



60W

INDUCTION SPEED CONTROL MOTOR

□ 90mm CONNECTOR TYPE

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (w)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μF)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
90	S9160GA()-V12 S9160GA()-V12(TP) S9160GA()-V12CE	SUA60IA-V12	4	60	1 ∅ 110	60	Cont.	90-1700	5.50	0.550	2.00	0.200	5.00	0.500	20.0
	S9160GB()-V12 S9160GB()-V12(TP) S9160GB()-V12CE	SUA60IB-V12	4	60	1 ∅ 220	60	Cont.	90-1700	5.50	0.550	2.00	0.200	5.00	0.500	5.0
	S9160GC()-V12 S9160GC()-V12(TP) S9160GC()-V12CE	SUA60IC-V12	4	60	1 ∅ 100	50 60	Cont.	90-1400 90-1700	5.50 5.00	0.550 0.500	1.20	0.120	4.00	0.400	20.0
	S9160GD()-V12 S9160GD()-V12(TP) S9160GD()-V12CE	SUA60ID-V12	4	60	1 ∅ 200	50 60	Cont.	90-1400 90-1700	5.50 5.00	0.550 0.500	1.20	0.120	4.00	0.400	5.0
	S9160GX()-V12 S9160GX()-V12CE	SUA60IX-V12	4	60	1 ∅ 220 1 ∅ 240	50	Cont.	90-1400	5.20 5.80	0.520 0.580	0.90 0.90	0.090 0.090	3.10 3.60	0.310 0.360	3.5

- ❖ CE marked at the end of motor model name indicates that it is impedance protected type which has received CE.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- ❖ S9160GX()-V12, S9160GX()-V12CE is thermally protected type with TP mounted.
- ❖ () is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'.

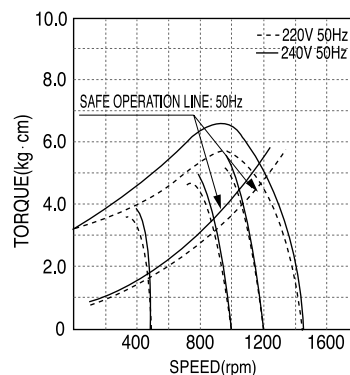
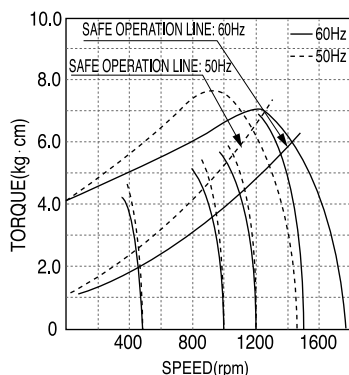
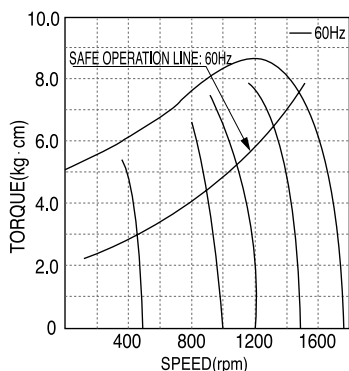
50Hz

MODEL	GEAR RATIO	rpm																							
		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
S9KC□()	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□()-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	rpm																							
		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
S9KC□()	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□()-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'.



▲ S9160GA()-V12 S9160GB()-V12
S9160GA()-V12(TP) S9160GB()-V12(TP)
S9160GA()-V12CE S9160GB()-V12CE

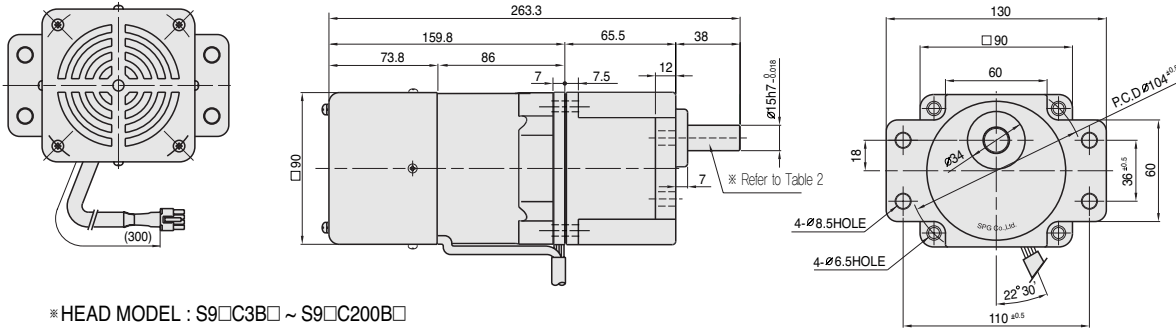
▲ S9160GC()-V12 S9160GD()-V12
S9160GC()-V12(TP) S9160GD()-V12(TP)
S9160GC()-V12CE S9160GD()-V12CE

▲ S9160GX()-V12
S9160GX()-V12CE

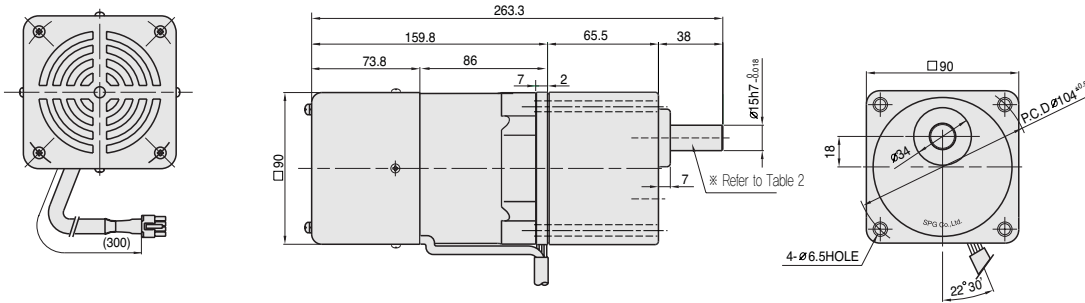
DIMENSIONS

+ GEARED MOTOR

* MOTOR MODEL : S9I60G□□-V12
 * HEAD MODEL : S9□C3B□ ~ S9□C200□-S

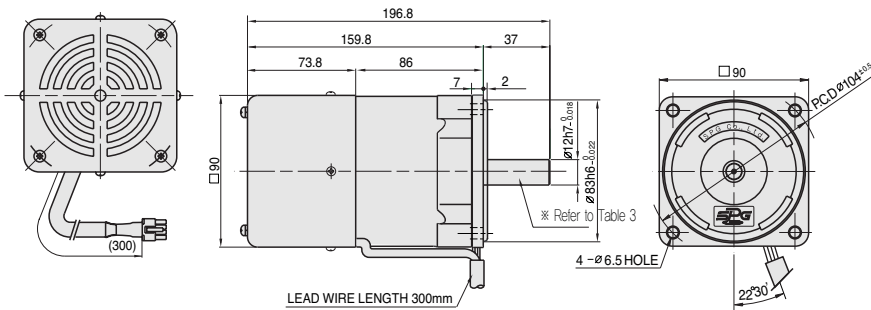


* HEAD MODEL : S9□C3B□ ~ S9□C200B□



+ MOTOR

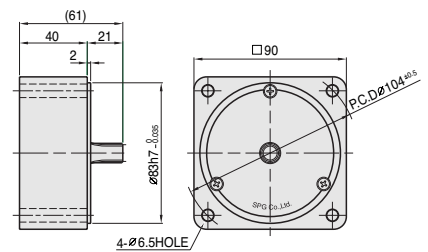
* MOTOR MODEL : S9I60□□□-V12



LEAD WIRE LENGTH 300mm

+ INTER-DECIMAL GEAR HEAD

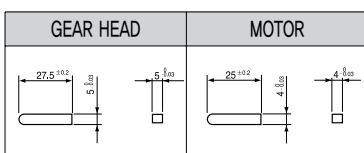
* MODEL : S9GX10B(H,L)-S



+ 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



+ 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□	

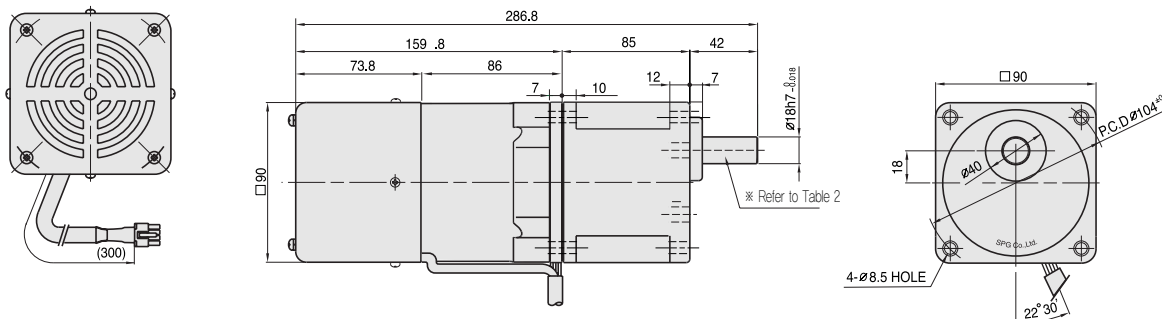
+ SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9I60G□□-V12	
STRAIGHT TYPE	
S9I60S□-V12	
D-CUT TYPE	
S9I60D□-V12	
KEY TYPE	
S9I60K□-V12	

DIMENSIONS

+ GEARED MOTOR

* MOTOR MODEL : S9I60G□H-V12
 * HEAD MODEL : S9□D3B□~S9□D200B



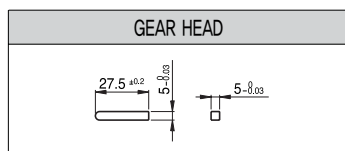
+ WEIGHT - (Table1)

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

+ SPEC for output shaft of gearhead - (Table2)

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

+ KEY SPEC



50Hz

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	
	MODEL	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8
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

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	
	MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
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.