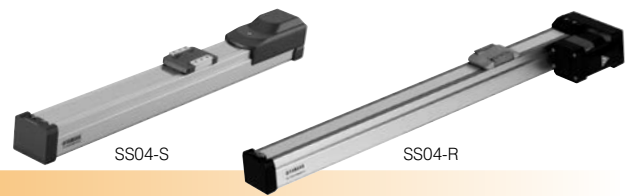


SS04 Slider type

- CE compliance
- Origin on the non-motor side is selectable



Ordering method

SS04

Model	Lead	Model	Brake	Origin position	Grease option	Stroke	Cable length ^{Note 2}
	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 ^{Note 1} 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 ^{Note 3}	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 4}

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 ^{Note 4}	B: With battery (Absolute) N: None (Incremental)

SD

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

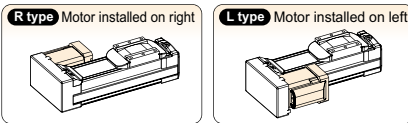
Note 1. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 2. The robot cable is flexible and resists bending.
 Note 3. See P.522 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.66.

Basic specifications

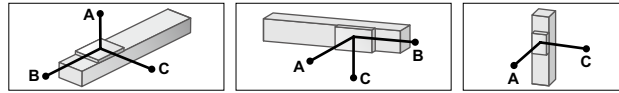
Motor	42 □ Step motor		
Resolution (Pulse/rotation)	20480		
Repeatability ^{Note 1} (mm)	±0.02		
Deceleration mechanism	Ball screw φ8		
Maximum motor torque (N·m)	0.27		
Ball screw lead (mm)	12	6	2
Maximum speed (mm/sec)	600	300	100
Maximum payload (kg)	Horizontal	2	4
	Vertical	1	2
Max. pressing force (N)	Horizontal	45	90
	Vertical	150	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 × H59		
Cable length (m)	Standard: 1 / Option: 3, 5, 10		

Note 1. Positioning repeatability in one direction.

Motor installation (Space-saving model)



Allowable overhang ^{Note}



	Horizontal installation (Unit: mm)				Wall installation (Unit: mm)				Vertical installation (Unit: mm)		
	Lead 12	A	B	C	Lead 12	A	B	C	Lead 12	A	C
1kg	807	218	292	274	204	776	0.5kg	407	408		
2kg	667	107	152	133	93	611	1kg	204	204		
2kg	687	116	169	149	102	656	1kg	223	223		
3kg	556	76	112	92	62	516	2kg	107	107		
4kg	567	56	84	63	43	507	2kg	118	118		
4kg	869	61	92	4kg	72	48	4kg	53	53		
6kg	863	40	60	6kg	39	29	6kg				

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 400mm stroke models).

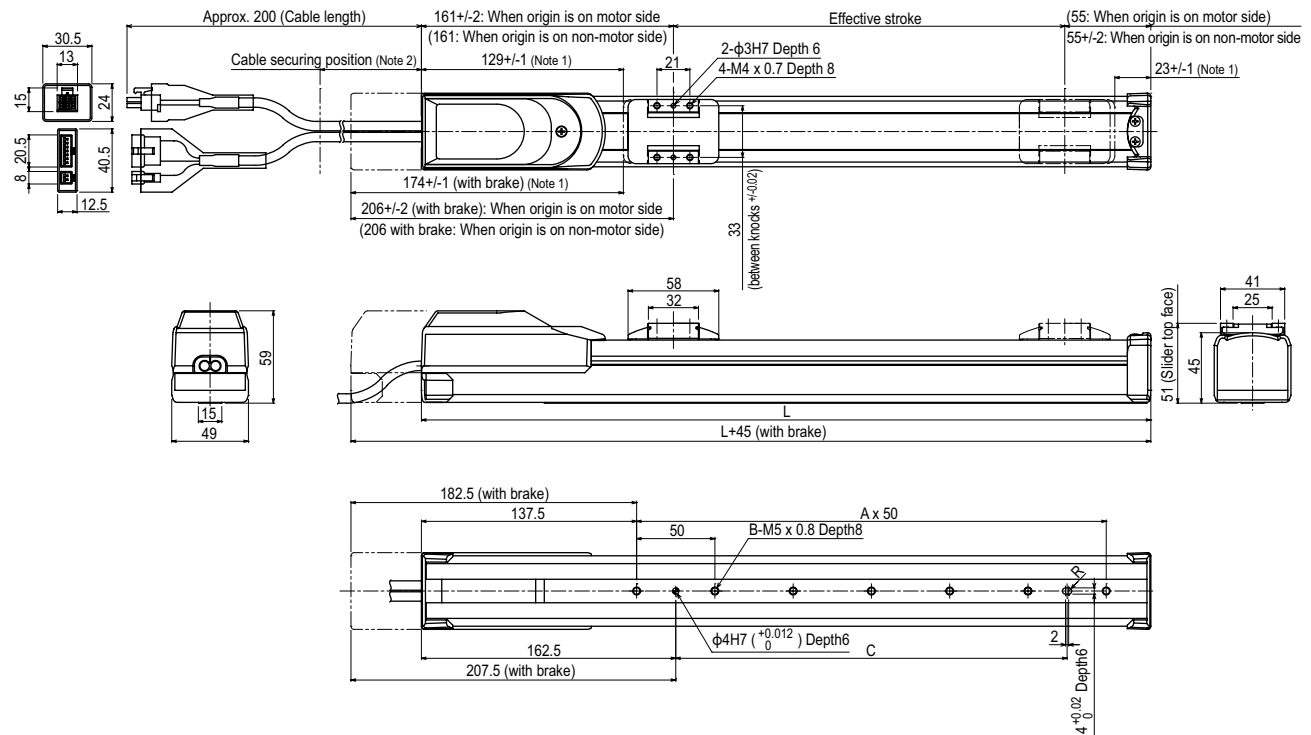
Static loading moment

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	I/O point trace / Remote command
TS-SD	Pulse train control

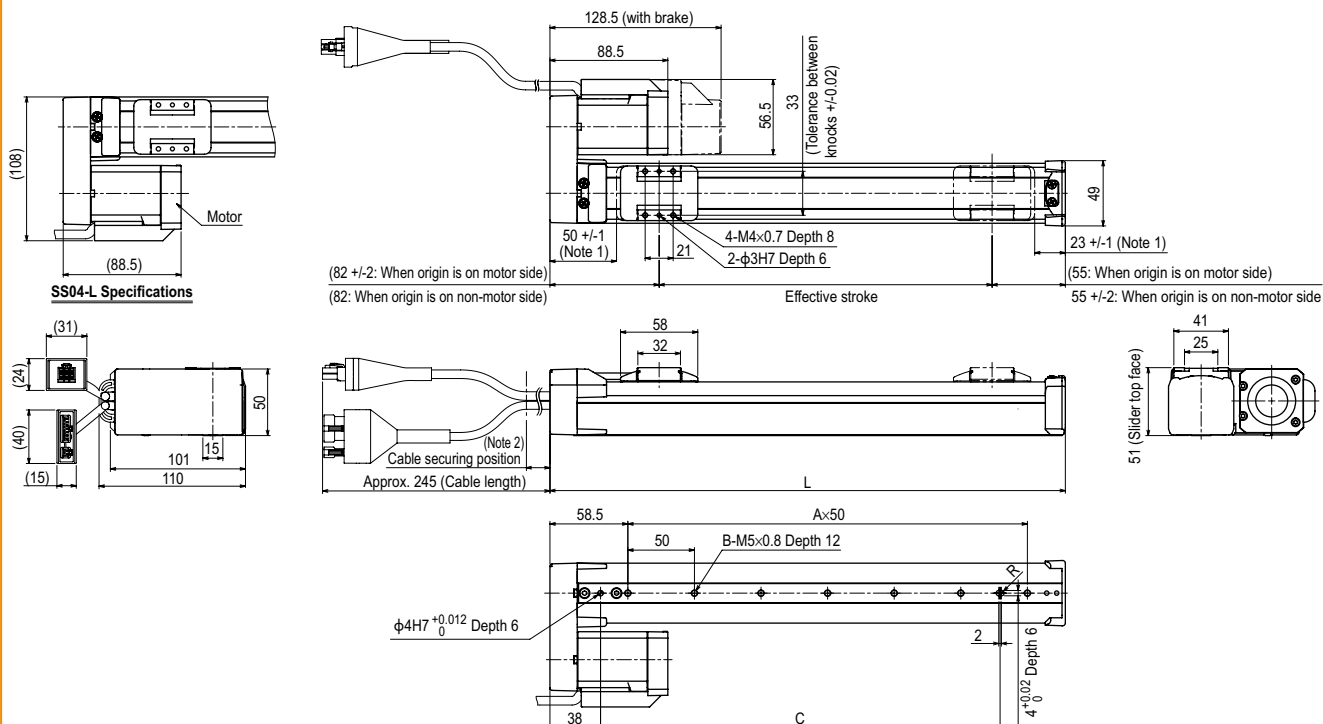
SS04 Straight model S



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) ^{Note 4}	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**



SS04-L Specifications

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	Origin position	Grease option	Stroke	Cable length
	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)	1K: 1m 3K: 3m 5K: 5m 10K: 10m

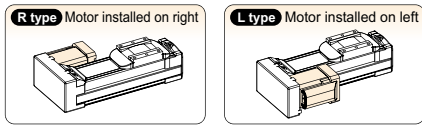
Note 1. Brake-equipped models can be selected only when the lead is 12mm or 6mm.
 Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 3. The robot cable is flexible and resists bending.
 Note 4. See P.522 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.66.

Basic specifications

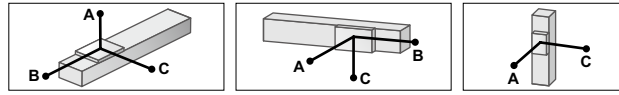
Motor	42 Step motor		
Resolution (Pulse/rotation)	20480		
Repeatability (mm)	±0.02		
Deceleration mechanism	Ball screw φ12		
Maximum motor torque (N·m)	0.27		
Ball screw lead (mm)	20	12	6
Maximum speed (mm/sec)	1000	600	300
Maximum payload (kg)	Horizontal	Vertical	
	4	6	10
Max. pressing force (N)	27	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)



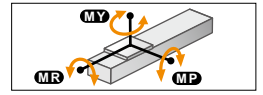
Allowable overhang



Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)					
	A	B	C	A	B	C	A	C				
Lead 20	2kg	413	139	218	2kg	192	123	372	Lead 12	0.5kg	578	579
4kg	334	67	120	4kg	92	51	265	1kg	286	286		
4kg	347	72	139	4kg	109	57	300	1kg	312	312		
6kg	335	47	95	6kg	63	31	263	2kg	148	148		
4kg	503	78	165	4kg	134	63	496					
8kg	332	37	79	6kg	76	35	377					
10kg	344	29	62	8kg	47	22	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

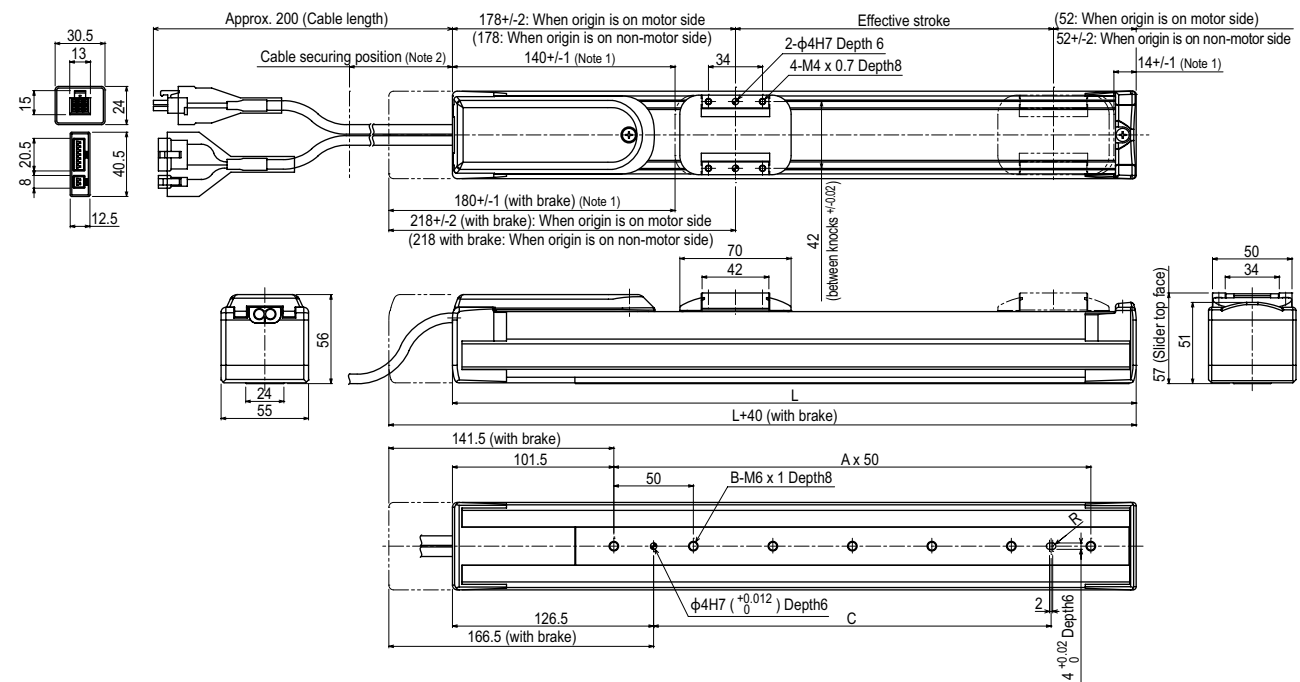


(Unit: N·m)		
MY	MP	MR
25	33	30

Controller

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

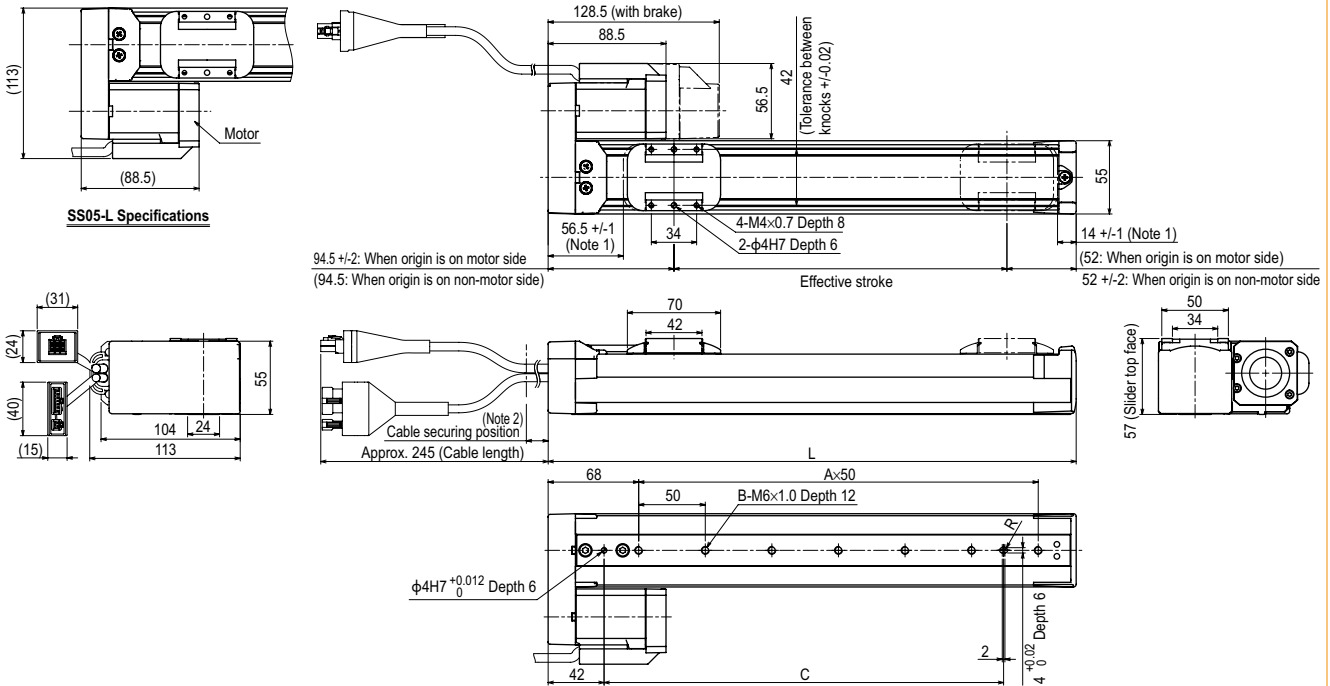
SS05 Straight model S



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)	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 (mm/sec)	Lead20	1000										933	833	733	633	
	Lead12	600										560	500	440	380	
	Lead6	300										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**



SS05-L Specifications

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.

SS05H

Slider type



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

Ordering method

SS05H							
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

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

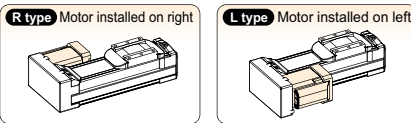
Note 1. Brake-equipped models can be selected only when the lead is 12mm or 6mm.
 Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 3. The robot cable is flexible and resists bending.
 Note 4. See P.522 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.66.

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)	0.47
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 (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)



Allowable overhang ^{Note}

Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)
		Lead 12
Lead 20	Lead 20	1kg 458 459
2kg 599 225 291	2kg 262 203 554	2kg 224 224
4kg 366 109 148	4kg 118 88 309	2kg 244 245
6kg 352 71 104	6kg 71 49 262	4kg 113 113
4kg 500 118 179	4kg 146 96 449	
6kg 399 79 118	6kg 85 55 334	
8kg 403 56 88	8kg 55 34 305	
6kg 573 83 136	6kg 101 62 519	
8kg 480 61 100	8kg 64 39 413	
10kg 442 47 78	10kg 43 26 355	
12kg 465 39 64	12kg 28 17 338	

Static loading moment

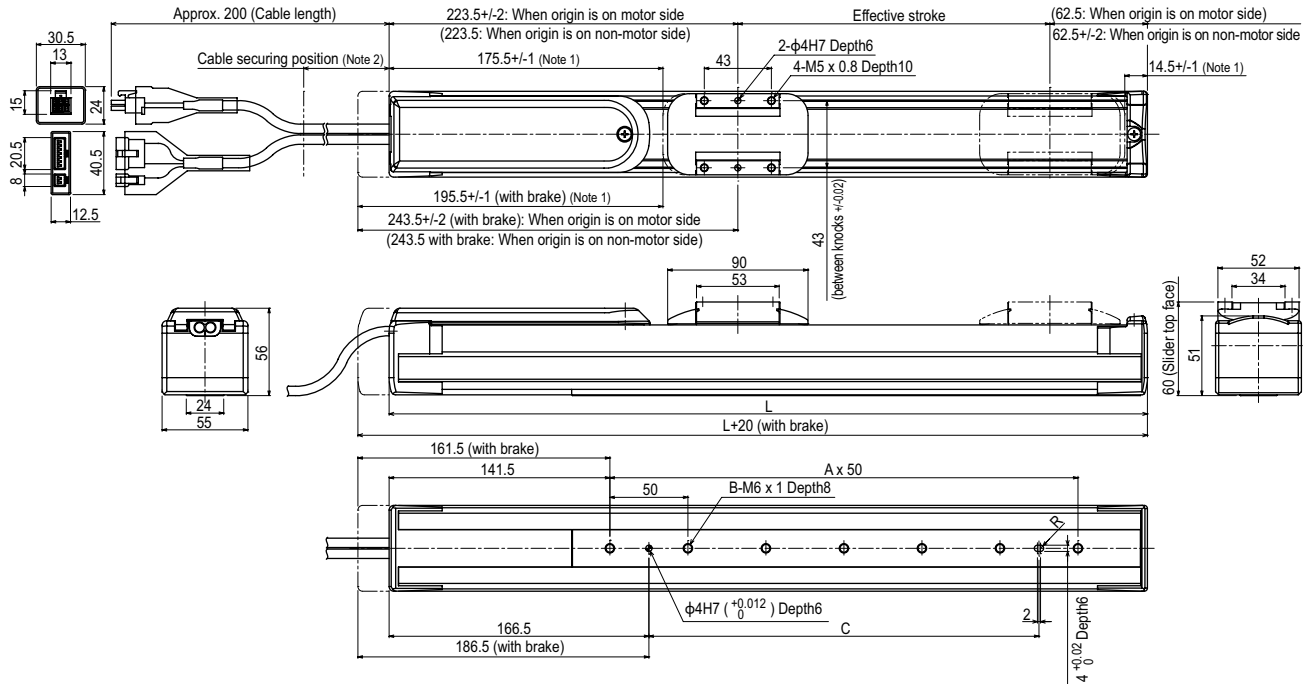
	MY	MP	MR
	32	38	34

Controller

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

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).

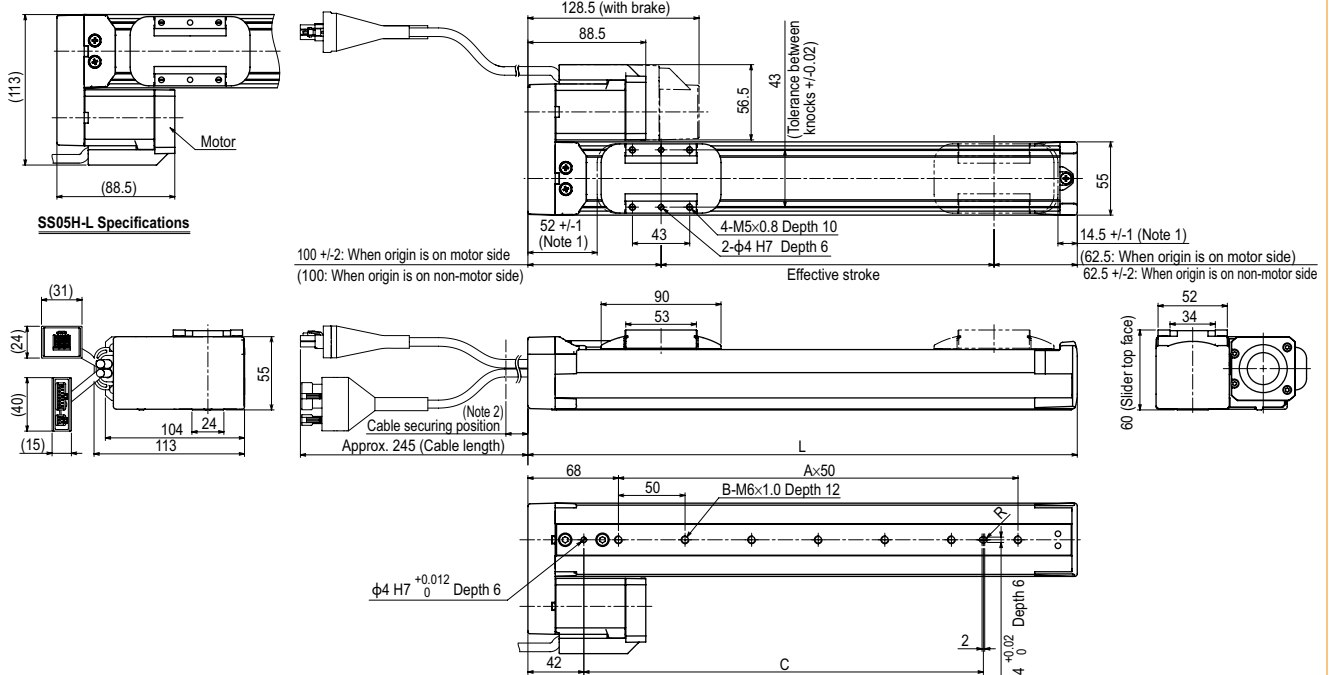
SS05H Straight model **S**



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) ^{Note 4}	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 ^{Note 5} (mm/sec)																
Lead20																
Lead12 (Horizontal)																
Lead12 (Vertical)																
Lead6 (Horizontal)																
Lead6 (Vertical)																
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



SS05H-L Specifications

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														
	Lead12 (Horizontal)	600														
	Lead12 (Vertical)	500														
	Lead6 (Horizontal)	300														
	Lead6 (Vertical)	250														
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.