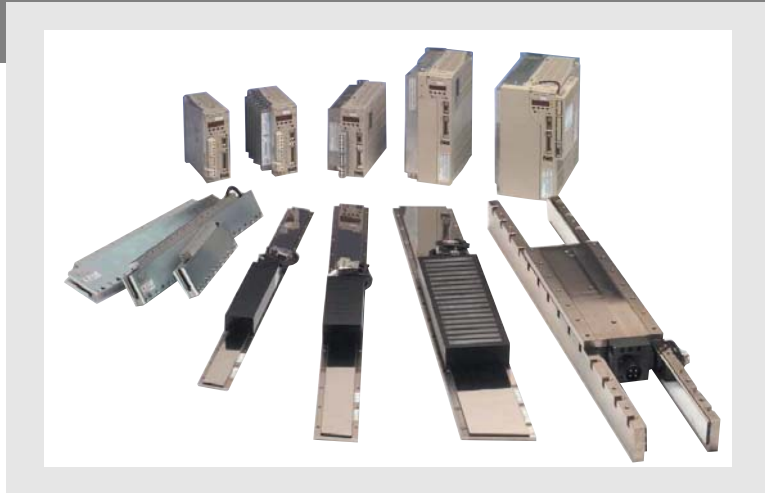


SGLG@, SGLF@, SGLT@

Sigma Linear Motors

Direct drive linear servomotors for faster machine cycles.

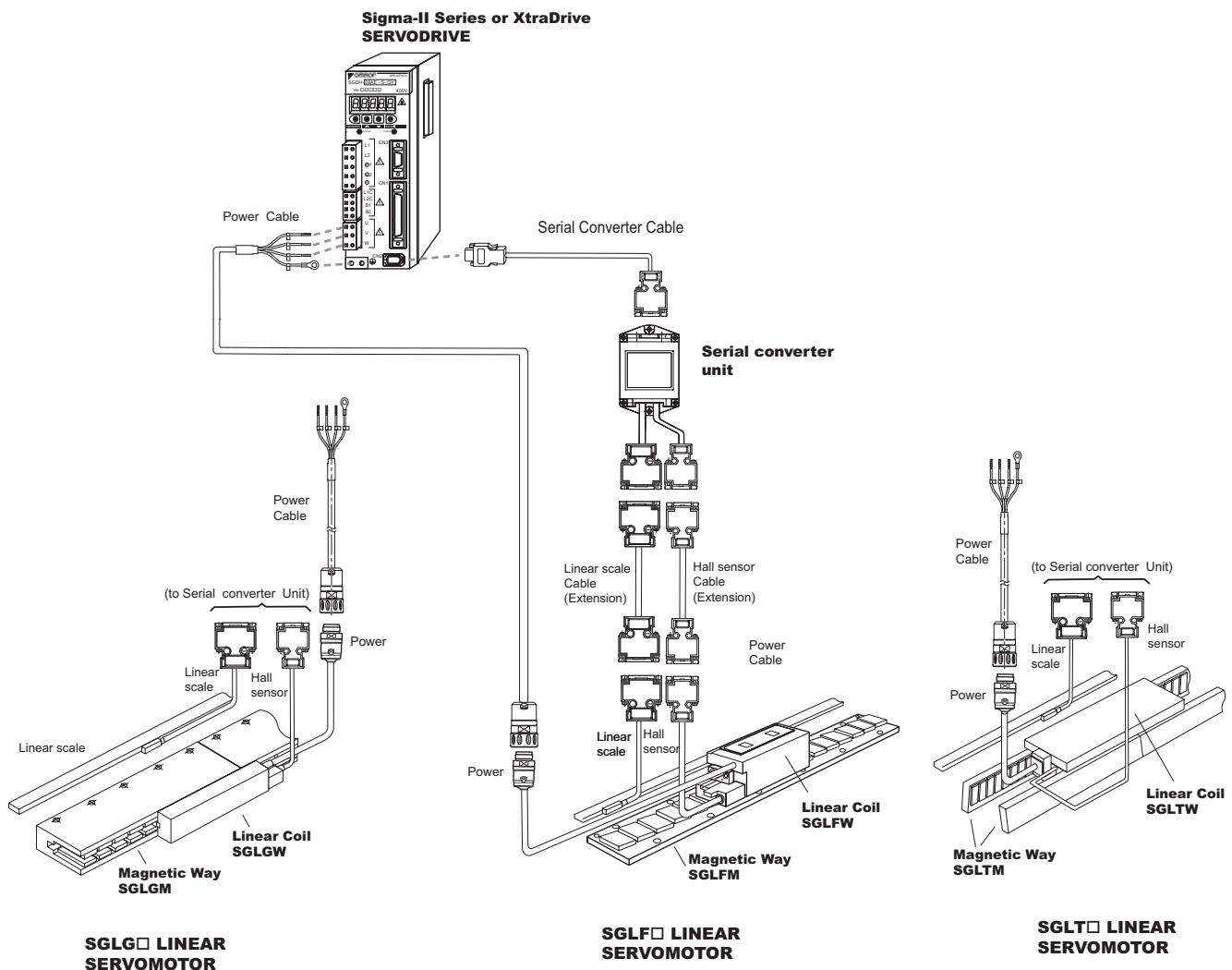
- Direct control of the motors using XtraDrive and Sigma-II drives
- Improved machine performance
- Easy of operation & high reliability
- Designed for high force density in compact packages
- Exhibit exceptional Force Linearity even at near the peak force regions
- Extremely energy efficient. Due to its optimised magnetic circuitry design and high-density windings
- Can reach speeds as high as 5 meters per second.
- Coreless and Iron core types available







Ratings

- 230VAC Single-phase 13,5 to 560 N (1200 N Peak)
- 400VAC Three-phase 80 to 2000 N (7500 N Peak)

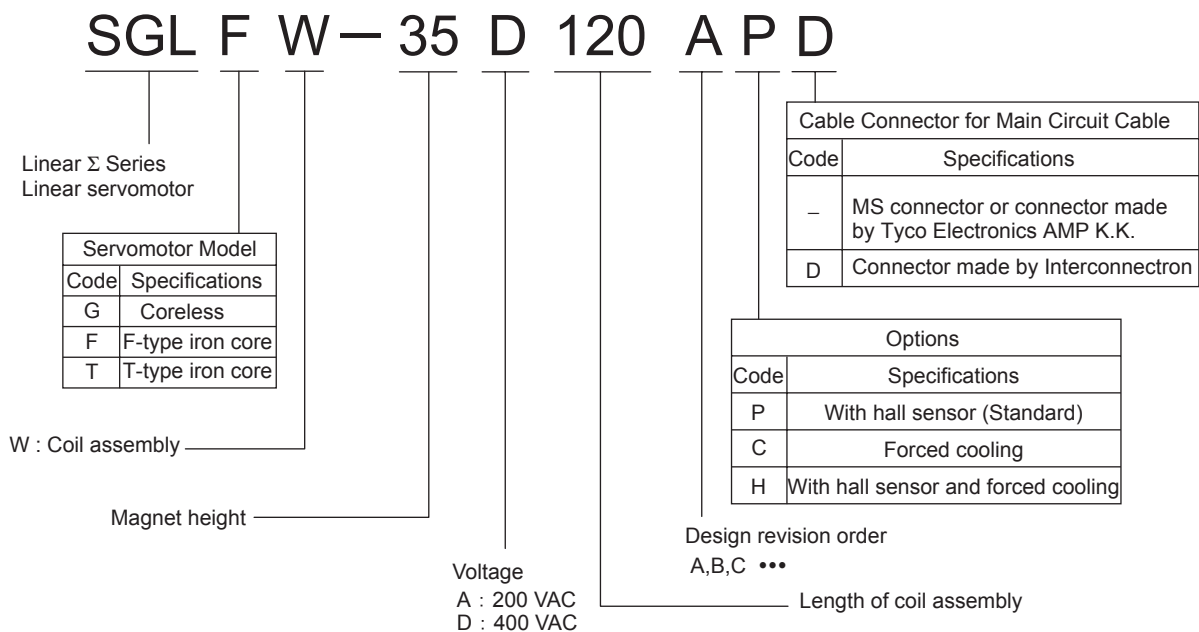
System Configuration



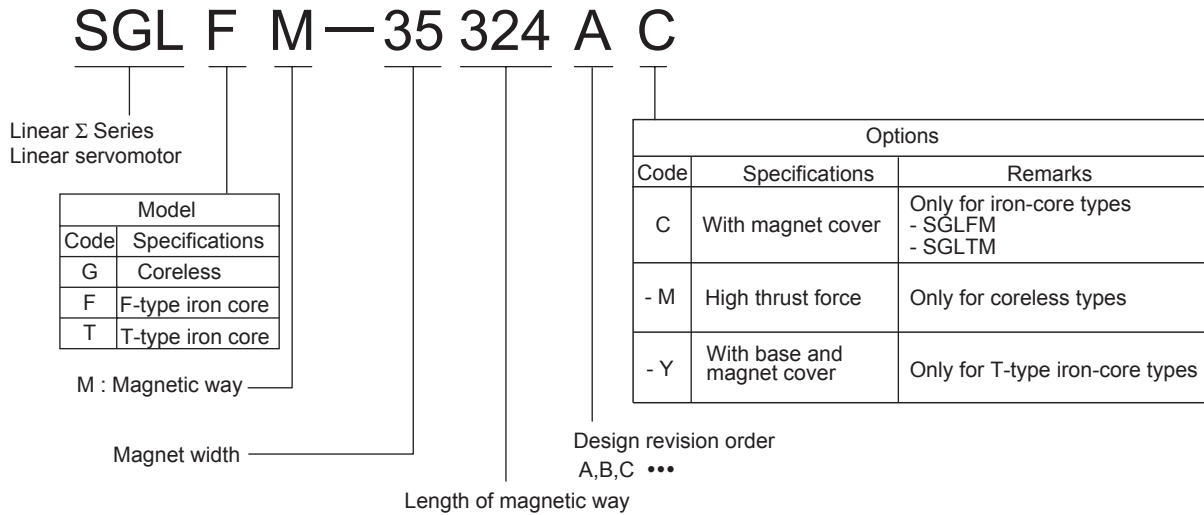
Servomotor / Servo Drive Combination

Sigma Series Linear Servomotor					Serial Converter	Servo Drive			
Type	Voltage	Rated Force	Peak Force	Model		Sigma-II Series		XtraDrive	
					JZDP-A008-@	230 V (1-phase)	400V(3-phase)	230 V (1-phase)	400V(3-phase)
SGLGW Coreless Standard-force Magnetic Ways 	230 V	13,5 N	40 N	30A050B	158	SGDH-A5AE-OY	-	XD-P5-MN01	-
		27 N	80 N	30A080B	156	SGDH-01AE-OY	-	XD-01-MN01	-
		47 N	140 N	40A140B	001	SGDH-01AE-OY	-	XD-01-MN01	-
		73 N	220 N	60A140B	004	SGDH-02AE-OY	-	XD-02-MN01	-
		93 N	280 N	40A253B	002	SGDH-02AE-OY	-	XD-02-MN01	-
		140 N	420 N	40A365B	003	SGDH-04AE-OY	-	XD-04-MN01	-
		147 N	440 N	60A253B	005	SGDH-04AE-OY	-	XD-04-MN01	-
		220 N	660 N	60A365B	006	SGDH-08AE-S-OY	-	XD-08-MN	-
SGLGW Coreless High-force Magnetic Ways 	230 V	325 N	1300 N	90A200A	101	SGDH-15AE-S-OY	-	-	-
		57 N	230 N	40A140B	063	SGDH-02AE-OY	-	XD-02-MN01	-
		114 N	460N	40A253B	059	SGDH-04AE-OY	-	XD-04-MN01	-
		171 N	690 N	40A365B	060	SGDH-08AE-S-OY	-	XD-08-MN	-
		89 N	360N	60A140B	061	SGDH-02AE-OY	-	XD-02-MN01	-
		178 N	720 N	60A253B	062	SGDH-08AE-S-OY	-	XD-08-MN	-
SGLFW Linear Motors 	230 V	25 N	86 N	20A090A	017	SGDH-02AE-OY	-	XD-02-MN01	-
		40 N	125 N	20A120A	018	SGDH-02AE-OY	-	XD-02-MN01	-
		80 N	220 N	35A120A	019	SGDH-02AE-OY	-	XD-02-MN01	-
		160 N	440 N	35A230A	020	SGDH-08AE-S-OY	-	XD-08-MN01	-
		280 N	600 N	50A200B	181	SGDH-08AE-S-OY	-	XD-08-MN	-
		560 N	1200 N	50A380B	182	SGDH-15AE-S-OY	-	-	-
	400 V	560 N	1200 N	1ZA200B	183	SGDH-15AE-S-OY	-	-	-
		80 N	220 N	35D120A	211	-	SGDH-05DE-OY	-	XD-05-TN
		160 N	440 N	35D230A	212	-	SGDH-05DE-OY	-	XD-05-TN
		280 N	600 N	50D200B	189	-	SGDH-10DE-OY	-	XD-10-TN
SGLTW Linear Motors 	400 V	560 N	1200 N	50D380B	190	-	SGDH-15DE-OY	-	XD-15-TN
		560 N	1200 N	1ZD200B	191	-	SGDH-15DE-OY	-	XD-15-TN
		1120 N	2400 N	1ZD380B	192	-	SGDH-30DE-OY	-	XD-30-TN
		300 N	600 N	35D170H	193	-	SGDH-10DE-OY	-	XD-10-TN
		600 N	1200 N	35D320H	194	-	SGDH-20DE-OY	-	XD-20-TN
		450 N	900 N	50D170H	195	-	SGDH-10DE-OY	-	XD-10-TN
		900 N	1800 N	50D320H	196	-	SGDH-20DE-OY	-	XD-20-TN
		670 N	2600 N	40D400B	197	-	SGDH-30DE-OY	-	XD-30-TN
1000 N	4000 N	40D600B	198	-	SGDH-50DE-OY	-	-		
1300 N	5000 N	80D400B	199	-	SGDH-50DE-OY	-	-		
2000 N	7500 N	80D600B	200	-	SGDH-75DE-OY	-	-		

Motor Coil

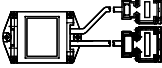


Magnetic Way



Serial Converter Unit

JZDP – A008 – 001

Serial Converter Unit Model			
Symbol	Appearance	Applicable Linear Scale	Hall Sensor
A008		Made by Renishaw or (Heidenhain *)	Yes

Note: * When using a Linear Scale made by Heidenhain an extension cable is required

Applicable Linear Servomotor					
Servomotor Model		Symbol	Servomotor Model		Symbol
SGLGW- (Coreless)	30A050B	158	SGLTW- (Iron core, T-type)	20A170A	011
	30A080B	156		20A320A	012
	40A140B	001		20A460A	013
	40A253B	002		35A170A	014
	40A365B	003		35A320A	015
	60A140B	004		35A460A	016
	60A253B	005		35A170H	105
	60A365B	006		35A320H	106
	90A200A	101		50A170H	108
	90A370A	102		50A320H	109
90A535A	103	40A400B	185		
SGLGW- + SGLGM- -M (Coreless)	40A140B	063	40A600B	186	
	40A253B	059	80A400B	187	
	40A365B	060	80A600B	188	
When a high-force magnetic way is used.	60A140B	061	35D170H	193	
	60A253B	062	35D320H	194	
	60A365B	047	50D170H	195	
	SGLFW- (Iron core, F-type)	20A090A	017	50D320H	196
		20A120A	018	40D400B	197
		35A120A	019	40D600B	198
		35A230A	020	80D400B	199
		50A200B	181	80D600B	200
		50A380B	182		
		1ZA200B	183		
1ZA380B		184			
35D120A		211			
35D230A		212			
50D200B	189				
50D380B	190				
1ZD200B	191				
1ZD380B	192				

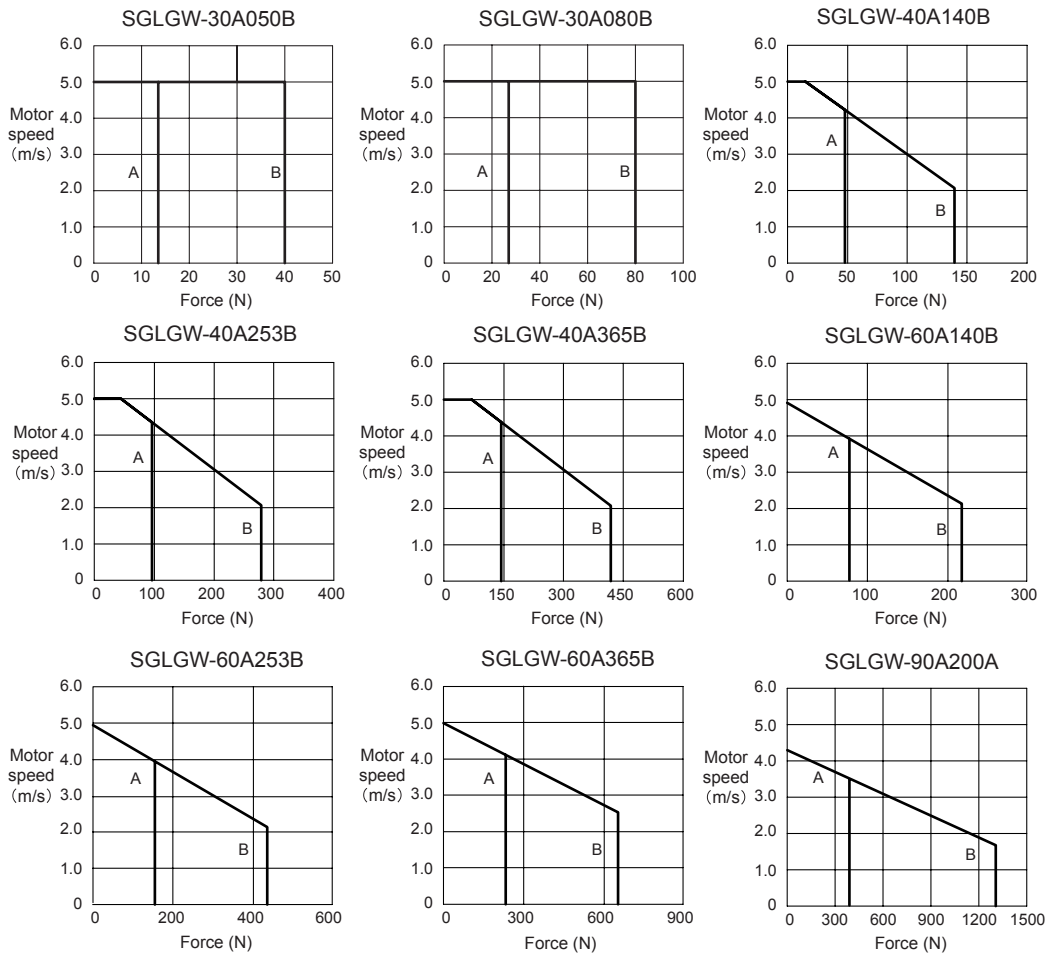
Servomotor Specifications

Coreless SGLGW/SGLGM - (With Standard-force Magnetic Ways)

Voltage		230V									
		30A			40A			60A			90A
Linear Servomotor Model SGLGW-		050B	080B	140B	253B	365B	140B	253B	365B	200A	
Rated Force*	N	13.5	27	47	93	140	73	147	220	325	
Rated Current*	Arms	0.55	0.85	0.8	1.6	2.4	1.2	2.3	3.5	4.4	
Instantaneous Peak Force*	N	40	80	140	280	420	220	440	660	1300	
Instantaneous Peak Current*	Arms	1.62	2.53	2.4	4.9	7.3	3.5	7.0	10.5	17.6	
Coil Assembly Mass	kg	0.10	0.15	0.34	0.60	0.87	0.42	0.76	1.10	2.15	
Force Constant	N / Arms	26.4	33.9	61.5	61.5	61.5	66.6	66.6	66.6	78	
BEMF Constant	V / (m / s)	8.8	11.3	20.5	20.5	20.5	22.2	22.2	22.2	26.0	
Motor Constant	N / \sqrt{w}	3.7	5.6	7.8	11.0	13.5	11.1	15.7	19.2	26.0	
Electrical Time Constant	ms	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	1.4	
Mechanical Time Constant	ms	7.30	4.78	5.59	4.96	4.77	3.41	3.08	2.98	3.18	
Thermal Resistance (With Heat Sink)	K / W	4.89	2.93	1.87	0.98	0.65	1.62	0.80	0.53	0.44	
Thermal Resistance (Without Heat Sink)	K / W	-	-	3.39	2.02	1.38	2.69	1.54	1.20	-	
Magnetic Attraction	N	0	0	0	0	0	0	0	0	0	
Head Sink Size	mm	200 x 300 X 12			300 x 400 X 12			400 x 300 X 12			800 x 900 X 12
Basic Specifications	Time Rating	Continuous									
	Insulation Class	Class B									
	Ambient Temperature	0 to +40° C									
	Ambient Humidity	20 to 80% (non-condensing)									
	Insulation Resistance	500 VDC, 10 MΩ min.									
	Excitation	Permanent magnet									
	Dielectric Strength	1500 VAC for 1 minute									
	Protection Methods	Self-cooled, air-cooling									
Allowable Winding Temperature	130 °C										

Force-Speed Characteristics - (With Standard-force Magnetic Ways)

A: Continuous duty zone
B: Intermittent duty zone



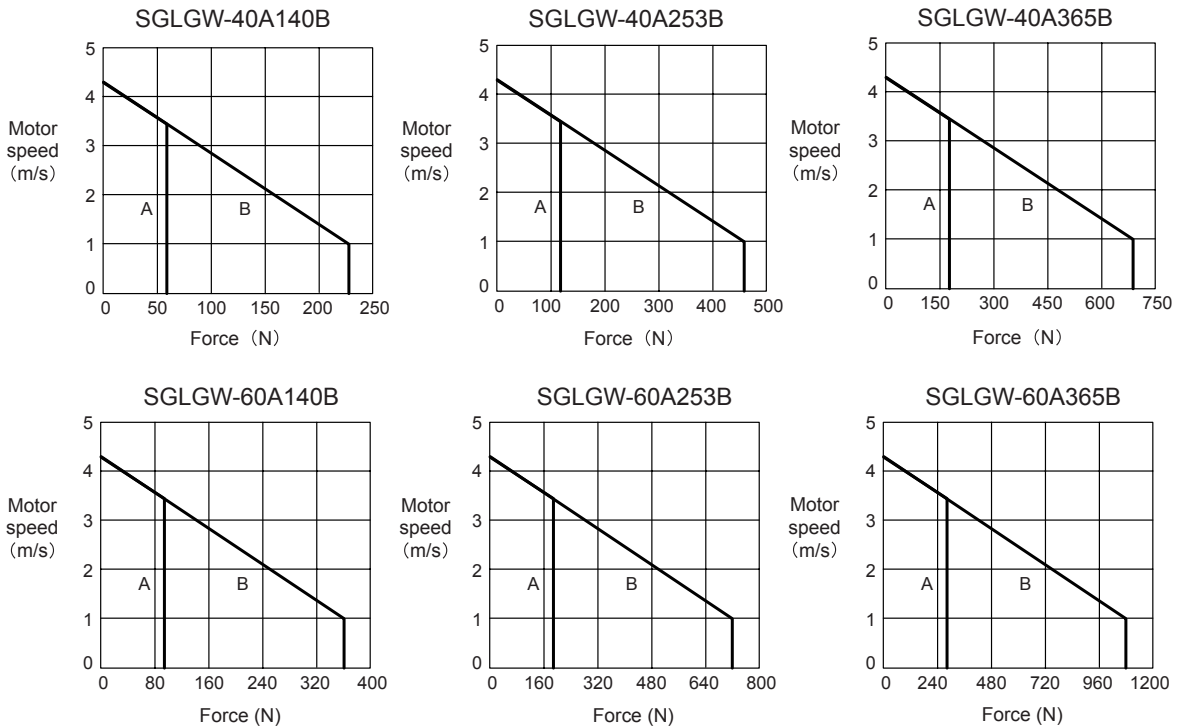
Coreless SGLGW/SGLGM - (With High-force Magnetic Ways)

Voltage		230V					
Linear Servomotor Model SGLGW-		40A			60A		
		140B	253B	365B	140B	253B	365B
Rated Force*	N	57	114	171	89	178	267
Rated Current*	Arms	0.8	1.6	2.4	1.2	2.3	3.5
Instantaneous Peak Force*	N	230	460	690	360	720	1080
Instantaneous Peak Current*	Arms	3.2	6.5	9.7	5.0	10.0	14.9
Coil Assembly Mass	kg	0.34	0.60	0.87	0.42	0.76	1.10
Force Constant	N / Arms	76.0	76.0	76.0	77.4	77.4	77.4
BEMF Constant	V / (m / s)	25.3	25.3	25.3	25.8	25.8	25.8
Motor Constant	N / √w	9.6	13.6	16.7	12.9	18.2	22.3
Electrical Time Constant	ms	0.4	0.4	0.4	0.5	0.5	0.5
Mechanical Time Constant	ms	3.69	3.24	3.12	2.52	2.29	2.21
Thermal Resistance (With Heat Sink)	K / W	1.87	0.98	0.65	1.62	0.80	0.53
Thermal Resistance (Without Heat Sink)	K / W	3.39	2.02	1.38	2.69	1.54	1.20
Magnetic Attraction	N	0	0	0	0	0	0
Head Sink Size	mm	200 x 300 X 12	300 x 400 X 12	400 x 500 X 12	200 x 300 X 12	300 x 400 X 12	400 x 500 X 12
Basic Specifications	Time Rating	Continuous					
	Insulation Class	Class B					
	Ambient Temperature	0 to +40° C					
	Ambient Humidity	20 to 80% (non-condensing)					
	Insulation Resistance	500 VDC, 10 MΩ min.					
	Excitation	Permanent magnet					
	Dielectric Strength	1500 VAC for 1 minute					
	Protection Methods	Self-cooled, air-cooling					
Allowable Winding Temperature	130 °C						

- Note:** 1. The items marked with an * and "Force and Speed Characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a SERVODRIVE. The others are at 20 °C (68°F).
 2. The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Force-Speed Characteristics - (With High-force Magnetic Ways)

A: Continuous duty zone
 B: Intermittent duty zone



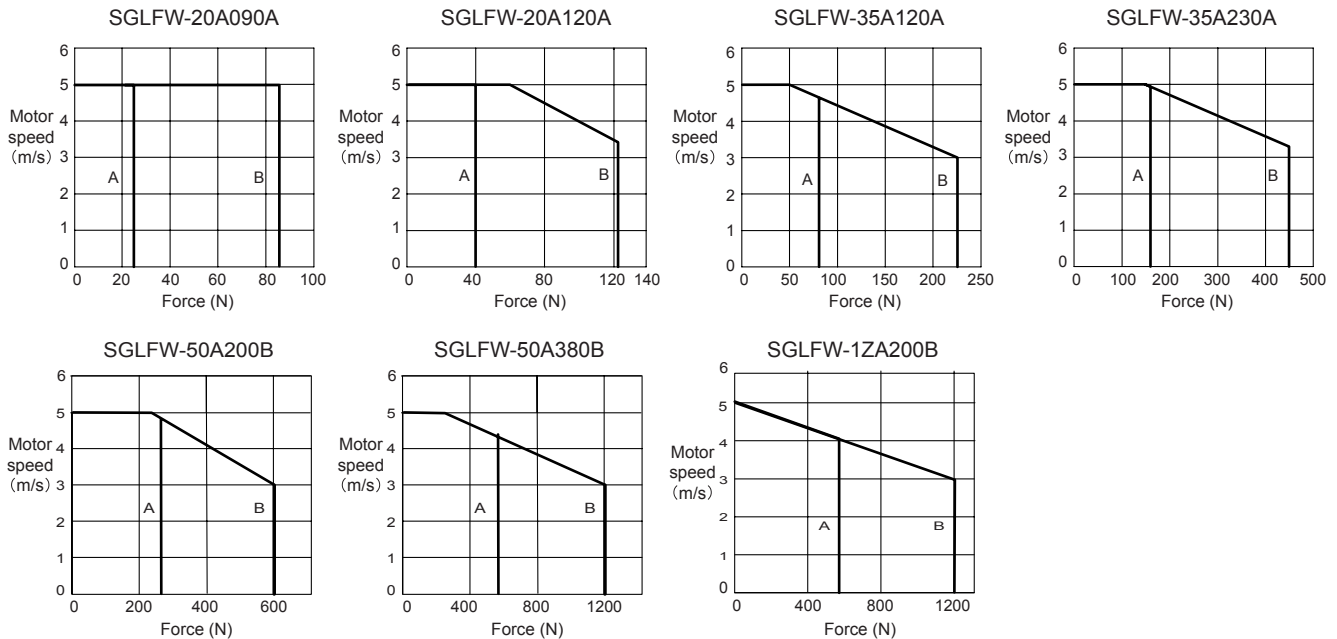
Iron-core SGLFW/SGLFM (200V)

Voltage		230V						
Linear Servomotor Model SGLFW-		20A		35A		50A		1ZA
		090A	120A	120A	230A	200B	380B	200B
Rated Force*	N	25	40	80	160	280	560	560
Rated Current*	Arms	0.7	0.8	1.4	2.8	5.0	10.0	8.7
Instantaneous Peak Force*	N	86	125	220	440	600	1200	1200
Instantaneous Peak Current*	Arms	3.0	2.9	4.4	8.8	12.4	25.0	21.6
Coil Assembly Mass	kg	0.7	0.9	1.3	2.3	3.5	6.9	6.4
Force Constant	N / Arms	36.0	54.0	62.4	62.4	60.2	60.2	69.0
BEMF Constant	V / (m / s)	12.0	18.0	20.8	20.8	20.1	20.1	23.0
Motor Constant	N / \sqrt{W}	7.9	9.8	14.4	20.4	34.3	48.5	52.4
Electrical Time Constant	ms	3.2	3.3	3.6	3.6	15.9	15.8	18.3
Mechanical Time Constant	ms	11.0	9.3	6.2	5.5	3.0	2.9	2.3
Thermal Resistance (With Heat Sink)	K / W	4.35	3.19	1.57	0.96	0.82	0.32	0.6
Thermal Resistance (Without Heat Sink)	K / W	7.69	5.02	4.10	1.94	1.48	0.74	0.92
Magnetic Attraction	N	314	462	809	1586	1650	3260	3300
Head Sink Size	mm	125 x 125 X 13		254 x 254 X 25		400 x 500 X 40		254 x 254 X 25
Basic Specifications	Time Rating	Continuous						
	Insulation Class	Class B						
	Ambient Temperature	0 to +40° C						
	Ambient Humidity	20 to 80% (non-condensing)						
	Insulation Resistance	500 VDC, 10 MΩ min.						
	Excitation	Permanent magnet						
	Dielectric Strength	1500 VAC for 1 minute						
	Protection Methods	Self-cooled						
Allowable Winding Temperature	130 °C							

- Note:** 1. The items marked with an * and "Force and Speed Characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a SERVODRIVE. The others are at 20 °C (68°F).
 2. The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Force-Speed Characteristics (200 V)

A: Continuous duty zone
 B: Intermittent duty zone



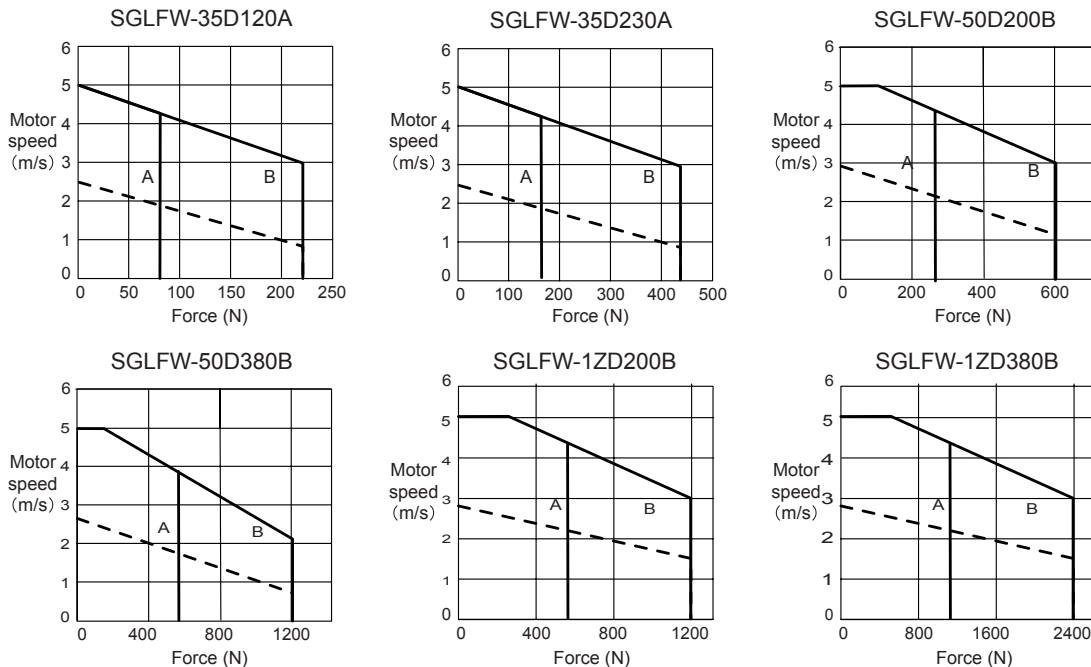
Iron-core SGLFW/SGLFM (400V)

Voltage		400V					
Linear Servomotor Model SGLFW-		35D		50D		1ZD	
		120A	230A	200B	380B	200B	380B
Rated Force*	N	80	160	280	560	560	1120
Rated Current*	Arms	0.7	1.4	2.3	4.5	4.9	9.8
Instantaneous Peak Force*	N	220	440	600	1200	1200	2400
Instantaneous Peak Current*	Arms	2.3	4.6	5.6	11.0	12.3	24.6
Coil Assembly Mass	kg	1.3	2.3	3.5	6.9	6.4	11.5
Force Constant	N / Arms	120.2	120.2	134.7	134.7	122.6	122.6
BEMF Constant	V / (m / s)	40.1	40.1	44.9	44.9	40.9	40.9
Motor Constant	N / √W	13.8	19.5	33.4	47.2	51.0	72.1
Electrical Time Constant	ms	3.5	3.5	15.0	15.0	17.4	17.2
Mechanical Time Constant	ms	5.5	5.5	3.2	3.2	2.5	2.2
Thermal Resistance (With Heat Sink)	K / W	1.57	0.96	0.82	0.32	0.6	0.28
Thermal Resistance (Without Heat Sink)	K / W	4.1	1.94	1.48	0.74	0.92	0.55
Magnetic Attraction	N	810	1590	1650	3260	3300	6520
Head Sink Size	mm	125 x 125 X 13			400 x 500 X 40	254 x 254 X 25	400 x 500 X 40
Basic Specifications	Time Rating	Continuous					
	Insulation Class	Class B					
	Ambient Temperature	0 to +40° C					
	Ambient Humidity	20 to 80% (non-condensing)					
	Insulation Resistance	500 VDC, 10 MΩ min.					
	Excitation	Permanent magnet					
	Dielectric Strength	1500 VAC for 1 minute					
	Protection Methods	Self-cooled					
	Allowable Winding Temperature	130 °C					

- Note:** 1. The items marked with an * and "Force and Speed Characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a SERVODRIVE. The others are at 20 °C (68°F).
 2. The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Force-Speed Characteristics (400 V)

A: Continuous duty zone
 B: Intermittent duty zone



Note: The dotted line indicates characteristics when the linear servomotor for 400 VAC is used with an input power supply for 200 VAC. In this case, the serial converter should be changed. Contact your Omron-Yaskawa representatives.

Iron-core SGLTW/SGLTM (400 V)

Voltage		400V							
Linear Servomotor Model SGLFW-		35D		50D		40D		80D	
		170H	320H	170H	320H	400B	600B	400B	600B
Rated Force*	N	300	600	450	900	670	1000	1300	2000
Rated Current*	Arms	3.2	6.5	3.2	6.3	3.7	5.5	7.2	11.1
Instantaneous Peak Force*	N	600	1200	900	1800	2600	4000	5000	7500
Instantaneous Peak Current*	Arms	7.5	15.1	7.3	14.6	20.7	30.6	37.6	56.4
Coil Assembly Mass	kg	4.7	8.8	6	11	15	23	25	36
Force Constant	N / Arms	99.6	99.6	153.3	153.3	196.1	196.1	194.4	194.4
BEMF Constant	V / (m / s)	33.2	33.2	51.1	51.1	65.4	65.4	64.8	64.8
Motor Constant	N / \sqrt{W}	36.3	51.4	48.9	69.1	59.6	73	85.9	105.2
Electrical Time Constant	ms	14.3	14.3	15.6	15.6	14.4	14.4	15.4	15.4
Mechanical Time Constant	ms	3.5	3.5	2.5	2.5	4.2	4.2	3.2	3.2
Thermal Resistance (With Heat Sink)	K / W	0.76	0.4	0.61	0.3	0.24	0.2	0.22	0.18
Thermal Resistance (Without Heat Sink)	K / W	1.26	0.83	0.97	0.8	0.57	0.4	0.47	0.33
Magnetic Attraction* ¹	N	0	0	0	0	0	0	0	0
Magnetic Attraction* ²	N	1400	2780	2000	3980	3950	5890	7650	11400
Head Sink Size	mm	400 x 500 X 40				609 x 762 X 50			
Basic Specifications	Time Rating	Continuous							
	Insulation Class	Class B							
	Ambient Temperature	0 to +40° C							
	Ambient Humidity	20 to 80% (non-condensing)							
	Insulation Resistance	500 VDC, 10 MΩ min.							
	Excitation	Permanent magnet							
	Dielectric Strength	1500 VAC for 1 minute							
	Protection Methods	Self-cooled							
	Allowable Winding Temperature	130 °C							

*1. The unbalanced magnetic gap resulted from the coil assembly installation condition causes a magnetic attraction on the coil assembly.

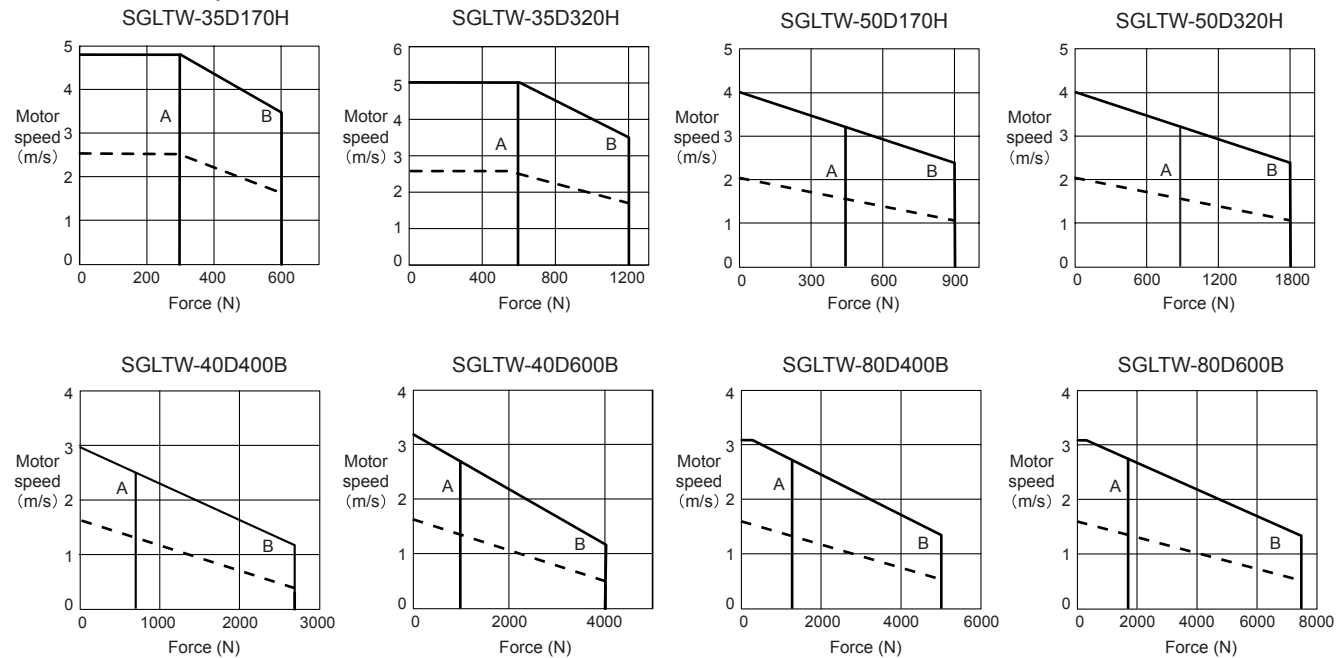
*2. The value indicates the magnetic attraction generated on one side of the magnetic way.

Note: 1. The items marked with an * and "Force and Speed Characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a SERVODRIVE. The others are at 20 °C (68°F).

2. The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Force-Speed Characteristics (400 V)

- A: Continuous duty zone
- B: Intermittent duty zone

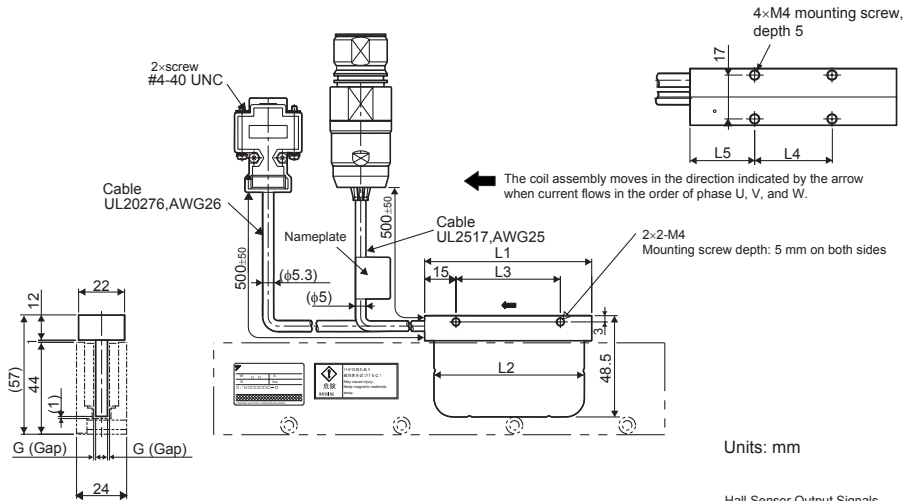


Dimensions

Coreless SGLG@-30

Coil Assembly: SGLGW-30A@@@B@D

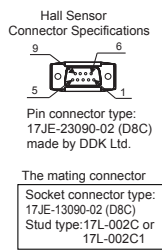
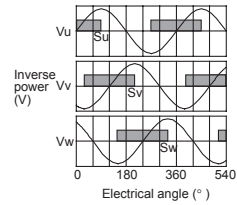
Coil Assembly Model SGLGW-	L1	L2	L3	L4	L5	G(Gap)	Approx. Mass* kg	
30A050B□D	50	48	30	20	20	0.85	0.14	*The value indicates the mass of coil assembly with a hall sensor unit.
30A080B□D	80	72	50	30	25	0.95	0.19	



Units: mm

Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the following figure.



Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications



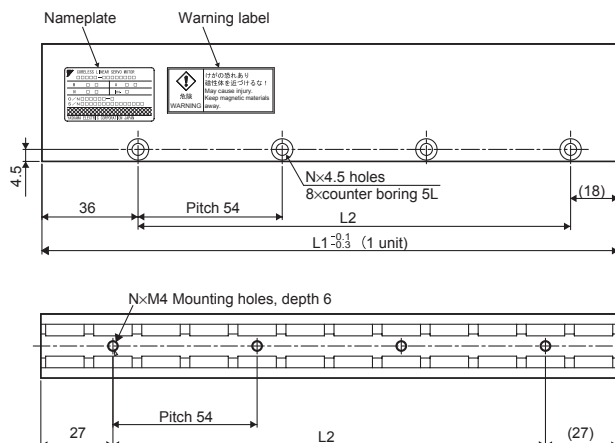
Extension: SROC06JMCSN169
Pin type: 021.421.1020
made by Interconnectron

The mating connector
Plug type: SPOC06KFSDN169

Pin No.	Name	Lead Color
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	Not used	-
5	Not used	-
6	FG	Green/Yellow
7	Not used	-

Magnetic Way: SGLGM-30@@@A

Magnetic Way Model SGLGM-	L1 mm	L2 mm	N	Approx. Mass kg
30108A	108	54	2	0.6
30216A	216	162	4	1.1
30432A	432	378	8	2.3

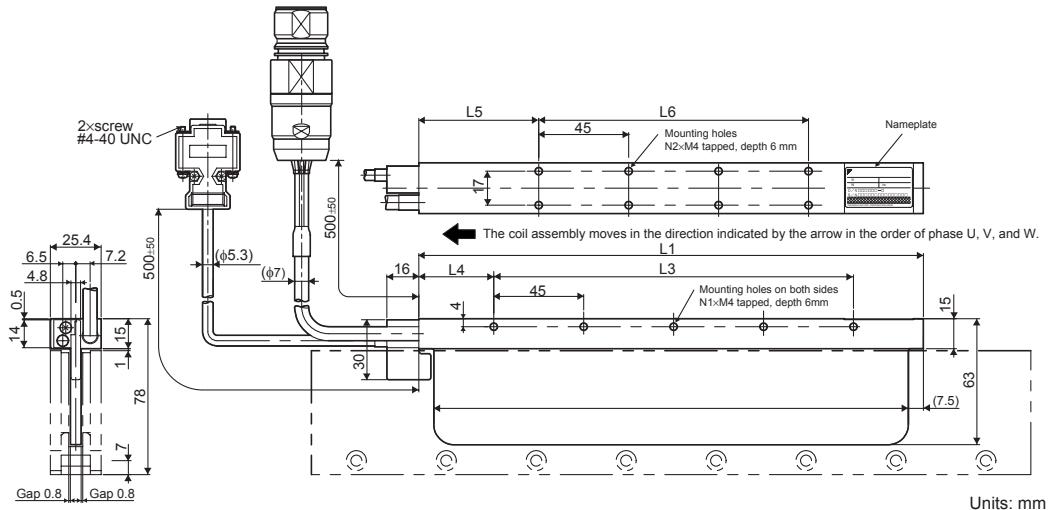


Units: mm

Coreless SGLG@-40

Coil Assembly: SGLGW-40A@@@B@D

Coil Assembly Model SGLGW-	L1	L2	L3	L4	L5	L6	N1	N2	Approx. Mass* kg	
40A140B□□	140	125	90	30	52.5	45	3	4	0.40	*The value indicates the mass of coil assembly with a hall sensor unit.
40A253B□□	252.5	237.5	180	37.5	60	135	5	8	0.66	
40A365B□□	365	350	315	30	52.5	270	8	14	0.93	



Units: mm

Hall Sensor Connector Specifications



Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C)
Stud type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications



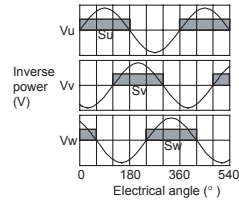
Extension: SROC06JM5CN169
Pin type: 021.421.1020 made by Intercontron

The mating connector
Plug type: SPOC06KFSDN169

Pin No.	Name	Lead Color
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	Not used	-
5	Not used	-
6	FG	Green/Yellow
7	Not used	-

Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.

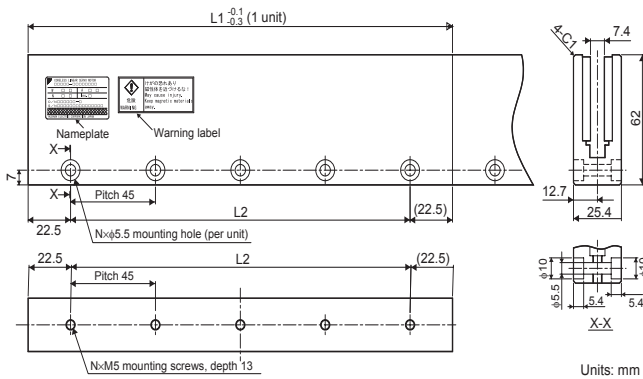


Standard-Force Magnetic Way: SGLGM-40@@@B

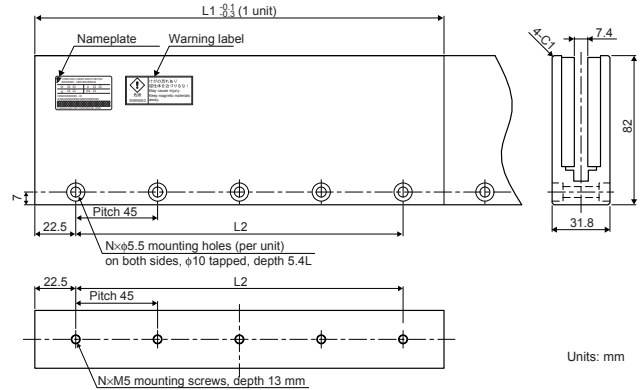
Standard-force Magnetic Way Model SGLGM-	L1 mm	L2 mm	N	Approx. Mass kg
40090B	90	45	2	0.8
40225B	225	180	5	2.0
40360B	360	315	8	3.1
40405B	405	360	9	3.5
40450B	450	405	10	3.9

High-Force Magnetic Way: SGLGM-40@@@B-M

Standard-force Magnetic Way Model SGLGM-	L1 mm	L2 mm	N	Approx. Mass kg
40090B-M	90	45	2	1.0
40225B-M	225	180	5	2.6
40360B-M	360	315	8	4.1
40405B-M	405	360	9	4.6
40450B-M	450	405	10	5.1



Units: mm



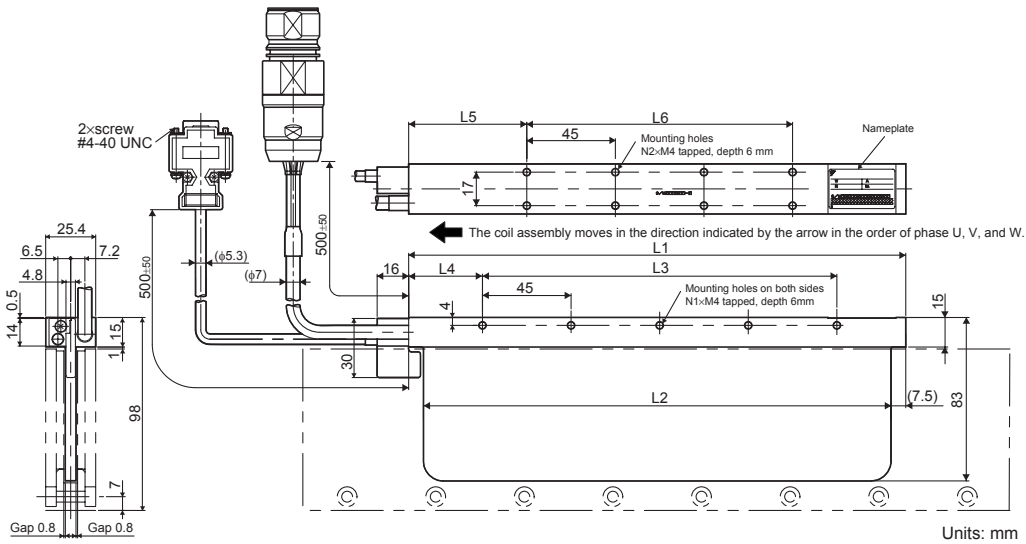
Units: mm

Coreless SGLG@-60

Coil Assembly: SGLGW-60A@@@B@D

Coil Assembly Model SGLGW-	L1	L2	L3	L4	L5	L6	N1	N2	Approx. Mass* kg
60A140B□D	140	125	90	30	52.5	45	3	4	0.48
60A253B□D	252.5	237.5	180	37.5	60	135	5	8	0.82
60A365B□D	365	350	315	30	52.5	270	8	14	1.16

*The value indicates the mass of coil assembly with a hall sensor unit.



Hall Sensor Connector Specifications

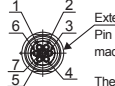


Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C)
Stud type: 17L-002C or 17L-002C-1

Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications



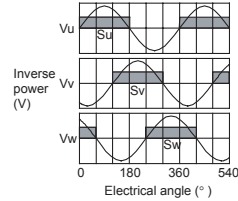
Extension: SROC06JMSCN169
Pin type: 021 421.1020 made by Interconnector

The mating connector
Plug type: SPOC06KFSDN169

Pin No.	Name	Lead Color
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	Not used	-
5	Not used	-
6	FG	Green/Yellow
7	Not used	-

Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.

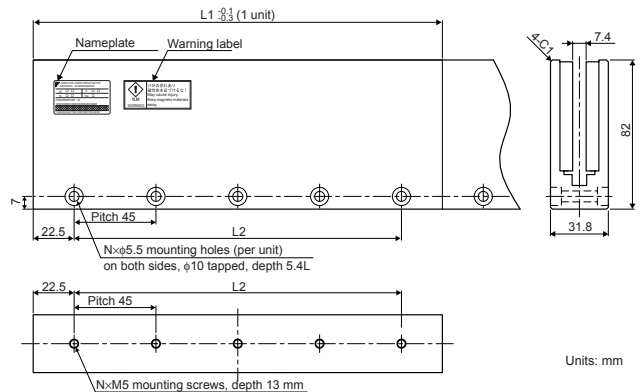
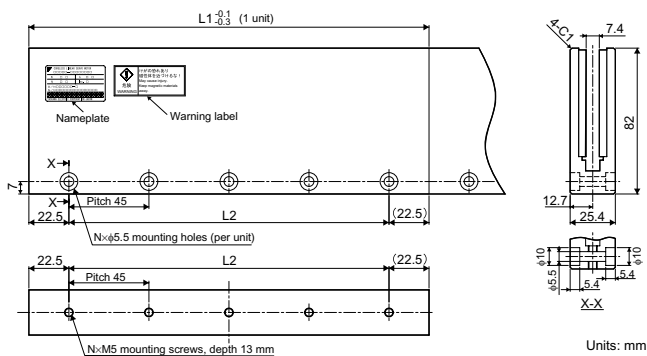


Standard-Force Magnetic Way: SGLGM-60@@@B

Standard-force Magnetic Way Model SGLGM-	L1 mm	L2 mm	N	Approx. Mass kg
60090B	90	45	2	1.1
60225B	225	180	5	2.6
60360B	360	315	8	4.1
60405B	405	360	9	4.6
60450B	450	405	10	5.1

High-Force Magnetic Way: SGLGM-60@@@B-M

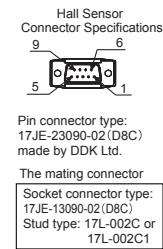
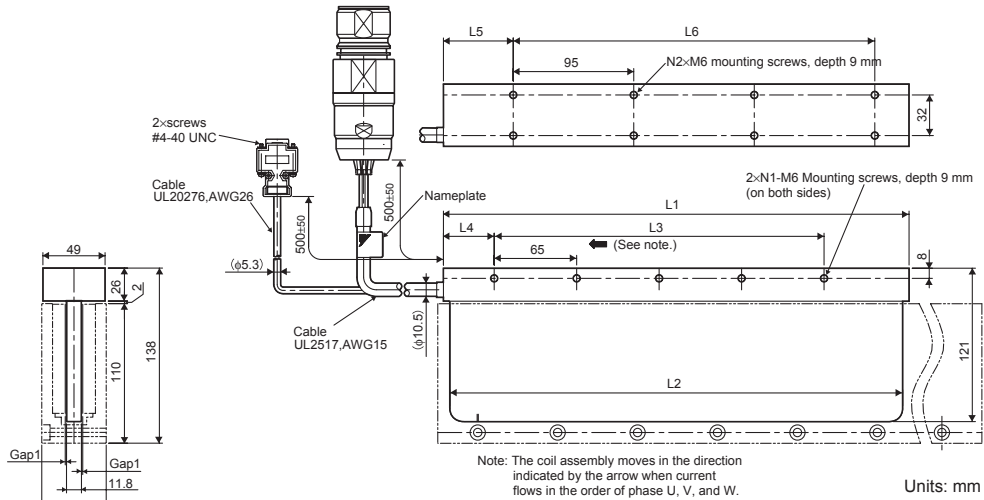
Standard-force Magnetic Way Model SGLGM-	L1 mm	L2 mm	N	Approx. Mass kg
60090B-M	90	45	2	1.3
60225B-M	225	180	5	3.3
60360B-M	360	315	8	5.2
60405B-M	405	360	9	5.9
60450B-M	450	405	10	6.6



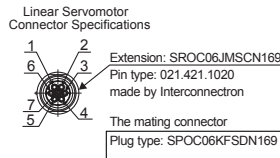
Coreless SGLG@-90

Coil Assembly: SGLGW-90A200A@D

Coil Assembly Model SGLGW-	L1	L2	L3	L4	L5	L6	N1	N2	Approx. Mass* kg	*The value indicates the mass of coil assembly with a hall sensor unit.
90A200A□	199	189	130	40	60	95	3	4	2.2	



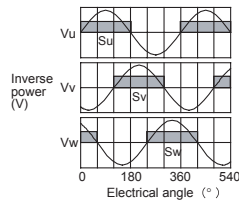
Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used



Pin No.	Name	Lead Color
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	Not used	-
5	Not used	-
6	FG	Green/Yellow
7	Not used	-

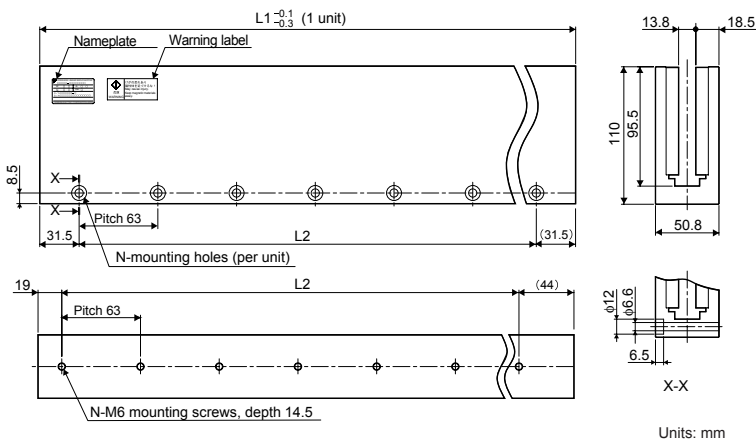
Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.



Magnetic Way: SGLGM-90@@@A

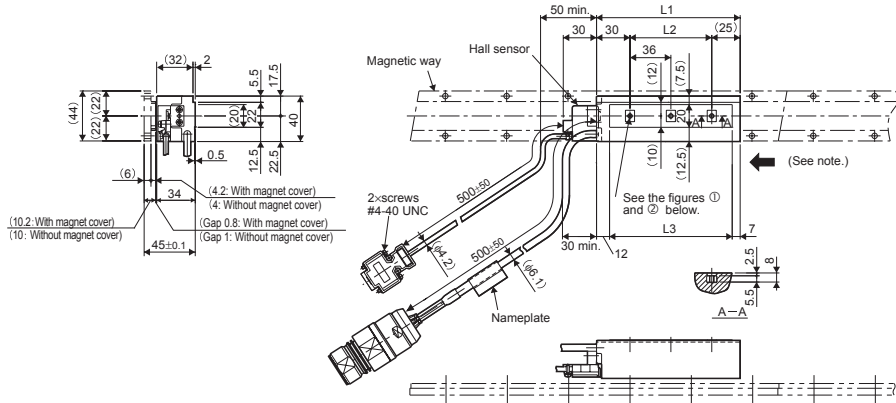
Magnetic Way Model SGLGM-	L1 mm	L2 mm	N	Approx. Mass kg
90252A	252	189	4	7.3
90504A	504	441	8	14.7



Iron-core SGLF@-20

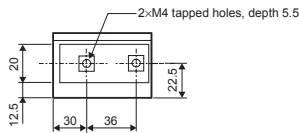
Coil Assembly: SGLFW-20A@@@A@D

Coil Assembly Model SGLFW-	L1	L2	L3	N	Approx. Mass kg
20A090A□	91	36	72	2	0.7
20A120A□	127	72	108	3	0.9

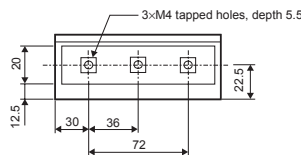


Note: The coil assembly moves in the direction indicated by the arrow, when current flows in the order of phase U, V, and W.

① SGLFW-20A090A□□

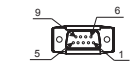


② SGLFW-20A120A□□



Units: mm

Hall Sensor Connector Specifications



Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector

Socket connector type: 17JE-13090-02 (D8C) Stud type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications



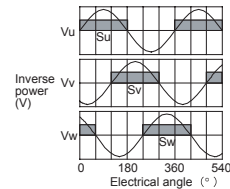
Extension: SROC06JM5CN169 Pin type: 021.421.1020 made by Interconnection

The mating connector Plug type: SPOC06KFSDN169

Pin No.	Name	Lead Color
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	Not used	-
5	Not used	-
6	FG	Green/Yellow
7	Not used	-

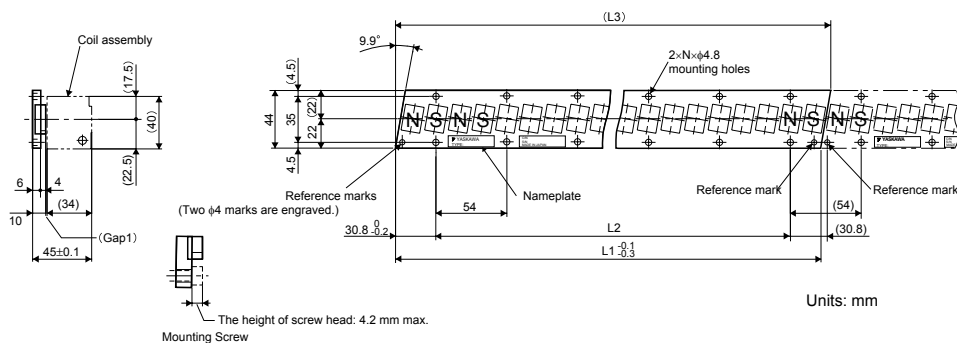
Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.



Magnetic Way: SGLFM-20@@@A

Magnetic Way Model SGLFM-	L1 -0.1 -0.3	L2	(L3)	N	Approx. Mass kg
20324A	324	270 (54 × 5)	(331.6)	6	0.9
20540A	540	486 (54 × 9)	(547.6)	10	1.4
20756A	756	702 (54 × 13)	(763.6)	14	2



Units: mm

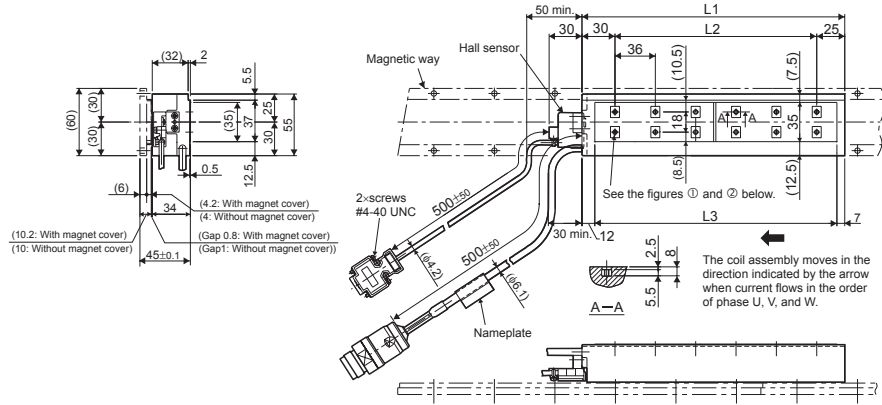
Note: 1. Multiple SGLFM-20□□□□ magnetic ways can be connected. Connect magnetic ways so that the reference marks match one on the other in the same direction as shown in the figure.

2. The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way

Iron-core SGLF@-35

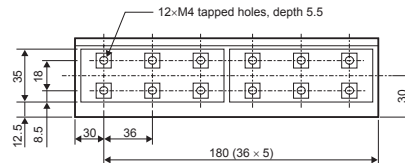
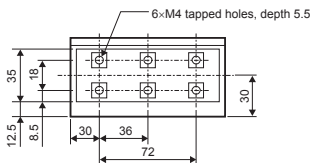
Coil Assembly: SGLFW-35@@@A@D

Coil Assembly Model SGLFW-	L1	L2	L3	N	Approx. Mass kg
35□120A□□D	127	72	108	6	1.3
35□230A□□D	235	180	216	12	2.3



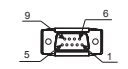
① SGLFW-35□120A□□D

② SGLFW-35□230A□□D



Units: mm

Hall Sensor Connector Specifications

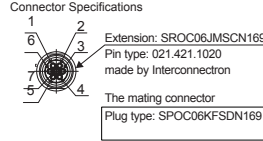


Pin connector type: 7JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C)
Stud type: 17L-002C or 17L-002C1

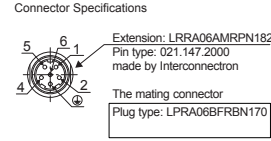
Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

SGLFW-35A□□□□□D
Linear Servomotor 200V
Connector Specifications



Pin No.	Name
1	Phase U
2	Phase V
3	Phase W
4	Not used
5	Not used
6	FG
7	Not used

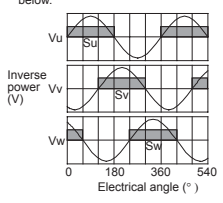
SGLFW-35D□□□□□D
Linear Servomotor 400V
Connector Specifications



Pin No.	Name
1	Phase U
2	Phase V
4	Phase W
5	Not used
6	Not used
⊕	Ground

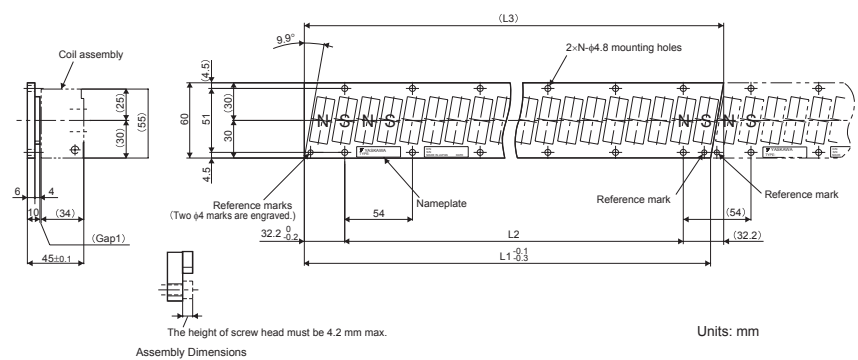
Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.



Magnetic Way: SGLFM-35@@@A

Magnetic Way Model SGLFM-	L1 ^{-0.1} / _{-0.3}	L2	(L3)	N	Approx. Mass kg
35324A	324	270 (54 × 5)	(334.4)	6	1.2
35540A	540	486 (54 × 9)	(550.4)	10	2
35756A	756	702 (54 × 13)	(766.4)	14	2.9



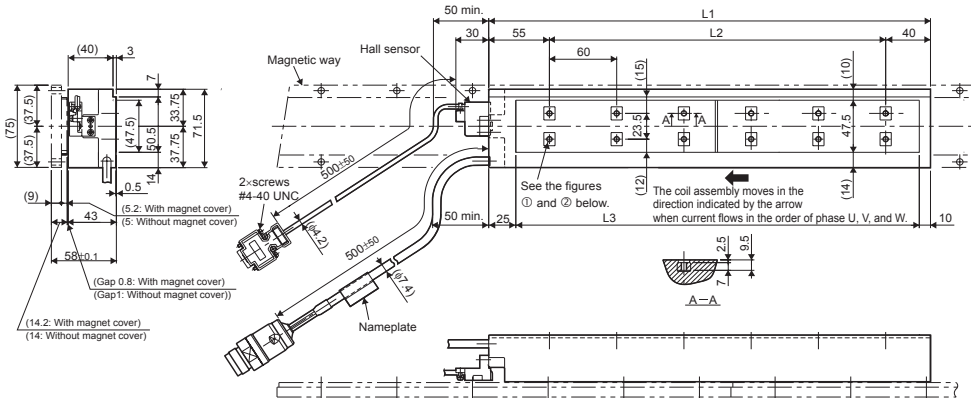
Units: mm

- Note:**
- Multiple SGLFM-35□□□□A magnetic ways can be connected. Connect magnetic ways so that the reference marks match one on the other in the same direction as shown in the figure.
 - The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way

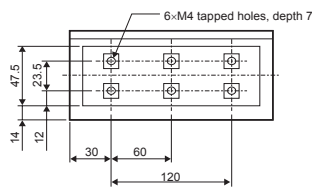
Iron-core SGLF@-50

Coil Assembly: SGLFW-50@@@B@D

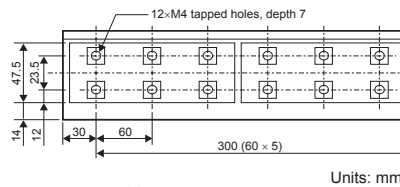
Coil Assembly Model SGLFW-	L1	L2	L3	N	Approx. Mass kg
50□200B□□D	215	120	180	6	3.5
50□380B□□D	395	300	360	12	6.9



① SGLFW-50□200B□□D



② SGLFW-50□380B□□D



Hall Sensor Connector Specifications



Pin connector type: 7JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C) Stud type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

SGLFW-50A□□□□□D Linear Servomotor 200V Connector Specifications



Extension: SROC06JM5CN169 Pin type: 021.421.1020 made by Interconnection

The mating connector Plug type: SPOC06KFSDN169

Pin No.	Name
1	Phase U
2	Phase V
3	Phase W
4	Not used
5	Not used
6	FG
7	Not used

SGLFW-50D□□□□□D Linear Servomotor 400V Connector Specifications



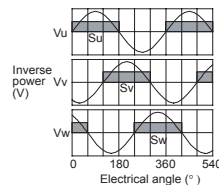
Extension: LRR06AMRPN182 Pin type: 021.147.2000 made by Interconnection

The mating connector Plug type: LPPRA06BFRBN170

Pin No.	Name
1	Phase U
2	Phase V
4	Phase W
5	Not used
6	Not used
⊕	Ground

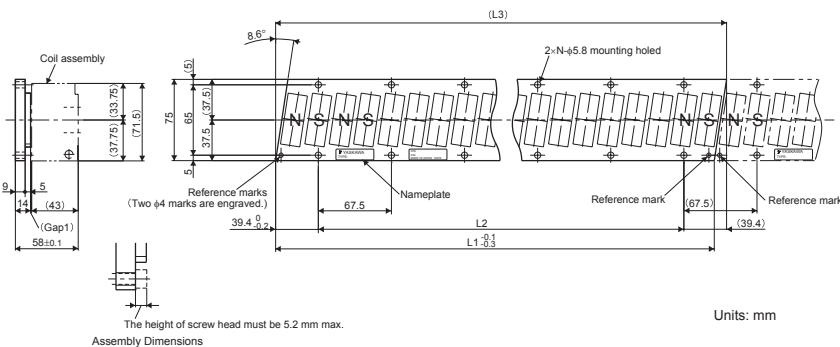
Hall Sensor Output Signals

When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.



Magnetic Way: SGLFM-50@@@A

Magnetic Way Model SGLFM-	L1 ^{-0.1} / _{-0.3}	L2	(L3)	N	Approx. Mass kg
50405A	405	337.5 (67.5 × 5)	(416.3)	6	2.8
50675A	675	607.5 (67.5 × 9)	(686.3)	10	4.6
50945A	945	877.5 (67.5 × 13)	(956.3)	14	6.5



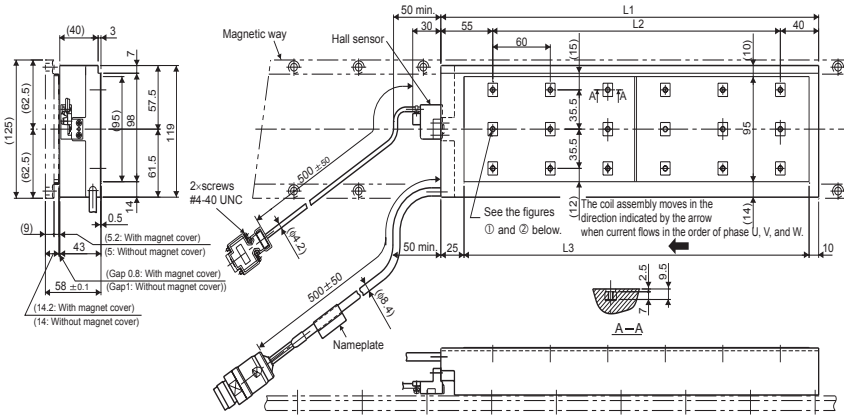
Note: 1. Multiple SGLFM-50□□□□A magnetic ways can be connected. Connect magnetic ways so that the reference marks match one on the other in the same direction as shown in the figure.

2. The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way

Iron-core SGLF@-1Z

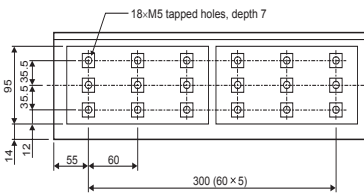
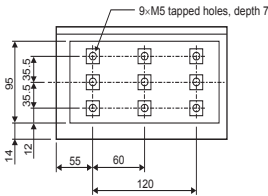
Coil Assembly: SGLFW-1Z@@@B@D

Coil Assembly Model SGLFW-	L1	L2	L3	N	Approx. Mass kg
1Z□200B□□	215	120	180	8	6.4
1ZD380B□□	395	300	360	18	11.5



① SGLFW-1Z□200B□□

② SGLFW-1ZD380B□□



Hall Sensor Connector Specifications

Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C)
Sturd type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

SGLFW-1ZA200A□□ Linear Servomotor 200V Connector Specifications

Extension: SROC06JMSCN169
Pin type: 021.421.1020
made by Interconnectron

The mating connector
Plug type: SP0C06KFSDN169

Pin No.	Name
1	Phase U
2	Phase V
3	Phase W
4	Not used
5	Not used
6	FG
7	Not used

SGLFW-1ZD□□□A□□ Linear Servomotor 400V Connector Specifications

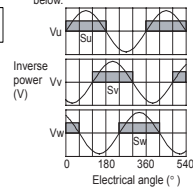
Extension: LRRA06AMRPN182
Pin type: 021.147.2000
made by Interconnectron

The mating connector
Plug type: LPR06BFRBN170

Pin No.	Name
1	Phase U
2	Phase V
4	Phase W
5	Not used
6	Not used
⊕	Ground

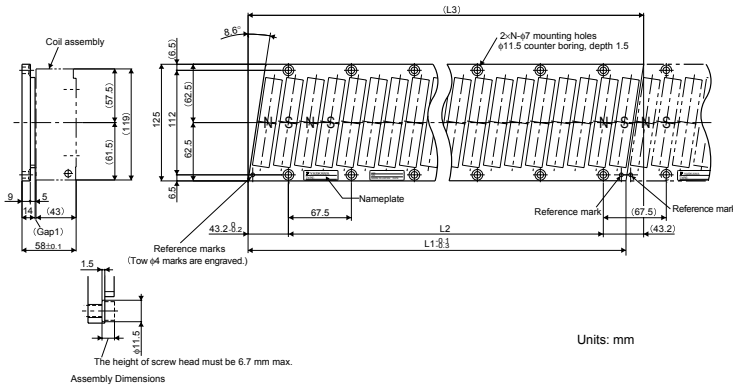
Units: mm

Hall Sensor Output Signals
When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.



Magnetic Way: SGLFM-1Z@@@A

Magnetic Way Model SGLFM-	L1 ^{-0.1} / _{-0.3}	L2	(L3)	N	Approx. Mass kg
1Z405A	405	337.5 (67.5 × 5)	(423.9)	6	7.3
1Z675A	675	607.5 (67.5 × 9)	(693.9)	10	12
1Z945A	945	877.5 (67.5 × 13)	(963.9)	14	17

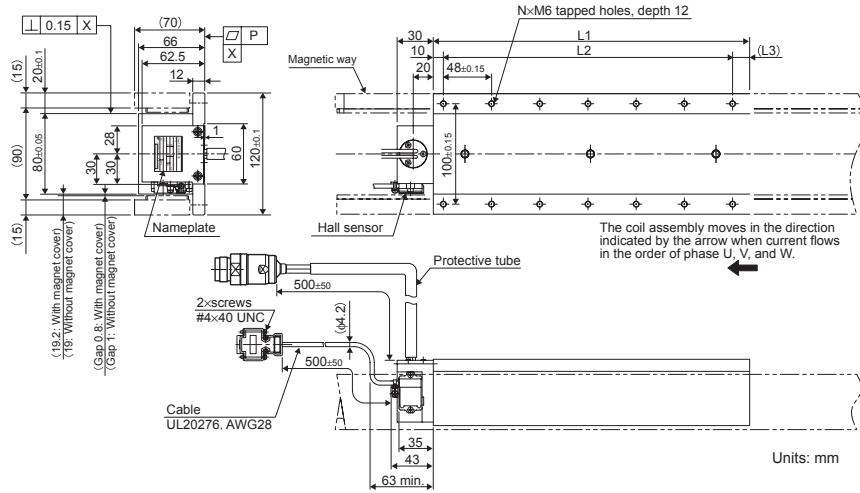


- Note:**
- Multiple SGLFM-1Z□□□A magnetic ways can be connected. Connect magnetic ways so that the reference marks match one on the other in the same direction as shown in the figure.
 - The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way

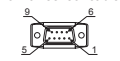
Iron-core SGLT@-35

Coil Assembly: SGLTW-35D@@@H@D

Coil Assembly Model SGLTW-	L1	L2	(L3)	N	Approx. Mass kg
35D170H□□	170	144 (48 × 3)	(16)	8	4.7
35D320H□□	315	288 (48 × 6)	(17)	14	8.8



Wiring specification of hall sensor cable



Pin connector type: 17JE-23080-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C)
Stud type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5VDC
2	Phase U
3	Phase V
4	Phase W
5	0V
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications



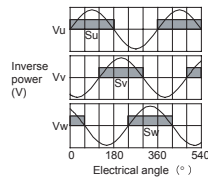
Extension: LPR06AMRPN182
Pin type: 021-1472000 made by Interconnectron

The mating connector
Plug type: LPR06BFRBN170

Pin No.	Name
1	Phase U
2	Phase V
4	Phase W
5	Not used
6	Not used
⊕	Ground

Hall Sensor Output Signals

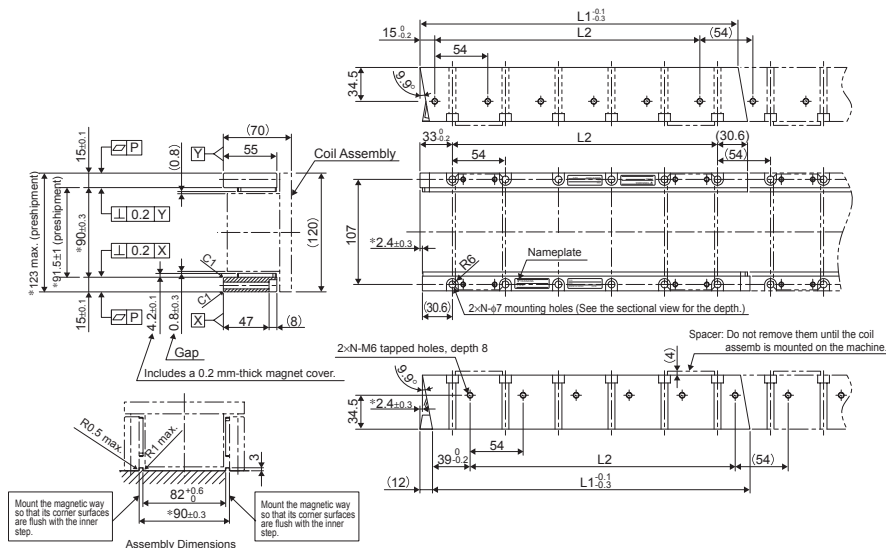
When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below



Magnetic Way: SGLTM-35@@@H

Magnetic Way Model SGLTM-	L1 ^{-0.1} _{-0.3}	L2	N	Approx. Mass kg
35324H	324	270 (54 × 5)	6	4.8
35540H	540	486 (54 × 9)	10	8
35756H	756	702 (54 × 13)	14	11

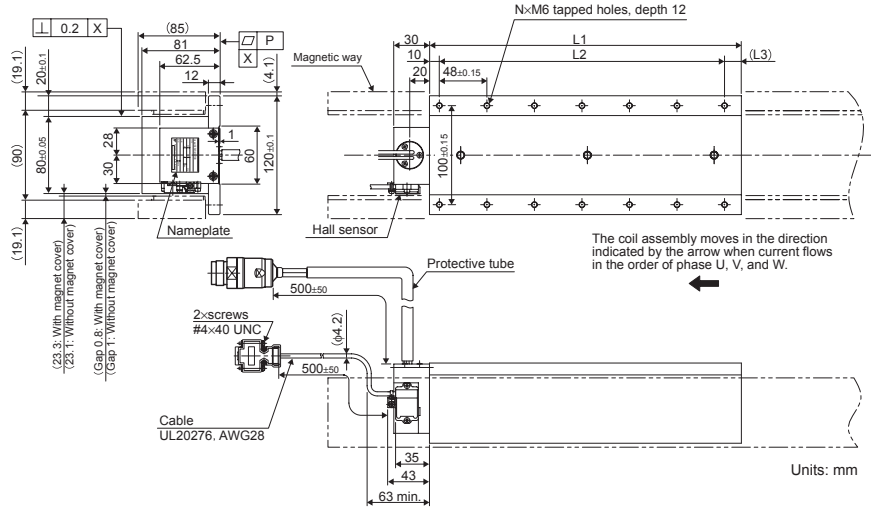
- Note: 1. Two magnetic ways for both ends of coil assembly make one set. Spacers are mounted on magnetic ways for safety during transportation. Do not remove the spacers until the coil assembly is mounted on a machine.
2. The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way.
3. Two magnetic ways in a set can be connected to each other.
4. The dimensions marked with an * are the dimensions between the magnetic ways. Be sure to follow exactly the dimensions specified in the figure above. Mount magnetic ways as shown in Assembly Dimensions. The values with an * are the dimensions at preshipment.
5. Use socket headed screws of strength class 10.9 minimum for magnetic way mounting screws. Do not use stainless steel screws.



Iron-core SGLT@-50

Coil Assembly: SGLTW-50D@@@H@D

Coil Assembly Model SGLTW-	L1	L2	(L3)	N	Approx. Mass kg
50D170H□□	170	144 (48 × 3)	(16)	8	6
50D320H□□	315	(17)	14	11	



Wiring specification of hall sensor cable

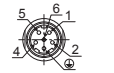


Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
Socket connector type: 17JE-13090-02 (D8C)
Stud type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5VDC
2	Phase U
3	Phase V
4	Phase W
5	0V
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications



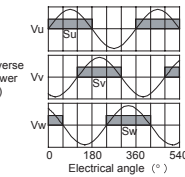
Extension: LRR406AMRPN182
Pin type: 021.147.2000 made by Interconnector

The mating connector
Plug type: LPR406BFRBN170

Pin No.	Name
1	Phase U
2	Phase V
4	Phase W
5	Not used
6	Not used
⊕	Ground

Hall Sensor Output Signals

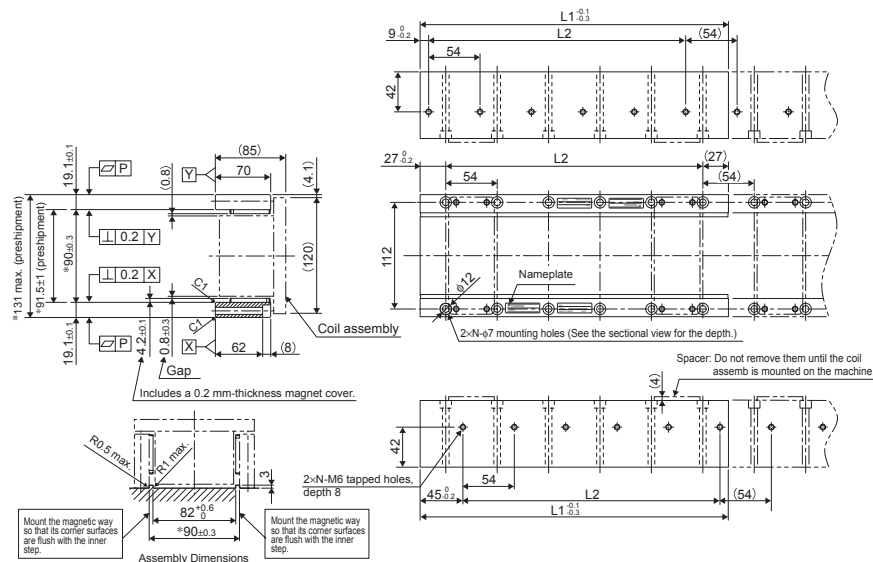
When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below



Magnetic Way: SGLTM-50@@@H

Magnetic Way Model SGLTM-	L1 -0.1 -0.3	L2	N	Approx. Mass kg
50324H	324	270 (54 × 5)	6	8
50540H	540	486 (54 × 9)	10	13
50756H	756	702 (54 × 13)	14	18

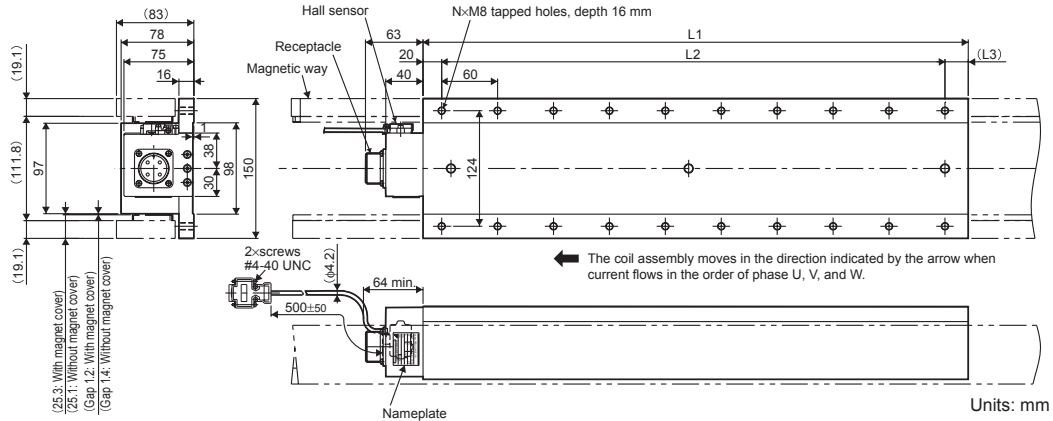
- Note: 1. Two magnetic ways for both ends of coil assembly make one set. Spacers are mounted on magnetic ways for safety during transportation. Do not remove the spacers until the coil assembly is mounted on a machine.
2. The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way.
3. Two magnetic ways in a set can be connected to each other.
4. The dimensions marked with an * are the dimensions between the magnetic ways. Be sure to follow exactly the dimensions specified in the figure above. Mount magnetic ways as shown in Assembly Dimensions. The values with an * are the dimensions at preshipment.
5. Use socket headed screws of strength class 10.9 minimum for magnetic way mounting screws. Do not use stainless steel screws.



Iron-core SGLT@-40

Coil Assembly: SGLTW-40D@@@B@

Coil Assembly Model SGLTW-	L1	L2	(L3)	N	Approx. Mass kg
40D400B□	395	360 (60 × 6)	(15)	14	20
40D600B□	585	(25)	20	30	



Hall Sensor Connector Specifications

Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector

Socket connector type: 17JE-13090-02 (D8C)

Stud type: 17L-002C or 17L-002C1

Pin No.	Name
1	+5V (Power supply)
2	Phase U
3	Phase V
4	Phase W
5	0V (Power supply)
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications

Receptacle type: MS3102A-22-22P made by DDK Ltd.

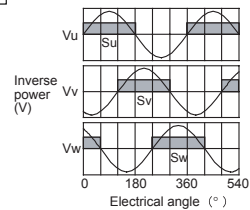
The mating connector

L-shaped plug type: MS3108E22-22S

Pin No.	Name
A	Phase U
B	Phase V
C	Phase W
D	Ground

Hall Sensor Output Signals

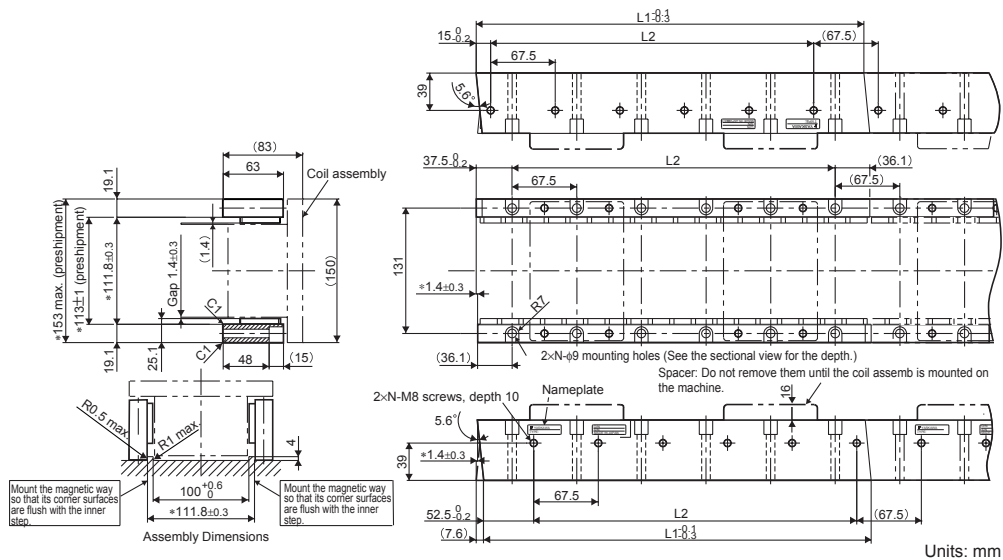
When the coil assembly moves in the direction indicated by the arrow in the figure, the relationship between the hall sensor output signals Su, Sv, Sw, and the inverse power of each motor phase Vu, Vv, Vw becomes as shown in the figure below.



Magnetic Way: SGLTM-40@@@A

Magnetic Way Model SGLTM-	L1 ^{-0.1} / _{-0.3}	L2	N	Approx. Mass kg
40405A	405	337.5 (67.5 × 5)	6	9
40675A	675	607.5 (67.5 × 9)	10	15
40945A	945	877.5 (67.5 × 13)	14	21

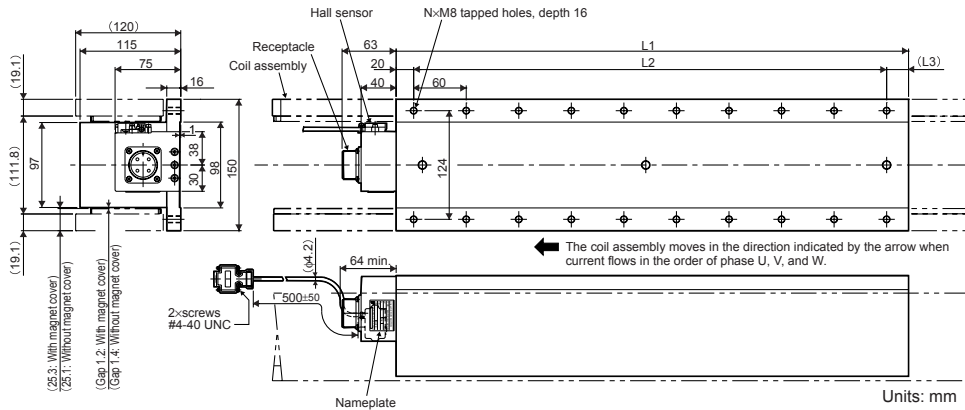
- Note: 1. Two magnetic ways for both ends of coil assembly make one set. Spacers are mounted on magnetic ways for safety during transportation. Do not remove the spacers until the coil assembly is mounted on a machine.
2. The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way.
3. Two magnetic ways in a set can be connected to each other.
4. The dimensions marked with an * are the dimensions between the magnetic ways. Be sure to follow exactly the dimensions specified in the figure above. Mount magnetic ways as shown in Assembly Dimensions. The values with an * are the dimensions at preshipment.
5. Use socket headed screws of strength class 10.9 minimum for magnetic way mounting screws. Do not use stainless steel screws.



Iron-core SGLT@-80

Coil Assembly: SGLTW-80D@@@B@

Coil Assembly Model SGLTW-	L1	L2	(L3)	N	Approx. Mass kg
80D400B□	395	360 (60 × 6)	(15)	14	30
80D600B□	585	(25)	20	43	



Hall Sensor Connector Specifications

Pin connector type: 17JE-23090-02 (D8C) made by DDK Ltd.

The mating connector
 Socket connector type: 17JE-13090-02 (D8C)
 Stud type: 17L-002C or 17L-002C1

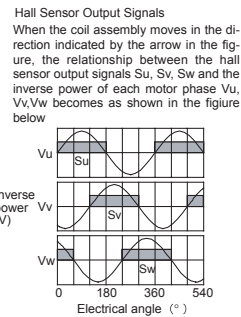
Pin No.	Name
1	+5VDC
2	Phase U
3	Phase V
4	Phase W
5	0V
6	Not used
7	Not used
8	Not used
9	Not used

Linear Servomotor Connector Specifications

Receptacle type: MS3102A-22-22P made by DDK Ltd.

The mating connector
 L-shaped plug type: MS3108E22-22S

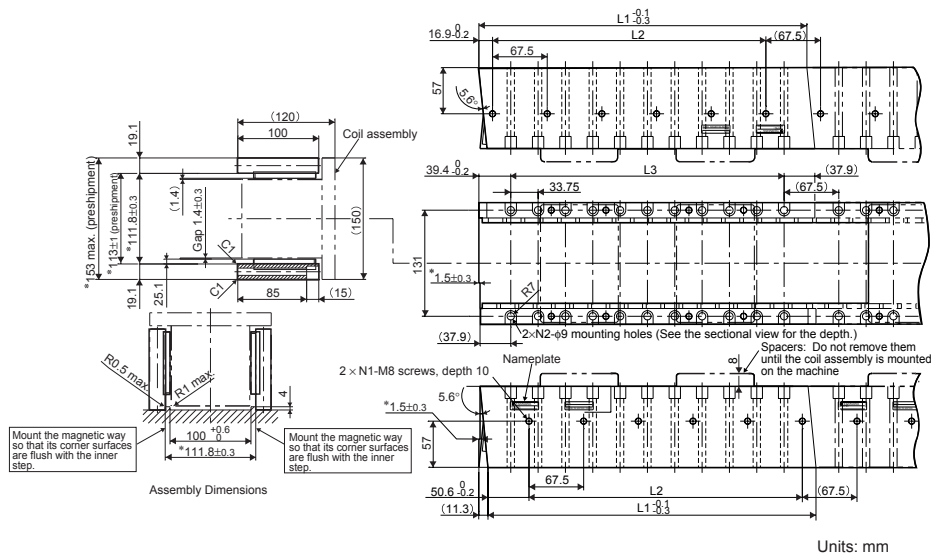
Pin No.	Name
A	Phase U
B	Phase V
C	Phase W
D	Ground



Magnetic Way: SGLTM-80@@@A

Magnetic Way Model SGLTM-	L1 ^{-0.1} _{-0.3}	L2	L3	N1	N2	Approx. Mass kg
80405A	405	337.5 (67.5 × 5)	337.5 (33.75 × 10)	6	11	14
80675A	675	607.5 (67.5 × 9)	607.5 (33.75 × 18)	10	19	24
80945A	945	877.5 (67.5 × 13)	887.5 (33.75 × 26)	14	27	34

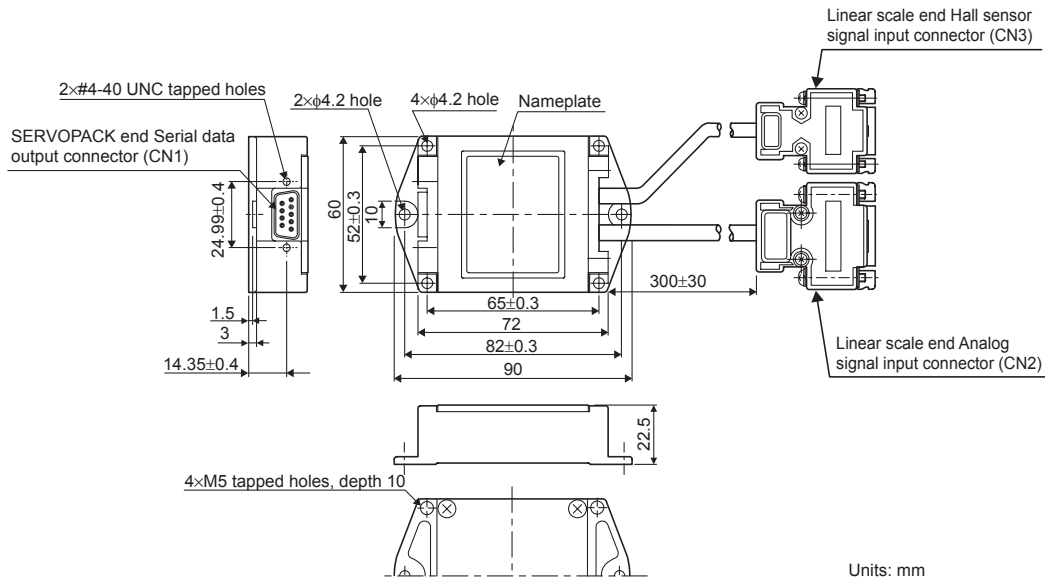
- Note: 1. Two magnetic ways for both ends of coil assembly make one set. Spacers are mounted on magnetic ways for safety during transportation. Do not remove the spacers until the coil assembly is mounted on a machine.
2. The magnetic way may affect pacemakers. Keep a minimum distance of 200 mm from the magnetic way.
3. Two magnetic ways in a set can be connected to each other.
4. The dimensions marked with an * are the dimensions between the magnetic ways. Be sure to follow exactly the dimensions specified in the figure above. Mount magnetic ways as shown in Assembly Dimensions. The values with an * are the dimensions at preshipment.
5. Use socket headed screws of strength class 10.9 minimum for magnetic way mounting screws. Do not use stainless steel screws.



Serial Converter Unit

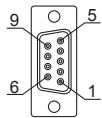
JZDP-A008-@@@

Items	Specifications	
Electrical Characteristics	Power Supply Voltage	+5.0V±5%, ripple content 5% max.
	Current Consumption*1	120 mA Typ. 350 mA Max.
	Signal Resolution	Input 2-phase sine wave: 1/256 pitch
	Max. Response Frequency	250 kHz
	Analog Input Signals (cos, sin, Ref)	Differential input amplitude: 0.4 V to 1.2V Input signal level: 1.5 V to 3.5V
	Pole Sensor Input Signal	CMOS level
	Output Signals*3	Position data, hall sensor information, and alarms
	Output Method	Serial data transmission (HDLC (High-level Data Link Control) protocol format with Manchester codes)
	Transmission Cycle	62.5 μs
Mechanical Characteristics	Output Circuit	Balanced transceiver (SN75LBC176 or the equivalent) Internal terminal resistance: 120 Ω
	Approx. mass	150 g
	Vibration Resistance	98 m/s ² max. (1 to 2500 Hz) in three directions
	Shock Resistance	980 m/s ² , (11 ms) two times in three directions
Environmental Conditions	Operating temperature	0 °C to 55 °C (32 to 131 °F)
	Storage temperature	-20 °C to +80 °C (-4 to +176 °F)
	Humidity	20 % to 90 %RH (without condensation)



CN1

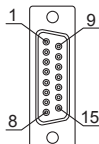
SERVOPACK end serial data output



Pin No.	Signal
1	+5V
2	S-phase output
3	Empty
4	Empty
5	0V
6	/S-phase output
7	Empty
8	Empty
9	Empty
Case	Shield

CN2

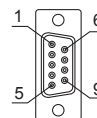
Linear scale end Analog signal input



Pin No.	Signal
1	/cos input (V1-)
2	/sin input (V2-)
3	Ref input (V0+)
4	+5V
5	5Vs
6	Empty
7	Empty
8	Empty
9	cos input (V1+)
10	sin input (V2+)
11	/Ref input (V0-)
12	0V
13	0Vs
14	Empty
15	Inner
Case	Shield

CN3

Linear scale end Hall sensor signal input



Pin No.	Signal
1	+5V
2	U-phase input
3	V-phase input
4	W-phase input
5	0V
6	Empty
7	Empty
8	Empty
9	Empty
Case	Shield

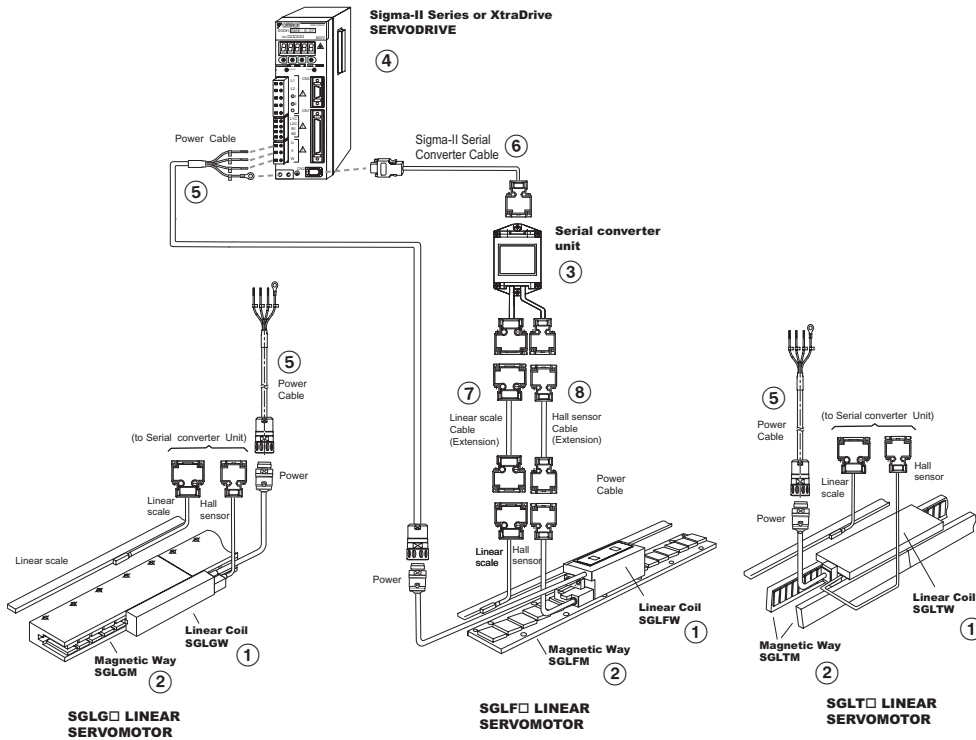
Note: 1. Do not use empty pins.

2. The linear scale (analog 1Vp-p output, D-sub 15-pin, male) by Renishaw Inc. can be directly connected. However, the BID and DIR signals are not connected.

3. Use the linear scale end connector to change the zero point specifications of the linear scale.

Ordering Information

System Configuration



SGLGW / SGLGM Coreless Type (200 V)



With Standard-force Magnetic Ways - 230V AC Single Phase

Symbol	Specifications		Model				
	Rated Force	Peak Force	(1) Linear Coil	(2) Magnetic Way	(3) Serial Converter	(4) Servo Drive	
						Sigma-II Series	XtraDrive
①②③④	13,5 N	40 N	SGLGW-30A050BPD	SGLGM-30108A	JZDP-A008-158	SGDH-A5AE-OY	XD-P5-MN01
			SGLGW-30A080BPD	SGLGM-30216A SGLGM-30432A		JZDP-A008-156	SGDH-01AE-OY
	47 N	140 N	SGLGW-40A140BPD	SGLGM-40090B	JZDP-A008-001	SGDH-01AE-OY	XD-01-MN01
			SGLGW-40A253BPD	SGLGM-40225B SGLGM-40360B SGLGM-40405B SGLGM-40450B		JZDP-A008-002	SGDH-02AE-OY
	140 N	420 N	SGLGW-40A365BPD		JZDP-A008-003	SGDH-04AE-OY	XD-04-MN01
	73 N	220 N	SGLGW-60A140BPD	SGLGM-60090B	JZDP-A008-004	SGDH-02AE-OY	XD-02-MN01
			SGLGW-60A253BPD	SGLGM-60225B SGLGM-60360B SGLGM-60405B SGLGM-60450B		JZDP-A008-005	SGDH-04AE-OY
	220 N	660 N	SGLGW-60A365BPD		JZDP-A008-006	SGDH-08AE-S-OY	XD-08-MN
325 N	1300 N	SGLGW-90A200APD	SGLGM-90252A SGLGM-90504A	JZDP-A008-101	SGDH-15AE-S-OY	-	

With High-force Magnetic Ways - 230V AC Single Phase

Symbol	Specifications		Model					
	Rated Force	Peak Force	(1) Linear Coil	(2) Magnetic Way	(3) Serial Converter	(4) Servo Drive		
						Sigma-II Series	XtraDrive	
①②③④	57 N	230 N	SGLGW-40A140BPD	SGLGM-40090B-M	JZDP-A008-063	SGDH-02AE-OY	XD-02-MN01	
			SGLGW-40A253BPD	SGLGM-40225B-M SGLGM-40360B-M SGLGM-40405B-M SGLGM-40450B-M		JZDP-A008-059	SGDH-04AE-OY	XD-04-MN01
			SGLGW-40A365BPD			JZDP-A008-060	SGDH-08AE-S-OY	XD-08-MN
	89 N	360 N	SGLGW-60A140BPD	SGLGM-60090B-M	JZDP-A008-061	SGDH-02AE-OY	XD-02-MN01	
			SGLGW-60A253BPD	SGLGM-60225B-M SGLGM-60360B-M SGLGM-60405B-M SGLGM-60450B-M		JZDP-A008-062	SGDH-08AE-S-OY	XD-08-MN
			SGLGW-60A365BPD			JZDP-A008-047	SGDH-15AE-S-OY	-

SGLFW / SGLFM Iron-Core Type



230V AC Single Phase

Symbol	Specifications		Model				
	Rated Force	Peak Force	① Linear Coil	② Magnetic Way	③ Serial Converter	④ Servo Drive	
						Sigma-II Series	XtraDrive
①②③④	25 N	86 N	SGLFW-20A090APD	SGLFM-20324AC	JZDP-A008-017	SGDH-02AE-OY	XD-02-MN01
	40 N	125 N	SGLFW-20A120APD	SGLFM-20540AC SGLFM-20756AC	JZDP-A008-018	SGDH-02AE-OY	XD-02-MN01
	80 N	220 N	SGLFW-35A120APD	SGLFM-35324AC	JZDP-A008-019	SGDH-02AE-OY	XD-02-MN01
	160 N	440 N	SGLFW-35A230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-020	SGDH-08AE-S-OY	XD-08-MN01
	280 N	600 N	SGLFW-50A200BPD	SGLFM-50405AC	JZDP-A008-181	SGDH-08AE-S-OY	XD-08-MN
	560 N	1200 N	SGLFW-50A380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-182	SGDH-15AE-S-OY	-
	560 N	1200 N	SGLFW-1ZA200BPD	SGLFM-1Z405AC SGLFM-1Z675AC SGLFM-1Z945AC	JZDP-A008-183	SGDH-15AE-S-OY	-

400V AC Three Phase

Symbol	Specifications		Model				
	Rated Force	Peak Force	① Linear Coil	② Magnetic Way	③ Serial Converter	④ Servo Drive	
						Sigma-II Series	XtraDrive
①②③④	80 N	220 N	SGLFW-35D120APD	SGLFM-35324AC	JZDP-A008-211	SGDH-05DE-OY	XD-05-TN
	160 N	440 N	SGLFW-35D230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-212	SGDH-05DE-OY	XD-05-TN
	280 N	600 N	SGLFW-50D200BPD	SGLFM-50405AC	JZDP-A008-189	SGDH-10DE-OY	XD-10-TN
	560 N	1200 N	SGLFW-50D380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-190	SGDH-15DE-OY	XD-15-TN
	560 N	1200 N	SGLFW-1ZD200BPD	SGLFM-1Z405AC	JZDP-A008-191	SGDH-15DE-OY	XD-15-TN
	1120 N	2400 N	SGLFW-1ZD380BPD	SGLFM-1Z675AC SGLFM-1Z945AC	JZDP-A008-192	SGDH-30DE-OY	XD-30-TN

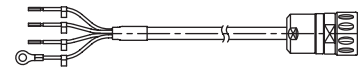
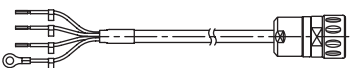
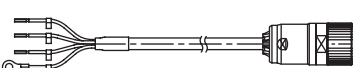
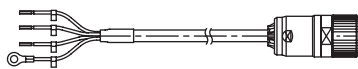
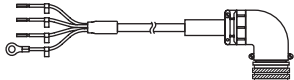
SGLTW / SGLTM Iron-Core Type



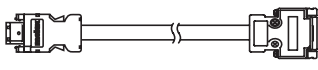
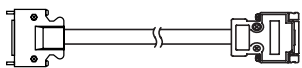
400V AC Three Phase

Symbol	Specifications		Model				
	Rated Force	Peak Force	① Linear Coil	② Magnetic Way	③ Serial Converter	④ Servo Drive	
						Sigma-II Series	XtraDrive
①②③④	300 N	600 N	SGLTW-35D170HPD	SGLTM-35324HC	JZDP-A008-193	SGDH-10DE-OY	XD-10-TN
	600 N	1200 N	SGLTW-35D320HPD	SGLTM-35540HC SGLTM-35756HC	JZDP-A008-194	SGDH-20DE-OY	XD-20-TN
	450 N	900 N	SGLTW-50D170HPD	SGLTM-50324HC	JZDP-A008-195	SGDH-10DE-OY	XD-10-TN
	900 N	1800 N	SGLTW-50D320HPD	SGLTM-50540HC SGLTM-50756HC	JZDP-A008-196	SGDH-20DE-OY	XD-20-TN
	670 N	2600 N	SGLTW-40D400BP	SGLTM-40405AC	JZDP-A008-197	SGDH-30DE-OY	XD-30-TN
	1000 N	4000 N	SGLTW-40D600BP	SGLTM-40675AC SGLTM-40945AC	JZDP-A008-198	SGDH-50DE-OY	-
	1300 N	5000 N	SGLTW-80D400BP	SGLTM-80405AC	JZDP-A008-199	SGDH-50DE-OY	-
	2000 N	7500 N	SGLTW-80D600BP	SGLTM-80675AC SGLTM-80945AC	JZDP-A008-200	SGDH-75DE-OY	-

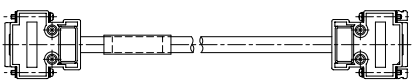
Power Cables

Symbol	Specifications	Model	Appearance	
⑤	For 200V Servomotors SGLGW-30A@@@B@D SGLGW-40A@@@B@D SGLGW-60A@@@B@D SGLFW-20A@@@A@D SGLFW-35A@@@A@D	3 m	R88A-CAWA003S-DE	
		5 m	R88A-CAWA005S-DE	
		10 m	R88A-CAWA010S-DE	
		15 m	R88A-CAWA015S-DE	
		20 m	R88A-CAWA020S-DE	
	For 200V Servomotors SGLGW-90A200B@D SGLFW-50A@@@B@D SGLFW-1ZA200B@D	3 m	R88A-CAWB003S-DE	
		5 m	R88A-CAWB005S-DE	
		10 m	R88A-CAWB010S-DE	
		15 m	R88A-CAWB015S-DE	
		20 m	R88A-CAWB020S-DE	
	For 400V Servomotors SGLFW-35D@@@A@D SGLFW-50D200@D SGLTW-35D170H@D SGLTW-50D170H@D	3 m	R88A-CAWK003S-DE	
		5 m	R88A-CAWK005S-DE	
		10 m	R88A-CAWK010S-DE	
		15 m	R88A-CAWK015S-DE	
		20 m	R88A-CAWK020S-DE	
	For 400V Servomotors SGLFW-50D380@D SGLFW-1ZD@@@B@D SGLTW-35D320H@D SGLTW-50D320H@D	3 m	R88A-CAWL003S-DE	
		5 m	R88A-CAWL005S-DE	
		10 m	R88A-CAWL010S-DE	
		15 m	R88A-CAWL015S-DE	
		20 m	R88A-CAWL020S-DE	
For 400V Servomotors SGLTW-40D@@@B@ SGLTW-80D@@@B@	3 m	R88A-CAWD003S-E		
	5 m	R88A-CAWD005S-E		
	10 m	R88A-CAWD010S-E		
	15 m	R88A-CAWD015S-E		
	20 m	R88A-CAWD020S-E		

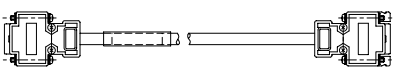
Serial converter Cable to Servo Drive

Symbol	Specifications	Model	Appearance	
⑥	Sigma-II Drive to Serial Converter Cable	3 m	JZSP-CLP70-03-E	
		5 m	JZSP-CLP70-05-E	
		10 m	JZSP-CLP70-10-E	
		15 m	JZSP-CLP70-15-E	
		20 m	JZSP-CLP70-20-E	
	XtraDrive Drive to Serial Converter Cable	3 m	XD-CLP70-03-E	
		5 m	XD-CLP70-05-E	
		10 m	XD-CLP70-10-E	
		15 m	XD-CLP70-15-E	
		20 m	XD-CLP70-20-E	

Linear Scale Cable to Serial Converter

Symbol	Specifications	Model	Appearance	
⑦	Extension cable for Renishaw Linear Scale to Serial converter. (Connector DB-15) (The extension cable is optional)	1 m	JZSP-CLL00-01-E	
		3 m	JZSP-CLL00-03-E	
		5 m	JZSP-CLL00-05-E	
		10 m	JZSP-CLL00-10-E	
		15 m	JZSP-CLL00-15-E	
	Extension cable for Heidenhain Linear Scale to Serial converter (Connector DB-15) (When a Heidenhain scale is used the extension cable is required)	1 m	JZSP-CLL20-01-E	
		3 m	JZSP-CLL20-03-E	
		5 m	JZSP-CLL20-05-E	
		10 m	JZSP-CLL20-10-E	
		15 m	JZSP-CLL20-15-E	

Hall Sensor Cable to Serial Converter

Symbol	Specifications	Model	Appearance	
⑧	Extension cable for Linear Scale to serial converter (The extension cable is optional)	1 m	JZSP-CLL10-01-E	
		3 m	JZSP-CLL10-03-E	
		5 m	JZSP-CLL10-05-E	
		10 m	JZSP-CLL10-10-E	
		15 m	JZSP-CLL10-15-E	

Connectors

Specification	Model
Control I/O connector (For CN1)	R88A-CNU11C or JZSP-CKI9
Sigma-II Drive Encoder connector (For CN2)	JZSP-CMP9-1
XtraDrive Encoder connector (For CN2)	DE9406973
Hypertac Power Connector IP67 (For 200V Motor Coils SGL@W-@@@A@@@@@D)	SPOC-06K-FSDN169
Hypertac Power Connector IP67 (For 400V Motor coils SGL@W-@@@D@@@@@D)	LPRA-06B-FRBN170
Military Power connector IP67 (For Motor coils SGLTW-40@/80@)	MS3108E22-22S

Dimensioning Software

Specifications	Model
SigmaSize	MOTION TOOLS CD

ServoDrive Accesories

Note: Refer to the Sigma-II ServoSystem or XtraDrive chapter for details.