

# US2 Series

# US2 S E R I E S



# Easy-to-use Functions

## Easy Operation

### ● "Spin and Push" Operation

Turn the dial to set desired value and the speed.  
Just push the dial to determine the speed.



### ● Start/Stop/Switching the Rotation Direction

You can switch start/stop or rotation direction by just one switch operation. No external switch is required.



## Simple Wiring

### ● Maximum Extension Length 10 m

Simple connection using the connector between the motor and the speed controller.  
The distance between the motor and the speed controller can be extended up to 10 m.



### ● Built-in Capacitor

The built-in capacitor do not require wire connection, hence saving space.

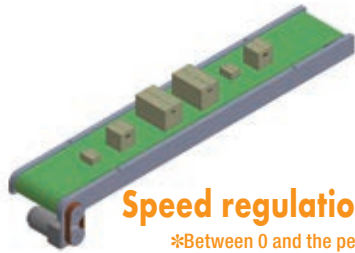


## Speed Control by the Closed Loop Control

### ● Stable Operation Even with Fluctuated Load

The rate generator installed in the AC motor always check the speed, thus maintaining the set speed even when the load fluctuates.

In addition, digitization of the control circuit has improved the speed regulation from  $-5\%$  to  $\pm 1\%*$  (reference value).



**Speed regulation** (For load)  $\pm 1\%*$  (Reference value)  
\*Between 0 and the permissible torque 1000 r/min  
(Reference value of the inverter)  
(Around between  $-6\sim-10\%$ )

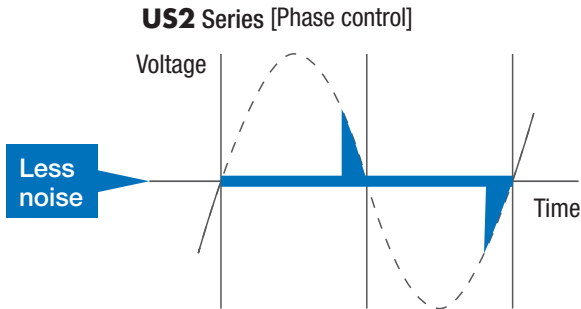


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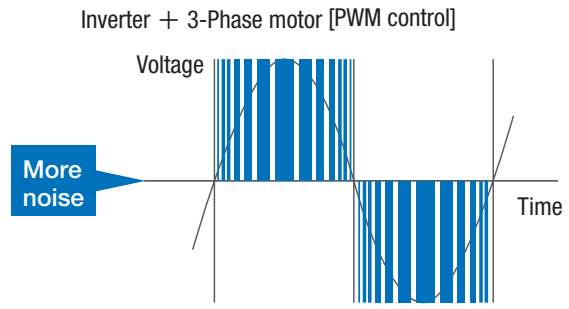
# High Reliability

## ● Simple System Configuration with Low Noises

The motor and speed controller used for the **US2** Series can emit little inherent noises. No peripherals require to reduce noise, hence able to achieve space saving and reduce installation work and cost.



Control of Voltage  
2 switchings per cycle  
[Condition] ● Power supply frequency: 50 Hz



Control of Voltage and Frequency  
300 switchings per cycle  
[Condition] ● Carrier frequency: 15 kHz  
● Set frequency: 50 Hz

# Useful Functions

## ● Open the Front Panel, you can Set Variety of Functions.



### Digital Display

Monitoring details and alarm codes can be displayed.

### Built-in Indicators

You can set the display settings of the gear output shaft speed and conveyor transportation speed.

### Selection of Moving Direction

You can select which one to use for operation: the switch on the front panel or external instructions.

### Data Protection (Lock)

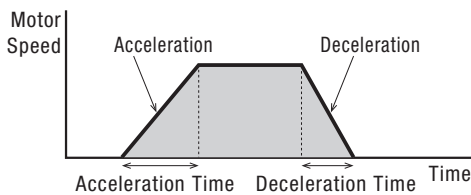
The data setting can be locked to prevent the set speed from changing.

## ● Smooth Operation When Starting/Stopping

Acceleration/deceleration time can be set with the use of acceleration/deceleration time potentiometer.

Setting time: 0.1 ~ 15.0 seconds (By factory default, fixed to 1 second)

- The acceleration/deceleration time potentiometer must be enabled in advance by the FUNCTION key.
- The instantaneous stop function is not available.



## ● Protection of Speed Controller

When overheating, connection failure, or locking occurs in the motor, an alarm is displayed to protect the motor speed controller.



# Gearhead with High Permissible Torque and High Strength

Models in the **US2** Series use a gearhead with high permissible torque and strength.

This gearhead uses our unique side plate, increasing the case rigidity. The gear is also strengthened by heat treatment (Carburizing and quenching).

## Parallel Shaft Combination Type

**Gearhead Internal Structure**

For Gearhead with Holding Angle of 80 mm

Permissible Radial Load 450 N  
(10 mm from the tip of the output shaft)  
Permissible Axial Load 100 N

Conventional model **4GN-K** Permissible torque 8 N·m  
**US2 Series** Permissible torque 16 N·m

## Lineup

### Motor

Type/Shape	Output Power [W]	Power Supply Voltage [VAC]	Maximum Permissible Torque [N·m]
Parallel Shaft Combination Type → Page 02-06	6 15 25 40 60 90	Single-Phase 110/115 Single-Phase 220/230	40
Round Shaft Type → Page 02-07			0.73

### Speed Controller

Shape	Output Power [W]	Power Supply Voltage [VAC]
	6 15 25 40 60 90	Single-Phase 110/115 Single-Phase 220/230

### Connection Cable

Cable Type
Connection Cable Flexible Connection Cable  1~10 m

## Product Number Code

### Motor

◇ Parallel Shaft Combination Type

**SCM 4 25 EC - 15**

① ② ③ ④ ⑤

◇ Round Shaft Type

**SCM 4 25 A - EC**

① ② ③ ⑤ ④

### Speed Controller

**US2D 25 - EC - CC**

① ② ③ ④

### Connection Cable, Flexible Connection Cable

**CC 01 SC R**

① ② ③ ④

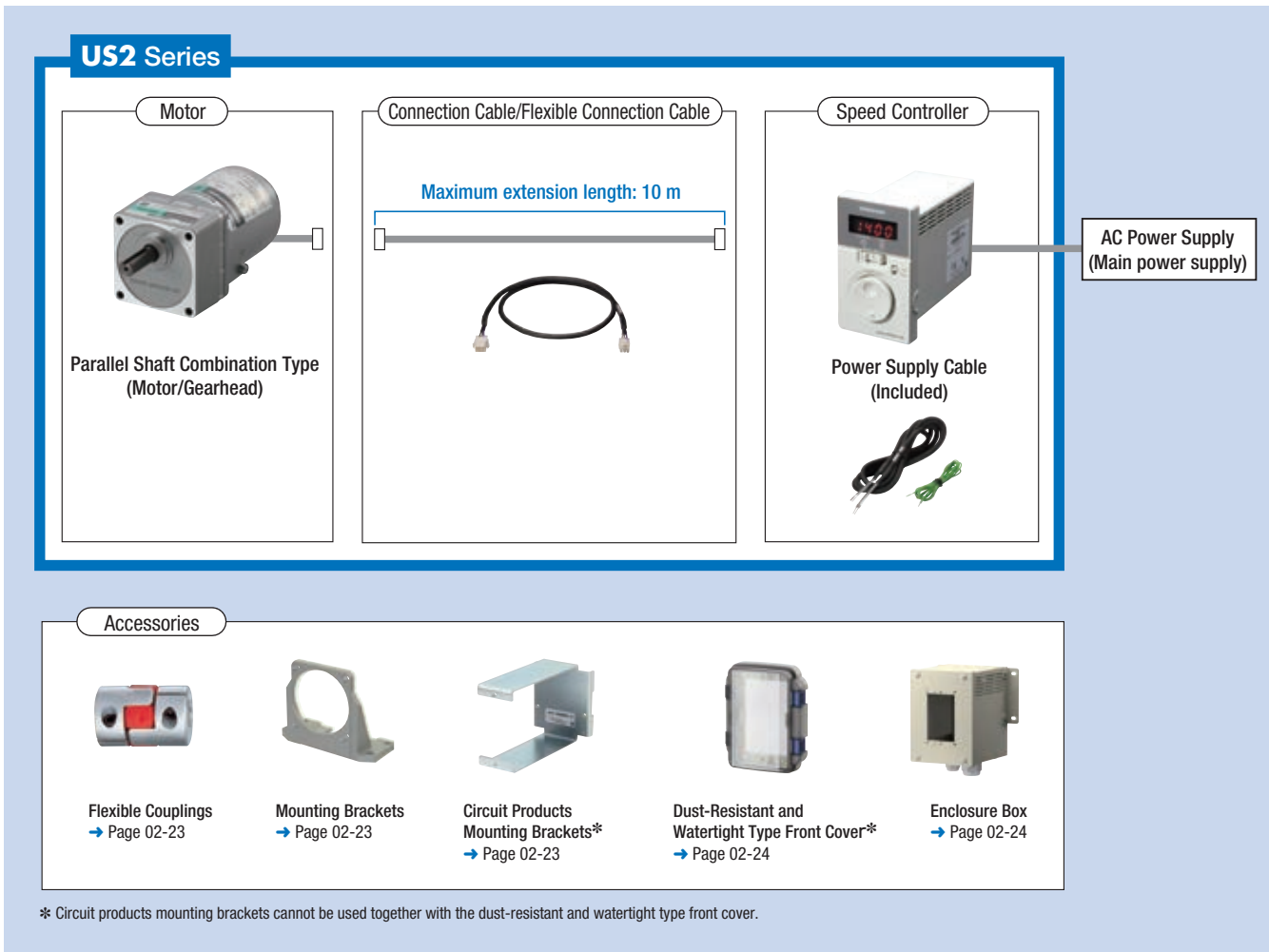
① Motor Type	<b>SCM:</b> Speed Control Motor
② Frame Size	<b>2:</b> 60 mm <b>3:</b> 70 mm <b>4:</b> 80 mm <b>5:</b> 90 mm
③ Output Power (W)	(Example) <b>25:</b> 25 W
④ Power Supply Voltage	<b>UA:</b> Single-Phase 110/115 VAC <b>EC:</b> Single-Phase 220/230 VAC
⑤ Gear Ratio/Shaft Configuration	Number: Gear Ratio for Combination Type <b>A:</b> Round Shaft Type

① Speed Controller Type	<b>US2D:</b> US2 Series Speed Controller
② Output Power (W)	(Example) <b>25:</b> 25 W
③ Power Supply Voltage	<b>UA:</b> Single-Phase 110/115 VAC <b>EC:</b> Single-Phase 220/230 VAC
④ Included	<b>CC:</b> Power Supply Cable

① Cable Type	<b>CC:</b> Connection Cable
② Length	<b>01:</b> 1 m <b>02:</b> 2 m <b>03:</b> 3 m <b>05:</b> 5 m <b>10:</b> 10 m
③ Applied Model	<b>SC:</b> Speed Control Motor
④ None: Connection Cable	<b>R:</b> Flexible Connection Cable

## System Configuration

The motor, speed controller, and connection cables need to be purchase separately.



### System Configuration Example

US2 Series			Sold Separately	
Motor Parallel Shaft Combination Type	Speed Controller	Connection Cable (5 m)	+	Mounting Brackets
<b>SCM425EC-25</b>	<b>US2D25-EC-CC</b>	<b>CC05SC</b>		<b>SOL4M6F</b>
SGD191	SGD126	SGD70		<b>MCL401515</b>
				SGD29
				SGD93

● The system configuration shown above is an example. Other combinations are available.

# Parallel Shaft Combination Type Round Shaft Type



Parallel Shaft Combination Type

02

US2 Series

## Product Line

### Parallel Shaft Combination Type

The price includes the prices of the motor and gearhead.



### Speed Controller



Output Power	Power Supply Voltage	Product Name	Gear Ratio	List Price
6 W	Single-Phase 110/115 VAC	<b>SCM26UA</b> -□	5, 6, 7.5, 9, 12.5, 15, 18	SGD158
			25, 30, 36	SGD166
			50, 60, 75, 90, 100, 120, 150, 180	SGD174
	Single-Phase 220/230 VAC	<b>SCM26EC</b> -□	250, 300, 360	SGD212
			5, 6, 7.5, 9, 12.5, 15, 18	SGD161
			25, 30, 36	SGD168
15 W	Single-Phase 110/115 VAC	<b>SCM315UA</b> -□	50, 60, 75, 90, 100, 120, 150, 180	SGD177
			250, 300, 360	SGD214
			5, 6, 7.5, 9, 12.5, 15, 18	SGD170
	Single-Phase 220/230 VAC	<b>SCM315EC</b> -□	25, 30, 36	SGD178
			50, 60, 75, 90, 100, 120, 150, 180	SGD186
			250, 300, 360	SGD221
25 W	Single-Phase 110/115 VAC	<b>SCM425UA</b> -□	5, 6, 7.5, 9, 12.5, 15, 18	SGD173
			25, 30, 36	SGD180
			50, 60, 75, 90, 100, 120, 150, 180	SGD189
	Single-Phase 220/230 VAC	<b>SCM425EC</b> -□	250, 300, 360	SGD224
			5, 6, 7.5, 9, 12.5, 15, 18	SGD180
			25, 30, 36	SGD188
40 W	Single-Phase 110/115 VAC	<b>SCM540UA</b> -□	50, 60, 75, 90, 100, 120, 150, 180	SGD196
			250, 300, 360	SGD234
			5, 6, 7.5, 9, 12.5, 15, 18	SGD184
	Single-Phase 220/230 VAC	<b>SCM540EC</b> -□	25, 30, 36	SGD191
			50, 60, 75, 90, 100, 120, 150, 180	SGD200
			250, 300, 360	SGD238
60 W	Single-Phase 110/115 VAC	<b>SCM560UA</b> -□	5, 6, 7.5, 9, 12.5, 15, 18	SGD214
			25, 30, 36	SGD223
			50, 60, 75, 90, 100, 120, 150, 180	SGD230
	Single-Phase 220/230 VAC	<b>SCM560EC</b> -□	250, 300	SGD300
			5, 6, 7.5, 9, 12.5, 15, 18	SGD218
			25, 30, 36	SGD226
90 W	Single-Phase 110/115 VAC	<b>SCM590UA</b> -□	50, 60, 75, 90, 100	SGD234
			120, 150, 180	SGD270
			250, 300	SGD281
	Single-Phase 220/230 VAC	<b>SCM590EC</b> -□	5, 6, 7.5, 9, 12.5, 15, 18	SGD264
			25, 30, 36, 50, 60, 75, 90, 100	SGD275
			120, 150, 180	SGD286
90 W	Single-Phase 110/115 VAC	<b>SCM590UA</b> -□	250, 300	SGD323
			5, 6, 7.5, 9, 12.5, 15, 18	SGD279
			25, 30, 36, 50, 60	SGD300
	Single-Phase 220/230 VAC	<b>SCM590EC</b> -□	75, 90, 100, 120, 150, 180	SGD310
			5, 6, 7.5, 9, 12.5, 15, 18	SGD284
			25, 30, 36, 50, 60	SGD305
90 W	Single-Phase 220/230 VAC	<b>SCM590EC</b> -□	75, 90, 100, 120, 150, 180	SGD315

Output Power	Power Supply Voltage	Product Name	List Price
6 W	Single-Phase 110/115 VAC	<b>US2D6-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D6-EC-CC</b>	SGD126
15 W	Single-Phase 110/115 VAC	<b>US2D15-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D15-EC-CC</b>	SGD126
25 W	Single-Phase 110/115 VAC	<b>US2D25-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D25-EC-CC</b>	SGD126
40 W	Single-Phase 110/115 VAC	<b>US2D40-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D40-EC-CC</b>	SGD126
60 W	Single-Phase 110/115 VAC	<b>US2D60-UA-CC</b>	SGD128
	Single-Phase 220/230 VAC	<b>US2D60-EC-CC</b>	SGD128
90 W	Single-Phase 110/115 VAC	<b>US2D90-UA-CC</b>	SGD128
	Single-Phase 220/230 VAC	<b>US2D90-EC-CC</b>	SGD128

● A number in the box □ in the product name indicates the gear ratio.

## ● Round Shaft Type



Output Power	Power Supply Voltage	Product Name	List Price
6 W	Single-Phase 110/115 VAC	<b>SCM26A-UA</b>	SGD88
	Single-Phase 220/230 VAC	<b>SCM26A-EC</b>	SGD91
15 W	Single-Phase 110/115 VAC	<b>SCM315A-UA</b>	SGD94
	Single-Phase 220/230 VAC	<b>SCM315A-EC</b>	SGD96
25 W	Single-Phase 110/115 VAC	<b>SCM425A-UA</b>	SGD103
	Single-Phase 220/230 VAC	<b>SCM425A-EC</b>	SGD106
40 W	Single-Phase 110/115 VAC	<b>SCM540A-UA</b>	SGD121
	Single-Phase 220/230 VAC	<b>SCM540A-EC</b>	SGD125
60 W	Single-Phase 110/115 VAC	<b>SCM560A-UA</b>	SGD139
	Single-Phase 220/230 VAC	<b>SCM560A-EC</b>	SGD144
90 W	Single-Phase 110/115 VAC	<b>SCM590A-UA</b>	SGD158
	Single-Phase 220/230 VAC	<b>SCM590A-EC</b>	SGD163

## ● Speed Controller



Output Power	Power Supply Voltage	Product Name	List Price
6 W	Single-Phase 110/115 VAC	<b>US2D6-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D6-EC-CC</b>	SGD126
15 W	Single-Phase 110/115 VAC	<b>US2D15-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D15-EC-CC</b>	SGD126
25 W	Single-Phase 110/115 VAC	<b>US2D25-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D25-EC-CC</b>	SGD126
40 W	Single-Phase 110/115 VAC	<b>US2D40-UA-CC</b>	SGD126
	Single-Phase 220/230 VAC	<b>US2D40-EC-CC</b>	SGD126
60 W	Single-Phase 110/115 VAC	<b>US2D60-UA-CC</b>	SGD128
	Single-Phase 220/230 VAC	<b>US2D60-EC-CC</b>	SGD128
90 W	Single-Phase 110/115 VAC	<b>US2D90-UA-CC</b>	SGD128
	Single-Phase 220/230 VAC	<b>US2D90-EC-CC</b>	SGD128

## ● Connection Cables



Length	Product Name	List Price
1 m	<b>CC01SC</b>	SGD35
2 m	<b>CC02SC</b>	SGD40
3 m	<b>CC03SC</b>	SGD50
5 m	<b>CC05SC</b>	SGD70
10 m	<b>CC10SC</b>	SGD120

## ● Flexible Connection Cables



Length	Product Name	List Price
1 m	<b>CC01SCR</b>	SGD70
2 m	<b>CC02SCR</b>	SGD80
3 m	<b>CC03SCR</b>	SGD100
5 m	<b>CC05SCR</b>	SGD140
10 m	<b>CC10SCR</b>	SGD240

## ■ Accessories

### ● Motor

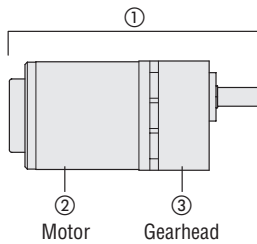
Type	Parallel Key	Installation Screws	Operating Manual
Parallel Shaft Combination Type	1 piece	1 set	1 copy
Round Shaft Type	–	–	

### ● Speed Controller

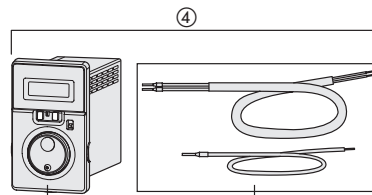
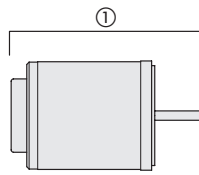
Power Supply Cable (2 m)	Operating Manual
1 piece	1 copy

# Combination List

## Parallel Shaft Combination Type



## Round Shaft Type



Speed Controller

Power Supply Cable

### Combination Type

The combination type comes with a motor and a gearhead pre-assembled. The combination of the motor and the gearhead can be changed. They are also available separately. You can remove the gearhead to change the installation position by 90°.

## Parallel Shaft Combination Type

Output Power	Power Supply Voltage	Speed Control Motor			Speed Controller		
		Product Name	Component Product Name		Product Name	Component Product Name	
		①	②	③	④	⑤	⑥
6 W	Single-Phase 110/115 VAC	<b>SCM26UA</b> -□	SCM26GV-UA	2GV□B	<b>US2D6-UA-CC</b>	US2D6-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM26EC</b> -□	SCM26GV-EC		<b>US2D6-EC-CC</b>	US2D6-EC	
15 W	Single-Phase 110/115 VAC	<b>SCM315UA</b> -□	SCM315GV-UA	3GV□B	<b>US2D15-UA-CC</b>	US2D15-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM315EC</b> -□	SCM315GV-EC		<b>US2D15-EC-CC</b>	US2D15-EC	
25 W	Single-Phase 110/115 VAC	<b>SCM425UA</b> -□	SCM425GV-UA	4GV□B	<b>US2D25-UA-CC</b>	US2D25-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM425EC</b> -□	SCM425GV-EC		<b>US2D25-EC-CC</b>	US2D25-EC	
40 W	Single-Phase 110/115 VAC	<b>SCM540UA</b> -□	SCM540GV-UA	5GV□B	<b>US2D40-UA-CC</b>	US2D40-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM540EC</b> -□	SCM540GV-EC		<b>US2D40-EC-CC</b>	US2D40-EC	
60 W	Single-Phase 110/115 VAC	<b>SCM560UA</b> -□	SCM560GVH-UA	5GVH□B	<b>US2D60-UA-CC</b>	US2D60-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM560EC</b> -□	SCM560GVH-EC		<b>US2D60-EC-CC</b>	US2D60-EC	
90 W	Single-Phase 110/115 VAC	<b>SCM590UA</b> -□	SCM590GVR-UA	5GVR□B	<b>US2D90-UA-CC</b>	US2D90-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM590EC</b> -□	SCM590GVR-EC		<b>US2D90-EC-CC</b>	US2D90-EC	

● A number in the box □ in the product name indicates the gear ratio.

## Round Shaft Type

Output Power	Power Supply Voltage	Speed Control Motor		Speed Controller		
		Product Name		Product Name	Component Product Name	
		①	②	④	⑤	⑥
6 W	Single-Phase 110/115 VAC	<b>SCM26A-UA</b>		<b>US2D6-UA-CC</b>	US2D6-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM26A-EC</b>		<b>US2D6-EC-CC</b>	US2D6-EC	
15 W	Single-Phase 110/115 VAC	<b>SCM315A-UA</b>		<b>US2D15-UA-CC</b>	US2D15-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM315A-EC</b>		<b>US2D15-EC-CC</b>	US2D15-EC	
25 W	Single-Phase 110/115 VAC	<b>SCM425A-UA</b>		<b>US2D25-UA-CC</b>	US2D25-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM425A-EC</b>		<b>US2D25-EC-CC</b>	US2D25-EC	
40 W	Single-Phase 110/115 VAC	<b>SCM540A-UA</b>		<b>US2D40-UA-CC</b>	US2D40-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM540A-EC</b>		<b>US2D40-EC-CC</b>	US2D40-EC	
60 W	Single-Phase 110/115 VAC	<b>SCM560A-UA</b>		<b>US2D60-UA-CC</b>	US2D60-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM560A-EC</b>		<b>US2D60-EC-CC</b>	US2D60-EC	
90 W	Single-Phase 110/115 VAC	<b>SCM590A-UA</b>		<b>US2D90-UA-CC</b>	US2D90-UA	CC02AC02N2
	Single-Phase 220/230 VAC	<b>SCM590A-EC</b>		<b>US2D90-EC-CC</b>	US2D90-EC	



# Specifications Continuous Rating



Product Name Upper Level: Parallel Shaft Combination Type Lower Level: Round Shaft Type		Speed Controller	Maximum Output Power W	Voltage VAC	Frequency Hz	Variable Speed Range r/min	Permissible Torque		Starting Torque mN·m	Current A	Power Consumption W	Motor Overheat Protection Device
							1200 r/min (50Hz)	90 r/min				
							1450 r/min (60Hz)					
							mN·m	mN·m				
<b>SCM26UA-□</b> <b>SCM26A-UA</b>	<b>US2D6-UA-CC</b>	6	Single-Phase 110 Single-Phase 115	60	90~1600	50	38	40	0.31	29	ZP	
												Single-Phase 220 Single-Phase 230
<b>SCM26EC-□</b> <b>SCM26A-EC</b>	<b>US2D6-EC-CC</b>	6	Single-Phase 220 Single-Phase 230	50 60	90~1400 90~1600	46 50	37 39	44 50	0.17	29	ZP	
												Single-Phase 110 Single-Phase 115
<b>SCM315UA-□</b> <b>SCM315A-UA</b>	<b>US2D15-UA-CC</b>	15	Single-Phase 220	50 60	90~1400 90~1600	125 110	40	67 72	0.26	43 46	TP	
												Single-Phase 230
<b>SCM315EC-□</b> <b>SCM315A-EC</b>	<b>US2D15-EC-CC</b>	15	Single-Phase 110 Single-Phase 115	60	90~1600	205	45	125 135	0.78	58 69	TP	
												Single-Phase 220
<b>SCM425UA-□</b> <b>SCM425A-UA</b>	<b>US2D25-UA-CC</b>	25	Single-Phase 220	50 60	90~1400 90~1600	205	40	110 120	0.40	70	TP	
												Single-Phase 230
<b>SCM540UA-□</b> <b>SCM540A-UA</b>	<b>US2D40-UA-CC</b>	40	Single-Phase 110 Single-Phase 115	60	90~1600	320	70	180 190	1.1	107	TP	
												Single-Phase 220
<b>SCM540EC-□</b> <b>SCM540A-EC</b>	<b>US2D40-EC-CC</b>	40	Single-Phase 230	50 60	90~1400 90~1600	320	65 70	190	0.58	99 105	TP	
												Single-Phase 110 Single-Phase 115
<b>SCM560UA-□</b> <b>SCM560A-UA</b>	<b>US2D60-UA-CC</b>	60	Single-Phase 220	50 60	90~1400 90~1600	490 460	80 75	280 290	0.74 0.77	129 143	TP	
												Single-Phase 230
<b>SCM560EC-□</b> <b>SCM560A-EC</b>	<b>US2D60-EC-CC</b>	60	Single-Phase 110 Single-Phase 115	60	90~1600	730	85	400 440	2.4 2.5	224 227	TP	
												Single-Phase 220
<b>SCM590UA-□</b> <b>SCM590A-UA</b>	<b>US2D90-UA-CC</b>	90	Single-Phase 230	50 60	90~1400 90~1600	730	95	520 530	1.2 1.3	204 228	TP	
												Single-Phase 110 Single-Phase 115
<b>SCM590EC-□</b> <b>SCM590A-EC</b>	<b>US2D90-EC-CC</b>	90	Single-Phase 220	50 60	90~1400 90~1600	730	95	500 520	1.3 1.2	226 204	TP	
												Single-Phase 230

● The specifications apply to the motor only. The variable speed ranges shown are under no load conditions.

ZP: These products are impedance protected.

TP: This indicates that there is a built-in thermal protector (Automatic return type).

● A number in the box □ in the product name indicates the gear ratio.

## Common Specifications

Item	Specifications
Speed Setting Methods	Digital setting by the dial (Speed can be set in 1 r/min increments)
Variable Speed Range	50 Hz: 90~1400 r/min 60 Hz: 90~1600 r/min Initial setting: 90 r/min
Acceleration/Deceleration Time	0.1~15.0 seconds (Initial setting: Fixed to 1.0 second) Acceleration time/deceleration time varies with the load condition of the motor.
Function	Parameters
	Monitoring
	Others
Input Signals	Photocoupler input Input resistance 2 kΩ Two input points: FWD input and REV input
Protective Functions	When the following protective functions are activated, the motor will coast to a stop, and the alarm code will appear on the control panel. Alarm types: Motor overheat, motor lock, improper motor connection, EEPROM error, prohibition of operation at the initial setting
Maximum Extension Length	Motor and speed controller distance 10 m

## General Specifications

Item	Motor	Speed Controller
Insulation Resistance	The measured value is 100 MΩ or more when a 500 VDC megger is applied between the motor windings and the case after continuous operation under normal ambient temperature and humidity.	The measured value is 100 MΩ or more when a 500 VDC megger is applied between the main circuit terminal and the input signal terminal, between the main circuit terminal and the case, and between the main circuit terminal and FG, after continuous operation under normal ambient temperature and humidity.
Dielectric Strength Voltage	No abnormality is judged even with application of 1.5 kVAC at 50 Hz or 60 Hz between the windings and the case for 1 minute after continuous operation under normal ambient temperature and humidity.	No abnormality is judged even with application of 1.9 kVAC at 50 Hz or 60 Hz between the main circuit terminal and the input signal terminal and between the main circuit terminal and the case, and 1.5 kVAC at 50 Hz or 60 Hz between the main circuit terminal and FG for 1 minute after continuous operation under normal ambient temperature and humidity.
Temperature Rise	A gearhead or equivalent heat sink*1 is connected to the motor and the winding temperature rise is measured at 80°C or less using the resistance change method after continuous operation with no load under normal ambient temperature and humidity.	—
Overheat Protection Device	The 6 W type is impedance protected. All other motors have a built-in thermal protector (Automatic return type). Open: 130±5°C Close: 85±20°C	—
Operating Environment	Ambient Temperature	—
	Ambient Humidity	—
	Altitude	—
	Atmosphere	—
	Vibration	—
Storage Condition*2	Ambient Temperature	—
	Ambient Humidity	—
	Altitude	—
	Atmosphere	—
Heat-resistant Class	130 (B)	—
Degree of Protection	IP20	IP20

\*1 Heat sink size (Material: Aluminum)

Motor Output Power	Size (mm)	Thickness (mm)
6 W	115×115	5
15 W	125×125	
25 W	135×135	
40 W	165×165	
60 W	200×200	
90 W	200×200	

\*2 The storage condition applies to a short period such as a period during transportation.

### Note

- Do not measure insulation resistance or perform the dielectric strength test while the motor and speed controller are connected.

## Output Shaft Speed of the Combination Type

### ● Motor Shaft Speed

Low speed: 90 r/min, High speed 50 Hz: 1400 r/min, High speed 60 Hz: 1600 r/min

Unit: r/min

Gear Ratio	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360
High Speed 50 Hz	280	233	186	155	112	93	77	56	46	38	28	23	18.6	15.5	14	11.6	9.3	7.7	5.6	4.6	3.8
Speed 60 Hz	320	266	213	177	128	106	88	64	53	44	32	26	21	17.7	16	13.3	10.6	8.8	6.4	5.3	4.4
Low Speed	18	15	12	10	7.2	6	5	3.6	3	2.5	1.8	1.5	1.2	1	0.9	0.75	0.6	0.5	0.36	0.3	0.25

## Permissible Torque of Combination Type

● A colored  background indicates gear shaft rotation in the same direction as the motor shaft. Others rotate in the opposite direction.

● A number in the box  in the product name indicates the gear ratio.

### ● Single-Phase 110/115 VAC

Unit: N·m

Product Name	Gear Ratio		5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360	
	Motor Shaft Speed r/min																							
SCM26UA-□	1450		0.23	0.27	0.34	0.41	0.56	0.68	0.81	1.1	1.3	1.5	2.2	2.6	3.2	3.9	4.3	5.2	6	6	6	6	6	6
	90		0.17	0.21	0.26	0.31	0.43	0.51	0.62	0.86	0.98	1.2	1.6	2.0	2.5	2.9	3.3	3.9	4.6	5.5	6	6	6	6
SCM315UA-□	1450	110 VAC	0.54	0.65	0.81	0.97	1.4	1.6	1.9	2.7	3.1	3.7	5.2	6.2	7.7	9.3	10	10	10	10	10	10	10	10
		115 VAC	0.56	0.68	0.84	1.0	1.4	1.7	2.0	2.8	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10	10	10	10	10
SCM425UA-□	1450		0.20	0.24	0.30	0.36	0.51	0.61	0.73	1.0	1.2	1.4	1.9	2.3	2.9	3.5	3.9	4.6	5.5	6.6	9.1	10	10	10
	90		0.20	0.24	0.30	0.36	0.51	0.61	0.73	1.0	1.2	1.4	1.9	2.3	2.9	3.5	3.9	4.6	5.5	6.6	9.1	10.9	13.1	
SCM540UA-□	1450		1.4	1.7	2.2	2.6	3.6	4.3	5.2	6.9	8.3	9.9	13.8	16.5	20.6	24.8	27.5	30	30	30	30	30	—	
	90		0.32	0.38	0.47	0.57	0.79	0.95	1.1	1.5	1.8	2.2	3.0	3.6	4.5	5.4	6.0	6.8	8.5	10.2	14.2	17.0	—	
SCM560UA-□	1450	110 VAC	2.1	2.5	3.1	3.7	5.2	6.2	7.5	9.9	11.9	14.2	19.8	23.7	29.7	30	30	30	30	30	30	30	30	—
		115 VAC	2.2	2.6	3.3	4.0	5.5	6.6	7.9	10.5	12.6	15.2	21.1	25.3	30	30	30	30	30	30	30	30	30	—
SCM590UA-□	1450		3.3	3.9	4.9	5.9	8.2	9.9	11.3	15.7	18.8	22.6	31.4	37.7	40	40	40	40	40	40	—	—	—	
	90		0.38	0.46	0.57	0.69	0.96	1.1	1.3	1.8	2.2	2.6	3.7	4.4	5.2	6.2	6.9	8.3	10.3	12.4	—	—	—	

### ● Single-Phase 220/230 VAC

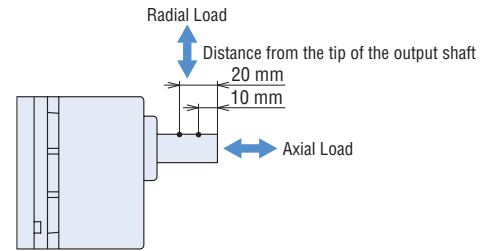
Unit: N·m

Product Name	Gear Ratio		5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360		
	Motor Shaft Speed r/min																								
SCM26EC-□	1200	220 VAC 50 Hz	0.19	0.23	0.28	0.34	0.47	0.57	0.68	0.95	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.3	5.1	6	6	6	6	6	
		230 VAC 50 Hz	0.21	0.25	0.31	0.37	0.52	0.62	0.75	1.0	1.2	1.4	2.0	2.4	3.0	3.6	4.0	4.7	5.6	6	6	6	6	6	
		220 VAC 60 Hz	0.21	0.25	0.31	0.37	0.52	0.62	0.75	1.0	1.2	1.4	2.0	2.4	3.0	3.6	4.0	4.7	5.6	6	6	6	6	6	
	1450	230 VAC 60 Hz	0.23	0.27	0.34	0.41	0.56	0.68	0.81	1.1	1.3	1.5	2.2	2.6	3.2	3.9	4.3	5.2	6	6	6	6	6	6	
		90	220 VAC 50/60 Hz	0.18	0.22	0.27	0.32	0.45	0.54	0.65	0.90	1.0	1.2	1.7	2.1	2.6	3.1	3.4	4.1	4.9	5.8	6	6	6	6
			230 VAC 50 Hz	0.17	0.20	0.25	0.30	0.42	0.50	0.60	0.83	0.95	1.1	1.6	1.9	2.4	2.9	3.2	3.8	4.5	5.4	6	6	6	6
SCM315EC-□	1200	50 Hz	0.56	0.68	0.84	1.0	1.4	1.7	2.0	2.8	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10	10	10	10	10	
		220 VAC 60 Hz	0.50	0.59	0.74	0.89	1.2	1.5	1.8	2.5	2.8	3.4	4.7	5.7	7.1	8.5	9.5	10	10	10	10	10	10		
		230 VAC 60 Hz	0.54	0.65	0.81	0.97	1.4	1.6	1.9	2.7	3.1	3.7	5.2	6.2	7.7	9.3	10	10	10	10	10	10	10		
SCM425EC-□	1450	50 Hz	0.18	0.22	0.27	0.32	0.45	0.54	0.65	0.90	1.0	1.2	1.7	2.1	2.6	3.1	3.4	4.1	4.9	5.8	8.1	9.7	10	10	
		60 Hz	0.18	0.22	0.27	0.32	0.45	0.54	0.65	0.90	1.0	1.2	1.7	2.1	2.6	3.1	3.4	4.1	4.9	5.8	8.1	9.7	10	10	
		90	0.18	0.22	0.27	0.32	0.45	0.54	0.65	0.90	1.0	1.2	1.7	2.1	2.6	3.1	3.4	4.1	4.9	5.8	8.1	9.7	11.7		
SCM540EC-□	1200	50 Hz	1.4	1.7	2.2	2.6	3.6	4.3	5.2	6.9	8.3	9.9	13.8	16.5	20.6	24.8	27.5	30	30	30	30	30	—		
		60 Hz	1.4	1.7	2.2	2.6	3.6	4.3	5.2	6.9	8.3	9.9	13.8	16.5	20.6	24.8	27.5	30	30	30	30	30	—		
	90	50 Hz	0.29	0.35	0.44	0.53	0.73	0.88	1.1	1.4	1.7	2.0	2.8	3.4	4.2	5.0	5.6	6.3	7.9	9.5	13.2	15.8	—		
SCM560EC-□	1450	50 Hz	0.32	0.38	0.47	0.57	0.79	0.95	1.1	1.5	1.8	2.2	3.0	3.6	4.5	5.4	6.0	6.8	8.5	10.2	14.2	17.0	—		
		60 Hz	0.32	0.38	0.47	0.57	0.79	0.95	1.1	1.5	1.8	2.2	3.0	3.6	4.5	5.4	6.0	6.8	8.5	10.2	14.2	17.0	—		
		90	220 VAC 50 Hz	2.1	2.5	3.1	3.7	5.2	6.2	7.5	9.9	11.9	14.2	19.8	23.7	29.7	30	30	30	30	30	30	30	—	
	90	230 VAC 60 Hz	2.2	2.6	3.3	4.0	5.5	6.6	7.9	10.5	12.6	15.2	21.1	25.3	30	30	30	30	30	30	30	30	30	—	
		220 VAC 50 Hz	0.36	0.43	0.54	0.65	0.90	1.1	1.3	1.7	2.1	2.5	3.4	4.1	5.2	6.2	6.9	7.8	9.7	11.7	16.2	19.4	—		
		230 VAC 60 Hz	0.34	0.41	0.51	0.61	0.84	1.0	1.2	1.6	1.9	2.3	3.2	3.9	4.8	5.8	6.5	7.3	9.1	10.9	15.2	18.2	—		
SCM590EC-□	1200	50 Hz	0.38	0.46	0.57	0.69	0.96	1.1	1.4	1.8	2.2	2.6	3.7	4.4	5.5	6.6	7.3	8.3	10.3	12.4	17.2	20.7	—		
		60 Hz	3.3	3.9	4.9	5.9	8.2	9.9	11.3	15.7	18.8	22.6	31.4	37.7	40	40	40	40	40	40	—	—			
	90	0.43	0.51	0.64	0.77	1.1	1.3	1.5	2.0	2.5	2.9	4.1	4.9	5.8	6.9	7.7	9.2	11.5	13.9	—	—	—			

## Permissible Radial Load/Permissible Axial Load

### Parallel Shaft Combination Type

Output Power	Gear Ratio	Permissible Radial Load N		Permissible Axial Load N
		Distance from the tip of the gearhead output shaft 10 mm	20 mm	
6 W	5~25	150	200	40
	30~360	200	300	
15 W	5~25	200	300	80
	30~360	300	400	
25 W	5~25	300	350	100
	30~360	450	550	
40 W 60 W	5~9	400	500	150
	12.5~18	450	600	
	25~300	500	700	
90 W	5~9	400	500	150
	12.5~18	450	600	
	25~180	500	700	



### Round Shaft Type

Output Power	Permissible Radial Load N		Permissible Axial Load
	Distance from the tip of the motor output shaft 10 mm	20 mm	
6 W	50	110	Half of motor mass or less*
15 W	40	60	
25 W	90	140	
40 W	140	200	
60 W	240	270	
90 W			

\*Avoid axial loads as much as possible.

If axial load is unavoidable, keep it at half or less of the motor mass.

## Gearhead Transmission Efficiency

Product Name	Gear Ratio	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360
		2GV□B, 3GV□B, 4GV□B		90%									86%						81%			
5GV□B, 5GVH□B		90%									86%						81%					
5GVR□B		90%									86%						81%					

## Permissible Load Inertia J of Combination Types

Unit:  $\times 10^{-4} \text{kg}\cdot\text{m}^2$

Output Power	Gear Ratio	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360
		6 W		12	18	28	40	78	110	160	260	370	540	920	1300	1700	2000	2500	3600	5000	5000	5000
15 W		20	28	45	65	120	180	260	440	630	900	1500	2100	2800	3200	4000	5700	8000	8000	8000	8000	8000
25 W		22	32	50	72	150	220	310	550	800	1100	2200	3200	4000	5000	6200	8900	12000	12000	12000	12000	12000
40 W 60 W		45	65	100	150	300	420	620	1100	1600	2300	4500	6000	8000	10000	12000	17000	25000	25000	25000	25000	—
90 W		45	65	100	150	300	420	620	1100	1600	2300	4500	6000	8000	10000	12000	17000	25000	25000	—	—	—

## How to Read Speed – Torque Characteristics

The characteristics diagram on the right shows the relationship between each setting speed and torque when a speed control motor is operated.

① 50 Hz Safe-Operation Line    ② 60 Hz Safe-Operation Line

The safe-operation line is the permissible line of the torque that is limited according to the permissible temperature.

Motors can be operated at a continuous rating within the safe-operation line.

The safe-operation line is determined under the most severe condition where there is no heat conduction. Therefore, the motor can be operated depending on installation conditions of the motor.

**Note**

● When operating beyond the safe-operation line, make sure the motor case temperature is kept at 90°C or less.

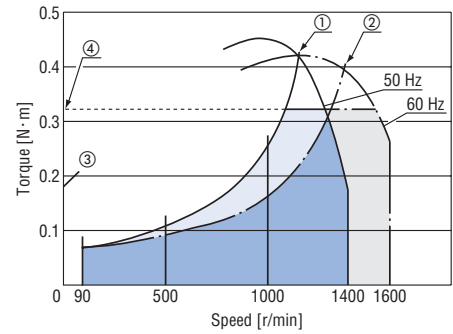
③ Starting Torque

This refers to the size of torque with which the motor can start.

④ Combination Type Permissible Torque

This refers to the permissible value of the motor torque when operating with the gearhead installed.

The permissible torque of the combination type varies according to the gear ratio. Use the motor without exceeding the value on the list of permissible torques.



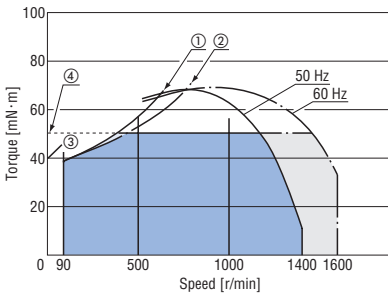
## Speed – Torque Characteristics (Reference)

① 50 Hz Safe-Operation Line    ② 60 Hz Safe-Operation Line    ③ Starting Torque    ④ Combination Type Permissible Torque

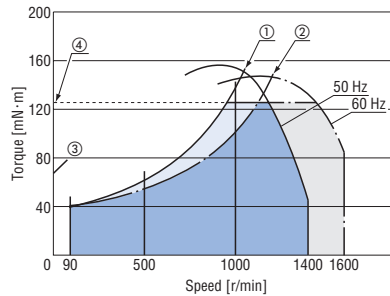
● The characteristics of each output are their representatives. (For motor only)

The permissible torque and starting torque of the motor vary according to the voltage. Check the specifications and the permissible torque of the combination type when using the motor.

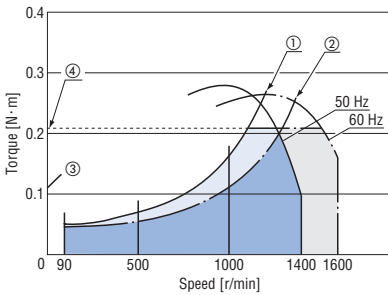
◇ 6 W



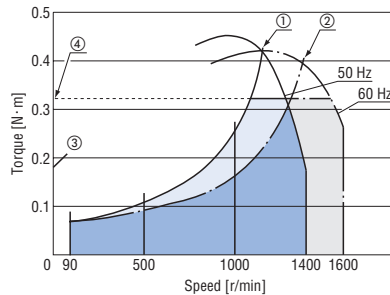
◇ 15 W



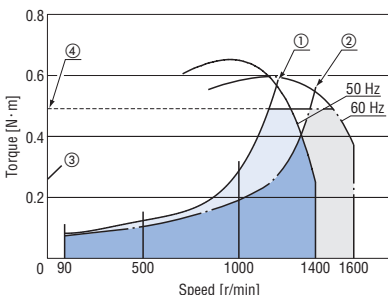
◇ 25 W



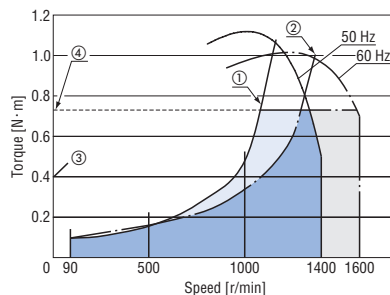
◇ 40 W



◇ 60 W



◇ 90 W



## Dimensions (Unit: mm)

● "Mounting screws" are included with the combination type. Dimensions of installation screws → Page 02-19

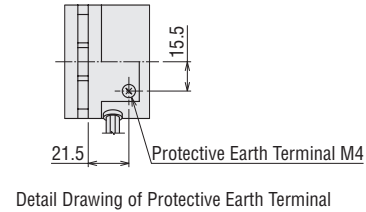
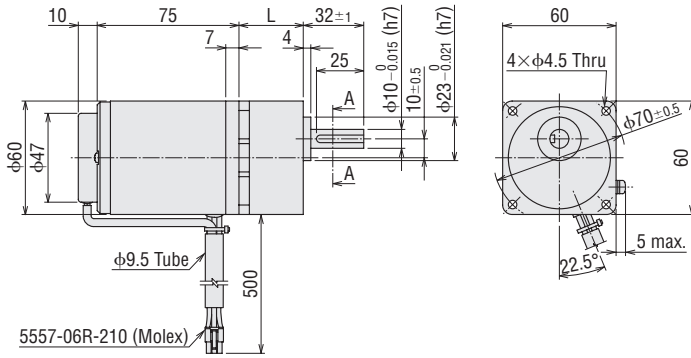
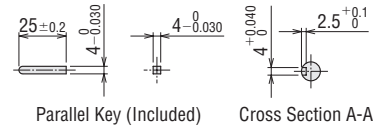
● A number in the box □ in the product name indicates the gear ratio.

### Parallel Shaft Combination Type

◇ 6 W

2D & 3D CAD

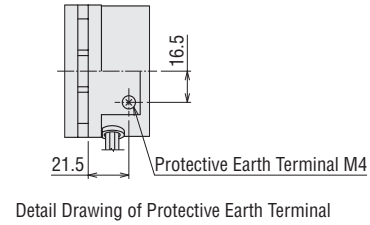
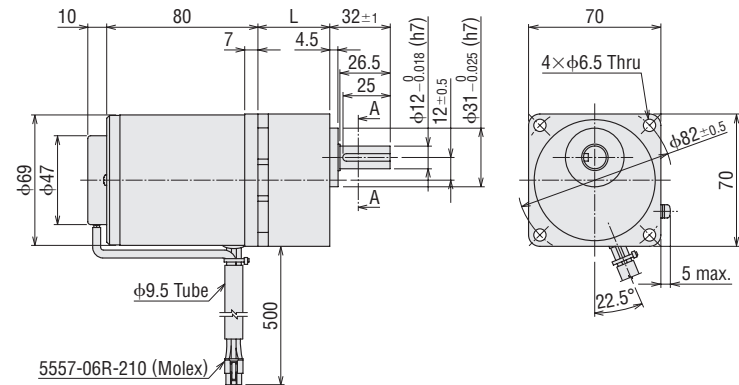
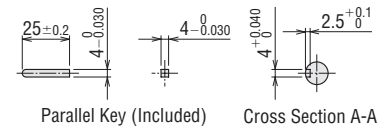
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	Mass kg	2D CAD
<b>SCM26UA</b> -□ <b>SCM26EC</b> -□	SCM26GV-UA SCM26GV-EC	2GV□B	5~25	34	1.1	A1214A
			30~120	38	1.1	A1214B
			150~360	43	1.2	A1214C



◇ 15 W

2D & 3D CAD

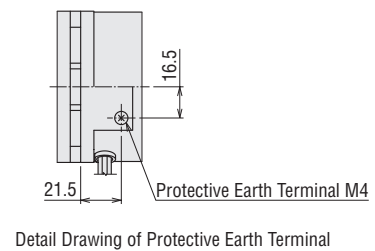
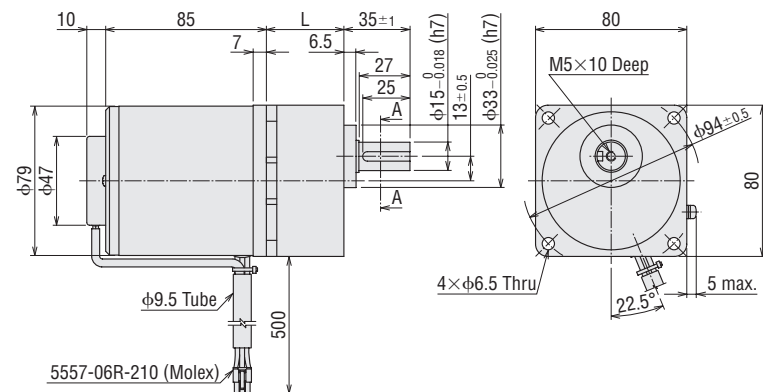
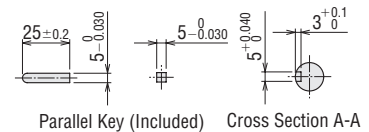
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	Mass kg	2D CAD
<b>SCM315UA</b> -□ <b>SCM315EC</b> -□	SCM315GV-UA SCM315GV-EC	3GV□B	5~25	38	1.6	A1215A
			30~120	43	1.7	A1215B
			150~360	48	1.8	A1215C



◇ 25 W

2D & 3D CAD

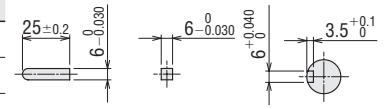
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	Mass kg	2D CAD
<b>SCM425UA</b> -□ <b>SCM425EC</b> -□	SCM425GV-UA SCM425GV-EC	4GV□B	5~25	41	2.3	A1216A
			30~120	46	2.4	A1216B
			150~360	51	2.5	A1216C



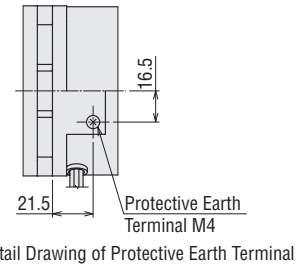
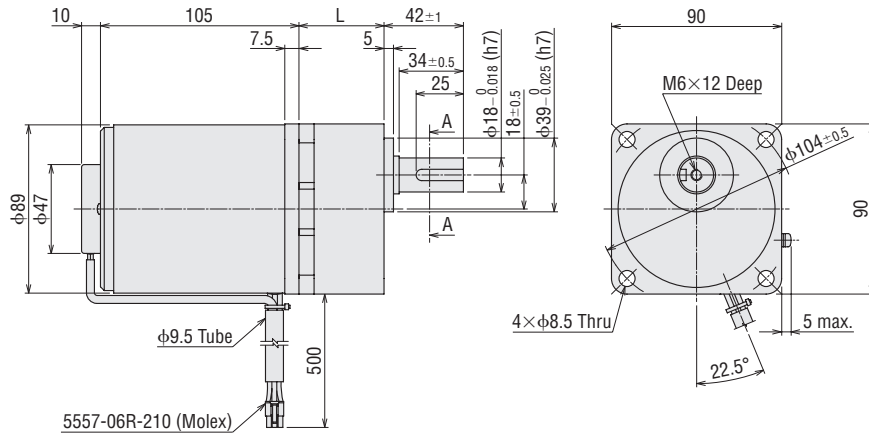
◇ 40 W

2D & 3D CAD

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	Mass kg	2D CAD
<b>SCM540UA</b> -□ <b>SCM540EC</b> -□	SCM540GV-UA SCM540GV-EC	5GV□B	5~18	45	3.6	A1217A
			25~100	58	3.9	A1217B
			120~300	64	4.0	A1217C



Parallel Key (Included) Cross Section A-A

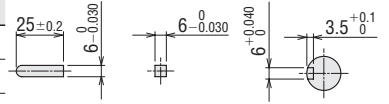


Detail Drawing of Protective Earth Terminal

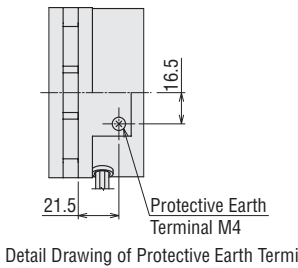
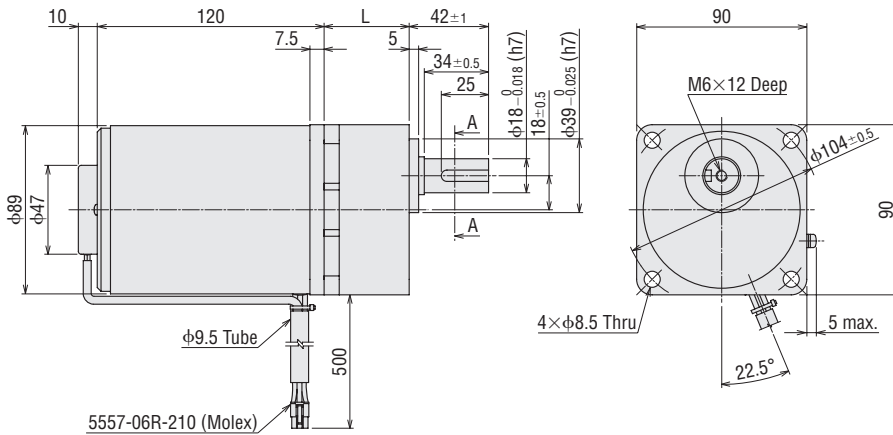
◇ 60 W

2D & 3D CAD

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	Mass kg	2D CAD
<b>SCM560UA</b> -□ <b>SCM560EC</b> -□	SCM560GVH-UA SCM560GVH-EC	5GVH□B	5~18	45	4.1	A1218A
			25~100	58	4.4	A1218B
			120~300	64	4.5	A1218C



Parallel Key (Included) Cross Section A-A

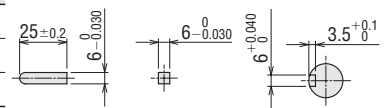


Detail Drawing of Protective Earth Terminal

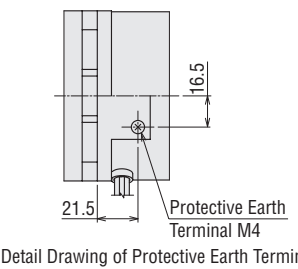
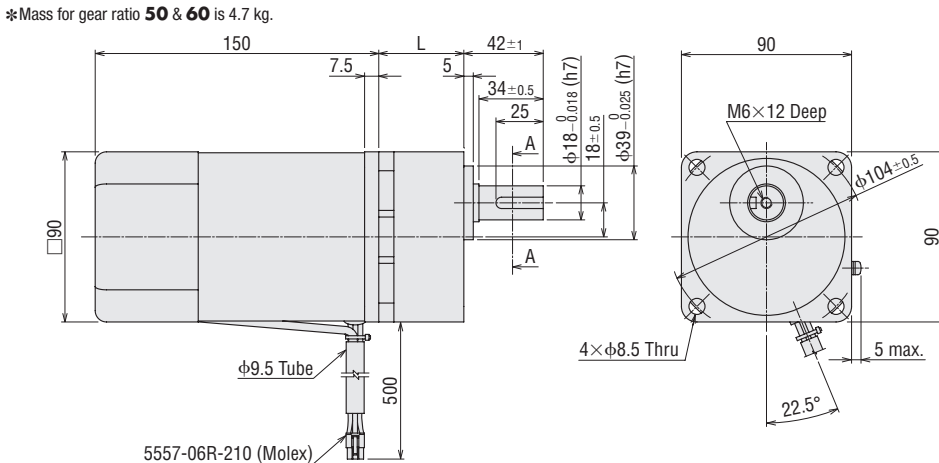
◇ 90 W

2D & 3D CAD

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	Mass kg	2D CAD
<b>SCM590UA</b> -□ <b>SCM590EC</b> -□	SCM590GVR-UA SCM590GVR-EC	5GVR□B	5~15	45	4.3	A1219A
			18~36	58	4.7	A1219B
			50~180	70	4.8*	A1219C



Parallel Key (Included) Cross Section A-A



Detail Drawing of Protective Earth Terminal

\*Mass for gear ratio 50 & 60 is 4.7 kg.

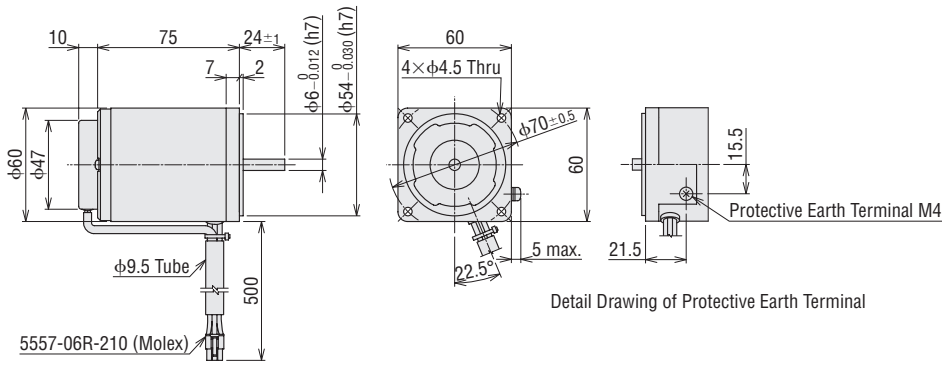
● Round Shaft Type

◇ 6 W

**SCM26A-UA, SCM26A-EC**

Mass: 0.8 kg

2D CAD A1256 3D CAD

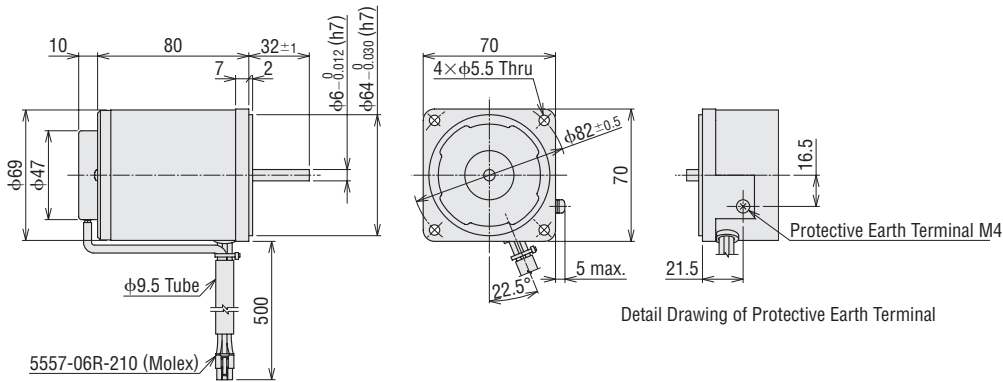


◇ 15 W

**SCM315A-UA, SCM315A-EC**

Mass: 1.2 kg

2D CAD A1257 3D CAD

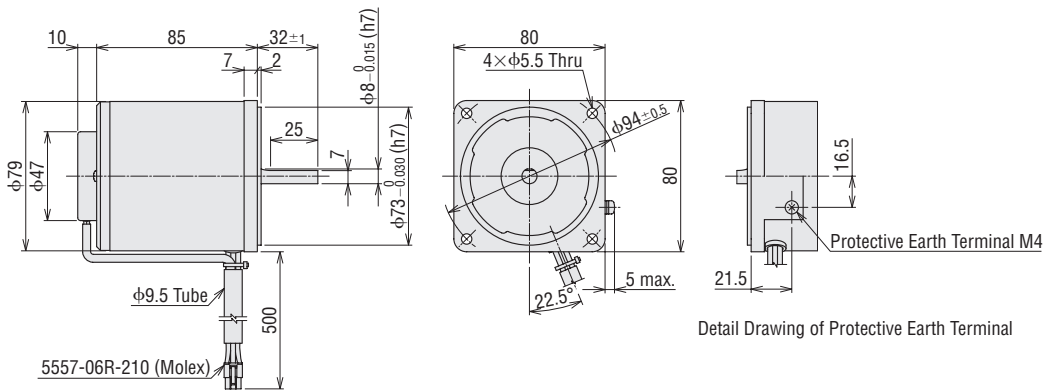


◇ 25 W

**SCM425A-UA, SCM425A-EC**

Mass: 1.6 kg

2D CAD A1258 3D CAD



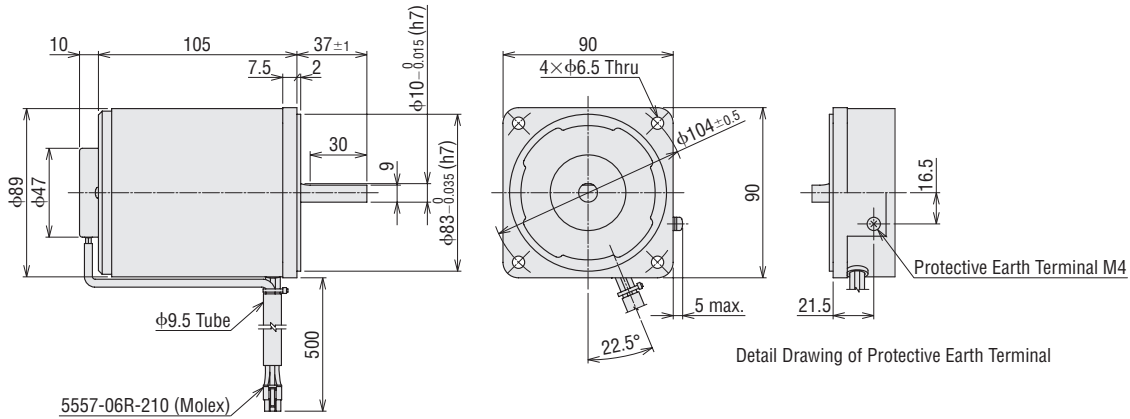


◇ 40 W

SCM540A-UA, SCM540A-EC

Mass: 2.6 kg

2D CAD A1259 3D CAD

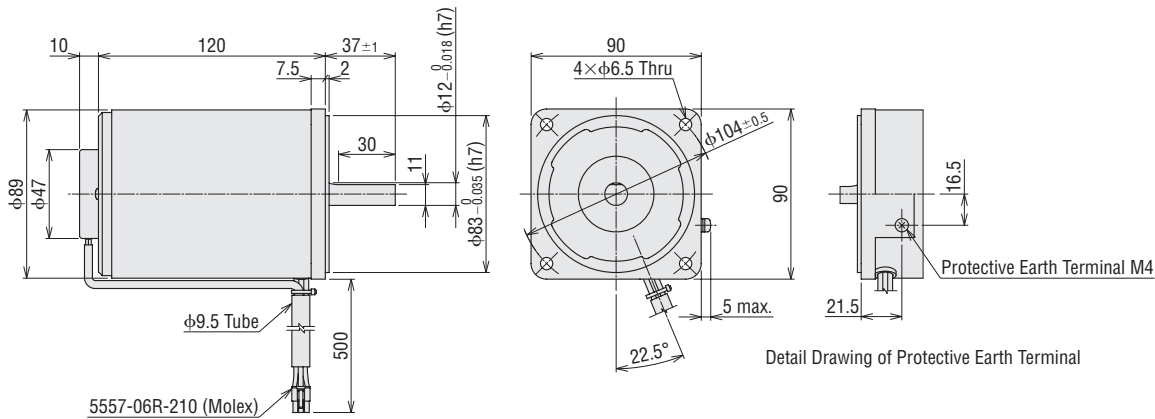


◇ 60 W

SCM560A-UA, SCM560A-EC

Mass: 3.1 kg

2D CAD A1260 3D CAD

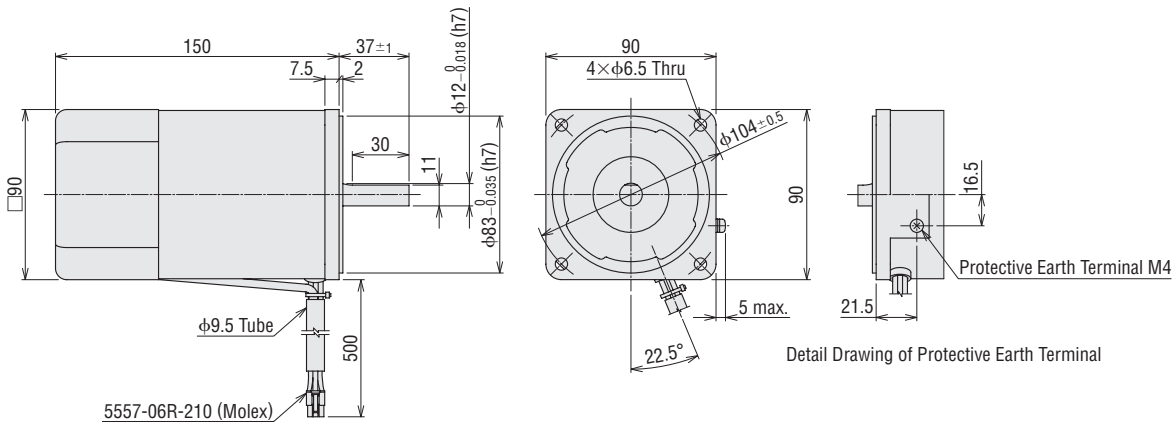


◇ 90 W

SCM590A-UA, SCM590A-EC

Mass: 3.3 kg

2D CAD A1261 3D CAD



● Speed Controller (Common to all types)

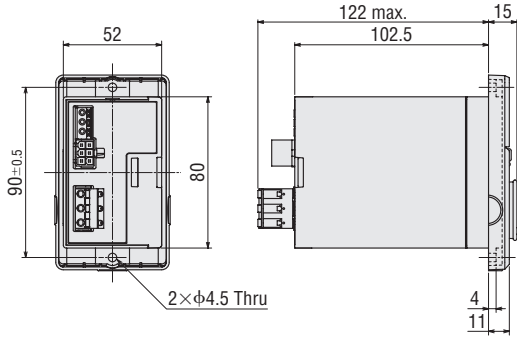
US2D6-UA, US2D6-EC, US2D15-UA, US2D15-EC,  
US2D25-UA, US2D25-EC, US2D40-UA, US2D40-EC

Mass: 0.3 kg

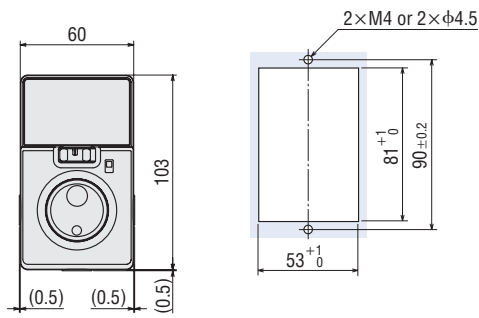
US2D60-UA, US2D60-EC, US2D90-UA, US2D90-EC

Mass: 0.4 kg

2D CAD A1430 3D CAD



◇ Panel Cut-Out for Speed Controller

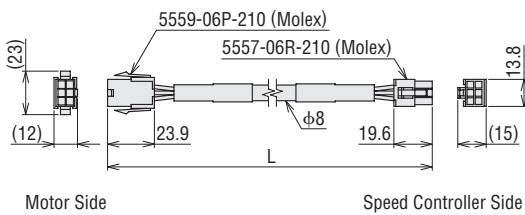


● Connection Cables

Product Name	Length L (m)
CC01SC	1
CC02SC	2
CC03SC	3
CC05SC	5
CC10SC	10

● Flexible Connection Cables

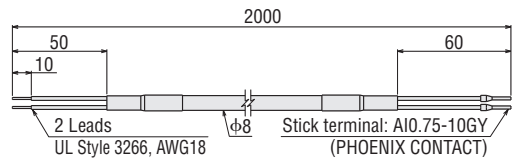
Product Name	Length L (m)
CC01SCR	1
CC02SCR	2
CC03SCR	3
CC05SCR	5
CC10SCR	10



● Power Supply Cable (Included with speed controller)

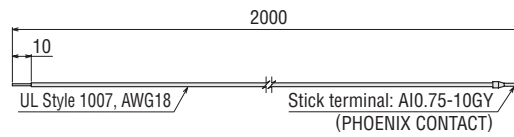
◇ CC02AC02N2

● Power Supply Cable



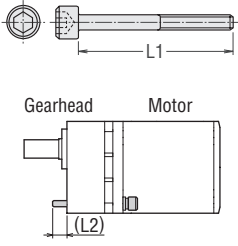
Speed Controller Side

● Lead for Connecting FG



Speed Controller Side

## ■ Dimensions of Installation Screws

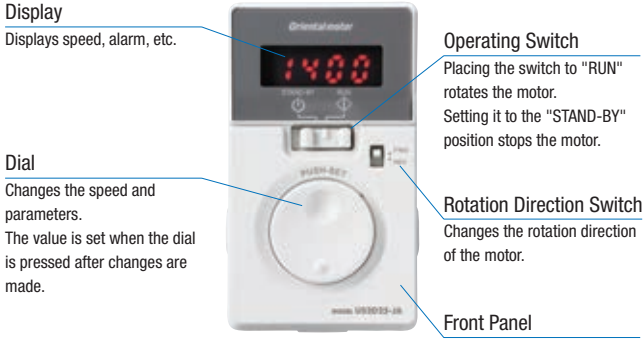


Product Name	Gear Ratio	Installation Screws		L2 (mm)
		Screw Size	L1 (mm)	
2GV□B	5~25	M4	50	7
	30~120		55	8
	150~360		60	8
3GV□B	5~25	M6	60	12
	30~120		65	12
	150~360		70	12
4GV□B	5~25	M6	60	9
	30~120		65	9
	150~360		70	9
5GV□B	5~18	M8	70	14
	25~100		85	16
	120~300		90	15
5GVH□B	5~18	M8	70	14
	25~100		85	16
	120~300		90	15
5GVR□B	5~15	M8	70	14
	18~36		85	16
	50~180		95	14

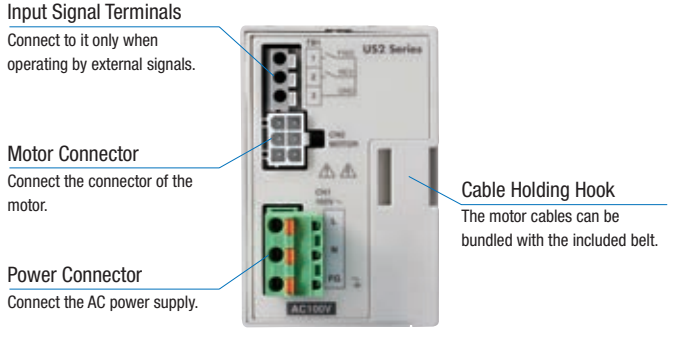
- Installation screws: 4 plain washers and 4 spring washers are included.
- The installation screw material is stainless steel.

# Connection and Operation

## Names and Functions of Speed Controller Parts

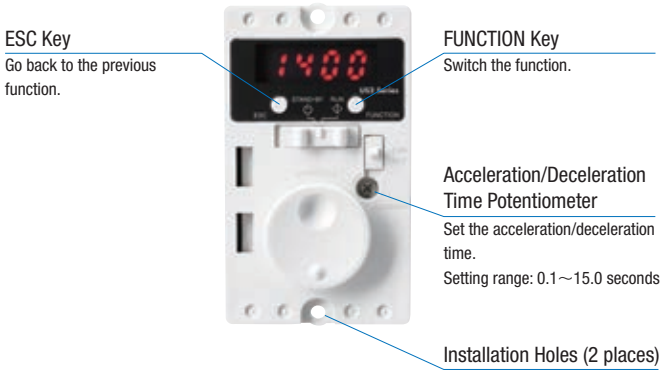


[Front]



[Back]

### When Front Panel is Removed



### Extended Functions

Remove the front panel to be able to perform various settings by operating the keys.

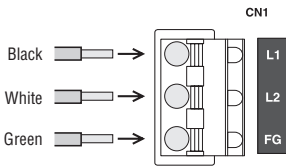
Operating Mode	Details
Monitoring	Rotation speed, input signals
Parameters	Gear ratio, speed up ratio, fixed display of the lower first digit, prohibition alarm of operation at the initial setting, upper and lower limits of speed, acceleration and deceleration time, external operating signals input, data initialization
Others	Locking of data editing

### Main Power Connector (CN1)

Connect the AC power supply to CN1. Use the FG terminal to connect to a ground.  
(The colors in the following figures apply when using the power supply cable.)

• Single-Phase 110/115 VAC, Single-Phase 220/230 VAC

• Applicable Lead Wire Size AWG18~14 (0.75~2.0 mm<sup>2</sup>)



● Operation with the Driver only

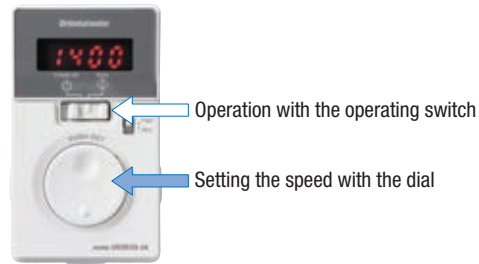
◇ Run/Stop

When the operating switch is set to the "RUN" position, the motor will start. When it is returned to the "STAND-BY" position, the motor decelerates to a stop.

◇ Speed Setting Method

Set the motor speed by using the dial.  
 Setting range: 90~1400 r/min (50Hz)  
 90~1600 r/min (60Hz)

Turning the dial slowly to the right increases the speed by 1 r/min increments, while turning it to the left reduces the speed by 1 r/min increments. Turning the dial fast produces a great variation in speed. Pressing the dial sets the speed.



● Operating Switch



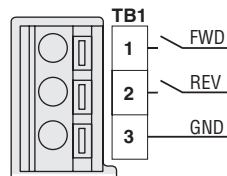
● Operation by External Signals

◇ Operating Method

● To perform run/stop by external signals, connect input signals to TB1.

● Input Signal Terminals (TB1)

Indication	Signal Name	Description
1	FWD	Forward input
2	REV	Reverse input
3	GND	Input signal common

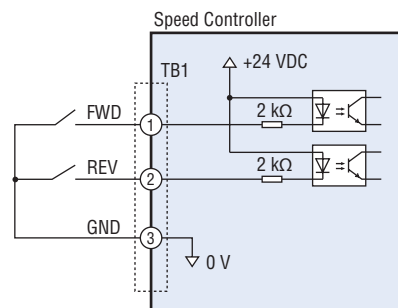


● Applicable Lead Wire

AWG24~16 (0.2~1.25 mm<sup>2</sup>)

◇ Example for Connection Using Switches, Relays, etc.

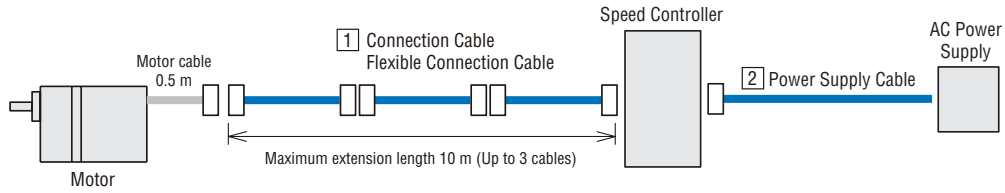
The figure shows a connection example for the operation of the motor using relays or switches.



# Accessories (Sold Separately)

## Cable

### Cable System Configuration



### 1 Connection Cables/Flexible Connection Cables

This is a connection cable for connecting the motor and the speed controller. The maximum extension length of cables used between products is 10 m (up to 3 cables). Use the flexible connection cable in applications where the cable is bent and flexed.

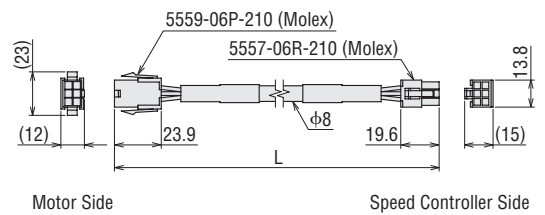
#### Product Line

##### ◇ Connection Cables

Product Name	Length L (m)	List Price
<b>CC01SC</b>	1	SGD35
<b>CC02SC</b>	2	SGD40
<b>CC03SC</b>	3	SGD50
<b>CC05SC</b>	5	SGD70
<b>CC10SC</b>	10	SGD120



#### Dimensions (Unit: mm)



##### ◇ Flexible Connection Cables

Product Name	Length L (m)	List Price
<b>CC01SCR</b>	1	SGD70
<b>CC02SCR</b>	2	SGD80
<b>CC03SCR</b>	3	SGD100
<b>CC05SCR</b>	5	SGD140
<b>CC10SCR</b>	10	SGD240



### 2 Power Supply Cable

This cable is used for connecting the speed controller and the power supply. The cable comes without the power supply plug.

#### Product Line

Product Name	List Price	Type	Power Supply Voltage	Length (m)
<b>CC02AC02N2</b>	SGD26	Plug not included	Single-Phase 110/115 VAC Single-Phase 220/230 VAC	2

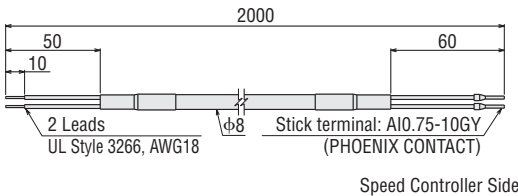


#### Dimensions (Unit: mm)

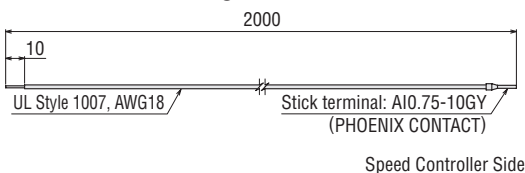
##### ◇ For Single-Phase 110/115 VAC, Single-Phase 220/230 VAC

### CC02AC02N2

#### • Power Supply Cable



#### • Lead for Connecting FG



## Flexible Couplings

These are clamp type couplings for connecting the motor and gearhead shaft with the driven shaft.

Once the gearhead is determined, the coupling can be selected.

● Couplings can also be used with round shaft types.

Select a coupling with the same inner diameter size as the motor shaft diameter.



Applicable Product	Load Type	Coupling Type	List Price
<b>SCM26</b>	Uniform load	<b>MCL30</b>	SGD61
	Shock load		
<b>SCM315</b>	Uniform load	<b>MCL30</b>	SGD61
	Shock load	<b>MCL40</b>	SGD93
<b>SCM425</b>	Uniform load	<b>MCL40</b>	SGD93
	Shock load	<b>MCL55</b>	SGD124
<b>SCM540</b> <b>SCM560</b> <b>SCM590</b>	Uniform load	<b>MCL55</b>	SGD124
	Shock load		

## Motor and Gearhead Mounting Brackets

These dedicated mounting brackets are for mounting motors and gearheads.



Product Name	List Price	Applicable Product
<b>SOL2M4F</b>	SGD24	<b>SCM26</b> Round Shaft Type
		<b>SCM26</b> Parallel Shaft Combination Type
<b>SOL3M5F</b>	SGD26	<b>SCM315</b> Round Shaft Type
<b>SOL3M6F</b>	SGD26	<b>SCM315</b> Parallel Shaft Combination Type
<b>SOL4M5F</b>	SGD29	<b>SCM425</b> Round Shaft Type
<b>SOL4M6F</b>	SGD29	<b>SCM425</b> Parallel Shaft Combination Type
<b>SOL5M6F</b>	SGD31	<b>SCM540, SCM560, SCM590</b> Round Shaft Type
<b>SOL5M8F</b>	SGD31	<b>SCM540, SCM560, SCM590</b> Parallel Shaft Combination Type

## Circuit Products Mounting Brackets

Mounting brackets for installing the driver are available.

Mounting brackets have product lines for different applications such as for DIN rail installation, installation on the wall surface, and for conveyor guide installation.

### Product Line

Material: SPCC Surface treatment: Electroless nickel plating

Product Name	Application	List Price
<b>MADP05-15</b>	For DIN rail installation	SGD23
<b>MAFP04-15</b>	For wall surface installation	SGD23
<b>MAFP05V</b>	For conveyor guide installation	SGD12
<b>MAFP05H</b>		SGD12

### Note

Circuit products mounting brackets cannot be used together with the dust-resistant and watertight type front cover.



**MADP05-15** <Application example>



**MAFP04-15** <Application example>



**MAFP05V** <Application example>



**MAFP05H** <Application example>

## Dust-Resistant and Watertight Type Front Cover

This cover protects the front panel of the speed controller.  
The degree of protection conforms to the IP64 specification.  
The cover can also be used to prevent operation errors on the front panel.



### Product Line

Product Name	List Price
<b>PCF12-B</b>	SGD31

### Note

The dust-resistant and watertight type front cover cannot be used together with circuit products mounting bracket.

## Enclosure Box

This box is useful for when a driver is installed.  
The box provides protection to the driver and wiring.



### Product Line

#### Enclosure Box

Product Name	List Price
<b>PCD12</b>	SGD206

#### Cable Gland (For I/O signals)

Use when using input/output signals to perform operations.

Product Name	List Price
<b>MPG</b>	SGD8

