SGLFW2 Models

Model Designations

Moving Coil

S G L F W2 - 30 A 070 A T 1 H

Linear Σ series linear servomotors

1st digit | 2nd digits | 3rd+4th digits | 5th digit | 6th+7th+8th digits | 9th digit | 10th digit | 11th digit | 12th digit

1st digit Servomotor Type

Code	Specification
F	With F-type iron core

2nd digit Moving Coil/Magnetic Way

Code	Specification
W2	Moving coil

3rd+4th digits Magnet Height

Code	Specification
30	30 mm
45	45 mm
90	90 mm
1D	135 mm

5th digit Power Supply Voltage

Code	Specification
A	200 VAC

6th+7th+8th digits Length of Moving Coil

Code	Specification
070	70 mm
120	125 mm
200	205 mm
230	230 mm
380	384 mm
560	563 mm

9th digit Design Revision Order

A

10th digit Sensor Specification

Code	Specification
S	With polarity sensor(hall sensor) and thermal protector
T	Without polarity sensor(hall sensor), with thermal protector

11th digit Cooling Method

Code	Specification
1	Self-cooled
L	Water-cooled*1

12th digit Connector for Servomotor Main Circuit Cable and Cable Length

Code	Specification
None	Connector from Tyco Electronics Japan G.K., 300 mm
F	Loose lead wires with no connector, 300 mm
G	Loose lead wires with no connector, 500 mm
H	Connector from Tyco Electronics Japan G.K., 500 mm

*1 Contact your Yaskawa representative for details on water-cooled models.

Note:

This information is provided to explain model numbers. It is not meant to imply that models are available for all combinations of codes.

Magnetic Way

S G L F M 2 - 30 270 A

Linear Σ series linear servomotors

1st digit | 2nd digits | 3rd+4th digits | 5th+6th+7th digits | 8th digit

1st digit Servomotor Type

(Same as for the moving coil.)

2nd digit Moving Coil/Magnetic Way

Code	Specification
M2	Magnetic way

3rd+4th digits Magnet Height

(Same as for the moving coil.)

5th+6th+7th digits Length of Magnetic Way

Code	Specification
270	270 mm
306	306 mm
450	450 mm
510	510 mm
630	630 mm
714	714 mm

8桁目 Design Revision Order

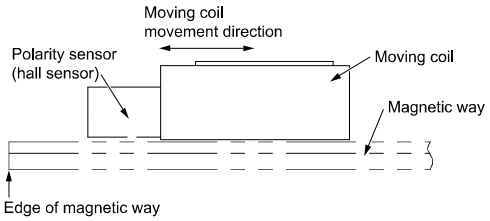
A

Precautions on Moving Coils with Polarity Sensors (Hall Sensors)

When you use a moving coil with a polarity sensor (hall sensor), the magnetic way must cover the bottom of the polarity sensor (hall sensor). Refer to the example that shows the correct installation.

When determining the length of the moving coil's stroke or the length of the magnetic way, consider the total length (L) of the moving coil and the polarity sensor (hall sensor). Refer to the following table.

<Correct>



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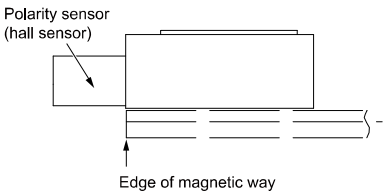
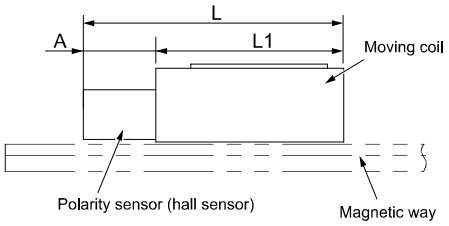


■ Total Length of Moving Coil with Polarity Sensor (Hall Sensor)



Moving Coil Model SGLFW2-	Length of Moving Coil L1 [mm]	Length of Polarity Sensor (Hall Sensor) A [mm]	Total Length L [mm]
30A070AS	70	27	97
30A120AS	125		152
30A230AS	230		257
45A200AS	205	32	237
45A380AS	384		416
90A200AS	205	32	237
90A380AS	384		416
90A560AS	563		595
1DA380AS	384	32	416
1DA560AS	563		595

Ratings and Specifications

Specifications

Linear Servomotor Moving Coil Model SGLFW2-		30A			45A		90A			1DA	
		070A□	120A□	230A□	200A□	380A□	200A□	380A□	560A□	380A□	560A□
Time Rating		Continuous									
Thermal Class		B									
Insulation Resistance		500 VDC, 10 MΩ min.									
Withstand Voltage		1,500 VAC for 1 minute									
Excitation		Permanent magnet									
Cooling Method		Self-cooled and water-cooled *1*									
Protective Structure		IP00									
Environmental Conditions	Surrounding Air Temperature	0°C to 40°C (with no freezing)									
	Surrounding Air Humidity	20% to 80% relative humidity (with no condensation)									
	Installation Site	Must be indoors and free of corrosive and explosive gases. Must be well-ventilated and free of dust and moisture. Must facilitate inspection and cleaning. Must have an altitude of 1,000 m or less. Must be free of strong magnetic fields.									
Shock Resistance	Impact Acceleration	196 m/s^2									
	Number of Impacts	2 times									
Vibration Resistance	Vibration Acceleration	49 m/s^2 (the vibration resistance in three directions, vertical, side-to-side, and front-to-back)									

*1 Contact your Yaskawa representative for details on water-cooled models.

Ratings

Linear Servomotor Moving Coil Model SGLFW2-		30A				45A	
		070A□1	120A□1	230A□1		200A□1	380A□1	
Rated Speed (Reference Speed during Speed Control) *1*	m/s	4.0	4.0	4.0		4.0	4.0	
Maximum speed *1* *2*	m/s	5.0	5.0	5.0		4.5	4.5	
Rated Force *1*	N	45	90	180	170	280	560	
Maximum Force *1*	N	135	270	540	500	840	1680	1500
Rated Current *1*	Arms	1.4	1.5	2.9	2.8	4.4	8.7	
Maximum Current *1*	Arms	5.3	5.2	10.5	9.3	16.4	32.7	27.5
Moving Coil Mass	kg	0.50	0.90	1.7		2.9	5.5	
Force Constant	N/Arms	33.3	64.5	64.5		67.5	67.5	
BEMF Constant	Vrms/(m/s)/phase	11.1	21.5	21.5		22.5	22.5	

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Linear Servomotor Moving Coil Model SGLFW2-		30A				45A		
		070A□1	120A□1	230A□1		200A□1	380A□1	
Motor Constant	N/√W	11.3	17.3	24.4		36.9	52.2	
Electrical Time Constant	ms	7.6	7.3	7.3		19	19	
Mechanical Time Constant	ms	3.9	3.0	2.9		2.1	2.0	
Thermal Resistance (with Heat Sink)	K/W	2.62	1.17	0.79		0.60	0.44	
Thermal Resistance (without Heat Sink)	K/W	11.3	4.43	2.55		2.64	1.49	
Magnetic Attraction	N	200	630	1260		2120	4240	
Maximum Allowable Payload	kg	5.6	9.4	34	10	58	110	95
Maximum Allowable Payload (With External Regenerative Resistor)	kg	5.6	11	34	20	64	110	110
Combined Magnetic Way, SGLFM2-		30□□□A				45□□□A		
Combined Serial Converter Unit, JZDP-□□□□-		628	629	630		631	632	
Applicable SERVOPACKs	SGDXS-	1R6A		3R8A	2R8A	5R5A	180A	120A
	SGDXW-	1R6A		-	2R8A	5R5A	-	

*1 These values are for operation in combination with a SERVOPACK when the temperature of the armature winding is 100°C. The values for other items are at 20°C. These are typical values.

*2 The rated forces are the continuous allowable force values at a surrounding air temperature of 40°C with an aluminum heat sink of the dimensions given in the following table.
<Heat Sink Dimensions>

- 150 mm × 100 mm × 10 mm: SGLFW2-30A070A
- 254 mm × 254 mm × 25 mm: SGLFW2-30A120A and 30A230A
- 400 mm × 500 mm × 25 mm: SGLFW2-45A200A and 45A380A

Linear Servomotor Moving Coil Model SGLFW2-		90A			1DA	
		200A□1	380A□1	560A□1	380A□1	560A□1
Rated Speed (Reference Speed during Speed Control) *1	m/s	4.0	4.0	4.0	2.0	2.0
Maximum speed *1	m/s	4.0	4.0	4.0	2.5	2.5
Rated Force *1 *2	N	560	1120	1680	1680	2520
Maximum Force *1	N	1680	3360	5040	5040	7560
Rated Current *1	Arms	7.2	14.4	21.6	14.4	21.6
Maximum Current *1	Arms	26.9	53.9	80.8	53.9	80.8
Moving Coil Mass	kg	5.3	10.1	14.9	14.6	21.5
Force Constant	N/Arms	82.0	82.0	82.0	123	123
BEMF Constant	Vrms/(m/s)/phase	27.3	27.3	27.3	41.0	41.0
Motor Constant	N/√W	58.1	82.2	101	105	129
Electrical Time Constant	ms	24	23	24	25	25
Mechanical Time Constant	ms	1.6	1.5	1.5	1.3	1.3

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Linear Servomotor Moving Coil Model SGLFW2-		90A			1DA	
		200A□1	380A□1	560A□1	380A□1	560A□1
Thermal Resistance (with Heat Sink)	K/W	0.45	0.21	0.18	0.18	0.12
Thermal Resistance (without Heat Sink)	K/W	1.81	1.03	0.72	0.79	0.55
Magnetic Attraction	N	4240	8480	12700	12700	19100
Maximum Allowable Payload	kg	130	160	360	690	1000
Maximum Allowable Payload (With External Regenerative Resistor)	kg	140	290	440	710	1000
Combined Magnetic Way, SGLFM2-		90□□□A			1D□□□A	
Combined Serial Converter Unit, JZDP-□□□□-		633	634	648	649	650
Applicable SERVOPACKs	SGDXS-	120A	200A	330A	200A	330A
	SGDXW-	-				

*1 These values are for operation in combination with a SERVOPACK when the temperature of the armature winding is 100°C. The values for other items are at 20°C. These are typical values.

*2 The rated forces are the continuous allowable force values at a surrounding air temperature of 40°C with an aluminum heat sink of the dimensions given in the following table.
<Heat Sink Dimensions>

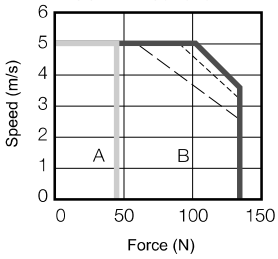
- 400 mm × 500 mm × 25 mm: SGLFW2-90A200A
- 609 mm × 762 mm × 40 mm: SGLFW2-90A380A
- 900 mm × 762 mm × 40 mm: SGLFW2-90A560A and 1DA380A
- 1400 mm × 900 mm × 40 mm: SGLFW2-1DA560A

Force-Motor Speed Characteristics

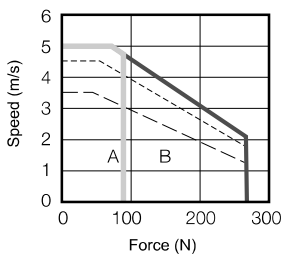
A : Continuous duty zone
B : Continuous duty zone

——— (solid lines): With three-phase 200-V input
- - - - - - - (dotted lines): With single-phase 200-V input
— — — (dashed lines): With single-phase 100-V input

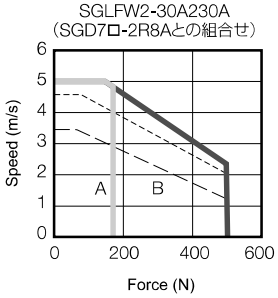
SGLFW2-30A070A



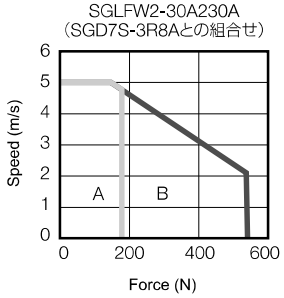
SGLFW2-30A120A



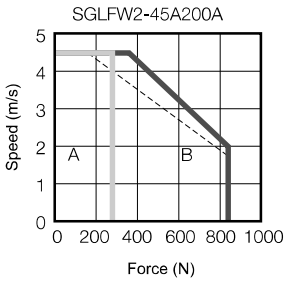
SGLFW2-30A230A
(SGD7□-2R8Aとの組合せ)



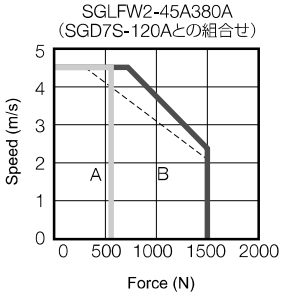
SGLFW2-30A230A
(SGD7S-3R8Aとの組合せ)



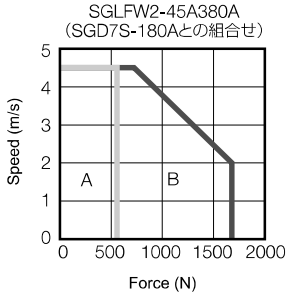
SGLFW2-45A200A



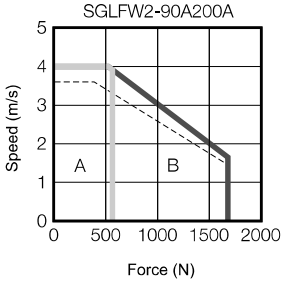
SGLFW2-45A380A
(SGD7S-120Aとの組合せ)



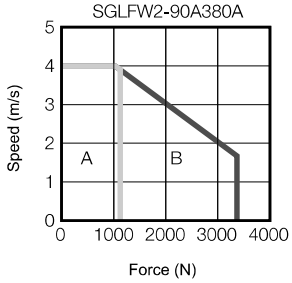
SGLFW2-45A380A
(SGD7S-180Aとの組合せ)



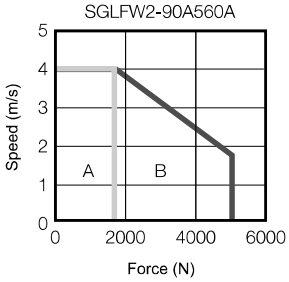
SGLFW2-90A200A



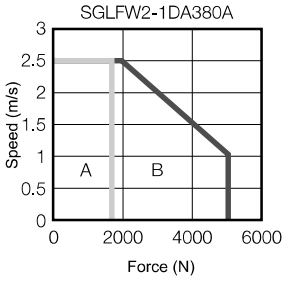
SGLFW2-90A380A



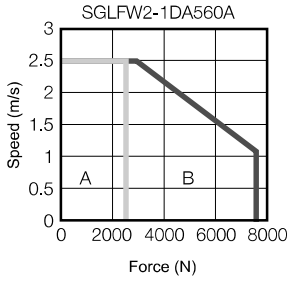
SGLFW2-90A560A



SGLFW2-1DA380A



SGLFW2-1DA560A

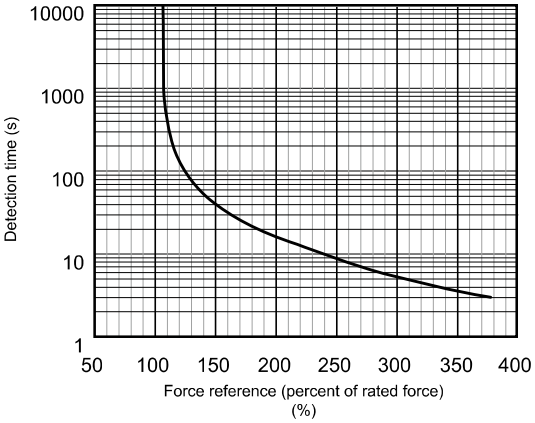


Note:

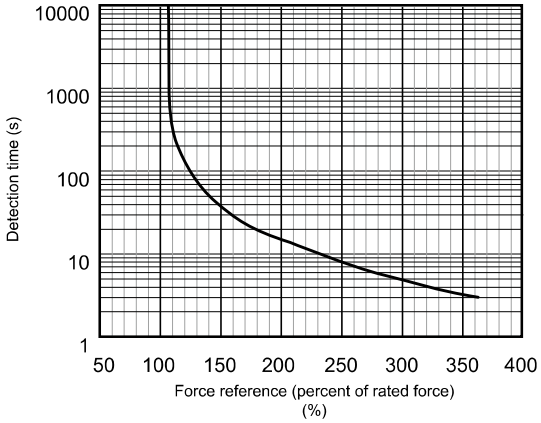
1. These values are for operation in combination with a SERVOPACK when the temperature of the armature winding is 100°C. These are typical values.
2. The characteristics in the intermittent duty zone depend on the power supply voltage.
3. If the effective force is within the allowable range for the rated force, the servomotor can be used within the intermittent duty zone.
4. If you use a servomotor main circuit cable that exceeds 20 m, the intermittent duty zone in the torque-motor speed characteristics will become smaller because the voltage drop increases.

Servomotor Overload Protection Characteristics

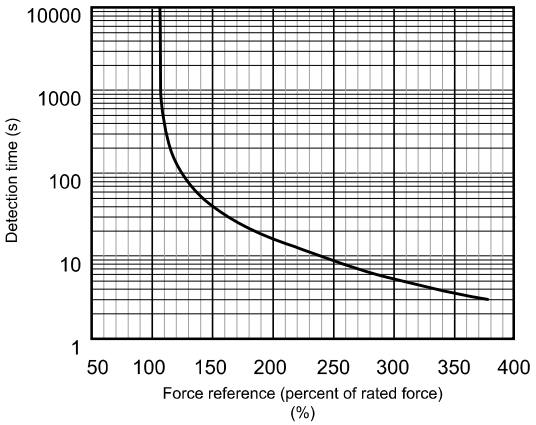
SGLFW2-30A070A



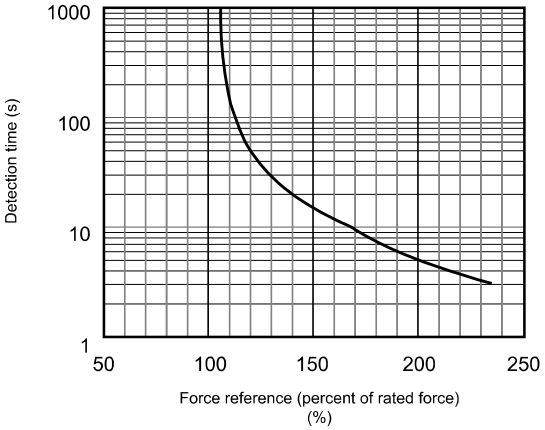
SGLFW2-30A120A and -230A



SGLFW2-45A, -90A□1, and -1DA□1



SGLFW2-90A□L



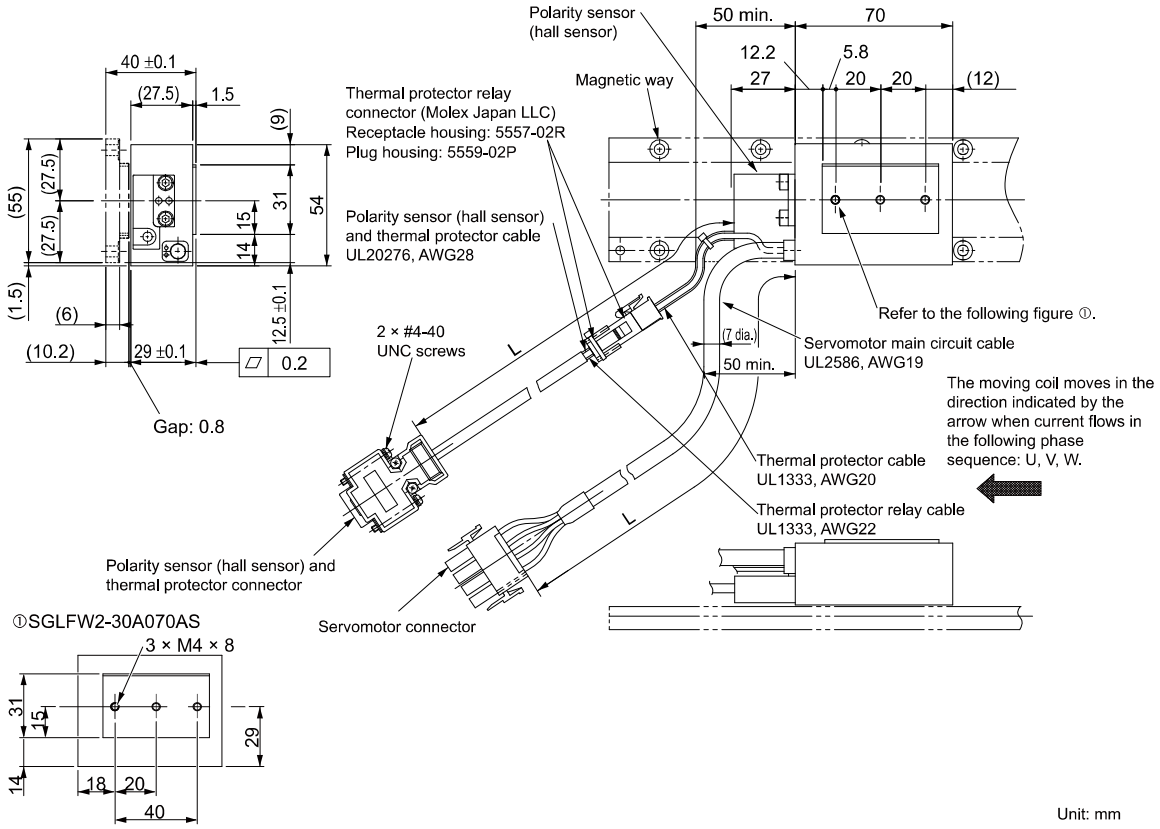
Note:

The above overload protection characteristics do not mean that you can perform continuous duty operation with an output of 100% or higher. Use the servomotor so that the effective force remains within the continuous duty zone given in *Force-Motor Speed Characteristics on page 329*.

External Dimensions

SGLFW2-30

■ Moving Coils with Polarity Sensors (Hall Sensors): SGLFW2-30A070AS

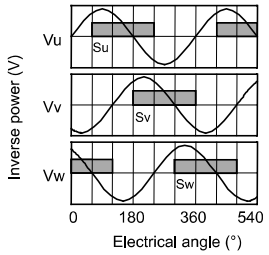


Unit: mm

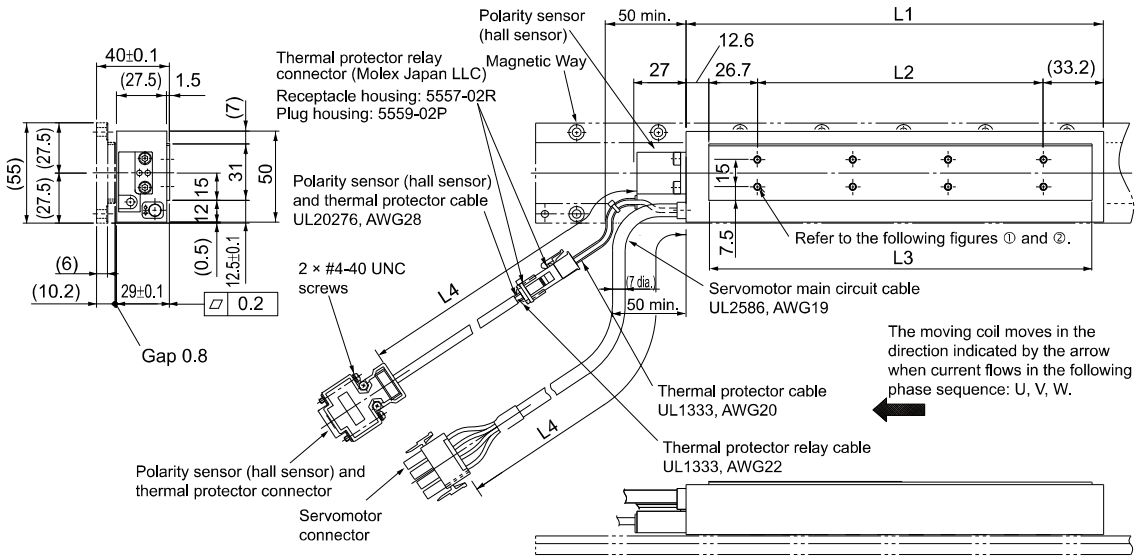
Moving Coil Model SGLFW2-	L	Approx. Mass [kg]
30A070AS1	300 ±30	0.5
30A070AS1H	500 ±50	0.5

◆ Polarity Sensor (Hall Sensor) Output Signal

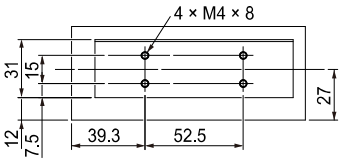
The figure on the right shows the relationship between the Su, Sv, and Sw polarity sensor (hall sensor) output signals and the inverse power of each motor phase Vu, Vv, and Vw when the moving coil moves in the direction indicated by the arrow in the dimensional drawings of the moving coil.



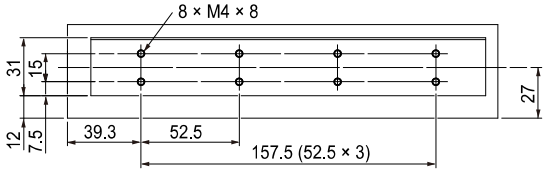
■ Moving Coils with Polarity Sensors (Hall Sensors): SGLFW2-30A□□□AS



①SGLFW2-30A120AS



②SGLFW2-30A230AS

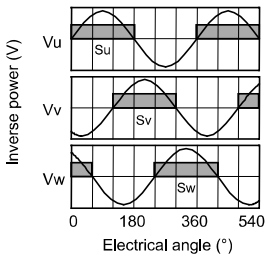


Unit: mm

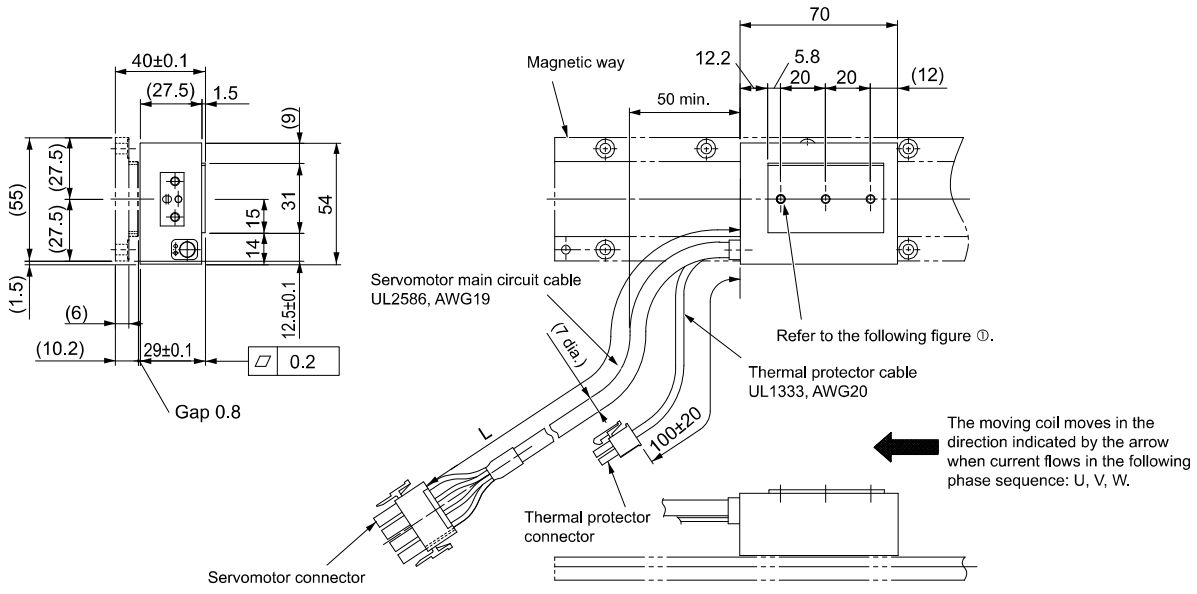
Moving Coil Model SGLFW2-	L1	L2	L3	L4	Approx. Mass [kg]
30A120AS1	125	52.5	105.9	300 ±30	0.9
30A120AS1H				500 ±50	
30A230AS1	230	157.5	210.9	300 ±30	1.7
30A230AS1H				500 ±50	

◆ Polarity Sensor (Hall Sensor) Output Signal

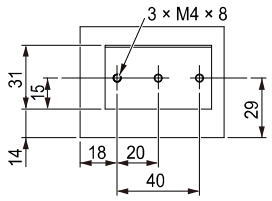
The figure on the right shows the relationship between the Su, Sv, and Sw polarity sensor (hall sensor) output signals and the inverse power of each motor phase Vu, Vv, and Vw when the moving coil moves in the direction indicated by the arrow in the dimensional drawings of the moving coil.



■ Moving Coil without Polarity Sensor (Hall Sensor): SGLFW2-30A070AT



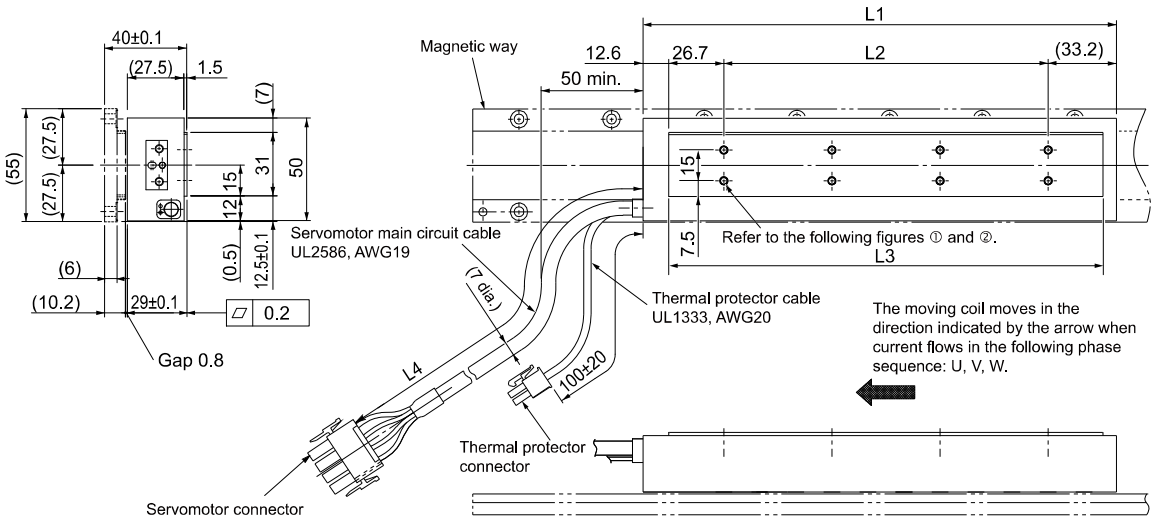
①SGLFW2-30A070AT

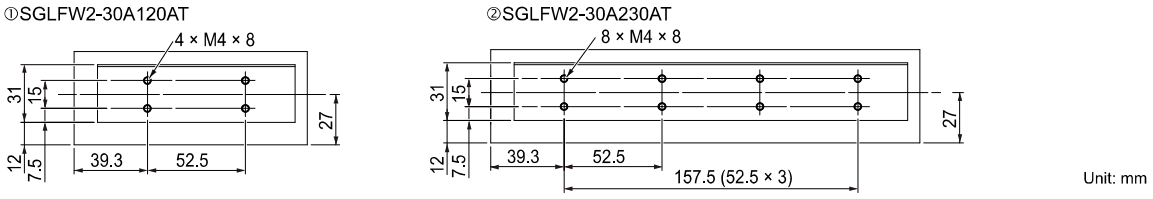


Unit: mm

Moving Coil Model SGLFW2-	L	Approx. Mass [kg]
30A070AT1	300 ±30	0.5
30A070AT1H	500 ±50	0.5

■ Moving Coil without Polarity Sensor (Hall Sensor): SGLFW2-30A□□□AT

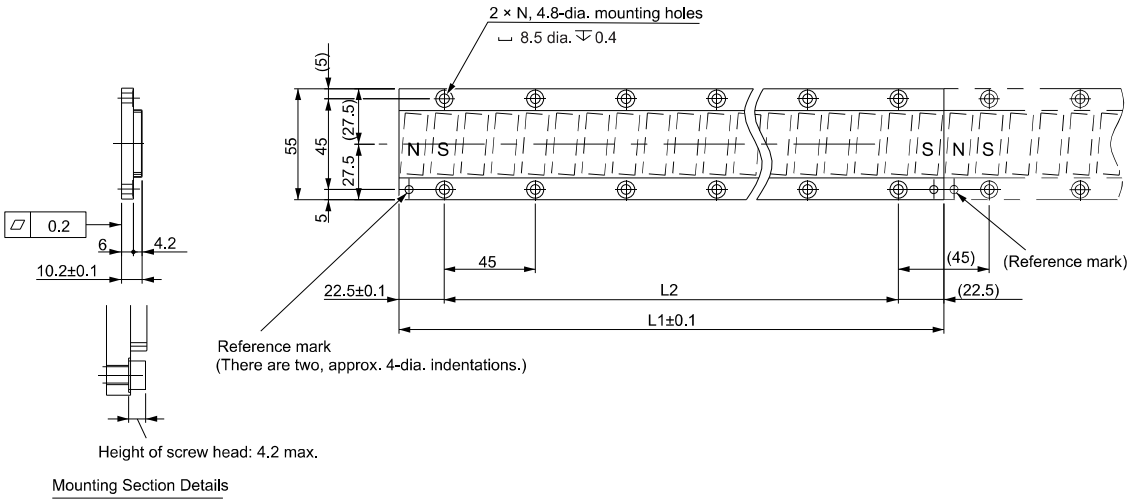




Unit: mm

Moving Coil Model SGLFW2-	L1	L2	L3	L4	Approx. Mass [kg]
30A120AT1	125	52.5	105.9	300 ±30	0.9
30A120AT1H				500 ±50	
30A230AT1	230	157.5	210.9	300 ±30	1.7
30A230AT1H				500 ±50	

■ Magnetic Ways: SGLFM2-30□□□A



Unit: mm

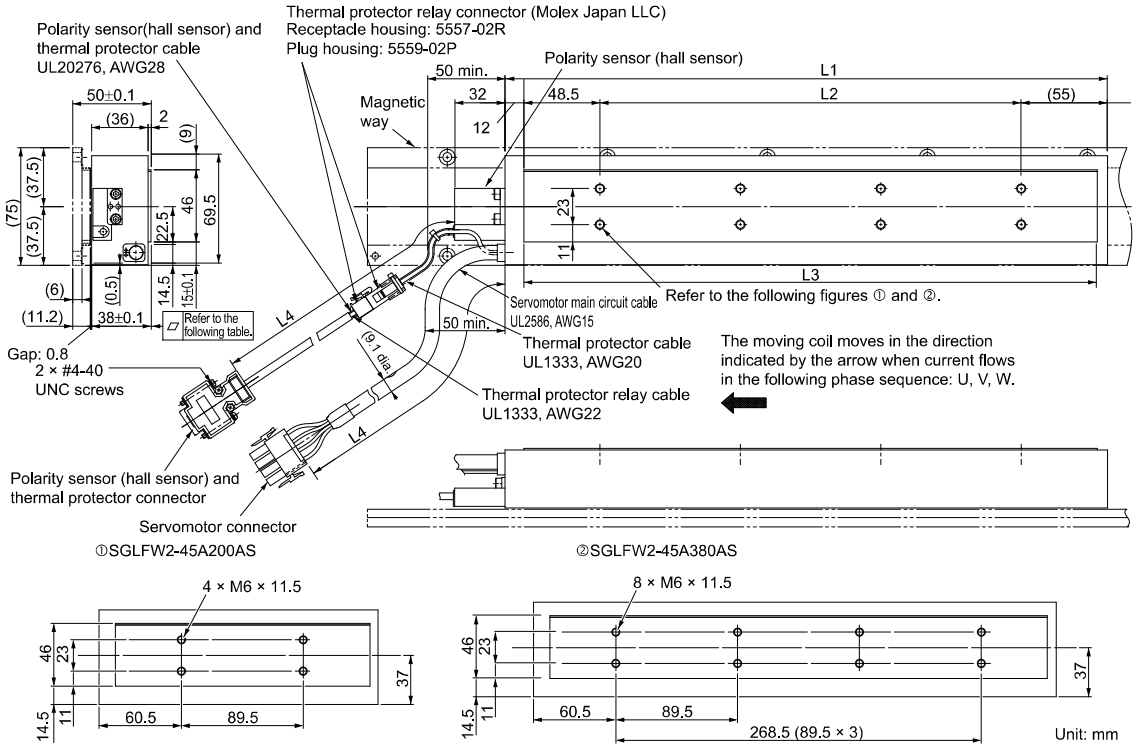
Note:

More than one magnetic way can be connected. Connect the magnetic ways so that the reference marks on them are aligned in the same direction as shown in the figure.

Magnetic Way Model SGLFM2-	L1± 0.1	L2	N	Approx. Mass [kg]
30270A	270	225 (45 × 5)	6	0.9
30450A	450	405 (45 × 9)	10	1.5
30630A	630	585 (45 × 13)	14	2.0

SGLFW2-45

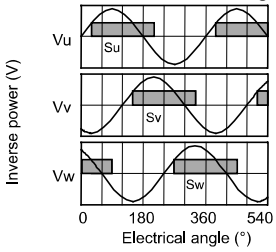
■ Moving Coils with Polarity Sensors (Hall Sensors): SGLFW2-45A□□□AS



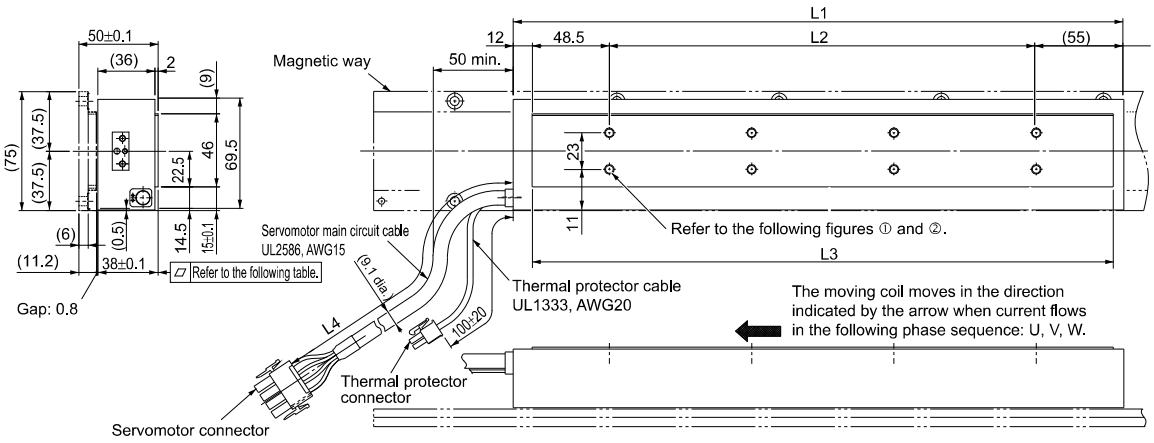
Moving Coil Model SGLFW2-	L1	L2	L3	L4	Flatness	Approx. Mass [kg]
45A200AS1	205	89.5	187	300 ±30	0.2	2.9
45A200AS1H				500 ±50		
45A380AS1	384	268.5	365.5	300 ±30	0.3	5.5
45A380AS1H				500 ±50		

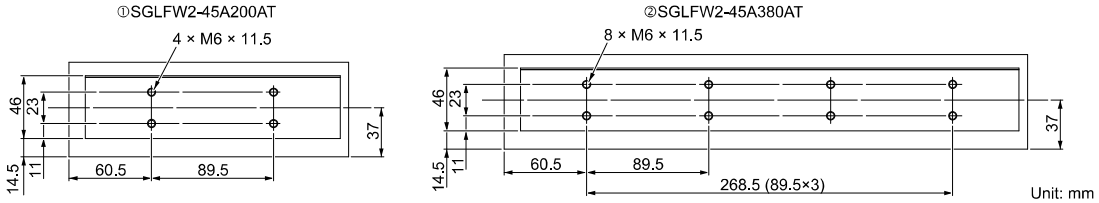
◆ Polarity Sensor (Hall Sensor) Output Signal

The figure on the right shows the relationship between the Su, Sv, and Sw polarity sensor (hall sensor) output signals and the inverse power of each motor phase Vu, Vv, and Vw when the moving coil moves in the direction indicated by the arrow in the dimensional drawings of the moving coil.



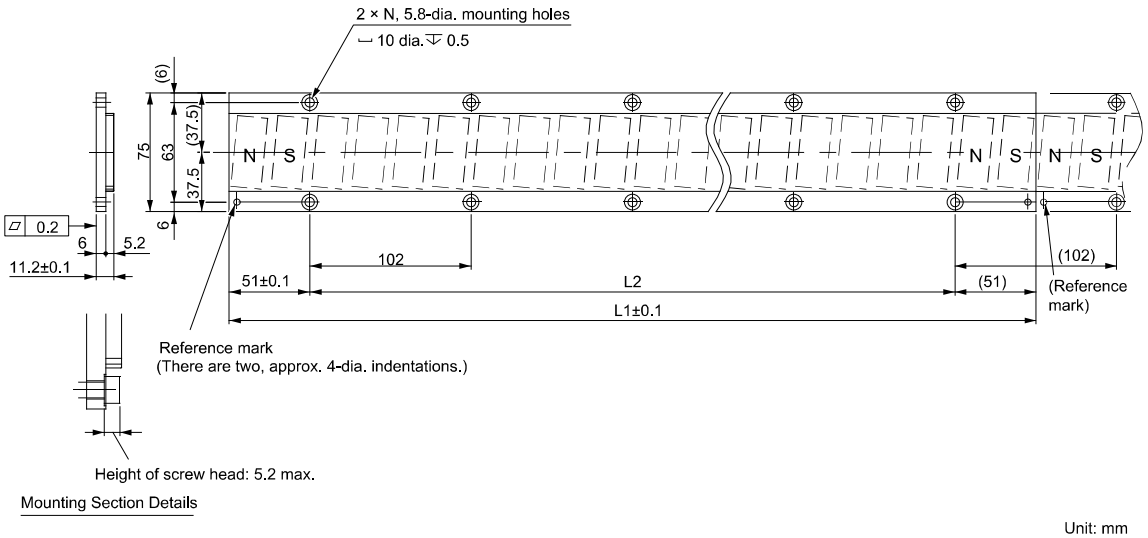
■ Moving Coils without Polarity Sensors (Hall Sensors): SGLFW2-45A□□□AT





Moving Coil Model SGLFW2-	L1	L2	L3	L4	Flatness	Approx. Mass [kg]
45A200AT1	205	89.5	187	300 ±30	0.2	2.9
45A200AT1H				500 ±50		
45A380AT1	384	268.5	365.5	300 ±30	0.3	5.5
45A380AT1H				500 ±50		

■ Magnetic Ways: SGLFM2-45□□□A



Unit: mm

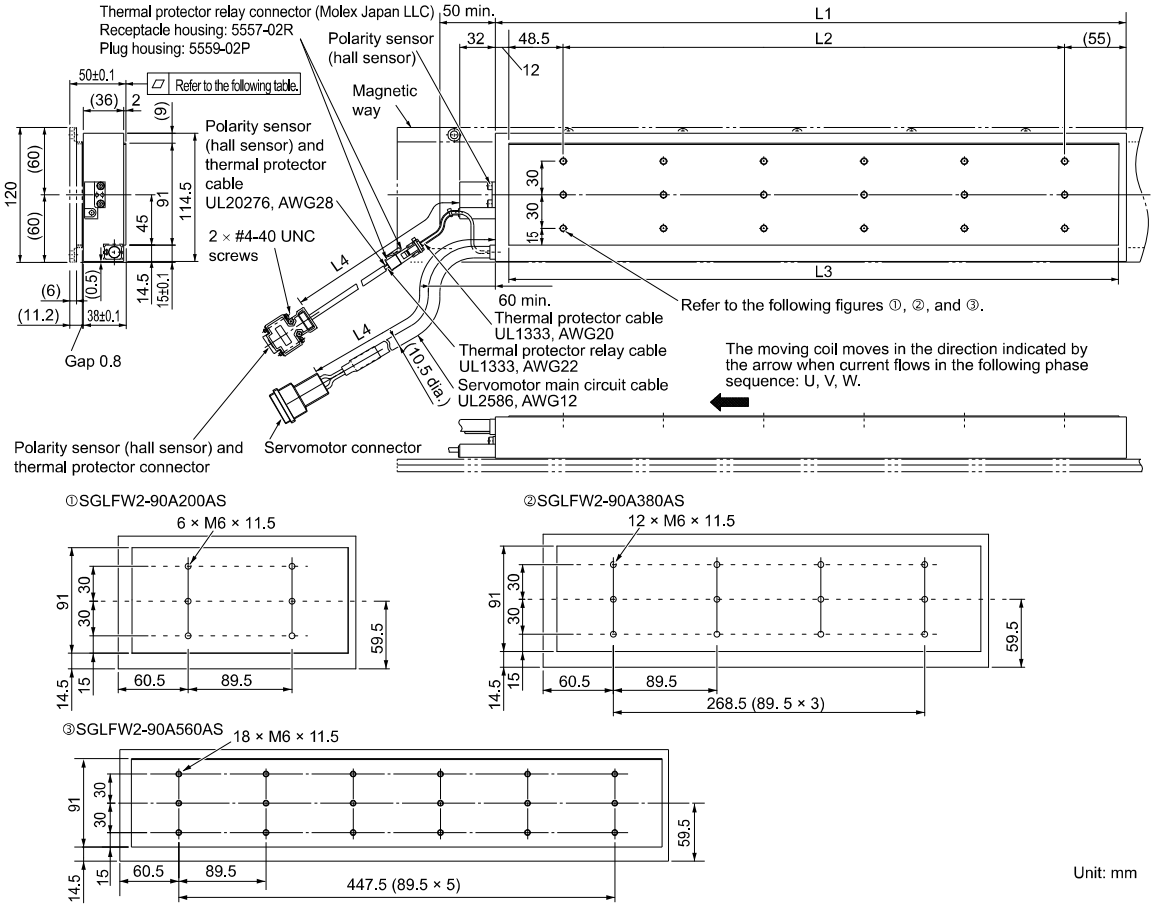
Note:

More than one magnetic way can be connected. Connect the magnetic ways so that the reference marks on them are aligned in the same direction as shown in the figure.

Magnetic Way Model SGLFM2-	L1± 0.1	L2	N	Approx. Mass [kg]
45306A	306	204 (102 × 2)	3	1.5
45510A	510	408 (102 × 4)	5	2.5
45714A	714	612 (102 × 6)	7	3.4

SGLFW2-90

■ Moving Coils with Polarity Sensors (Hall Sensors): SGLFW2-90A□□□AS1

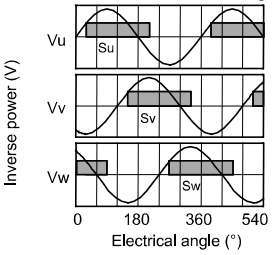


Unit: mm

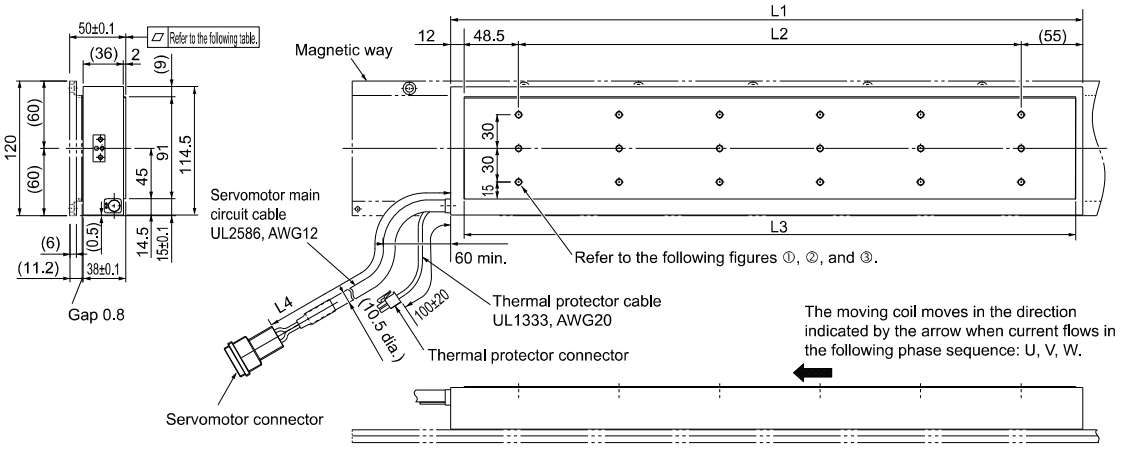
Moving Coil Model SGLFW2-	L1	L2	L3	L4	Flatness	Approx. Mass [kg]
90A200AS1	205	89.5	187	300 ±30	0.2	5.3
90A200AS1H				500 ±50		
90A380AS1	384	268.5	365.5	300 ±30	0.3	10.1
90A380AS1H				500 ±50		
90A560AS1	563	447.5	544	300 ±30	0.3	14.9
90A560AS1H				500 ±50		

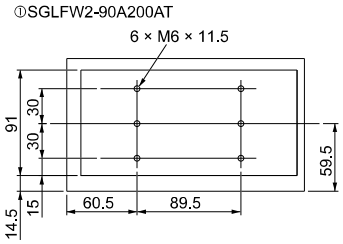
◆ Polarity Sensor (Hall Sensor) Output Signal

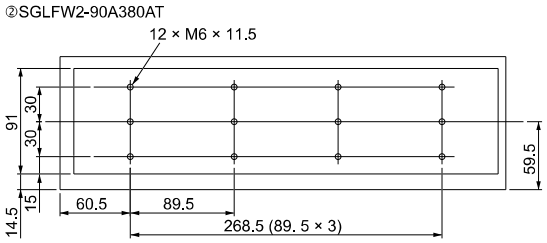
The figure on the right shows the relationship between the Su, Sv, and Sw polarity sensor (hall sensor) output signals and the inverse power of each motor phase Vu, Vv, and Vw when the moving coil moves in the direction indicated by the arrow in the dimensional drawings of the moving coil.

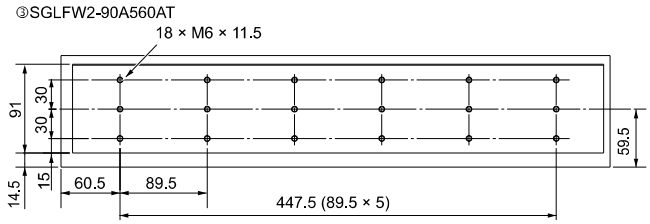


■ Moving Coils without Polarity Sensors (Hall Sensors): SGLFW2-90A□□□AT1





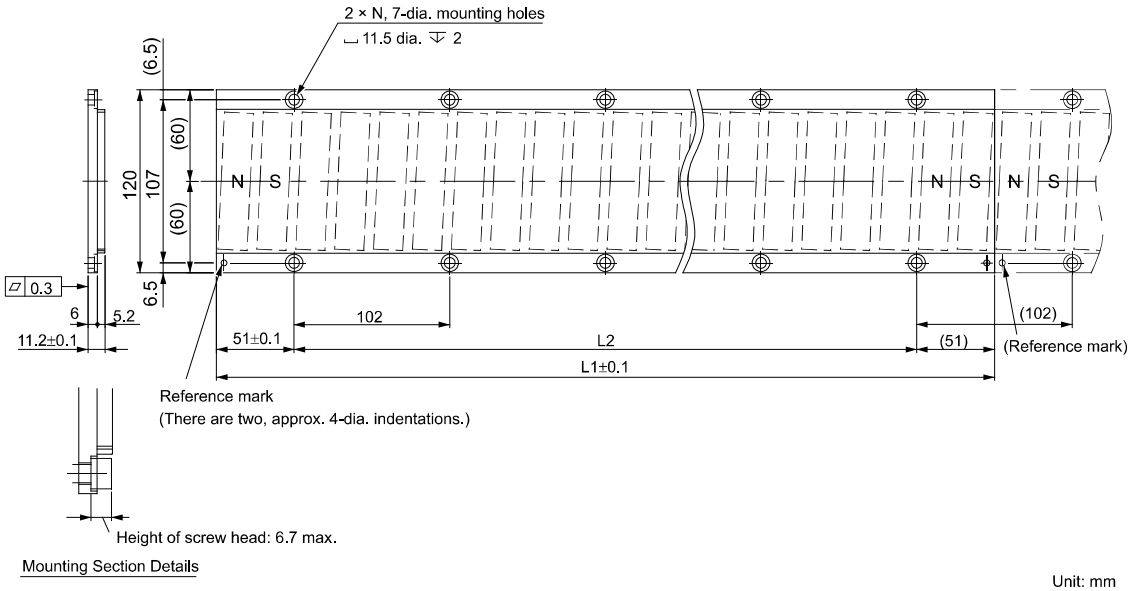




Unit: mm

Moving Coil Model SGLFW2-	L1	L2	L3	L4	Flatness	Approx. Mass [kg]
90A200AT1	205	89.5	187	300 ±30	0.2	5.3
90A200AT1H				500 ±50		
90A380AT1	384	268.5	365.5	300 ±30	0.3	10.1
90A380AT1H				500 ±50		
90A560AT1	563	447.5	544	300 ±30	0.3	14.9
90A560AT1H				500 ±50		

■ Magnetic Ways: SGLFM2-90□□□A



Unit: mm

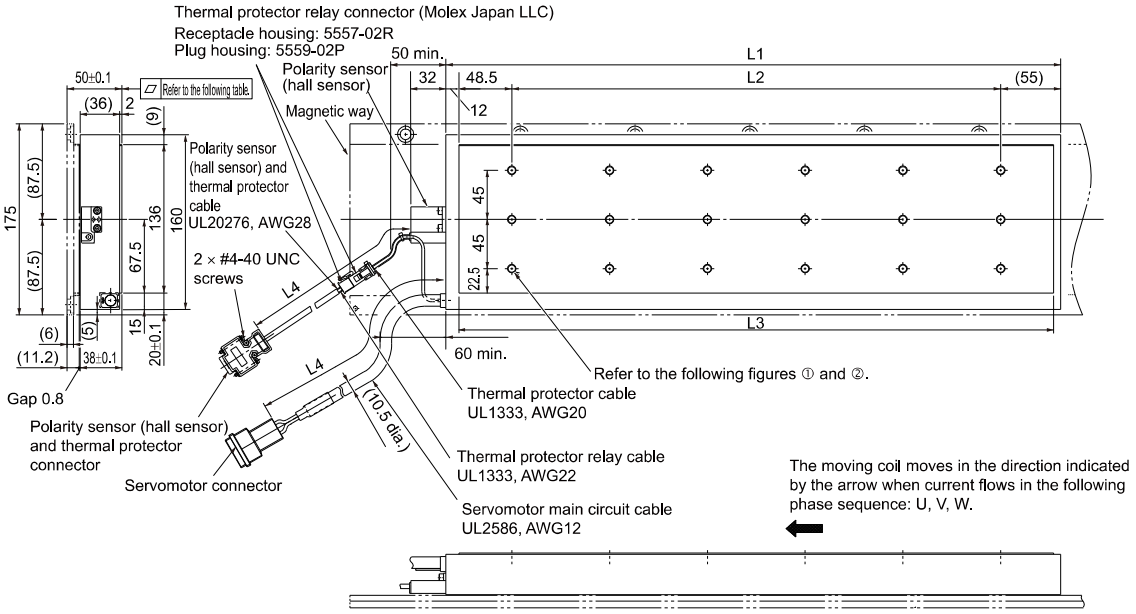
Note:

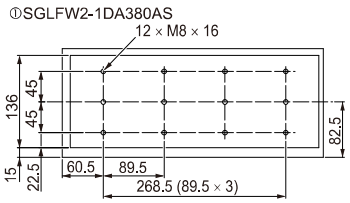
More than one magnetic way can be connected. Connect the magnetic ways so that the reference marks on them are aligned in the same direction as shown in the figure.

Magnetic Way Model SGLFM2-	L1± 0.1	L2	N	Approx. Mass [kg]
90306A	306	204 (102 × 2)	3	2.6
90510A	510	408 (102 × 4)	5	4.2
90714A	714	612 (102 × 6)	7	5.9

SGLFW2-1D

■ Moving Coil with Polarity Sensor (Hall Sensor): SGLFW2-1DA□□□AS1



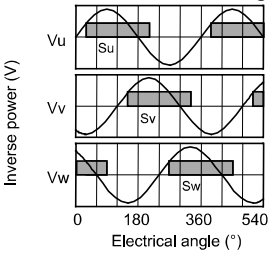


Unit: mm

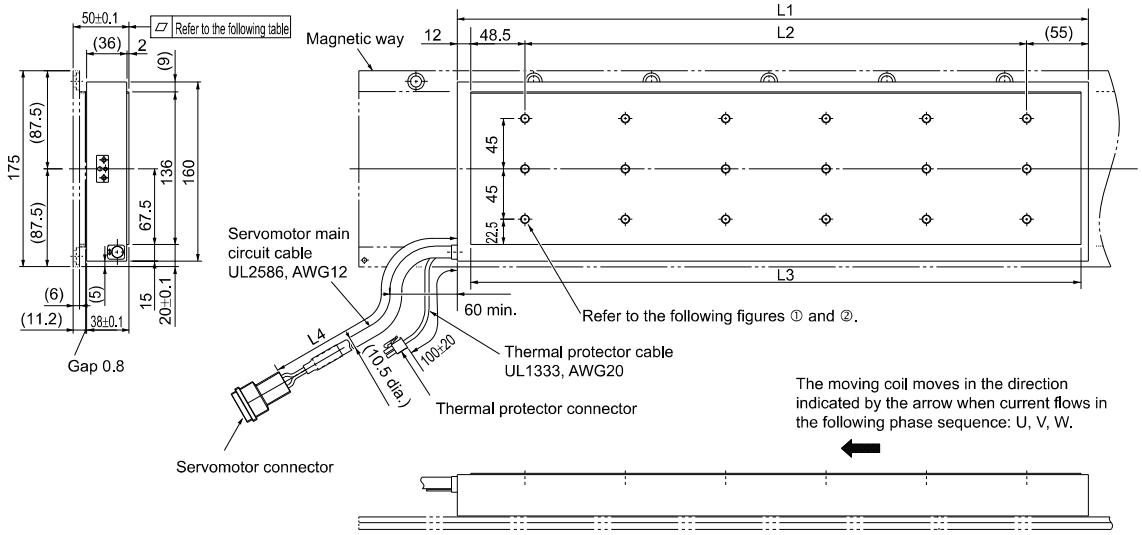
Moving Coil Model SGLFW2-	L1	L2	L3	L4	Flatness	Approx. Mass [kg]
1DA380AS1	384	268.5	365.5	300 ±30	0.3	14.6
1DA380AS1H				500 ±50		
1DA560AS1	563	447.5	544	300 ±30	0.3	21.5
1DA560AS1H				500 ±50		

◆ Polarity Sensor (Hall Sensor) Output Signal

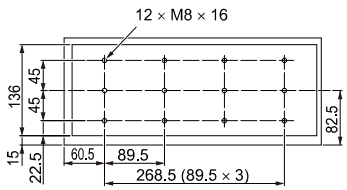
The figure on the right shows the relationship between the Su, Sv, and Sw polarity sensor (hall sensor) output signals and the inverse power of each motor phase Vu, Vv, and Vw when the moving coil moves in the direction indicated by the arrow in the dimensional drawings of the moving coil.



■ Moving Coil without Polarity Sensor (Hall Sensor): SGLFW2-1DA□□□AT1



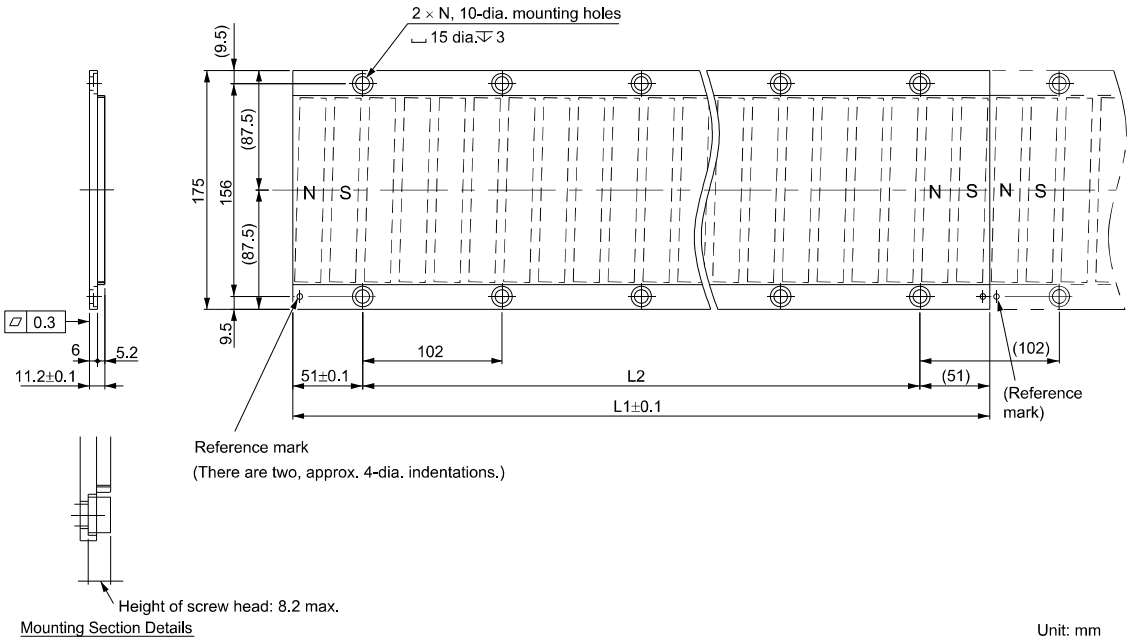
①SGLFW2-1DA380AT



Unit: mm

Moving Coil Model SGLFW2-	L1	L2	L3	L4	Flatness	Approx. Mass [kg]
1DA380AT1	384	268.5	365.5	300 ±30	0.3	14.6
1DA380AT1H				500 ±50		
1DA560AT1	563	447.5	544	300 ±30	0.3	21.5
1DA560AT1H				500 ±50		

■ Magnetic Ways: SGLFM2-1D□□□A



Note:

More than one magnetic way can be connected. Connect the magnetic ways so that the reference marks on them are aligned in the same direction as shown in the figure.

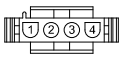
Magnetic Way Model SGLFM2-	L1± 0.1	L2	N	Approx. Mass [kg]
1D306A	306	204 (102 × 2)	3	3.7
1D510A	510	408 (102 × 4)	5	6.2
1D714A	714	612 (102 × 6)	7	8.6

Connector Specifications

SGLFW2-30

■ SGLFW2-30A070AS

· Servomotor Connector



1	Phase U	Red	3	Phase W	Blue
2	Phase V	White	4	FG	Green

Plug: 350779-1

Pins: 350218-3 or 350547-3 (No.1 to 3)

350654-1 or 350669-1 (No. 4)

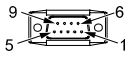
From Tyco Electronics Japan G.K.

Mating Connector

Cap: 350780-1

Socket: 350536-3 or 350550-3

· Polarity Sensor (Hall Sensor) and Thermal Protector Connector



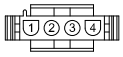
1	+5 V (thermal protector), +5 V (power supply)		
2	Su	6	Not used
3	Sv	7	
4	Sw	8	
5	0 V (power supply)	9	Thermal Protector

Pin connector: 17JE-23090-02 (D8C)-CG
From DDK Ltd.

Mating Connector
Socket connector: 17JE-13090-02 (D8C) A-CG
Studs: 17L-002C or 17L-002C1

■ SGLFW2-30A□□□AS

· Servomotor Connector

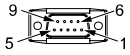


1	Phase U	Red	3	Phase W	Blue
2	Phase V	White	4	FG	Green

Plug: 350779-1
Pins: 350218-3 or 350547-3 (No.1 to 3)
350654-1 or 350669-1 (No. 4)
From Tyco Electronics Japan G.K.

Mating Connector
Cap: 350780-1
Socket: 350536-3 or 350550-3

· Polarity Sensor (Hall Sensor) and Thermal Protector Connector



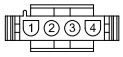
1	+5 V (thermal protector), +5 V (power supply)		
2	Su	6	Not used
3	Sv	7	
4	Sw	8	
5	0 V (power supply)	9	Thermal Protector

Pin connector: 17JE-23090-02 (D8C)-CG
From DDK Ltd.

Mating Connector
Socket connector: 17JE-13090-02 (D8C) A-CG
Studs: 17L-002C or 17L-002C1

■ SGLFW2-30A070AT

· Servomotor Connector



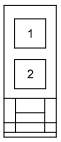
1	Phase U	Red	3	Phase W	Blue
2	Phase V	White	4	FG	Green

Plug: 350779-1

Pins: 350218-3 or 350547-3 (No.1 to 3)
350654-1 or 350669-1 (No. 4)
From Tyco Electronics Japan G.K.

Mating Connector
Cap: 350780-1
Socket: 350536-3 or 350550-3

• Thermal Protector Connector



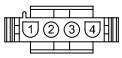
1	Thermal Protector
2	Thermal Protector

Receptacle housing: 5557-02R
Terminals: 5556T or 5556TL
From Molex Japan LLC

Mating Connector
Plug housing: 5559-02P
Terminals: 5558T or 5558TL

■ SGLFW2-30A□□□AT

· Servomotor Connector

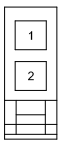


1	Phase U	Red	3	Phase W	Blue
2	Phase V	White	4	FG	Green

Plug: 350779-1
Pins: 350218-3 or 350547-3 (No.1 to 3)
350654-1 or 350669-1 (No. 4)
From Tyco Electronics Japan G.K.

Mating Connector
Cap: 350780-1
Socket: 350536-3 or 350550-3

• Thermal Protector Connector



1	Thermal Protector
2	Thermal Protector

Receptacle housing: 5557-02R
Terminals: 5556T or 5556TL
From Molex Japan LLC

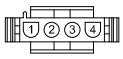
Mating Connector
Plug housing: 5559-02P

Terminals: 5558T or 5558TL

SGLFW2-45

■ SGLFW2-45A□□□AS

· Servomotor Connector



1	Phase U	Red	3	Phase W	Blue
2	Phase V	White	4	FG	Green

Plug: 350779-1

Pins: 350218-3 or 350547-3 (No.1 to 3)

350654-1 or 350669-1 (No. 4)

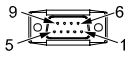
From Tyco Electronics Japan G.K.

Mating Connector

Cap: 350780-1

Socket: 350536-3 or 350550-3

• Polarity Sensor (Hall Sensor) and Thermal Protector Connector



1	+5 V (thermal protector), +5 V (power supply)		
2	Su	6	Not used
3	Sv	7	
4	Sw	8	
5	0 V (power supply)	9	Thermal Protector

Pin connector: 17JE-23090-02 (D8C)-CG

From DDK Ltd.

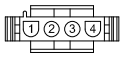
Mating Connector

Socket connector: 17JE-13090-02 (D8C) A-CG

Studs: 17L-002C or 17L-002C1

■ SGLFW2-45A□□□AT

· Servomotor Connector



1	Phase U	Red	3	Phase W	Blue
2	Phase V	White	4	FG	Green

Plug: 350779-1

Pins: 350218-3 or 350547-3 (No.1 to 3)

350654-1 or 350669-1 (No. 4)

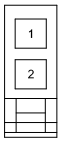
From Tyco Electronics Japan G.K.

Mating Connector

Cap: 350780-1

Socket: 350536-3 or 350550-3

• Thermal Protector Connector



1	Thermal Protector
2	Thermal Protector

Receptacle housing: 5557-02R
Terminals: 5556T or 5556TL
From Molex Japan LLC

Mating Connector
Plug housing: 5559-02P
Terminals: 5558T or 5558TL

SGLFW2-90

■ SGLFW2-90A□□□AS1

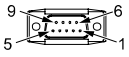
· Servomotor Connector

A1	Phase U	Red	B1	Phase W	Black
A2	Phase V	White	B2	FG	Green

Tab housing: 1-917808-2
Contacts: 917803-2 (A1, A2, and B1)
84695-1(B2)
From Tyco Electronics Japan G.K.

Mating Connector
Receptacle housing: 1-917807-2
Contacts: 179956-2

• Polarity Sensor (Hall Sensor) and Thermal Protector Connector



1	+5 V (thermal protector), +5 V (power supply)		
2	Su	6	Not used
3	Sv	7	
4	Sw	8	
5	0 V (power supply)	9	Thermal Protector

Pin connector: 17JE-23090-02 (D8C)-CG
From DDK Ltd.

Mating Connector
Socket connector: 17JE-13090-02 (D8C) A-CG
Studs: 17L-002C or 17L-002C1

■ SGLFW2-90A□□□AT1

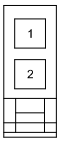
· Servomotor Connector

A1	Phase U	Red	B1	Phase W	Black
A2	Phase V	White	B2	FG	Green

Tab housing: 1-917808-2
Contacts: 917803-2 (A1, A2, and B1)
84695-1(B2)
From Tyco Electronics Japan G.K.

Mating Connector
Receptacle housing: 1-917807-2
Contacts: 179956-2

· Thermal Protector Connector



1	Thermal Protector
2	Thermal Protector

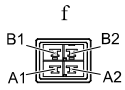
Receptacle housing: 5557-02R
Terminals: 5556T or 5556TL
From Molex Japan LLC

Mating Connector
Plug housing: 5559-02P
Terminals: 5558T or 5558TL

SGLFW2-1D

■ SGLFW2-1DA□□□AS1

· Servomotor Connector

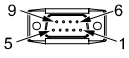


A1	Phase U	Red	B1	Phase W	Black
A2	Phase V	White	B2	FG	Green

Tab housing: 1-917808-2
Contacts: 917803-2 (A1, A2, and B1)
84695-1(B2)
From Tyco Electronics Japan G.K.

Mating Connector
Receptacle housing: 1-917807-2
Contacts: 179956-2

• Polarity Sensor (Hall Sensor) and Thermal Protector Connector



1	+5 V (thermal protector), +5 V (power supply)		
2	Su	6	Not used
3	Sv	7	
4	Sw	8	
5	0 V (power supply)	9	Thermal Protector

Pin connector: 17JE-23090-02 (D8C)-CG

From DDK Ltd.

Mating Connector
Socket connector: 17JE-13090-02 (D8C) A-CG
Studs: 17L-002C or 17L-002C1

■ SGLFW2-1DA□□□AT1

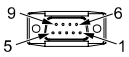
· Servomotor Connector

A1	Phase U	Red	B1	Phase W	Black
A2	Phase V	White	B2	FG	Green

Tab housing: 1-917808-2
Contacts: 917803-2 (A1, A2, and B1)
84695-1(B2)
From Tyco Electronics Japan G.K.

Mating Connector
Receptacle housing: 1-917807-2
Contacts: 179956-2

• Polarity Sensor (Hall Sensor) and Thermal Protector Connector



1	+5 V (thermal protector), +5 V (power supply)		
2	Su	6	Not used
3	Sv	7	
4	Sw	8	
5	0 V (power supply)	9	Thermal Protector

Pin connector: 17JE-23090-02 (D8C)-CG
From DDK Ltd.

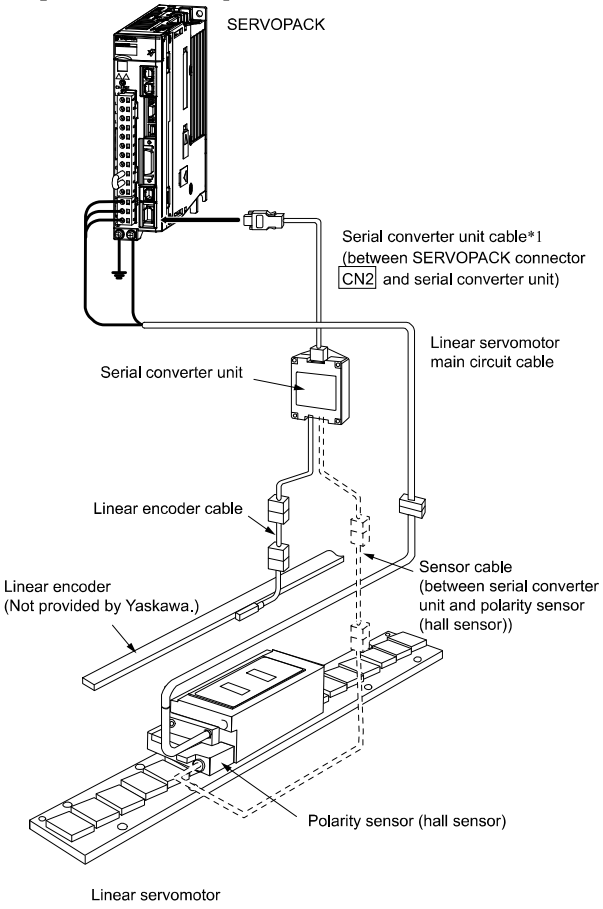
Mating Connector
Socket connector: 17JE-13090-02 (D8C) A-CG
Studs: 17L-002C or 17L-002C1

Selecting Cables

Cable Configurations

Refer to *Recommended Linear Encoders on page 382* to select a linear encoder.

Prepare the cable required for the encoder.



*1 You can connect directly to an absolute linear encoder.

Note:

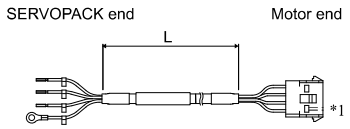
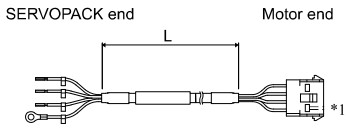
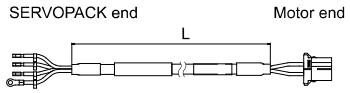
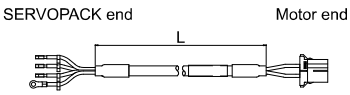
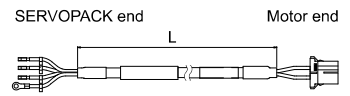
Refer to the following manual for the following information.

- Cable dimensional drawings and cable connection specifications
- Order numbers and specifications of individual connectors for cables
- Order numbers and specifications for wiring materials

Σ-X-Series AC Servo Deive Peripheral Device Selection Manual (Manual No.: SIEP C710812 12)

Linear Servomotor Main Circuit Cables

★翻訳不要

Linear Servomotor Model	Length (L)	Order Number	Appearance
SGLFW2-30A070A□ SGLFW2-30A120A□ SGLFW2-30A230A□	1 m	JZSP-CL2N703-01-E	
	3 m	JZSP-CL2N703-03-E	
	5 m	JZSP-CL2N703-05-E	
	10 m	JZSP-CL2N703-10-E	
	15 m	JZSP-CL2N703-15-E	
	20 m	JZSP-CL2N703-20-E	
SGLFW2-45A200A□ SGLFW2-45A380A□	1 m	JZSP-CL2N603-01-E	
	3 m	JZSP-CL2N603-03-E	
	5 m	JZSP-CL2N603-05-E	
	10 m	JZSP-CL2N603-10-E	
	15 m	JZSP-CL2N603-15-E	
	20 m	JZSP-CL2N603-20-E	
SGLFW2-90A200A□ SGLFW2-90A380A□	1 m	JZSP-CL2N803-01-E	
	3 m	JZSP-CL2N803-03-E	
	5 m	JZSP-CL2N803-05-E	
	10 m	JZSP-CL2N803-10-E	
	15 m	JZSP-CL2N803-15-E	
	20 m	JZSP-CL2N803-20-E	
SGLFW2-90A560A□ SGLFW2-1DA380A□ SGLFW2-1DA560A□	1 m	JZSP-CL2N503-01-E	
	3 m	JZSP-CL2N503-03-E	
	5 m	JZSP-CL2N503-05-E	
	10 m	JZSP-CL2N503-10-E	
	15 m	JZSP-CL2N503-15-E	
	20 m	JZSP-CL2N503-20-E	
SGLFW2-90A200A□L□	1 m	JZSP-CLN423-01-E	
	3 m	JZSP-CLN423-03-E	
	5 m	JZSP-CLN423-05-E	
	10 m	JZSP-CLN423-10-E	
	15 m	JZSP-CLN423-15-E	
	20 m	JZSP-CLN423-20-E	

Note:

Estimates are available for models other than those listed above (SGLFW2-90A380A□L□, -90A560A□L□, SGLFW2-1DA□□□A□L□).

*1 Connector from Tyco Electronics Japan G.K.