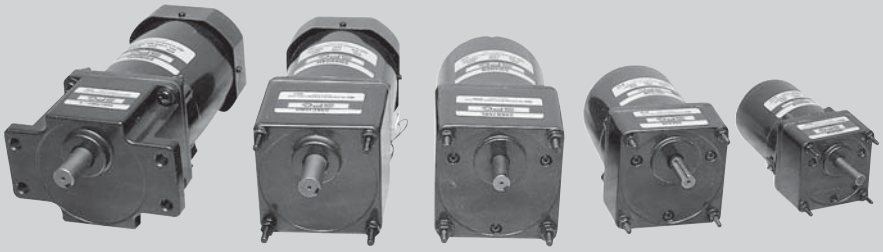
INDUCTION MOTORS

INDEX



CODING SYSTEM

MOTOR

MAKER	SIZE	MOTOR TYPE	OUTPUT	SHAFT TYPE	VOLTAGE	GEAR TYPE		SPECIAL TYPE
S	9	I	40	G	B	H	-	E

MAKER
S : SPG Co., Ltd.

SIZE
6 : □60(㎜)
7 : □70(㎜)
8 : □80(㎜)
9 : □90(㎜)

MOTOR TYPE
I : Induction Motor
R : Reversible Motor

OUTPUT
03 : 3W
06 : 6W
15 : 15W
25 : 25W
40 : 40W
60 : 60W
90 : 90W
120 : 120W
150 : 150W
180 : 180W
200 : 200W

SHAFT TYPE
G : Gear Type
S : Straight Type
D : D-Cut Type
K : Key Type

VOLTAGE

A : 1ØAC 110V	60Hz	(4Pole)
B : 1ØAC 220V	60Hz	(4Pole)
C : 1ØAC 100V	50/60Hz	(4Pole)
D : 1ØAC 200V	50/60Hz	(4Pole)
E : 1ØAC 115V	60Hz	(4Pole)
X : 1ØAC 220~240V	50Hz	(4Pole)
U : 3ØAC 200V	50/60Hz	(4Pole)
T : 3ØAC 220V	50/60Hz	(4Pole)
S : 3ØAC 380~440V	50/60Hz	(4Pole)

GEAR TYPE
H : Heavy Impact
L : Light Impact

SPECIAL TYPE
E : Electro-magnetic Brake Type
T : Terminal Box Type(Terminal Block Type)
T1 : Terminal Box Type(PCB Type Terminal Block) (25~90W)
T2 : Conduit Box Type(25~90W)
B : Semi-Brake Type
S : Variable Speed Control(Pack Type)
S12 : T.G Voltage 12V Type
S24 : T.G Voltage 24V Type
V : Variable Speed Control(Unit Type)
V12 : T.G Voltage 12V Type
ES : Electro-Magnetic Brake
Variable Speed Control(Pack Type)
ES12 : T.G Voltage 12V Type
ES24 : T.G Voltage 24V Type

※ NOTE 1) 'H' & 'L' type are applied to over 40W.
• 'H' type is the standard for over 60W.
• 'L' type is the standard for over 40W.
※ NOTE 2) Key Type are applied to over □80 15W

SPEED CONTROLLER (SR PACK TYPE)

CONTROLLER TYPE	VOLTAGE	OUTPUT
SR	B	01

CONTROLLER TYPE
SR SERIES
※ NOTE) The applicable motor is for T.G. 12V.

VOLTAGE

A : 1Ø AC110V	60Hz	(4Pole)
B : 1Ø AC220V	60Hz	(4Pole)
C : 1Ø AC100V	50/60Hz	(4Pole)
D : 1Ø AC200V	50/60Hz	(4Pole)
E : 1Ø AC115V	60Hz	(4Pole)
X : 1Ø AC220~240V	50Hz	(4Pole)

OUTPUT
01 : 6W
02 : 15W~90W

SPEED CONTROLLER (SS PACK TYPE)

CONTROLLER TYPE	VOLTAGE	OUTPUT		RUN / STOP TYPE
SS	B	01	-	SRSS

CONTROLLER TYPE
SS SERIES
※ NOTE) The applicable motor is for T.G. 24V.

VOLTAGE

A : 1Ø AC110V	60Hz	(4Pole)
B : 1Ø AC220V	60Hz	(4Pole)
C : 1Ø AC100V	50/60Hz	(4Pole)
D : 1Ø AC200V	50/60Hz	(4Pole)
E : 1Ø AC115V	60Hz	(4Pole)
X : 1Ø AC220V~240V	50Hz	(4Pole)

OUTPUT
01 : 6W(Standard Type)
02 : 15W~40W(Standard Type)
03 : 6W~90W(High Output Type)

RUN / STOP TYPE
Slow Run Slow Stop

SPEED CONTROLLER (UNIT TYPE)

MAKER	CONTROLLER TYPE	OUTPUT	TYPE	VOLTAGE		T.G VOLTAGE
S	U	A	40	I	B	- V12

V12 : T.G Voltage 12V Type

A : 1Ø AC110V 60Hz (4Pole)
B : 1Ø AC220V 60Hz (4Pole)
C : 1Ø AC100V 50/60Hz (4Pole)
D : 1Ø AC200V 50/60Hz (4Pole)
E : 1Ø AC115V 60Hz (4Pole)
X : 1Ø AC220~240V 50Hz (4Pole)

I : Induction Motor
※ NOTE) Unit Type of Speed Controller does not have Reversible Motor.(715 Type : No marking)

06 : 6W **25** : 25W **90** : 90W
715 : 15W(□70) **40** : 40W **120** : 120W
15 : 15W(□80) **60** : 60W **180** : 180W

A : Analogue Type
D : Digital Type

U : Unit Type

S : SPG Co.,Ltd.

BRAKE PACK (CONTACT TYPE)

BRAKE TYPE	VOLTAGE		MOTOR TYPE
SB	B	-	IR

IR : 1Ø Motor
I : 3Ø Motor

A : 1Ø AC 110V 60Hz (4Pole)
B : 1Ø AC 220V 60Hz (4Pole)
C : 1Ø AC 100V 50/60Hz (4Pole)
D : 1Ø AC 200V 50/60Hz (4Pole)
X : 1Ø AC 220~240V 50Hz (4Pole)
U : 3Ø AC 200V 50/60Hz (4Pole)
T : 3Ø AC 220V 50/60Hz (4Pole)
S : 3Ø AC 380~440V 50/60Hz (4Pole)

SB SERIES

GEAR HEAD

MAKER	SIZE	SHAFT TYPE	OUTPUT	GEAR RATIO	BEARING TYPE	SHAFT IMPACT TYPE		SPECIAL TYPE
S	9	K	C	36	B	H	-	S

S : Flange Type

※
H : Heavy Impact
L : Light Impact

B : Ball bearing + Metal bearing(6W~40W)
All Ball bearing(60W MIN)
B1 : All Ball bearing(6W~40W)
M : Metal bearing(6W~40W)

Reduction Ratio(36:1/36)

T : 3W **C** : 60W~120W
A : 6W~ 25W **D** : 60W~120W
B : 40W **H** : 150W~200W

S : Straight Type
D : D-Cut Type
K : Key Type

6 : □60(㎜)
7 : □70(㎜)
8 : □80(㎜)
9 : □90(㎜)

※ NOTE) 'H' & 'L' type are applied to over 40W.
• 'H' type is the standard for over 60W.
• 'L' type is the standard for over 40W.

S : SPG Co.,Ltd.

BRAKE PACK (NON CONTACT TYPE)

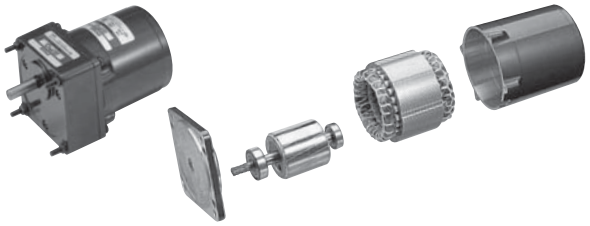
BRAKE TYPE	VOLTAGE		
SB	B	-	NCR

NCR : Non Contact Relay
ENCR : Brake type Non Contact Relay

A : 1Ø AC 110V 60Hz (4Pole)
B : 1Ø AC 220V 60Hz (4Pole)
C : 1Ø AC 100V 50/60Hz (4Pole)
D : 1Ø AC 200V 50/60Hz (4Pole)
X : 1Ø AC 220V~240V 50Hz (4Pole)

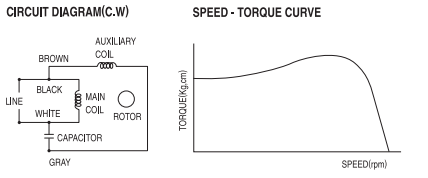
SB SERIES

Characteristics of INDUCTION MOTOR

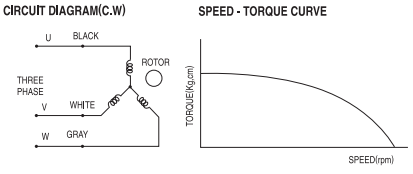


1. Characteristics of INDUCTION MOTOR

- A small induction motor usually means the condenser – run induction motor. This motor always uses both auxiliary winding and condenser not only when starting but also during operation. Generally, its starting torque isn't great, but its structure is simple reliable and efficient. Refer to 〈Fig. 1〉.
- The motor can be used in continuous rated operations.
- The number of rated rotation of the motor varies depending on the load imposed on it.
- It is suitable for operations that do not require the speed control.
- Its insulation class is E. SPG's UL conformance motor is class A.
- There are two types. One is a condenser-run single-phase induction motor and the other is a three-phase induction motor.
- Since the single-phase motor is a condenser-run induction motor, it provides high efficiency and low noise.
- The power source for a single motor includes A(110V 60Hz), B(220V 60Hz), C(100V 50/60Hz), D(200V 50/60Hz), E(115V 60Hz), and X(220-240V 50Hz).
- For a single-phase induction motor, make sure that the condenser complies with the capacity of the motor.
- For a single-phase induction motor, reversing the direction of the rotation within a short time during operation is not possible due to adverse exerting of the inertia torque against reversing. Thus, stop the motor first and change the rotational direction next.
- As an induction motor is driven by a three-phase power source, the three-phase motor provides high efficiency, relatively great starting torque, and high reliability. The three-phase motor is popular as a general-purpose motor.
- The power source for a three-phase motor, an induction motor, includes U(200V 50/60Hz), T(220V 50/60Hz), and S(380-440V 50/60Hz). Refer to 〈Fig. 2〉.



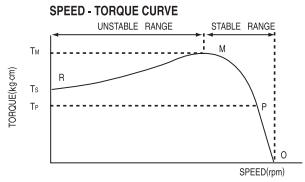
〈Fig. 1〉



〈Fig. 2〉

2. Characteristics of Rotation and TORQUE

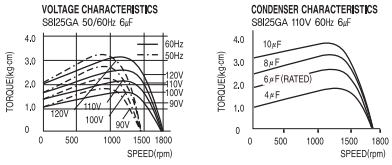
- Under a constant voltage, the relationship between the number of rotation and the torque is as shown in 〈Fig. 3〉. With no-load, the number of rotation roughly approximates the number of synchronous rotation, but as the load increases, the number of rotation decreases and approaches to the speed(rpm) indicated by the point P where the torque Tp horizontally meets the load curve.
- When the load is further increased and reaches the point M, the motor stops at the point R because the motor no longer generates further torque. Therefore, the leg R-M is referred to as an unstable zone and the leg M-O is a stable zone for operation.



〈Fig. 3〉

3. Characteristics of Voltage and CONDENSOR

- The Characteristics of voltage can be represented by the torque's Characteristics about the applied voltage. The torque of induction motor changes proportionate to twice the voltage.
- The characteristics of torque also change according the capacity of the condenser.
- As the capacity of the condenser boost, the starting torque and stalling torque increase. But if the capacity increases by 2.5-3.0 folds, the operating torque decreases and the starting torque do not increase.
- As a simple method to increase the torque when the induction motor is short on torque, either the voltage or the condenser capacity can be increased to continue the operation. In this case, the loss input of the motor increases and the temperature rises rapidly.
- However, if the motor must be run with insufficient torque, take measures to let the motor release heat as much as possible and operate the motor while keeping the temperature of the motor's housing below 90℃. Refer to (Fig. 4).



〈Fig. 4〉

GENERAL SPECIFICATION OF INDUCTION MOTORS

ITEM	SPECIFICATION
Insulation Resistance	100MΩ or more when 500V megger is applied between the windings and the housing after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5kVat 50/60Hz applied between the windings and the case after rated motor operation under normal ambient temperature and humidity.
Temperature Rise	80℃ or less increase measured by thermometer after rated operation.
Insulation Class	Class B(130℃)
Overheat Protection Device	Built-in THERMAL PROTECTOR (automatic return type) : Open 120℃±5℃ Close 76℃±15℃
Ambient Temperature	-10℃ ~ 40℃
Ambient Humidity	85% maximum(non condensing)

3W

INDUCTION MOTOR □60㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
60	S6I03GA S6I03GACE	4	3	1ø 110	60	Cont.	0.15	1500	0.21	0.021	0.25	0.025	2.0
	S6I03GC S6I03GCCE	4	3	1ø 100	50	Cont.	0.15	1200	0.25	0.025	0.25	0.025	2.0
					60			1450	0.21	0.021			
	S6I03GE S6I06GECE	4	3	1ø 100	50	Cont.	0.15	1200	0.25	0.025	0.25	0.025	2.0
					60			1450	0.21	0.021			
				1ø 115	60		0.15	1450	0.21	0.021			1.5

❖ Appropriate capacitors shall be used according to the voltage for S6I03GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
❖ CE marked at the end of model name indicates that it is impedance protected type which has received CE. S6I03GECE is available only for 115V specification.
❖ "L"or "H"type does not apply to motors under 40W.

50Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5	6
S6DT□B	kg-cm	0.6	0.7	1.0	1.2	1.5	1.8	2.0	2.5	3.0	3.6	3.6	4.6	5.5	6.6	7.3	8.2	9.8	12.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	N·m	0.06	0.07	0.10	0.12	0.15	0.18	0.20	0.25	0.30	0.36	0.36	0.46	0.55	0.66	0.73	0.82	0.98	1.23	1.5	1.5	1.5	1.5	1.5	1.5	1.5

60Hz

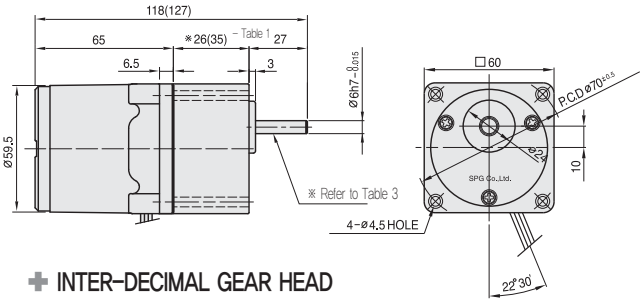
GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	7.2
S6DT□B	kg-cm	0.5	0.6	0.8	1.0	1.3	1.5	1.7	2.1	2.6	3.1	3.4	3.8	4.6	5.5	6.8	6.9	8.3	10.0	12.0	14.0	15.0	15.0	15.0	15.0	15.0
	N·m	0.05	0.06	0.08	0.10	0.13	0.15	0.17	0.21	0.26	0.31	0.34	0.38	0.46	0.55	0.68	0.69	0.83	1.0	1.2	1.4	1.5	1.5	1.5	1.5	1.5

❖ The code in□of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 5 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ "L"or "H"type does not apply to motors under 40W.

DIMENSIONS

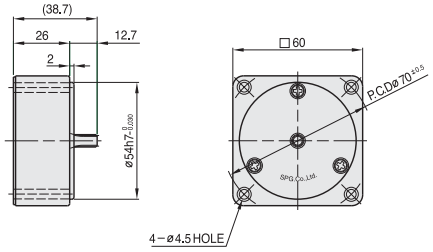
GEARED MOTOR

※MOTOR MODEL : S6I03G□
※HEAD MODEL : S6□T3□~S6□T250□



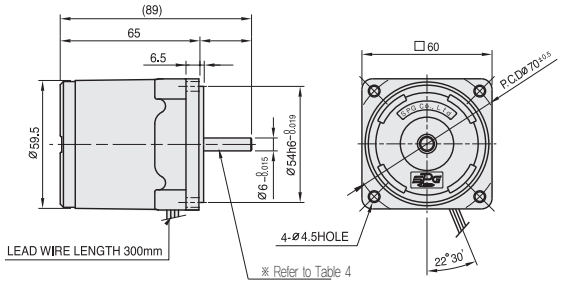
INTER-DECIMAL GEAR HEAD

※ MODEL : S6GX10B



MOTOR

※MOTOR MODEL : S6I03□□



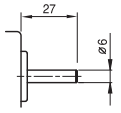
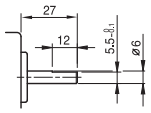
※26(35) - (Table1)

GEAR RATIO	SIZE(mm)
S6□T3□ ~ S6□T18□	26
S6□T20□ ~ S6□T250□	35

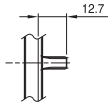
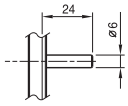
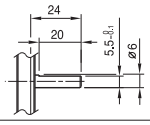
WEIGHT - (Table2)

PART		WEIGHT(kg)
MOTOR		0.60
DECIMAL GEAR HEAD		0.18
GEAR HEAD	S6□T3□ ~S6□T18□	0.21
	S6□T20□ ~S6□T40□	0.27
	S6□T50□ ~S6□T250□	0.30

SPEC for output shaft of gearhead - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S6ST3□ ~S6ST250□	
D-CUT TYPE	
S6DT3□ ~S6DT250□	

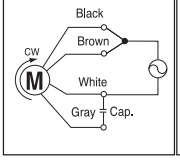
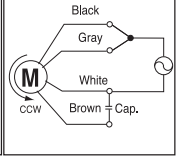
SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S6I03G□	
STRAIGHT TYPE	
S6I03S□	
D-CUT TYPE	
S6I03D□	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

S6I03GA S6I03GACE
S6I03GC S6I03GACE
S6I03GE S6I03GECE

CW	CCW
	

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.

6W

INDUCTION MOTOR □60㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
60	S6I06GA S6I06GACE	4	6	1ø 110	60	Cont.	0.20	1550	0.40	0.040	0.55	0.055	2.5
	S6I06GB S6I06GBCE	4	6	1ø 220	60	Cont.	0.10	1550	0.40	0.040	0.55	0.055	0.7
	S6I06GC S6I06GCCE	4	6	1ø 100	50	Cont.	0.21	1200	0.50	0.050	0.45	0.045	2.5
					60		0.19	1500	0.42	0.042			
	S6I06GD S6I06GDCE	4	6	1ø 200	50	Cont.	0.10	1200	0.50	0.050	0.45	0.045	0.7
					60			1500	0.42	0.042			
	S6I06GE S6I06GECE	4	6	1ø 100	50	Cont.	0.18	1200	0.50	0.050	0.52	0.052	2.5
					60		0.19	1500	0.42	0.042			
				1ø 115	60		0.19	1500	0.42	0.042	0.55	0.055	2.0
	S6I06GX S6I06GXCE	4	6	1ø 220	50	Cont.	0.08	1200	0.50	0.050	0.50	0.050	0.6
				1ø 240			0.09		0.53	0.053	0.55	0.055	

❖ S6I06GE is UL approved (UL FILE No. E172722) impedance protected type.
❖ Appropriate capacitors shall be used according to the voltage for S6I06GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise informed of the required voltage.
❖ CE marked at the end of model name indicates that it is impedance protected type which has received CE. S6I06GECE is available only for 115V specification.
❖ "L"or "H"type does not apply to motors under 40W.

50Hz

MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5	6
S6DA□B	kg-cm	1.3	1.5	2.1	2.6	3.2	3.9	4.3	5.4	6.4	7.7	7.7	9.7	11.6	13.9	15.5	17.5	21.0	26.2	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	N·m	0.127	0.147	0.206	0.255	0.314	0.382	0.421	0.529	0.627	0.755	0.755	0.951	1.137	1.362	1.519	1.715	2.058	2.568	2.942	2.942	2.942	2.942	2.942	2.942	2.942

60Hz

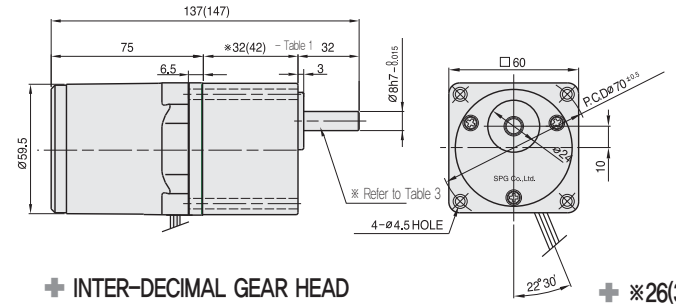
MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	7.2
S6DA□B	kg.-cm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.8	9.4	11.3	12.6	14.2	17.0	21.3	25.5	28.4	30.0	30.0	30.0	30.0	30.0
	N·m	0.098	0.127	0.167	0.206	0.255	0.304	0.343	0.431	0.510	0.617	0.617	0.764	0.921	1.107	1.235	1.392	1.666	2.087	2.499	2.783	2.942	2.942	2.942	2.942	2.942

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 30 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ "L"or "H"type does not apply to motors under 40W.

DIMENSIONS

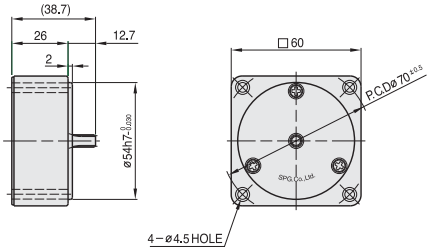
GEARED MOTOR

※MOTOR MODEL : S6I06G□
※HEAD MODEL : S6□A3□~S6□A250□



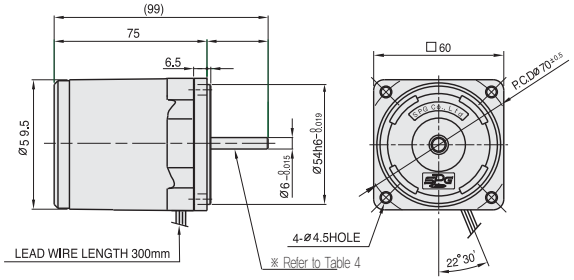
INTER-DECIMAL GEAR HEAD

※ MODEL : S6GX10B



MOTOR

※MOTOR MODEL : S6I06□□



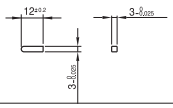
※26(35) - (Table1)

GEAR RATIO	SIZE(㎜)
S6□A3□ ~ S6□A18□	30
S6□A20□ ~ S6□A250□	40

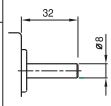
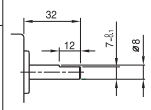
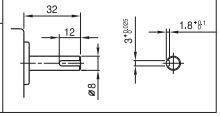
WEIGHT - (Table2)

PART		WEIGHT(kg)
MOTOR		0.70
DECIMAL GEAR HEAD		0.18
GEAR HEAD	S6□A3□ ~S6□A18□	0.24
	S6□A20□ ~S6□A40□	0.30
	S6□A50□ ~S6□A250□	0.33

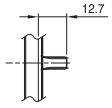
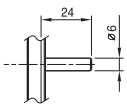
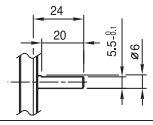
KEY SPEC

GEAR HEAD


SPEC for output shaft of gearhead - (Table3)

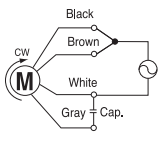
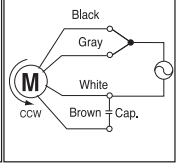
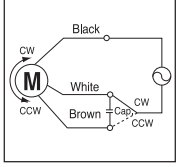
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S6SA3□ ~S6SA250□	
D-CUT TYPE	
S6DA3□ ~S6DA250□	
KEY TYPE	
S6KA3□ ~S6KA250□	

SPEC for output shaft of motor - (Table4)

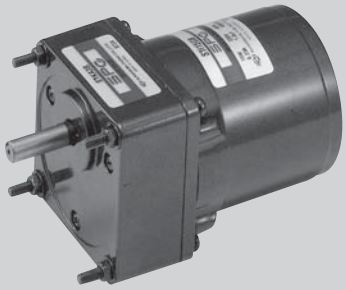
MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S6I06G□	
STRAIGHT TYPE	
S6I06S□	
D-CUT TYPE	
S6I06D□	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

S6I06GA S6I06GB S6I06GC S6I06GD S6I06GACE S6I06GBCE S6I06GE S6I06GCCE S6I06GDCE S6I06GECE		S6I06GX S6I06GXCE
CW	**CCW**	**CW,CCW**
		

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



15W

INDUCTION MOTOR □70㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
70	S7I15GA S7I15GA(TP) S7I15GACE	4	15	1Ø 110	60	Cont.	0.34	1600	1.00	0.100	1.10	0.110	5.0
	S7I15GB S7I15GB(TP) S7I15GBCE	4	15	1Ø 220	60	Cont.	0.19	1550	1.10	0.110	1.10	0.110	1.2
	S7I15GC S7I15GC(TP) S7I15GCCE	4	15	1Ø 100	50	Cont.	0.35	1250	1.20	0.120	0.90	0.090	5.0
					60		0.34	1550	1.00	0.100			
	S7I15GD S7I15GD(TP) S7I15GDCE	4	15	1Ø 200	50	Cont.	0.19	1200	1.25	0.125	0.90	0.090	1.2
					60		0.18	1500	1.20	0.120			
	S7I15GE S7I15GECE	4	15	1Ø 100	50	Cont.	0.35	1200	1.25	0.125	0.90	0.090	5.0
					60		0.33	1550	1.00	0.100			
				1Ø 115	60		0.30	1600	1.00	0.100			4.0
	S7I15GX S7I15GXCE	4	15	1Ø 220	50	Cont.	0.16	1200	1.25	0.125	0.75	0.075	0.9
				1Ø 240			0.18		1.35	0.135	0.90	0.090	

❖ S7I15GE is UL approved (UL FILE No.E172720) thermally protected type.
❖ Appropriate capacitors shall be used according to the voltage for S7I15GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
S7I15GECE is available only for 115V specification.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S7I15GE, S7I15GX is thermally protected type with TP mounted.
❖ "L"or "H"type does not apply to motors under 40W.

50Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S7KA□B	kg-cm	3.2	3.9	5.4	6.5	8.1	9.7	10.8	13.5	16.2	19.4	19.4	24.2	29.1	34.9	38.8	43.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	N·m	0.314	0.382	0.530	0.637	0.794	0.951	1.059	1.324	1.587	1.902	1.902	2.373	2.854	3.423	3.805	4.276	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900

60Hz

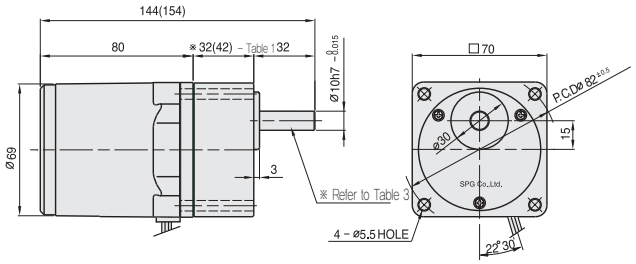
GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S7KA□B	kg-cm	3.0	3.6	5.1	6.1	7.6	9.1	10.1	12.7	15.2	18.2	18.2	22.8	27.3	32.8	36.5	41.0	49.2	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	N·m	0.294	0.353	0.500	0.598	0.745	0.892	0.990	1.245	1.491	1.785	1.785	2.236	2.677	3.217	3.579	4.021	4.825	4.900	4.900	4.900	4.900	4.900	4.900	4.900

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 50 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ "L"or "H"type does not apply to motors under 40W.

DIMENSIONS

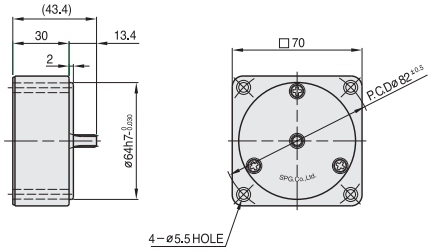
GEARED MOTOR

※MOTOR MODEL : S7I15G□
※HEAD MODEL : S7□A3□~S7□A200□



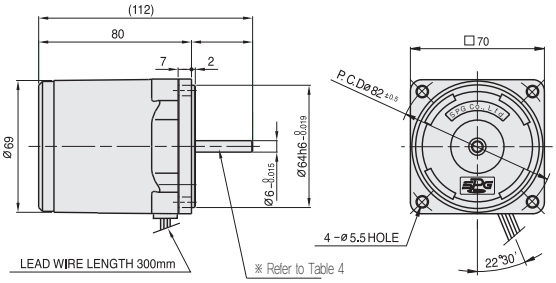
INTER-DECIMAL GEAR HEAD

※ MODEL : S7GX10B



MOTOR

※MOTOR MODEL : S7I15□□



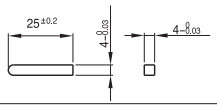
※26(35) - (Table1)

GEAR RATIO	SIZE(mm)
S7□A3□ ~ S7□A18□	32
S7□A20□ ~ S7□A200□	42

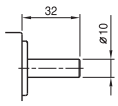
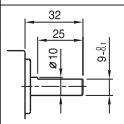
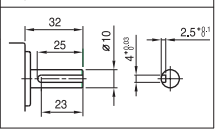
WEIGHT - (Table2)

PART		WEIGHT(kg)
MOTOR		1.04
DECIMAL GEAR HEAD		0.32
GEAR HEAD	S7□A3□ ~S7□A18□	0.38
	S7□A20□ ~S7□A40□	0.47
	S7□A50□ ~S7□A250□	0.52

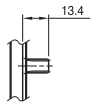
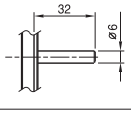
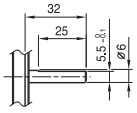
KEY SPEC

GEAR HEAD


SPEC for output shaft of gearhead - (Table3)

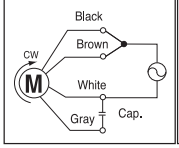
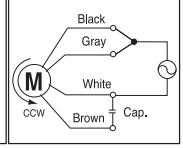
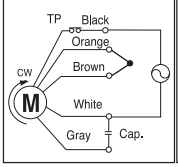
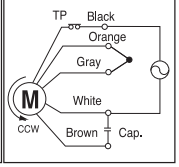
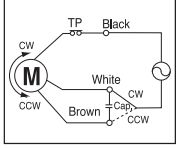
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S7SA3□ ~S7SA200□	
D-CUT TYPE	
S7DA3□ ~S7DA200□	
KEY TYPE	
S7KA3□ ~S7KA200□	

SPEC for output shaft of motor - (Table4)

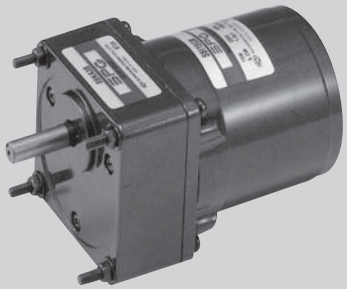
MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S7I15G□	
STRAIGHT TYPE	
S7I15S□	
D-CUT TYPE	
S7I15D□	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

S7I15GA S7I15GB S7I15GC S7I15GD		S7I15GA(TP) S7I15GB(TP) S7I15GC(TP) S7I15GD(TP) S7I15GACE S7I15GBCE S7I15GE S7I15GCCE S7I15GDCE S7I15GECE		S7I15GX S7I15GXCE
CW	**CCW**	**CW**	**CCW**	**CW,CCW**
				

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



15W

INDUCTION MOTOR □80㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
80	S8I15GA S8I15GA(TP) S8I15GACE	4	15	1Ø 110	60	Cont.	0.43	1600	1.00	0.100	1.20	0.120	4.0
	S8I15GB S8I15GB(TP) S8I15GBCE	4	15	1Ø 220	60	Cont.	0.22	1600	1.00	0.100	1.20	0.120	1.0
	S8I15GC S8I15GC(TP) S8I15GCCE	4	15	1Ø 100	50	Cont.	0.51	1300	1.20	0.120	0.95	0.095	4.0
					60		0.43	1550	1.00	0.100			
	S8I15GD S8I15GD(TP) S8I15GDCE	4	15	1Ø 200	50	Cont.	0.25	1300	1.20	0.120	0.95	0.095	1.0
					60		0.22	1550	1.00	0.100			
	S8I15GE S8I15GECE	4	15	1Ø 100	50	Cont.	0.51	1250	1.20	0.120	0.95	0.095	4.0
					60		0.42	1550	1.00	0.100			
				1Ø 115	60		0.46	1600	1.00	0.100			3.0
	S8I15GX S8I15GXCE	4	15	1Ø 220	50	Cont.	0.16	1200	1.30	0.130	0.95	0.095	1.0
				1Ø 240			0.17		1.40	0.140	1.10	0.110	

❖ S8I15GE is UL approved (UL FILE No. E172720) thermally protected type.
❖ Appropriate capacitors shall be used according to the voltage for S8I15GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
S8I15GECE is available only for 115V specification.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S8I15GE, S8I15GX is thermally protected type with TP mounted.
❖ "L"or "H"type does not apply to motors under 40W.

50Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S8KA□B	kg-cm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.2	80	80	80	80	80	80
	N·m	0.333	0.402	0.559	0.666	0.833	1.000	1.107	1.392	1.666	1.999	1.999	2.509	3.009	3.606	4.008	4.530	5.433	6.786	7.840	7.840	7.840	7.840	7.840	7.840

60Hz

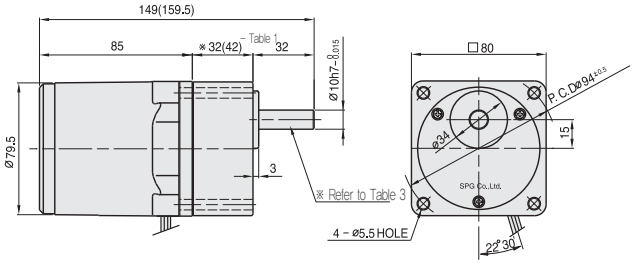
GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S8KA□B	kg-cm	2.9	3.5	4.9	5.8	7.3	8.7	9.7	12.2	14.6	17.5	17.5	21.9	26.3	31.5	35.0	39.6	47.5	59.4	71.3	79.2	80	80	80	80
	N·m	0.284	0.343	0.481	0.568	0.715	0.853	0.951	1.196	1.432	1.715	1.715	2.146	2.577	3.087	3.430	3.881	4.658	5.825	6.992	7.767	7.840	7.840	7.840	7.840

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ "L"or "H"type does not apply to motors under 40W.

DIMENSIONS

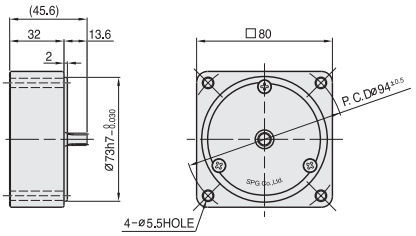
GEARED MOTOR

※MOTOR MODEL : S8I15G□
※HEAD MODEL : S8□A3□~S8□A200□



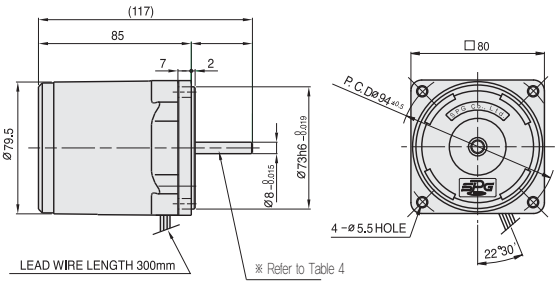
INTER-DECIMAL GEAR HEAD

※ MODEL : S8GX10B



MOTOR

※MOTOR MODEL : S7I15□□



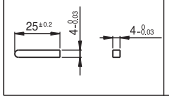
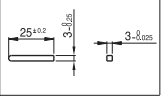
※26(35) - (Table1)

GEAR RATIO	SIZE(mm)
S8□A3□ ~ S8□A18□	32
S8□A20□ ~ S8□A200□	42.5

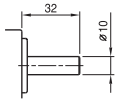
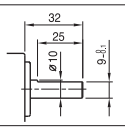
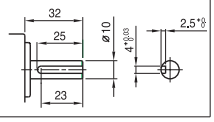
WEIGHT - (Table2)

PART		WEIGHT(kg)
MOTOR		1.14
DECIMAL GEAR HEAD		0.43
GEAR HEAD	S8□A3□ ~S8□A18□	0.43
	S8□A20□ ~S8□A40□	0.57
	S8□A50□ ~S8□A200□	0.61

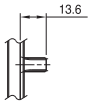
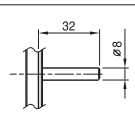
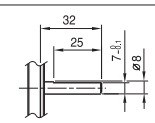
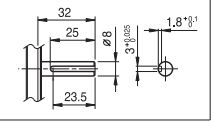
KEY SPEC

GEAR HEAD	MOTOR
	

SPEC for output shaft of gearhead - (Table3)

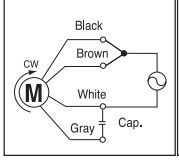
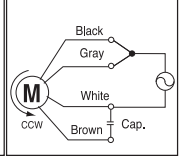
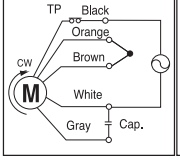
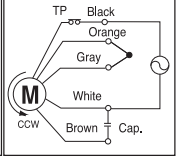
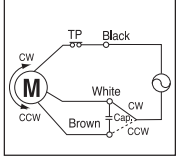
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S8SA3□ ~S8SA200□	
D-CUT TYPE S8DA3□ ~S8DA200□	
KEY TYPE S8KA3□ ~S8KA200□	

SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S8I15G□	
STRAIGHT TYPE S8I15S□	
D-CUT TYPE S8I15D□	
KEY TYPE S8I15K□	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

S8I15GA S8I15GB S8I15GC S8I15GD		S8I15GA(TP) S8I15GB(TP) S8I15GC(TP) S8I15GD(TP) S8I15GACE S8I15GBCE S8I15GE S8I15GCCE S8I15GDCE S8I15GECE		S8I15GX S8I15GXCE
CW	**CCW**	**CW**	**CCW**	**CW,CCW**
				

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.

25W

INDUCTION MOTOR □80㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
80	S8I25GA S8I25GA(TP) S8I25GACE	4	25	1Ø 110	60	Cont.	0.51	1600	1.60	0.160	1.80	0.180	6.0
	S8I25GB S8I25GB(TP) S8I25GBCE	4	25	1Ø 220	60	Cont.	0.23	1550	1.65	0.165	1.80	0.180	1.5
	S8I25GC S8I25GC(TP) S8I25GCCE	4	25	1Ø 100	50	Cont.	0.57	1250	2.00	0.200	1.45	0.145	6.0
					60		0.52	1550	1.65	0.165			
	S8I25GD S8I25GD(TP) S8I25GDCE	4	25	1Ø 200	50	Cont.	0.30	1250	2.00	0.200	1.45	0.145	1.5
					60		0.29	1500	1.70	0.170			
	S8I25GE S8I25GECE	4	25	1Ø 100	50	Cont.	0.54	1250	2.00	0.200	1.20	0.120	6.0
					60		0.55	1500	1.70	0.170			
				1Ø 115	60		0.59	1500	1.70	0.170			4.5
	S8I25GX S8I25GXCE	4	25	1Ø 220	50	Cont.	0.23	1200	2.10	0.210	1.10	0.110	1.3
				1Ø 240			0.25		2.20	0.220	1.30	0.130	
	S8I25GU S8I25GUCE	4	25	3Ø 200	50	Cont.	0.26	1300	1.95	0.195	3.50	0.350	—
					60		0.24	1550	1.65	0.165	2.90	0.290	
	S8I25GT S8I25GTCE	4	25	3Ø 220	50	Cont.	0.28	1350	1.90	0.190	4.20	0.420	—
					60		0.24	1600	1.60	0.160	3.50	0.350	
	S8I25GS S8I25GSCE	4	25	3Ø 380	50	Cont.	0.14	1250	2.00	0.200	3.15	0.315	—
					60		0.12	1500	1.70	0.170	2.50	0.250	
				3Ø 400	50	Cont.	0.14	1250	2.10	0.210	3.50	0.350	
					60		0.12	1500	1.80	0.180	2.75	0.275	
				3Ø 415	50	Cont.	0.15	1300	1.95	0.195	3.75	0.375	
					60		0.13	1550	1.65	0.165	3.00	0.300	
				3Ø 440	50	Cont.	0.15	1300	2.10	0.210	4.40	0.440	
					60		0.13	1550	1.80	0.180	3.40	0.340	

- ❖ S8I25GE is UL approved (UL FILE No. E172720) thermally protected type.
- ❖ Appropriate capacitors shall be used according to the voltage for S8I25GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
- ❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP. S8I25GECE is availableonly for 115V specification.
- ❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
  S8I25GE,S8I25GX, S8I25GS is thermally protected type with TP mounted.
- ❖ Be cautious when using a three-phase 380V motor controlled with inverter.
- ❖ "L"or "H"type does not apply to motors under 40W.
- ❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

50Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S8KA□B	kg-cm	5.3	6.4	8.9	10.7	13.4	16.0	17.8	22.3	26.7	32.1	32.1	40.2	48.2	57.8	64.2	72.6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	N·m	0.519	0.627	0.872	1.049	1.313	1.568	1.744	2.185	2.617	3.146	3.146	3.940	4.724	5.664	6.292	7.115	7.840	7.840	7.840	7.840	7.840	7.840	7.840	7.840

60Hz

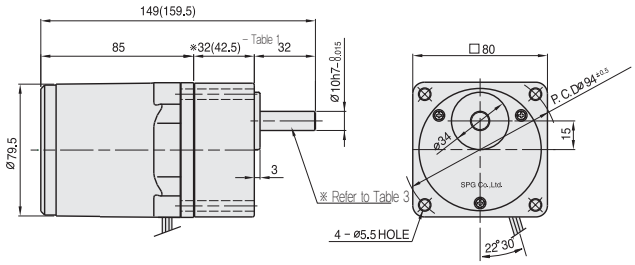
GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S8KA□B	kg-cm	4.4	5.2	7.3	8.7	10.9	13.1	14.6	18.2	21.9	26.2	26.3	32.9	39.4	47.3	52.6	59.4	71.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	N·m	0.431	0.510	0.715	0.853	1.068	1.284	1.431	1.784	2.146	2.568	2.577	3.224	3.861	4.635	5.155	5.821	6.987	7.840	7.840	7.840	7.840	7.840	7.840	7.840

- ❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- ❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
  The actual rotation speed can be 2~20% less than displayed value depending on the load.
- ❖ "L"or "H"type does not apply to motors under 40W.

DIMENSIONS

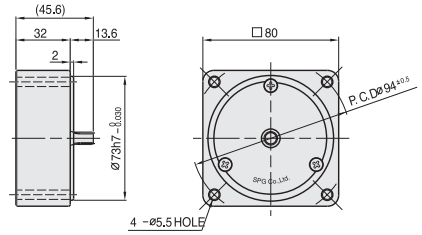
GEARED MOTOR

※MOTOR MODEL : S8I25G□
※HEAD MODEL : S8□A3□~S8□A200□



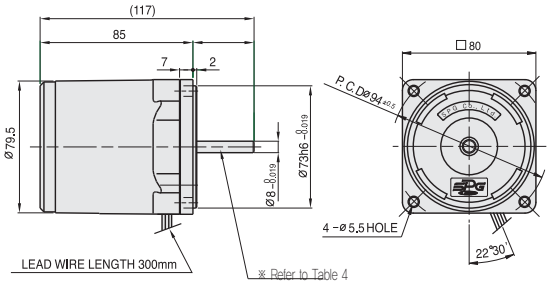
INTER-DECIMAL GEAR HEAD

※MODEL : S8GX10B



MOTOR

※MOTOR MODEL : S8I25□□



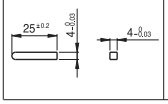
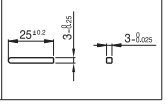
※26(35) - (Table1)

GEAR RATIO	SIZE(mm)
S8□A3□ ~ S8□A18□	32
S8□A20□ ~ S8□A200□	42.5

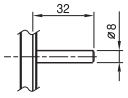
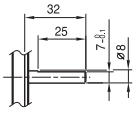
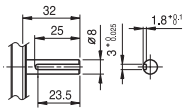
WEIGHT - (Table2)

PART		WEIGHT(kg)
MOTOR		1.46
DECIMAL GEAR HEAD		0.43
GEAR HEAD	S8□A3□ ~S8□A18□	0.43
	S8□A20□ ~S8□A40□	0.57
	S8□A50□ ~S8□A200□	0.61

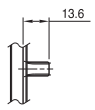
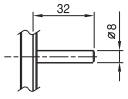
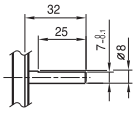
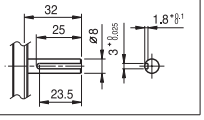
KEY SPEC

GEAR HEAD	MOTOR
	

SPEC for output shaft of gearhead - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S8SA3□ ~S8SA200□	
D-CUT TYPE	
S8DA3□ ~S8DA200□	
KEY TYPE	
S8KA3□ ~S8KA200□	

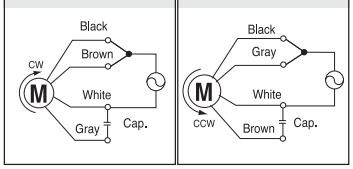
SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S8I25G□	
STRAIGHT TYPE	
S8I25S□	
D-CUT TYPE	
S8I25D□	
KEY TYPE	
S8I25K□	

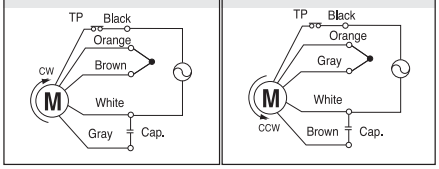
SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

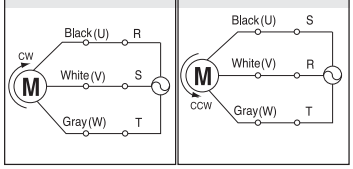
S8I25GA S8I25GB S8I25GC S8I25GD



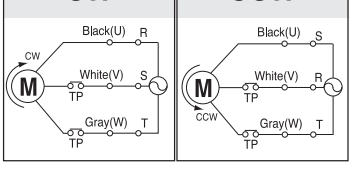
S8I25GA(TP), S8I25GB(TP), S8I25GC(TP), S8I25GD(TP) S8I25GACE, S8I25GBCE, S8I25GE, S8I25GCCE, S8I25GDCE, S8I25GECE



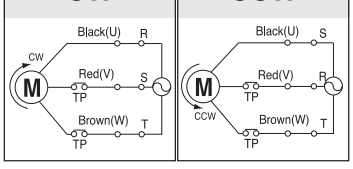
S8I25GU S8I25GT



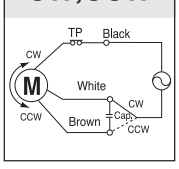
S8I25GUCE S8I25GTCE



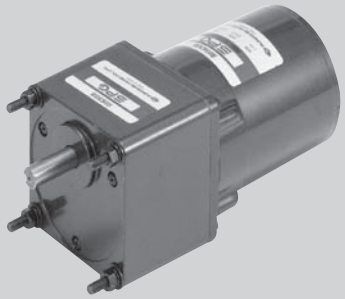
S8I25GS, S8I25GSCE



S8I25GX S8I25GXCE



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



40W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
90	S9I40GA( ) S9I40GA( )(TP) S9I40GA( )CE	4	40	1 Ø 110	60	Cont.	0.82	1600	2.50	0.250	2.90	0.290	10.0
	S9I40GB( ) S9I40GB( )(TP) S9I40GB( )CE	4	40	1 Ø 220	60	Cont.	0.41	1600	2.50	0.250	2.90	0.290	2.5
	S9I40GC( ) S9I40GC( )(TP) S9I40GC( )CE	4	40	1 Ø 100	50	Cont.	0.80	1300	3.10	0.310	2.40	0.240	10.0
					60		0.85	1550	2.60	0.260			
	S9I40GD( ) S9I40GD( )(TP) S9I40GD( )CE	4	40	1 Ø 200	50	Cont.	0.41	1300	3.10	0.310	2.40	0.240	2.5
					60		0.43	1550	2.60	0.260			
	S9I40GE( ) S9I40GE( )CE	4	40	1 Ø 100	50	Cont.	0.82	1300	3.10	0.310	2.40	0.240	10.0
					60		0.85	1550	2.60	0.260			
				1 Ø 115	60		0.91	1550	2.60	0.260			8.0
	S9I40GX( ) S9I40GX( )CE	4	40	1 Ø 220	50	Cont.	0.34	1250	3.15	0.315	1.80	0.180	2.0
				1 Ø 240			0.37		3.35	0.335	2.10	0.210	
	S9I40GU( ) S9I40GU( )CE	4	40	3 Ø 200	50	Cont.	0.36	1300	3.10	0.310	6.30	0.630	—
					60		0.33	1550	2.60	0.260	5.20	0.520	
	S9I40GT( ) S9I40GT( )CE	4	40	3 Ø 220	50	Cont.	0.39	1350	3.00	0.300	7.60	0.760	—
					60		0.33	1600	2.50	0.250	6.10	0.610	
	S9I40GS( ) S9I40GS( )CE	4	40	3 Ø 380	50	Cont.	0.21	1300	3.20	0.320	6.30	0.630	—
					60		0.19	1550	2.70	0.270	4.85	0.485	
				3 Ø 400	50	Cont.	0.21	1300	3.30	0.330	6.90	0.690	
					60		0.19	1550	2.80	0.280	5.25	0.525	
				3 Ø 415	50	Cont.	0.21	1350	3.10	0.310	7.30	0.730	
					60		0.19	1600	2.60	0.260	5.70	0.570	
				3 Ø 440	50	Cont.	0.21	1350	3.20	0.320	8.20	0.820	
					60		0.19	1600	2.70	0.270	6.30	0.630	

❖ S9I40GE is UL approved (UL FILE No. E172720) thermally protected type.
❖ Appropriate capacitors shall be used according to the voltage for S9I40GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
S9I40GE( )CE is available only for 115V specification.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S9I40GE, S9I40GX, S9I40GS is thermally protected type with TP mounted.
❖ Be cautious when using a three-phase 380V motor controlled with inverter.
❖ ( ) is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'.
❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

50Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KB□B( )	kg-Cm	8.3	9.9	13.8	16.5	20.7	24.8	27.5	34.4	41.3	49.6	49.6	62.1	74.5	89.4	99.3	100	100	100	100	100	100	100	100	100
	N·m	0.813	0.970	1.352	1.617	2.029	2.430	2.695	3.371	4.047	4.861	4.861	6.086	7.301	8.761	9.731	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800

60Hz

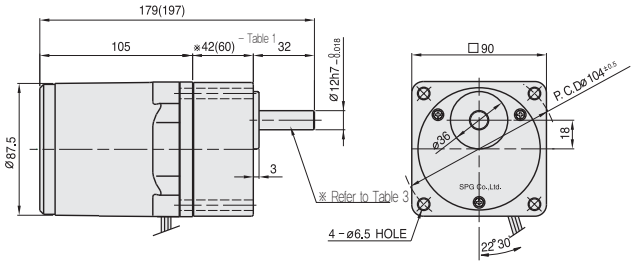
GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KB□B( )	kg-cm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	28.4	34.0	40.8	40.9	51.1	61.3	73.6	81.8	100	100	100	100	100	100	100	100	100
	N·m	0.666	0.804	1.107	1.333	1.666	1.999	2.225	2.783	3.332	3.998	4.008	5.008	6.007	7.213	8.016	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800

❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 100 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ ( ) is for marking 'L' type or 'H'. 'L' should be used with motor 'L' and 'H' should be used with motor 'H'.

DIMENSIONS

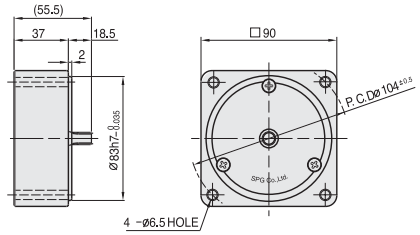
GEARED MOTOR

※MOTOR MODEL : S9I40G□□
※HEAD MODEL : S9□B3□□~S9□B200□□



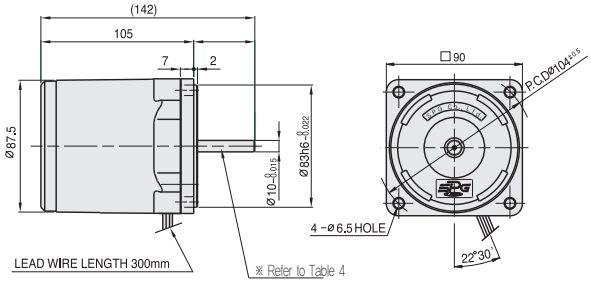
INTER-DECIMAL GEAR HEAD

※MODEL : S9GX10B(H,L)



MOTOR

※MOTOR MODEL : S9I40□□□



※26(35) - (Table1)

GEAR RATIO	SIZE(㎜)
S9□B3□□ ~ S9□B18□□	42
S9□B20□□ ~ S9□B200□□	60

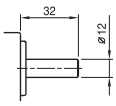
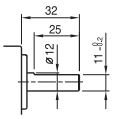
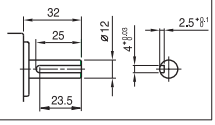
WEIGHT - (Table2)

PART		WEIGHT(kg)
MOTOR		2.30
DECIMAL GEAR HEAD		0.60
GEAR HEAD	S9□B3□□ ~S9□B18□□	0.73
	S9□B20□□ ~S9□B40□□	1.03
	S9□B50□□ ~S9□B200□□	1.13

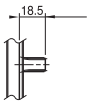
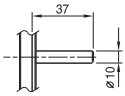
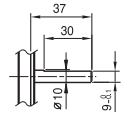
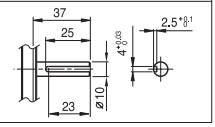
KEY SPEC

GEAR HEAD	MOTOR
	

SPEC for output shaft of gearhead - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SB3□□ ~S9SB200□□	
D-CUT TYPE S9DB3□□ ~S9DB200□□	
KEY TYPE S9KB3□□ ~S9KB200□□	

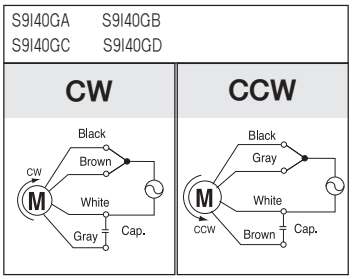
SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I40G□□	
STRAIGHT TYPE S9I40S□	
D-CUT TYPE S9I40D□	
KEY TYPE S9I40K□	

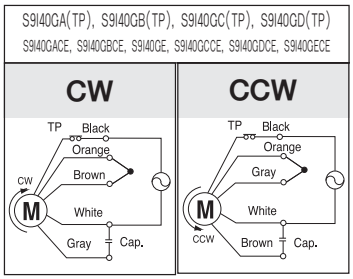
SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

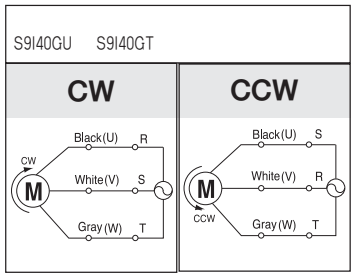
S9I40GA S9I40GB
S9I40GC S9I40GD



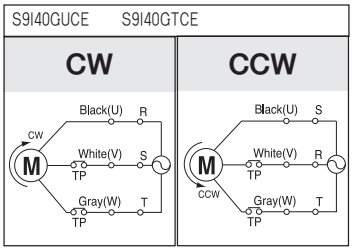
S9I40GA(TP), S9I40GB(TP), S9I40GC(TP), S9I40GD(TP)
S9I40GACE, S9I40GBCE, S9I40GE, S9I40GCCE, S9I40GDCE, S9I40GECE



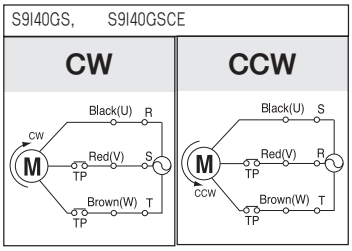
S9I40GU S9I40GT



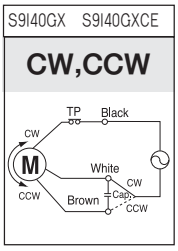
S9I40GUCE S9I40GTCE



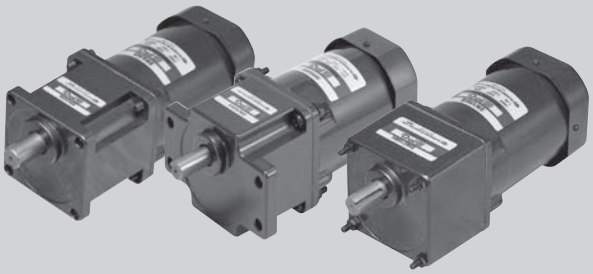
S9I40GS, S9I40GSCE



S9I40GX S9I40GXCE



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



60W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output (W)	Voltage (V)	Frequency (Hz)	Duty	Rated Load Current (A)	Rated Load Speed (rpm)	Rated Load Torque (kg-cm)	Rated Load Torque (N-m)	Starting Torque (kg-cm)	Starting Torque (N-m)	Capacitor (uF)
90	S9I60GA( ) S9I60GA( )(TP) S9I60GA( )CE	4	60	1Ø 110	60	Cont.	1.35	1600	3.80	0.380	4.80	0.480	15.0
	S9I60GB( ) S9I60GB( )(TP) S9I60GB( )CE	4	60	1Ø 220	60	Cont.	0.68	1600	3.90	0.390	4.80	0.480	4.0
	S9I60GC( ) S9I60GC( )(TP) S9I60GC( )CE	4	60	1Ø 100	50	Cont.	1.26	1300	4.60	0.460	3.40	0.340	15.0
					60		1.37	1550	3.90	0.390			
	S9I60GD( ) S9I60GD( )(TP) S9I60GD( )CE	4	60	1Ø 200	50	Cont.	0.65	1300	4.70	0.470	3.85	0.385	4.0
					60		0.70	1550	4.00	0.400			
	S9I60GE( ) S9I60GE( )CE	4	60	1Ø 100	50	Cont.	1.10	1300	4.60	0.460	3.20	0.320	15.0
					60		1.20	1550	3.90	0.390			
				1Ø 115	60		1.20	1550	4.00	0.400			12.0
	S9I60GX( ) S9I60GX( )CE	4	60	1Ø 220	50	Cont.	0.47	1300	4.60	0.460	3.20	0.320	3.5
				1Ø 240			0.50		4.90	0.490	3.90	0.390	
	S9I60GU( ) S9I60GU( )CE	4	60	3Ø 200	50	Cont.	0.60	1300	4.60	0.460	9.30	0.930	—
					60		0.50	1550	3.90	0.390	8.00	0.800	
	S9I60GT( ) S9I60GT( )CE	4	60	3Ø 220	50	Cont.	0.80	1350	4.40	0.440	11.35	1.135	—
					60		0.57	1600	3.90	0.390	9.30	0.930	
	S9I60GS( ) S9I60GS( )CE	4	60	3Ø 380	50	Cont.	0.27	1300	4.60	0.460	8.25	0.825	—
					60		0.24	1550	3.90	0.390	6.50	0.650	
				3Ø 400	50	Cont.	0.29	1300	4.70	0.470	9.30	0.930	
					60		0.25	1550	4.00	0.400	7.35	0.735	
				3Ø 415	50	Cont.	0.27	1350	4.60	0.460	9.95	0.995	
					60		0.23	1600	3.80	0.380	7.50	0.750	
				3Ø 440	50	Cont.	0.31	1350	4.70	0.470	10.75	1.075	
					60		0.25	1600	3.90	0.390	8.40	0.840	

❖ S9I60GE is UL approved (UL FILE No. E172720) thermally protected type.
❖ Appropriate capacitors shall be used according to the voltage for S9I60GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
S9I60GE( )CE is available only for 115V specification.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S9I60GE, S9I60GX, S9I60GS is thermally protected type with TP mounted.
❖ Be cautious when using a three-phase 380V motor controlled with inverter.
❖ ( ) is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'.
❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

50Hz

MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KC□B( )	kg-cm	12.2	14.6	20.3	24.3	30.4	36.5	40.5	45.6	54.8	65.7	73.0	82.5	99.0	119	132	165	198	200	200	200	200	200	200	200
S9KC□B( )-S	N·m	1.196	1.431	1.989	2.381	2.989	3.577	3.969	4.469	5.370	6.439	7.154	8.085	9.702	11.66	12.94	16.17	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60

60Hz

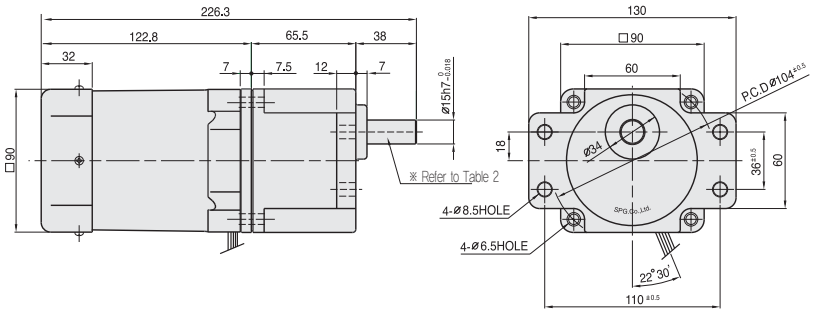
MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KC□B( )	kg-cm	9.72	11.7	16.2	19.4	24.3	29.2	32.4	36.5	43.8	52.6	58.4	66.0	79.2	95.0	106	132	158	177	200	200	200	200	200	200
S9KC□B( )-S	N·m	0.953	1.147	1.588	1.901	2.381	2.862	3.175	3.577	4.292	5.155	5.723	6.468	7.762	9.310	10.39	12.94	15.48	17.35	19.60	19.60	19.60	19.60	19.60	19.60

❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ ( ) is for marking 'L' type or 'H'. 'L' should be used with motor 'L' and 'H' should be used with motor 'H'.

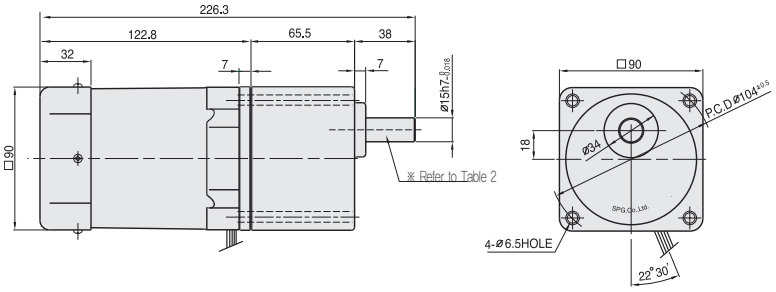
DIMENSIONS

GEARED MOTOR

※MOTOR MODEL : S9I60G□□
※HEAD MODEL : S9□C3B□-S~S9□C200B□-S

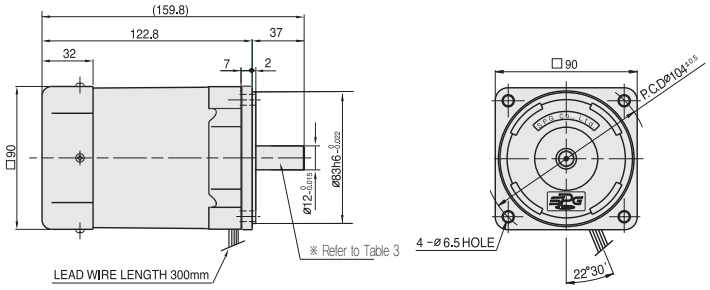


※MOTOR MODEL : S9I60G□□
※HEAD MODEL : S9□C3B□-S~S9□C200B□-S



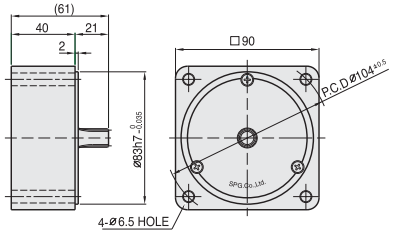
MOTOR

※MOTOR MODEL : S9I60□□□



INTER-DECIMAL GEAR HEAD

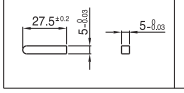
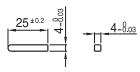
※MODEL : S9GX10B(H,L)-S



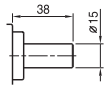
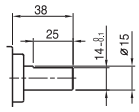
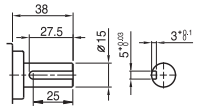
WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		2.44
DECIMAL GEAR HEAD		0.65
GEAR HEAD	S9□C3B□ ~S9□C10B□	1.21
	S9□C12.5B□ ~S9□C20B□	1.30
	S9□C25B□ ~S9□C60B□	1.40
	S9□C75B□ ~S9□C200B□	1.45

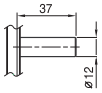
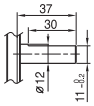
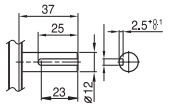
KEY SPEC

GEAR HEAD	MOTOR
	

SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SC3B□ ~S9SC200B□	
D-CUT TYPE S9DC3B□ ~S9DC200B□	
KEY TYPE S9KC3B□ ~S9KC200B□	

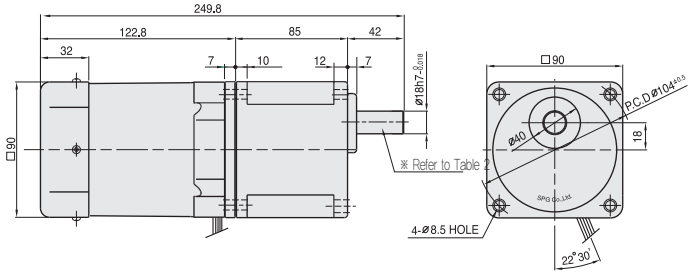
SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I60G□□	
STRAIGHT TYPE S9I60S□	
D-CUT TYPE S9I60D□	
KEY TYPE S9I60K□	

DIMENSIONS

✚ GEARED MOTOR

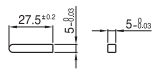
※MOTOR MODEL : S9I60G□H
※HEAD MODEL : S9□D3B~S9□D200B



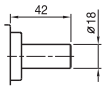
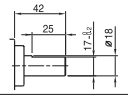
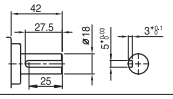
✚ WEIGHT – (Table1)

PART		WEIGHT(kg)
MOTOR		2.44
GEAR HEAD	S9□D3B ~S9□D10B□	1.65
	S9□D12.5B ~S9□D20B	1.80
	S9□D25B ~S9□D60B	1.90
	S9□D75B ~S9□D200B	1.95

✚ KEY SPEC

GEAR HEAD


✚ SPEC for output shaft of gearhead – (Table2)

MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF
STRAIGHT TYPE		D-CUT TYPE		KEY TYPE	
S9SD3B ~S9SD200B		S9DD3B ~S9DD200B		S9KD3B ~S9KD200B	

50Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KD□B	kg-cm	12.2	14.6	20.3	24.3	30.4	36.5	40.5	45.6	54.8	65.7	73.0	82.5	99.0	119	132	165	198	221	266	295	300	300	300	300
	N·m	1.196	1.431	1.989	2.381	2.989	3.577	3.969	4.469	5.370	6.439	7.154	8.085	9.702	11.66	12.94	16.17	19.40	21.67	26.09	28.93	29.42	29.42	29.42	29.42

60Hz

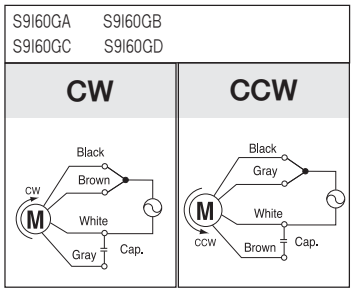
MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KD□B	kg-cm	9.72	11.7	16.2	19.4	24.3	29.2	32.4	36.5	43.8	52.6	58.4	66.0	79.2	95.0	106	132	158	177	212	236	283	300	300	300
	N·m	0.953	1.147	1.588	1.901	2.381	2.862	3.175	3.577	4.292	5.155	5.723	6.468	7.762	9.310	10.39	12.94	15.48	17.35	20.79	23.14	27.75	29.42	29.42	29.42

❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 300 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable. Please use 'H' type motor.

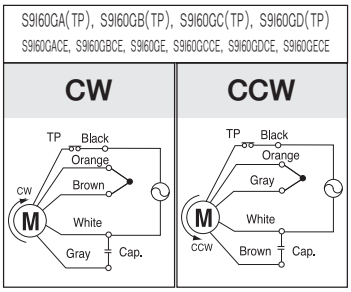
SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

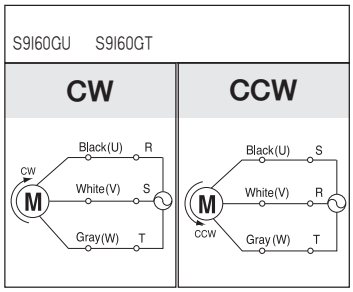
S9I60GA S9I60GB
S9I60GC S9I60GD



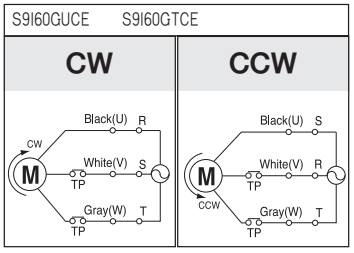
S9I60GA(TP), S9I60GB(TP), S9I60GC(TP), S9I60GD(TP)
S9I60GACE, S9I60GBCE, S9I60GE, S9I60GCCE, S9I60GDCE, S9I60GECE



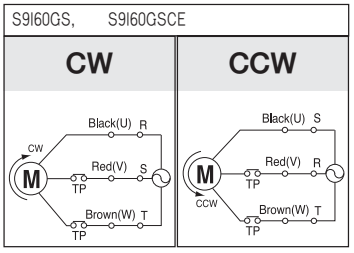
S9I60GU S9I60GT



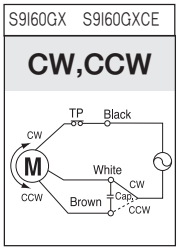
S9I60GUCE S9I60GTCE



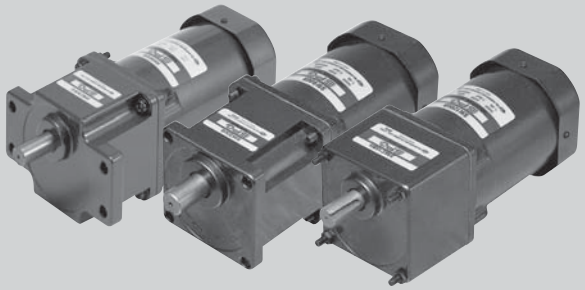
S9I60GS, S9I60GSCE



S9I60GX S9I60GXCE



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



90W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
90	S9I90GA( ) S9I90GA( )(TP) S9I90GA( )CE	4	90	1Ø 110	60	Cont.	2.00	1600	5.60	0.560	5.70	0.570	25.0
	S9I90GB( ) S9I90GB( )(TP) S9I90GB( )CE	4	90	1Ø 220	60	Cont.	1.00	1600	5.60	0.560	5.70	0.570	6.0
	S9I90GC( ) S9I90GC( )(TP) S9I90GC( )CE	4	90	1Ø 100	50	Cont.	1.80	1300	6.90	0.690	5.00	0.500	25.0
					60		2.00	1550	5.80	0.580			
	S9I90GD( ) S9I90GD( )(TP) S9I90GD( )CE	4	90	1Ø 200	50	Cont.	0.90	1300	6.90	0.690	5.00	0.500	6.0
					60		1.00	1550	5.80	0.580			
	S9I90GE( ) S9I90GE( )CE	4	90	1Ø 100	50	Cont.	1.50	1300	6.90	0.690	5.00	0.500	25.0
					60		1.80	1550	5.80	0.580			
				1Ø 115	60		1.80	1550	6.00	0.600			20.0
	S9I90GX( ) S9I90GX( )CE	4	90	1Ø 220	50	Cont.	0.68	1300	6.90	0.690	4.80	0.480	5.0
				1Ø 240			0.72		7.20	0.720	5.20	0.520	
	S9I90GU( ) S9I90GU( )CE	4	90	3Ø 200	50	Cont.	0.63	1300	6.90	0.690	10.60	1.060	—
					60		0.60	1550	6.00	0.600	8.90	0.890	
	S9I90GT( ) S9I90GT( )CE	4	90	3Ø 220	50	Cont.	0.68	1350	6.80	0.680	13.00	1.300	—
					60		0.55	1600	5.70	0.570	10.50	1.050	
	S9I90GS( ) S9I90GS( )CE	4	90	3Ø 380	50	Cont.	0.32	1300	6.80	0.680	10.55	1.055	—
					60		0.30	1550	5.70	0.570	8.20	0.820	
				3Ø 400	50	Cont.	0.35	1300	6.90	0.690	11.70	1.170	
					60		0.32	1550	5.80	0.580	8.90	0.890	
				3Ø 415	50	Cont.	0.33	1350	6.80	0.680	12.00	1.200	
					60		0.29	1600	5.70	0.570	9.50	0.950	
				3Ø 440	50	Cont.	0.35	1350	6.90	0.690	13.30	1.330	
					60		0.31	1600	5.80	0.580	10.50	1.050	

❖ S9I90GE is UL approved (UL FILE No. E172720) thermally protected type.
❖ Appropriate capacitors shall be used according to the voltage for S9I60GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
S9I90GE( )CE is available only for 115V specification.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S9I90GE, S9I90GX, S9I90GS is thermally protected type with TP mounted.
❖ Be cautious when using a three-phase 380V motor controlled with inverter.
❖ ( ) is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'.
❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

50Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KC□B( )	kg-cm	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	110	124	149	178	198	200	200	200	200	200	200	200	200	200
S9KC□B( )-S	N·m	1.784	2.146	2.979	3.577	4.469	5.361	5.958	6.703	8.046	9.663	10.78	12.15	14.60	17.44	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60

60Hz

GEAR RATIO / MODEL		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KC□B( )	kg-cm	14.6	17.5	24.3	29.2	36.5	43.7	48.6	54.8	65.7	78.8	87.6	99.0	119	143	158	198	200	200	200	200	200	200	200	200
S9KC□B( )-S	N·m	1.431	1.715	2.381	2.862	3.577	4.675	4.763	5.370	6.439	7.722	8.585	9.702	11.66	14.01	15.48	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60

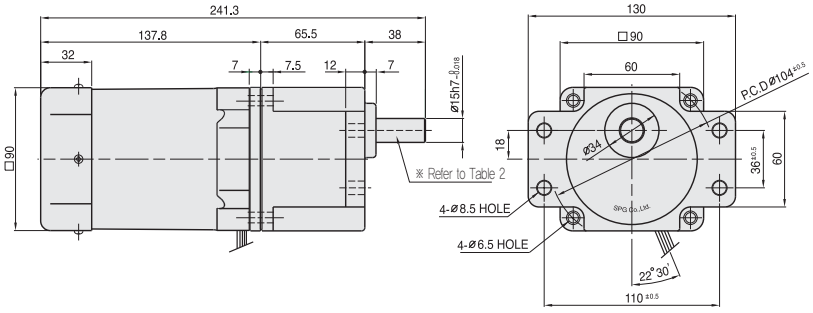
❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible toque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ ( ) is for marking 'L' type or 'H'. 'L' should be used with motor 'L' and 'H' should be used with motor 'H'.

DIMENSIONS

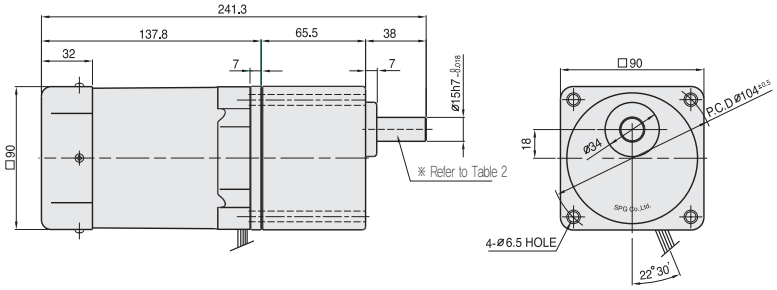
✚ GEARED MOTOR

※MOTOR MODEL : S9I90G□□

※HEAD MODEL : S9□C3B□-S~S9□C200B□-S

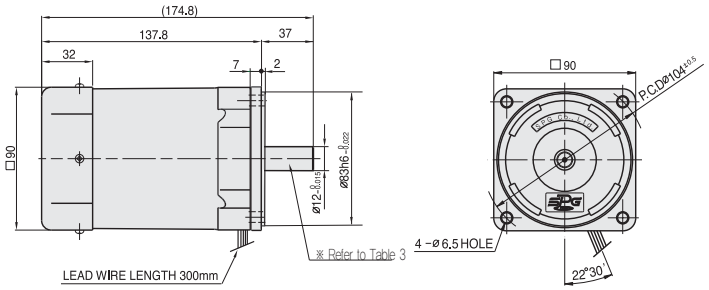


※HEAD MODEL : S9□C3B□~S9□C200B□



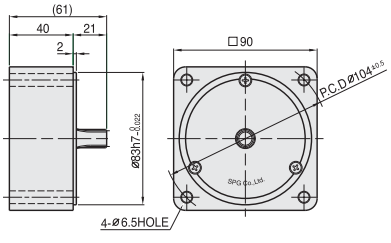
✚ MOTOR

※MOTOR MODEL : S9I90□□□



✚ INTER-DECIMAL GEAR HEAD

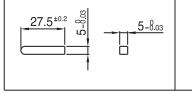
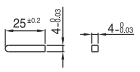
※MOTOR MODEL : S9GX10B(H,L)-S



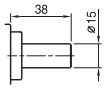
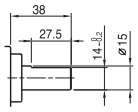
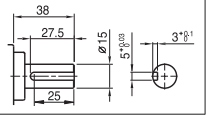
✚ WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		2.93
DECIMAL GEAR HEAD		0.65
GEAR HEAD	S9□C3B□ ~S9□C10B□	1.21
	S9□C12.5B□ ~S9□C20B□	1.30
	S9□C25B□ ~S9□C60B□	1.40
	S9□C75B□ ~S9□C200B□	1.45

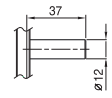
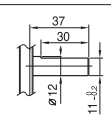
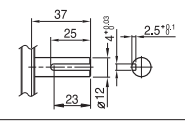
✚ KEY SPEC

GEAR HEAD	MOTOR
	

✚ SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SC3B□ ~S9SC200B□	
D-CUT TYPE S9DCB3□ ~S9DC200B□	
KEY TYPE S9KC3B□ ~S9KC200B□	

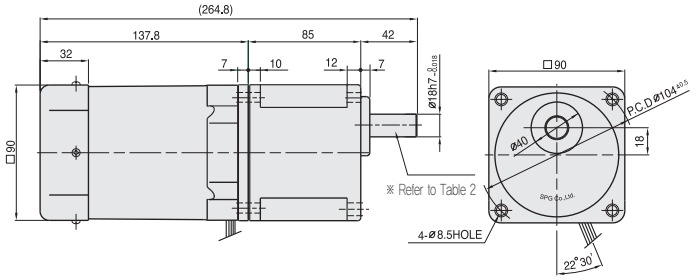
✚ SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I90G□□	
STRAIGHT TYPE S9I90S□	
D-CUT TYPE S9I90D□	
KEY TYPE S9I90K□	

DIMENSIONS

GEARED MOTOR

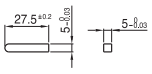
※MOTOR MODEL : S9I90G□H
※HEAD MODEL : S9□D3B~S9□D200B



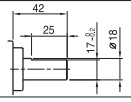
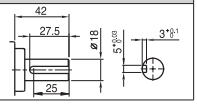
WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		2.93
GEAR HEAD	S9□D3B ~S9□D10B	1.65
	S9□D12.5B ~S9□D20B	1.80
	S9□D25B ~S9□D60B	1.90
	S9□D75B ~S9□D200B	1.95

KEY SPEC

GEAR HEAD


SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF
STRAIGHT TYPE		D-CUT TYPE		KEY TYPE	
S9SD3B ~S9SD200B		S9DDB3B ~S9DD200B		S9KD3B ~S9KD200B	

50Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KD□B	kg-cm	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	110	124	149	178	198	248	297	300	300	300	300	300	300	300
	N·m	1.784	2.146	2.979	3.577	4.469	5.361	5.958	6.703	8.046	9.663	10.78	12.15	14.60	17.44	19.40	24.32	29.13	29.42	29.42	29.42	29.42	29.42	29.42	29.42

60Hz

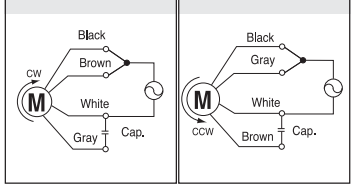
MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KD□B	kg-cm	14.6	17.5	24.3	29.2	36.5	43.7	48.6	54.8	65.7	78.8	87.6	99.0	119	143	158	198	238	266	300	300	300	300	300	300
	N·m	1.431	1.715	2.381	2.862	3.577	4.675	4.763	5.370	6.439	7.722	8.585	9.702	11.66	14.01	15.48	19.40	23.34	26.09	29.42	29.42	29.42	29.42	29.42	29.42

❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 300 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable. Please use 'H' type motor.

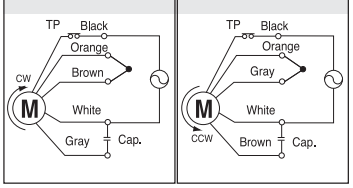
SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

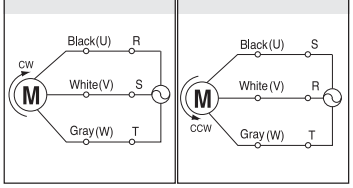
S9I90GA S9I90GB
S9I90GC S9I90GD



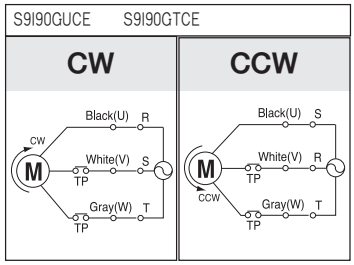
S9I90GA(TP), S9I90GB(TP), S9I90GC(TP), S9I90GD(TP)
S9I90GACE, S9I90GBCE, S9I90GE, S9I90GCCE, S9I90GDCE, S9I90GECE



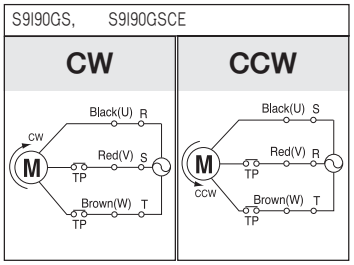
S9I90GU S9I90GT



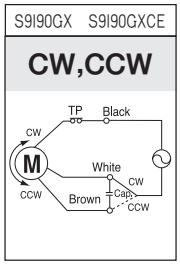
S9I90GUCE S9I90GTCE



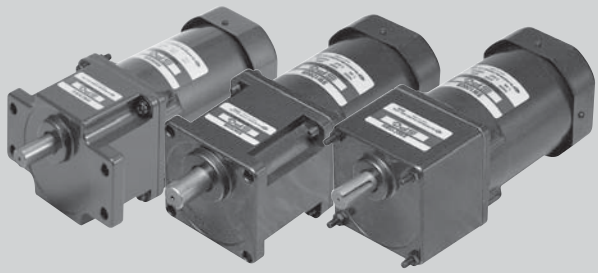
S9I90GS, S9I90GSCE



S9I90GX S9I90GXCE



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



120W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
90	S9I120GA S9I120GA(TP) S9I120GACE	4	120	1 ø 110	60	Cont.	2.10	1600	7.60	0.760	6.20	0.620	25.0
	S9I120GB S9I120GB(TP) S9I120GBCE	4	120	1 ø 220	60	Cont.	1.00	1600	7.50	0.750	6.00	0.600	6.0
	S9I120GC S9I120GC(TP) S9I120GCCE	4	120	1 ø 100	50	Cont.	2.00	1250	9.60	0.960	5.70	0.570	25.0
					60			1550	7.90	0.790			
	S9I120GD S9I120GD(TP) S9I120GDCE	4	120	1 ø 200	50	Cont.	1.00	1250	9.50	0.950	5.50	0.550	6.0
					60			1550	7.80	0.780			

❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
❖ Only "H" type is applicable.

50Hz

MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KC□BH	kg-cm	23.2	27.8	38.7	46.4	58.0	69.6	77.4	87.0	104	125	139	156	188	200	200	200	200	200	200	200	200	200	200	200
S9KC□BH-S	N·m	2.276	2.731	3.793	4.552	5.689	6.827	7.586	8.534	10.24	12.29	13.65	15.36	18.43	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61

60Hz

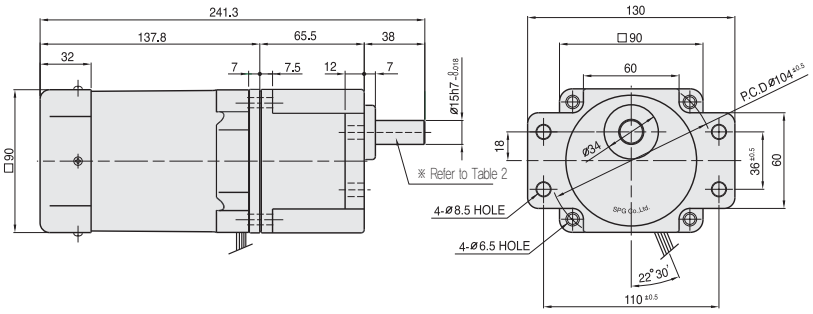
MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KC□BH	kg-cm	18.7	22.5	31.2	37.4	46.8	56.1	62.4	70.2	84.2	101	112	126	152	182	200	200	200	200	200	200	200	200	200	200
S9KC□BH-S	N·m	1.835	2.202	3.058	3.670	4.587	5.505	6.116	6.881	8.257	9.909	11.01	12.39	14.86	17.84	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61	19.61

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable.

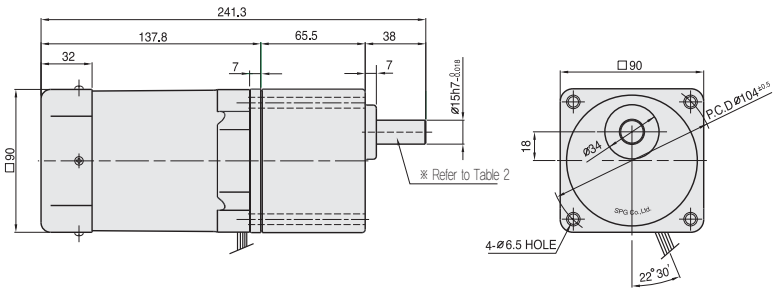
DIMENSIONS

✚ GEARED MOTOR

※MOTOR MODEL : S9I120G□
※HEAD MODEL : S9□C3BH-S~S9□C200BH-S

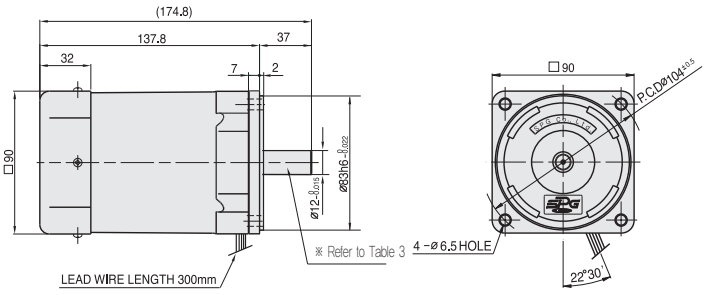


※HEAD MODEL □ : S9□C3BH~S9□C200BH



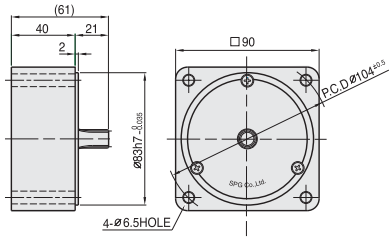
✚ MOTOR

※MOTOR MODEL : S9I120□□



✚ INTER-DECIMAL GEAR HEAD

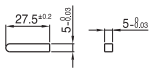
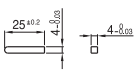
※ MODEL : S9GX10BH-S



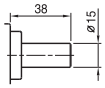
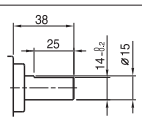
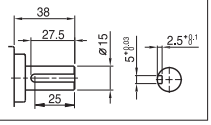
✚ WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		2.93
DECIMAL GEAR HEAD		0.65
GEAR HEAD	S9□C3BH ~S9□C10BH	1.21
	S9□C12.5BH ~S9□C20BH	1.30
	S9□C25BH ~S9□C60BH	1.40
	S9□C75BH ~S9□C200BH	1.45

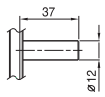
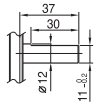
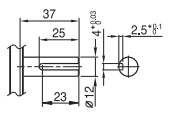
✚ KEY SPEC

GEAR HEAD	MOTOR
	

✚ SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SC3BH ~S9SC200BH	
D-CUT TYPE S9DC3BH ~S9DC200BH	
KEY TYPE S9KC3BH ~S9KC200BH	

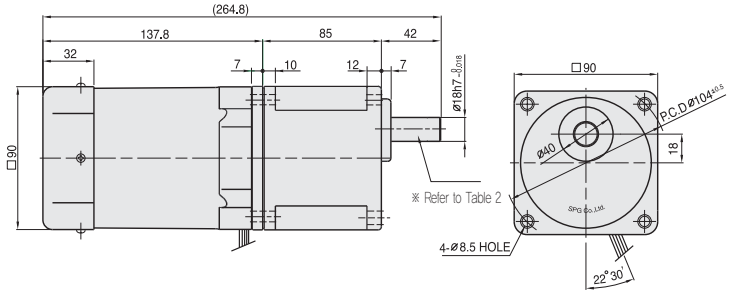
✚ SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I120G□	
STRAIGHT TYPE S9I120S□	
D-CUT TYPE S9I120D□	
KEY TYPE S9I120□	

DIMENSIONS

✚ GEARED MOTOR

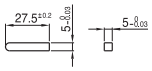
※MOTOR MODEL : S9I120G□
※HEAD MODEL □ : S9□D3B~S9□D200B



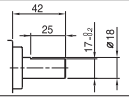
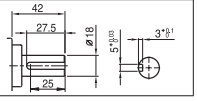
✚ WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		2.93
GEAR HEAD	S9□D3B ~S9□D10B	1.65
	S9□D12.5B ~S9□D20B	1.80
	S9□D25B ~S9□D60B	1.90
	S9□D75B ~S9□D200B	1.95

✚ KEY SPEC

GEAR HEAD


✚ SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF
STRAIGHT TYPE		D-CUT TYPE		KEY TYPE	
S9SD3B ~S9SD200B		S9DD3B ~S9DD200B		S9KD3B ~S9KD200B	

50Hz

MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KD□B	kg-cm	23.2	27.8	38.7	46.4	58.0	69.6	77.4	87.0	104	125	139	156	188	225	250	300	300	300	300	300	300	300	300	300
	N·m	2.276	2.731	3.793	4.552	5.689	6.827	7.586	8.534	10.24	12.29	13.65	15.36	18.43	22.12	24.58	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

60Hz

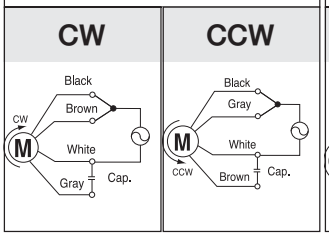
MODEL \ GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KD□B	kg-cm	18.7	22.5	31.2	37.4	46.8	56.1	62.4	70.2	84.2	101	112	126	152	182	202	252	300	300	300	300	300	300	300	300
	N·m	1.835	2.202	3.058	3.670	4.587	5.505	6.116	6.881	8.757	9.909	11.01	12.39	14.86	17.84	19.82	24.77	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible torque of the assembled motor and gearhead.
❖ The permissible torque of the motor and inter-decimal gearhead is 5 kg-cm.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable.

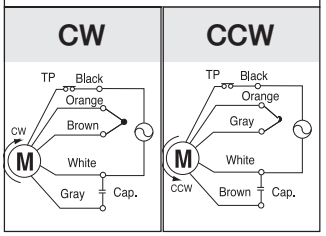
SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

S9I120GA S9I120GB
S9I120GC S9I120GD



S9I120GA(TP) S9I120GB(TP)
S9I120GC(TP) S9I120GD(TP)
S9I120GACE S9I120GBCE
S9I120GCCE S9I120GDCE



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.

150W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
90	S9I150GU S9I150GUCE	4	150	3 Ø 200	50	Cont.	1.0	1250	11.70	1.170	18.0	1.800	—
					60		0.9	1500	9.70	0.970	15.0	1.500	
	S9I150GT S9I150GTCE	4	150	3 Ø 220	50	Cont.	1.0	1300	11.30	1.130	22.0	2.200	—
					60		0.9	1550	9.40	0.940	19.0	1.900	
	S9I150GS S9I150GSCE	4	150	3 Ø 380	50	Cont.	0.46	1250	11.70	1.170	18.00	1.800	—
					60		0.42	1500	9.70	0.970	15.00	1.500	
				3 Ø 400	50	Cont.	0.49	1250	11.70	1.170	19.00	1.900	
					60		0.43	1500	9.70	0.970	16.00	1.600	

❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP.
❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
❖ Only "H" type is applicable.
❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

50Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KH□B	kg-cm	23.1	27.7	38.5	46.2	57.7	69.3	77.0	86.6	104	125	139	156	187	224	249	300	300	300	300	300	300	300	300	300
	N·m	2.264	2.717	3.773	4.528	5.660	6.792	7.546	8.489	10.24	12.29	13.65	15.36	18.34	21.97	24.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

60Hz

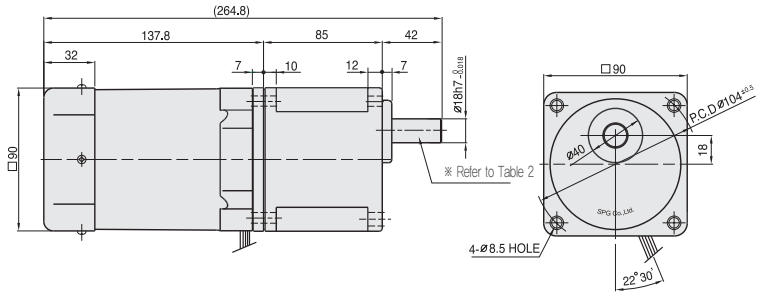
MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KH□B	kg-cm	23.2	27.8	38.7	46.4	58.0	69.6	77.4	87.0	104	125	139	156	188	225	250	300	300	300	300	300	300	300	300	300
	N·m	2.276	2.731	3.793	4.552	5.689	6.827	7.586	8.534	10.24	12.29	13.65	15.36	18.43	22.06	24.52	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible TORQUE of the assembled motor and gearhead.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable.

DIMENSIONS

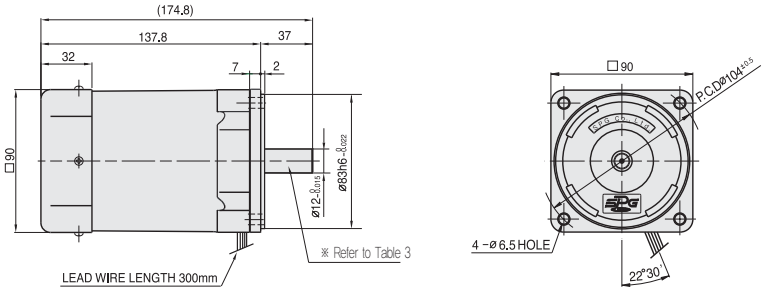
GEARED MOTOR

※MOTOR MODEL : S9I150G□
※HEAD MODEL : S9□H3B~S9□H200B



MOTOR

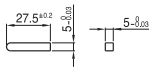
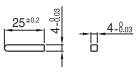
※MODEL : S9I150□□



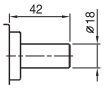
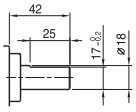
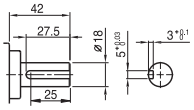
WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		2.93
GEAR HEAD	S9□H3B ~S9□H10B	1.65
	S9□H12.5B ~S9□H20B	1.80
	S9□H25B ~S9□H60B	1.90
	S9□H75B ~S9□H200B	1.95

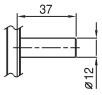
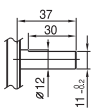
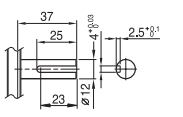
KEY SPEC

GEAR HEAD	MOTOR
	

SPEC for output shaft of gearhead - (Table2)

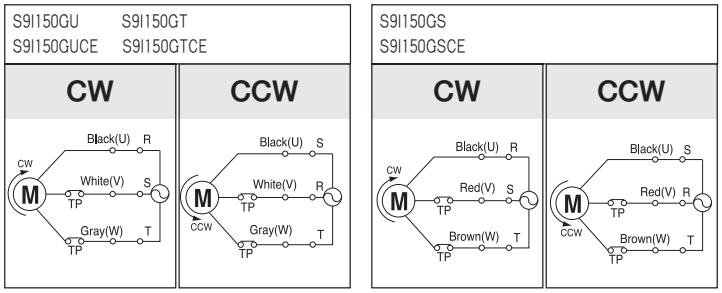
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S9SH3B ~S9SH200B	
D-CUT TYPE	
S9DH3B ~S9DH200B	
KEY TYPE	
S9KH3B ~S9KH200B	

SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9I150G□	
STRAIGHT TYPE	
S9I150S□	
D-CUT TYPE	
S9I150D□	
KEY TYPE	
S9I150K□	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.

180W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
90	S9I180GA S9I180GA(TP) S9I180GACE	4	180	1 Ø 110	60	Cont.	2.60	1600	11.50	1.150	8.00	0.800	25.0
	S9I180GB S9I180GB(TP) S9I180GBCE	4	180	1 Ø 220	60	Cont.	1.32	1600	11.50	1.150	8.00	0.800	6.5
	S9I180GC S9I180GC(TP) S9I180GCCE	4	180	1 Ø 100	50	Cont.	3.20	1250	14.00	1.400	7.00	0.700	25.0
					60		2.90	1550	11.60	1.160			
	S9I180GD S9I180GD(TP) S9I180GDCE	4	180	1 Ø 200	50	Cont.	1.60	1250	14.00	1.400	7.00	0.700	6.5
					60		1.45	1550	11.60	1.160			

❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
❖ Only "H" type is applicable.

50Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KH□B	kg-cm	34.0	41.0	57.0	68.0	85.1	102	113	128	153	184	204	230	278	300	300	300	300	300	300	300	300	300	300	300
	N·m	3.336	4.021	5.590	6.672	8.341	10.01	11.12	12.55	15.01	18.04	20.02	22.56	27.26	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

60Hz

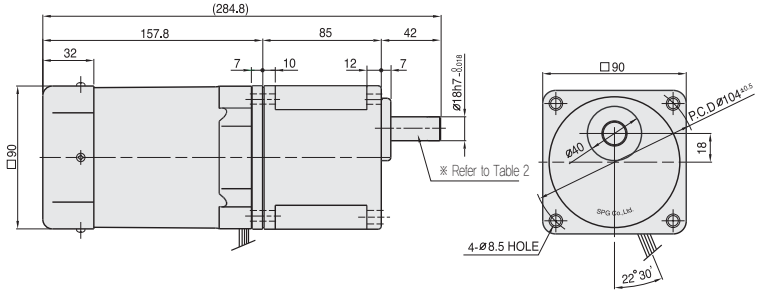
MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KH□B	kg-cm	28.1	34.0	47.0	57.0	71.0	84.2	94.0	105	126	152	168	189	227	273	300	300	300	300	300	300	300	300	300	300
	N·m	2.756	3.334	4.609	5.590	6.963	8.257	9.218	10.30	12.39	14.91	16.51	18.58	22.29	26.75	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.
The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable.

DIMENSIONS

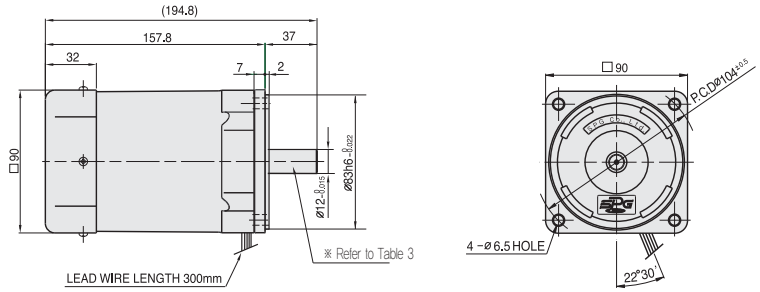
✚ GEARED MOTOR

※MOTOR MODEL : S9I180G□
※HEAD MODEL : S9□H3B~S9□H200B



✚ MOTOR

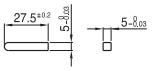
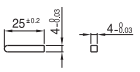
※MOTOR MODEL : S9I180□□



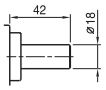
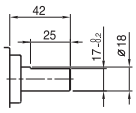
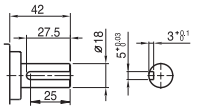
✚ WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		3.70
GEAR HEAD	S9□H3B ~S9□H10B	1.65
	S9□H12.5B ~S9□H20B	1.80
	S9□H25B ~S9□H60B	1.90
	S9□H75B ~S9□H200B	1.95

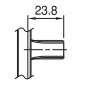
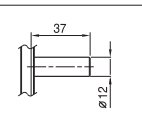
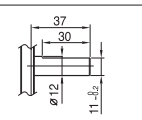
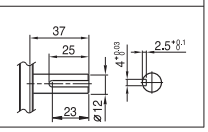
✚ KEY SPEC

GEAR HEAD	MOTOR
	

✚ SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SH3B ~S9SH200B	
D-CUT TYPE S9DH3B ~S9DH200B	
KEY TYPE S9KH3B ~S9KH200B	

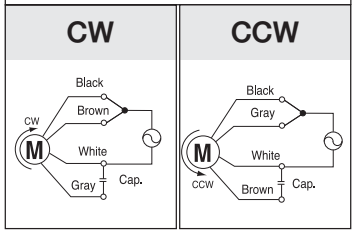
✚ SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I180G□	
STRAIGHT TYPE S9I180S□	
D-CUT TYPE S9I180D□	
KEY TYPE S9I180K□	

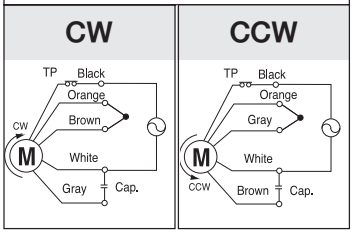
SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.

S9I180GA S9I180GB S9I180GC S9I180GD



S9I180GA(TP) S9I180GB(TP) S9I180GC(TP)
S9I180GD(TP) S9I180GACE S9I180GBCE
S9I180GCCE S9I180GDCE



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.

200W

INDUCTION MOTOR □90㎜ LEAD WIRE TYPE

SIZE mm sq.	Type	Poles	Output	Voltage	Frequency	Duty	Rated Load				Starting Torque		Capacitor
							Current	Speed	Torque				
			(W)	(V)	(Hz)		(A)	(rpm)	(kg-cm)	(N-m)	(kg-cm)	(N-m)	(uF)
90	S9I200GU S9I200GUCE	4	200	3 Ø 200	50	Cont.	1.3	1250	16.00	1.600	24.00	2.400	—
					60		1.2	1500	13.40	1.340	20.00	2.000	
	S9I200GT S9I200GTCE	4	200	3 Ø 220	50	Cont.	1.3	1300	15.00	1.500	30.00	3.000	—
					60		1.2	1550	12.90	1.290	25.00	2.500	
	S9I200GS S9I200GSCE	4	200	3 Ø 380	50	Cont.	0.62	1250	16.00	1.600	26.00	2.600	—
					60		0.55	1500	13.40	1.340	22.00	2.200	
				3 Ø 400	50	Cont.	0.64	1250	16.00	1.600	30.00	3.000	—
					60		0.55	1500	13.40	1.340	25.00	2.500	

❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
❖ Only "H" type is applicable.
❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

50Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
S9KH□B	kg-cm	39.0	47.0	64.8	77.8	97.2	117	130	146	175	210	233	262	300	300	300	300	300	300	300	300	300	300	300	300
	N·m	3.813	4.609	6.355	7.626	9.532	11.47	12.75	14.32	17.16	20.59	22.88	25.74	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

60Hz

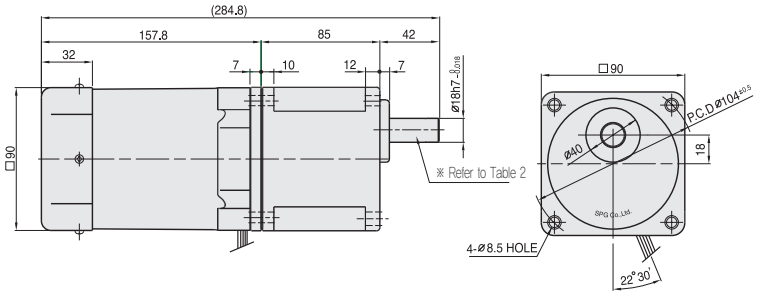
MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
S9KH□B	kg-cm	32.0	38.3	53.3	64.0	79.9	96.0	107	120	144	173	192	216	259	300	300	300	300	300	300	3000	300	300	300	300
	N·m	3.134	3.760	5.223	6.267	7.384	9.414	10.49	11.75	14.10	16.97	18.83	21.18	25.40	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

❖ The code in □ of gearhead model is for gear ratio.
❖ It is the permissible torque of the assembled motor and gearhead.
❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
❖ Only "H" type is applicable.

DIMENSIONS

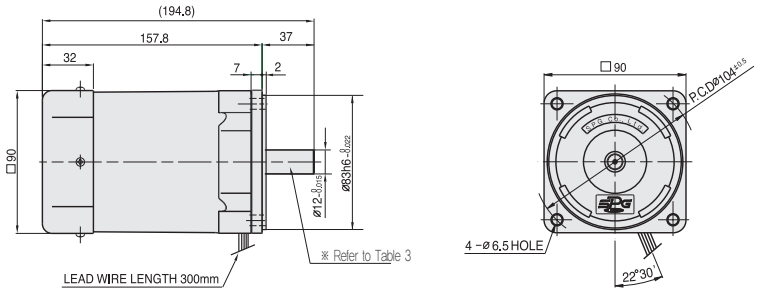
GEARED MOTOR

※MOTOR MODEL : S9I200G□
※HEAD MODEL : S9□H3B~S9□H200B



MOTOR

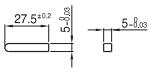
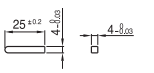
※MOTOR MODEL : S9I200□□



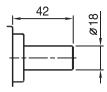
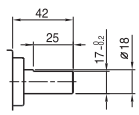
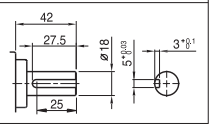
WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		3.70
GEAR HEAD	S9□H3B ~S9□H10B	1.65
	S9□H12.5B ~S9□H20B	1.80
	S9□H25B ~S9□H60B	1.90
	S9□H75B ~S9□H200B	1.95

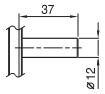
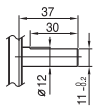
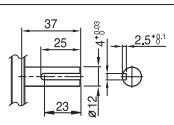
KEY SPEC

GEAR HEAD	MOTOR
	

SPEC for output shaft of gearhead - (Table2)

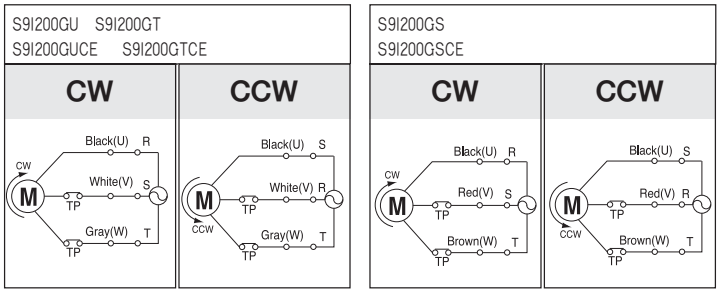
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SH3B ~S9SH200B	
D-CUT TYPE S9DH3B ~S9DH200B	
KEY TYPE S9KH3B ~S9KH200B	

SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I200G□	
STRAIGHT TYPE S9I200S□	
D-CUT TYPE S9I200D□	
KEY TYPE S9I200K□	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.