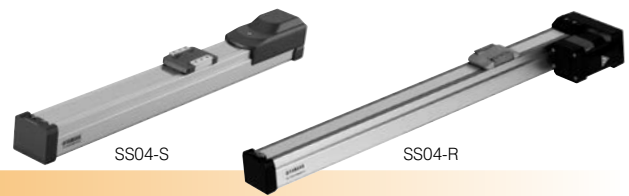


SS04 Slider type

- 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

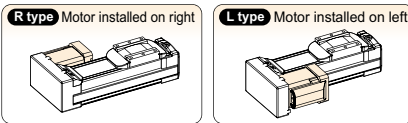
Note 1. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 2. The robot cable is flexible and resists bending.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

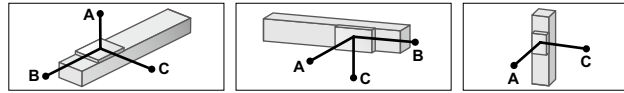
Motor	42 □ Step motor		
Resolution (Pulse/rotation)	20480		
Repeatability ^{Note 1} (mm)	±0.02		
Deceleration mechanism	Ball screw φ8		
Maximum motor torque (N·m)	0.27		
Ball screw lead (mm)	12	6	2
Maximum speed (mm/sec)	600	300	100
Maximum payload (kg)	Horizontal 2	4	6
	Vertical 1	2	4
Max. pressing 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 × 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)			
	A	B	C		A	B	C		A	C	
Lead 12	1kg	807	218	292	1kg	274	204	776	0.5kg	407	408
	2kg	667	107	152	2kg	133	93	611	1kg	204	204
Lead 6	2kg	687	116	169	2kg	149	102	656	1kg	223	223
	3kg	556	76	112	3kg	92	62	516	2kg	107	107
	4kg	567	56	84	4kg	63	43	507	2kg	118	118
Lead 2	4kg	869	61	92	4kg	72	48	829	4kg	53	53
	6kg	863	40	60	6kg	39	29	789			

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).

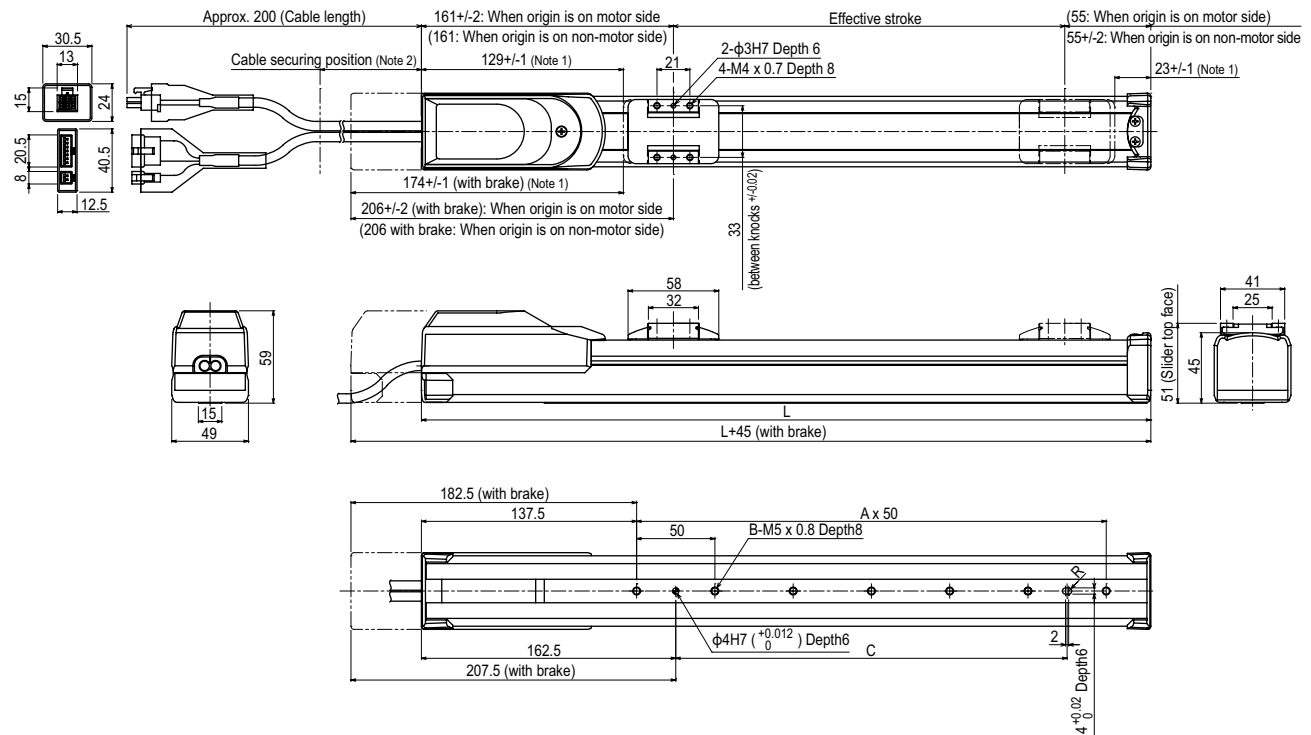
Static loading moment

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	Remote command
TS-SD	Pulse train control

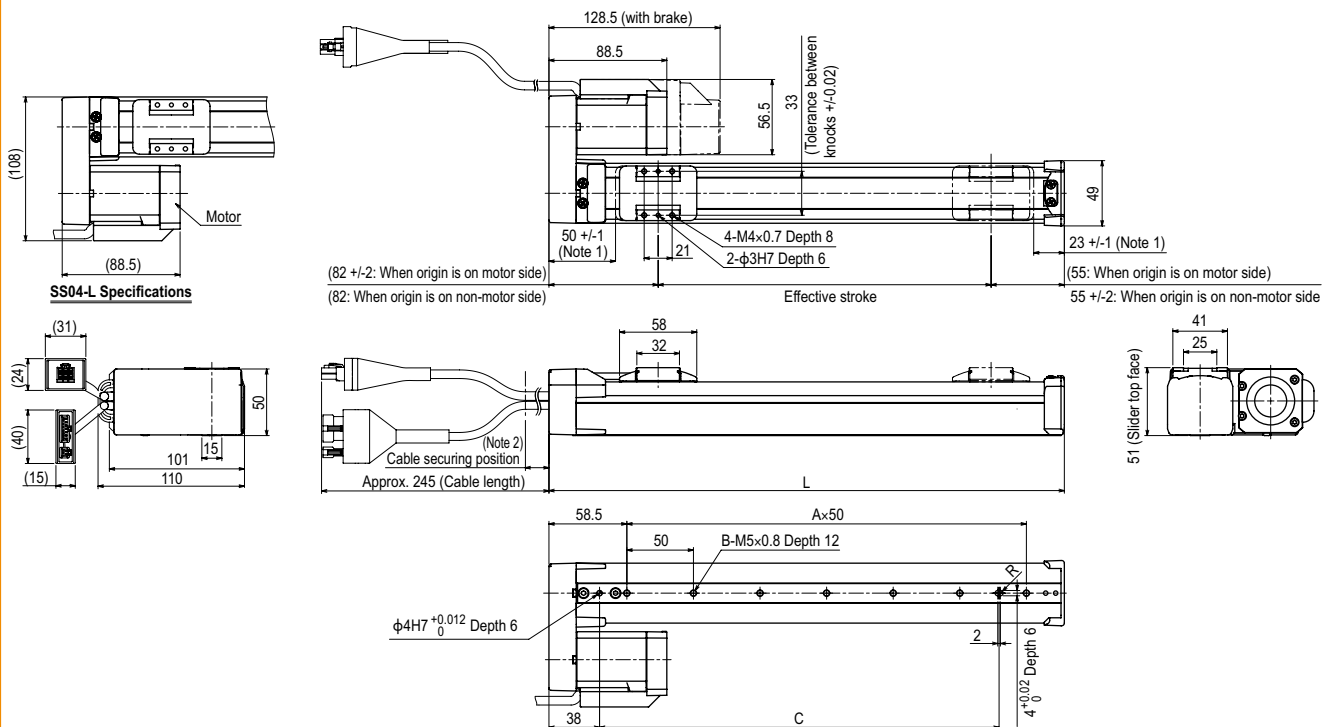
SS04 Straight model S



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**



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)	Note 1 N: With no brake B: With brake	Note 2 N: Standard Z: Non-motor side	N: Standard grease C: Clean room grease	50 to 800 (50mm pitch)	Note 3 1K: 1m 3K: 3m 5K: 5m 10K: 10m

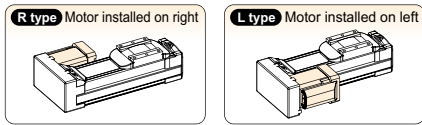
Note 1. Brake-equipped models can be selected only when the lead is 12mm or 6mm.
 Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 3. The robot cable is flexible and resists bending.
 Note 4. See P.634 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.96.

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

Horizontal installation (Unit: mm)	A			B			C		
	2kg	4kg	6kg	2kg	4kg	6kg	2kg	4kg	6kg
Lead 20	413	334	335	139	67	47	123	51	31
Lead 12	334	347	503	72	139	78	109	57	300
Lead 6	332	344	503	37	79	165	134	63	496
Lead 6	344	29	62	29	62	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).

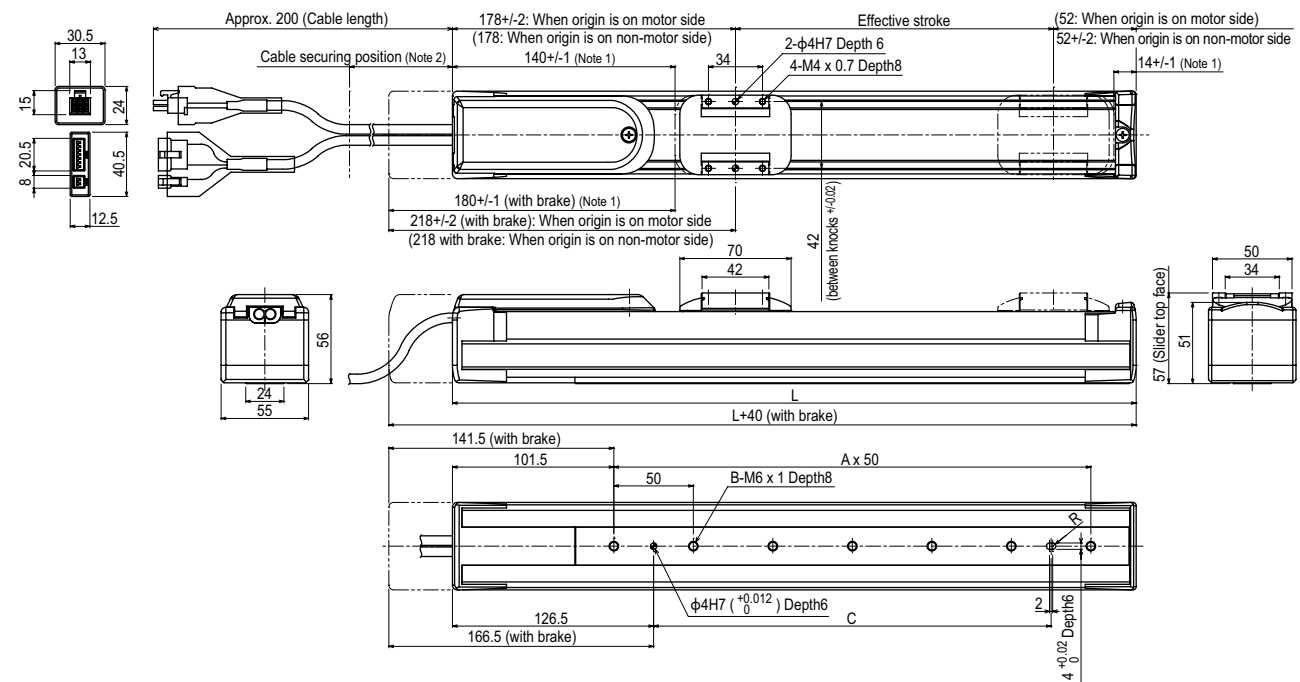
Static loading moment

Static loading moment (Unit: N·m)	MY			MP			MR		
	0.5kg	1kg	2kg	25	33	30	25	33	30
Lead 20	578	286	148	578	286	148	578	286	148
Lead 12	578	286	148	578	286	148	578	286	148
Lead 6	578	286	148	578	286	148	578	286 </tr	

Controller

Controller	Operation method
T\$2	IO point trace / Remote command
T\$H	Remote command
T\$D	Pulse train control

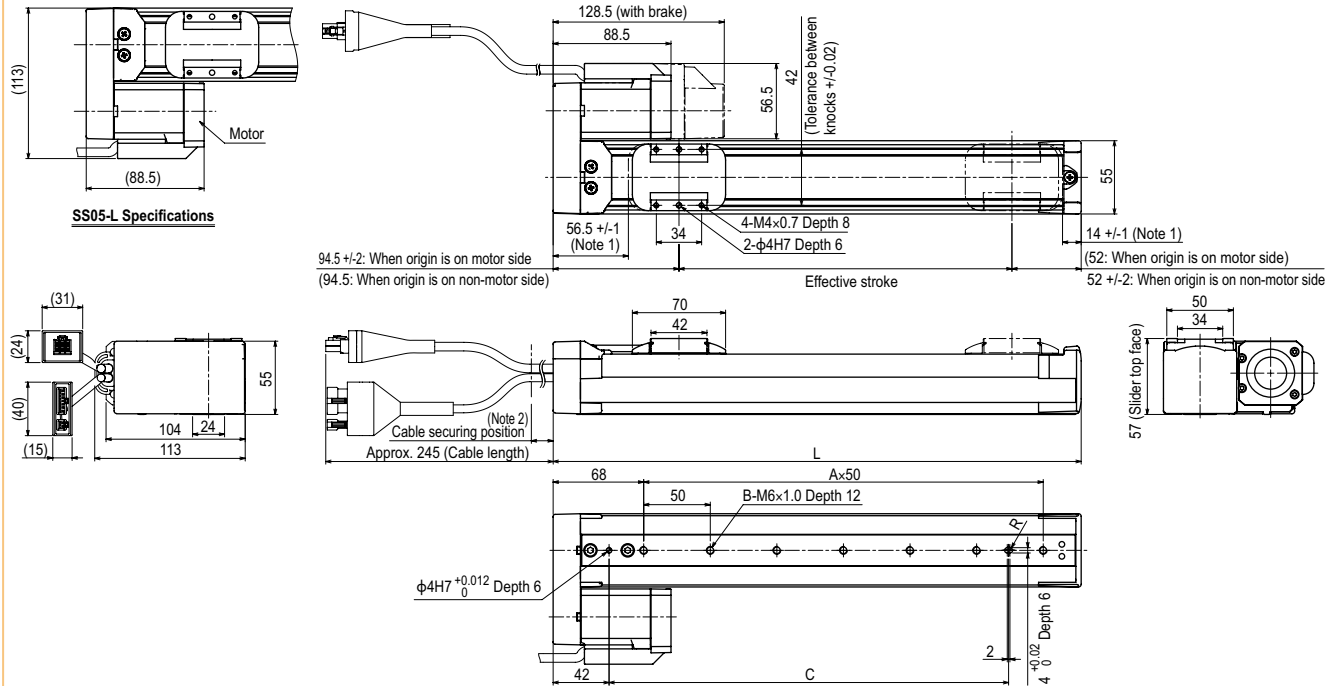
SS05 Straight model S



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)	Lead 20	1000										933	833	733	633	
	Lead 12	600										560	500	440	380	
	Lead 6	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**



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											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 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

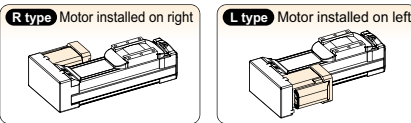
- Note 1. Brake-equipped models can be selected only when the lead is 12mm or 6mm.
 Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 3. The robot cable is flexible and resists bending.
 Note 4. See P.634 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

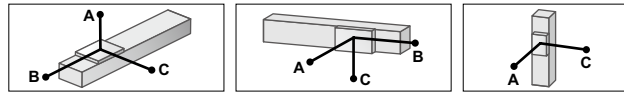
Motor	42 □ Step motor
Resolution (Pulse/rotation)	20480
Repeatability ^{Note 1} (mm)	+/-0.02
Deceleration mechanism	Ball screw φ12
Maximum motor torque (N·m)	0.47
Ball screw lead (mm)	20 12 6
Maximum speed ^{Note 2} (mm/sec)	Horizontal 1000 600 300 Vertical - 500 250
Maximum payload (kg)	Horizontal 6 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)				
	A	B	C		A	B	C		A	C		
Lead 20	2kg	599	225	291	2kg	262	203	554	Lead 12	1kg	458	459
	4kg	366	109	148	4kg	118	88	309		2kg	224	224
	6kg	352	71	104	6kg	71	49	262		2kg	244	245
Lead 12	4kg	500	118	179	4kg	146	96	449	Lead 6	2kg	244	245
	6kg	399	79	118	6kg	85	55	334		4kg	113	113
	8kg	403	56	88	8kg	55	34	305				
Lead 6	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				

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).

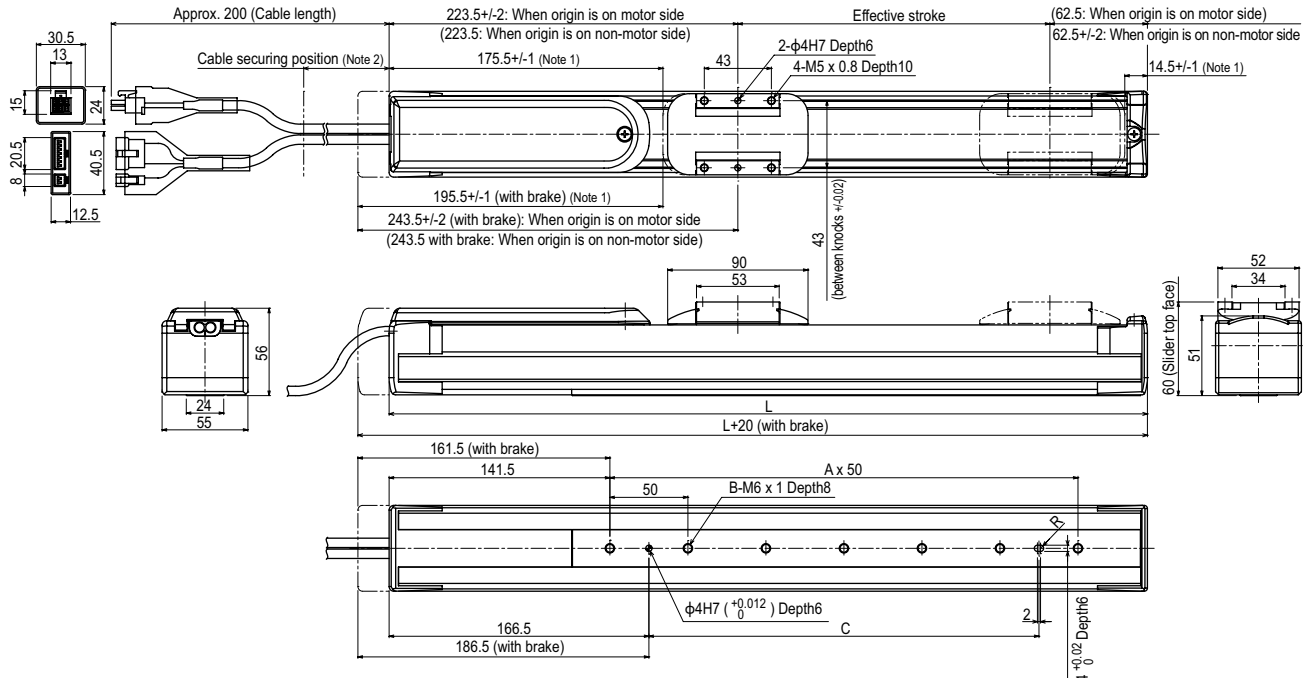
Static loading moment

(Unit: N·m)		
MY	MP	MR
32	38	34

Controller

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

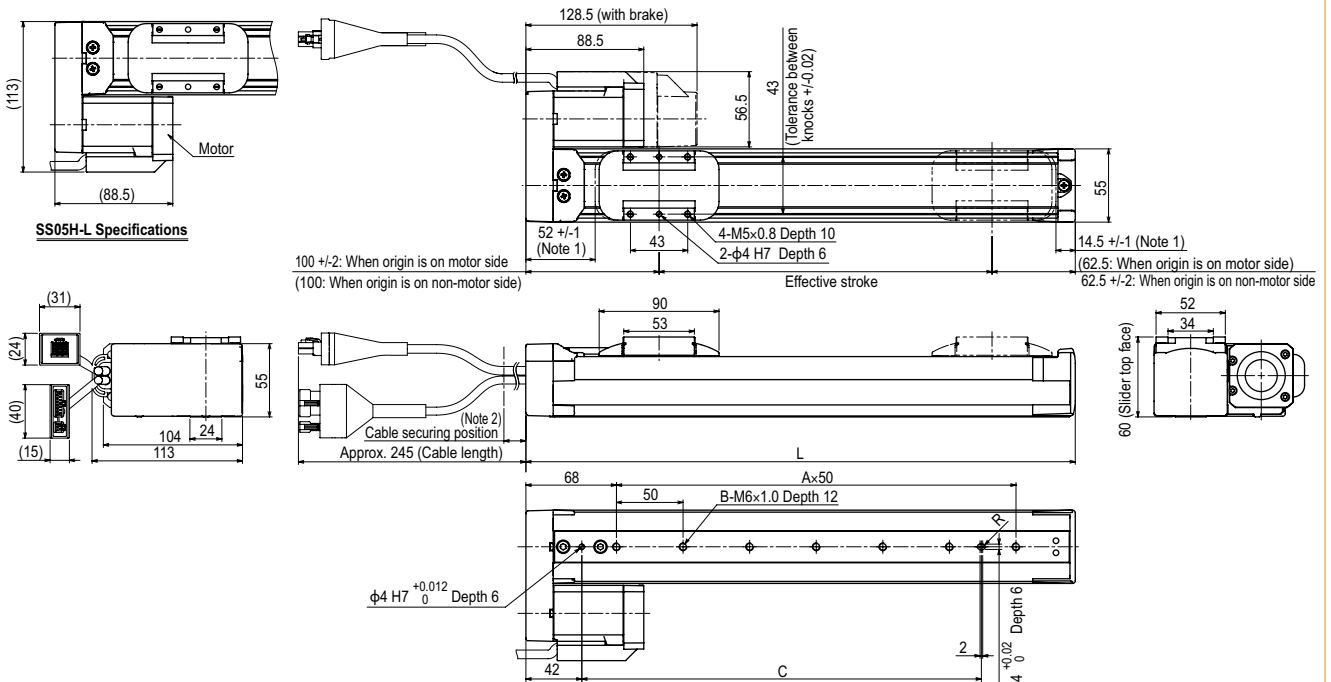
SS05H Straight model S



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	1000															
	Lead12 (Horizontal)	600															
	Lead12 (Vertical)	500															
	Lead6 (Horizontal)	300															
	Lead6 (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														
	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.