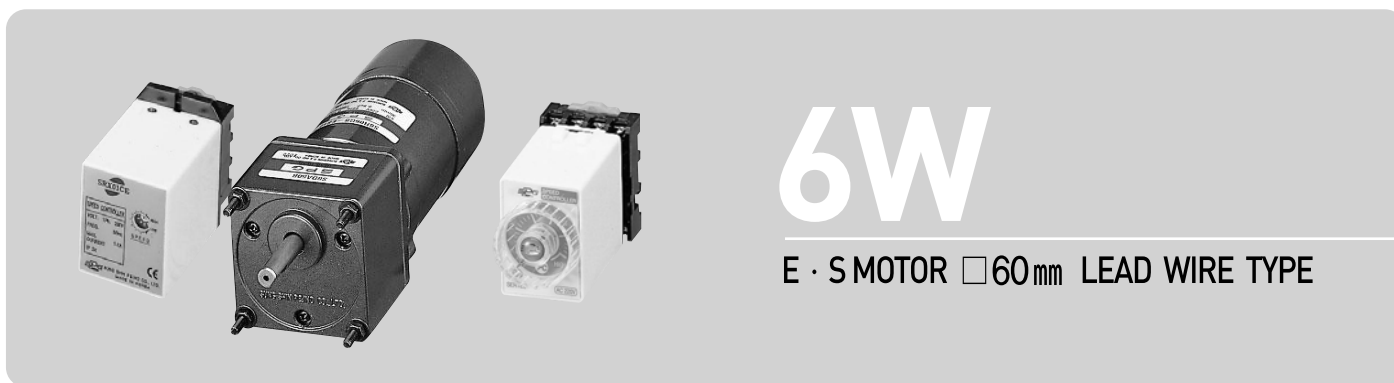


SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR (E · S MOTOR)

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SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

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)	
60	S6R06GA-ES12 S6R06GA-ES12CE	SRA01 SRA01CE	4	6	1 ∅ 110	60	30min.	90-1700	0.62	0.062	0.45	0.045	0.55	0.055	3.0
	S6R06GB-ES12 S6R06GB-ES12CE	SRB01 SRB01CE	4	6	1 ∅ 220	60	30min.	90-1700	0.62	0.062	0.45	0.045	0.55	0.055	0.8
	S6R06GC-ES12 S6R06GC-ES12CE	SRC01 SRC01CE	4	6	1 ∅ 100	50 60	30min.	90-1400 90-1700	0.56	0.056	0.38	0.038	0.50	0.050	3.0
	S6R06GD-ES12 S6R06GD-ES12CE	SRD01 SRD01CE	4	6	1 ∅ 200	50 60	30min.	90-1400 90-1700	0.55	0.055	0.38	0.038	0.50	0.050	0.8
	S6R06GX-ES12 S6R06GX-ES12CE	SRX01 SRX01CE	4	6	1 ∅ 220 1 ∅ 240	50	30min.	90-1400	0.47 0.52	0.047 0.052	0.38	0.038	0.45 0.52	0.045 0.052	0.7

❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.

❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.

❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SOCKET SS TYPE SPEED CONTROL MOTORS

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)	
60	S6R06GA-ES24 S6R06GA-ES24CE	SSA01-SRSS SSA03-SRSS	4	6	1 ∅ 110	60	30min.	90-1700	0.62	0.062	0.45	0.045	0.55	0.055	3.0
	S6R06GB-ES24 S6R06GB-ES24CE	SSB01-SRSS SSB03-SRSS	4	6	1 ∅ 220	60	30min.	90-1700	0.62	0.062	0.45	0.045	0.55	0.055	0.8
	S6R06GC-ES24 S6R06GC-ES24CE	SSC01-SRSS SSC03-SRSS	4	6	1 ∅ 100	50 60	30min.	90-1400 90-1700	0.56	0.056	0.38	0.038	0.50	0.050	3.0
	S6R06GD-ES24 S6R06GD-ES24CE	SSD01-SRSS SSD03-SRSS	4	6	1 ∅ 200	50 60	30min.	90-1400 90-1700	0.55	0.055	0.38	0.038	0.50	0.050	0.8
	S6R06GX-ES24 S6R06GX-ES24CE	SSX01-SRSS SSX03-SRSS	4	6	1 ∅ 220 1 ∅ 240	50	30min.	90-1400	0.47 0.52	0.047 0.052	0.38	0.038	0.45 0.52	0.045 0.052	0.7

❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.

❖ "L" or "H" type does not apply to motors under 40W.

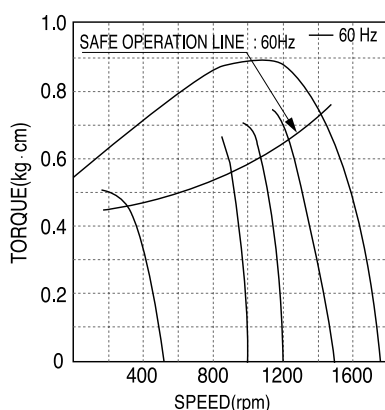
50Hz

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	250
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	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

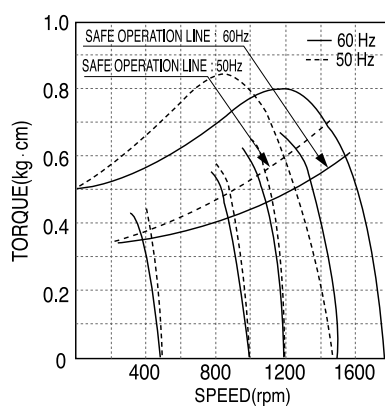
60Hz

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
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	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

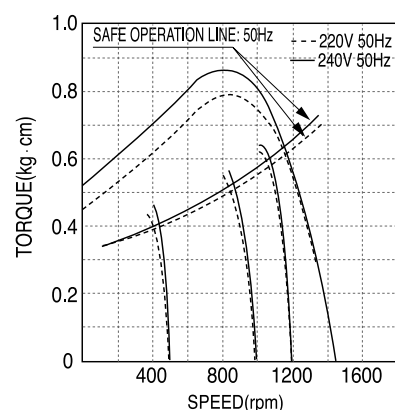
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 30 kg·cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as 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.



- ▲ S6R06GA-ES12 S6R06GA-ES24
- S6R06GA-ES12CE S6R06GA-ES24CE
- S6R06GB-ES12 S6R06GB-ES24
- S6R06GB-ES12CE S6R06GB-ES24



- ▲ S6R06GC-ES12 S6R06GC-ES24
- S6R06GC-ES12CE S6R06GC-ES24CE
- S6R06GD-ES12 S6R06GD-ES24
- S6R06GD-ES12CE S6R06GD-ES24CE



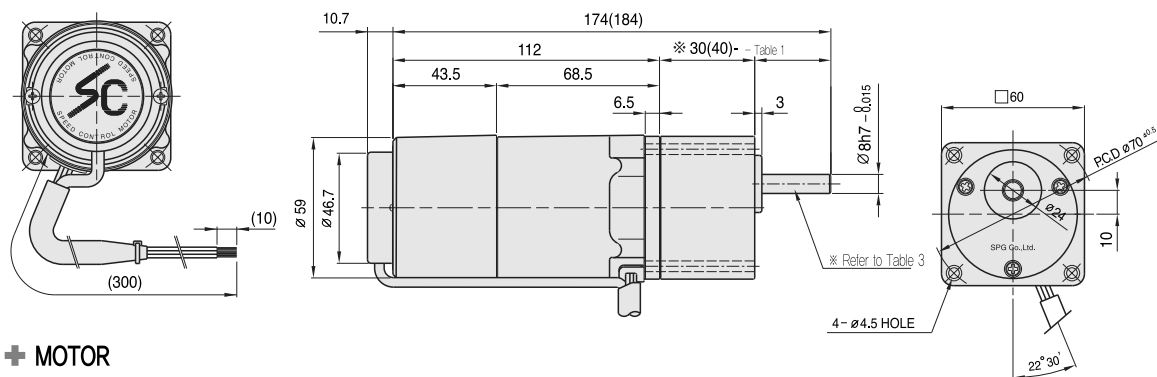
- ▲ S6R06GX-ES12 S6R06GX-ES24
- S6R06GX-ES12CE S6R06GX-ES24CE

DIMENSIONS

+ GEARED MOTOR

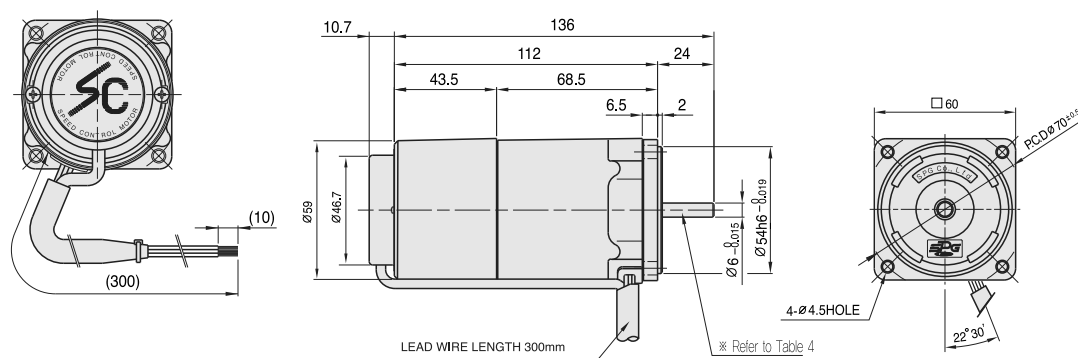
※ MOTOR MODEL : S6R06G□-ES12, S6R06G□-ES24

※ HEAD MODEL : S6□A3□~S6□A250□



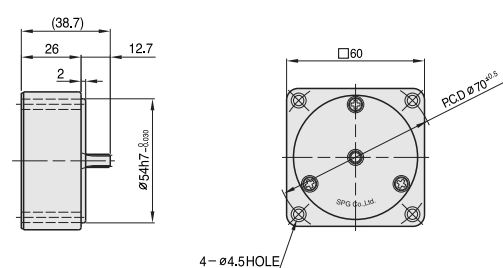
+ MOTOR

※ MOTOR MODEL : S6R06□□-ES12, S6R06□□-ES24



+ INTER-DECIMAL GEAR HEAD

※ MODEL : S6GX10B



+ KEY SPEC

GEAR HEAD	
12 ^{+0.2}	3 ^{+0.05}

+ ※26(35) - (Table1)

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

+ WEIGHT - (Table2)

PART	WEIGHT(kg)
MOTOR	1.00
DECIMAL GEAR HEAD	0.18
GEAR HEAD	S6□A3□ ~ S6□A18□
	0.24
	S6□A20□ ~ S6□A40□
	0.30
GEAR HEAD	S6□A50□ ~ S6□A250□
	0.33

+ SPEC for output shaft of gearhead - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	32 ø8
S6SA3□ ~ S6SA250□	32 ø8
D-CUT TYPE	32 12 7.5 ø8
S6DA3□ ~ S6DA250□	32 12 7.5 ø8
KEY TYPE	32 12 3 ^{+0.05} 1.8 ^{+0.1} ø8
S6KA3□ ~ S6KA250□	32 12 3 ^{+0.05} 1.8 ^{+0.1} ø8

+ SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	12.7
S6R06G□-ES12 S6R06G□-ES24	12.7
STRAIGHT TYPE	24 ø6
S6R06S□-ES12 S6R06S□-ES24	24 ø6
D-CUT TYPE	24 20 5.5-0.1 ø6
S6R60D□-ES12 S6R60D□-ES24	24 20 5.5-0.1 ø6



15W

E · S MOTOR □ 70mm LEAD WIRE TYPE

SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

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)	
70	S7R15GA-ES12 S7R15GA-ES12(TP) S7R15GA-ES12CE	SRA02 SRA02CE	4	15	1 ∅ 110	60	30min.	90-1700	1.40	0.140	0.70	0.070	1.30	0.130	6.0
	S7R15GB-ES12 S7R15GB-ES12(TP) S7R15GB-ES12CE	SRB02 SRB02CE	4	15	1 ∅ 220	60	30min.	90-1700	1.40	0.140	0.70	0.070	1.30	0.130	1.5
	S7R15GC-ES12 S7R15GC-ES12(TP) S7R15GC-ES12CE	SRC02 SRC02CE	4	15	1 ∅ 100	50	30min.	90-1400	1.10	0.110	0.60	0.060	1.00	0.100	6.0
						60		90-1700	0.90	0.090					
	S7R15GD-ES12 S7R15GD-ES12(TP) S7R15GD-ES12CE	SRD02 SRD02CE	4	15	1 ∅ 200	50	30min.	90-1400	1.10	0.110	0.60	0.060	1.00	0.100	1.5
						60		90-1700	0.90	0.090					
	S7R15GX-ES12 S7R15GX-ES12CE	SRX02 SRX02CE	4	15	1 ∅ 220	50	30min.	90-1400	1.00	0.100	0.55	0.055	0.90	0.090	1.2
					1 ∅ 240			90-1400	1.15	0.115	0.60	0.060	1.00	0.100	

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- S7R15GX-ES12, S7R15GX-ES12CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

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)	
70	S7R15GA-ES24 S7R15GA-ES24(TP) S7R15GA-ES24CE	SSA02-SRSS SSA03-SRSS	4	15	1 ∅ 110	60	30min.	90-1700	1.40	0.140	0.70	0.070	1.30	0.130	6.0
	S7R15GB-ES24 S7R15GB-ES24(TP) S7R15GB-ES24CE	SSB02-SRSS SSB03-SRSS	4	15	1 ∅ 220	60	30min.	90-1700	1.40	0.140	0.70	0.070	1.30	0.130	1.5
	S7R15GC-ES24 S7R15GC-ES24(TP) S7R15GC-ES24CE	SSC02-SRSS SSC03-SRSS	4	15	1 ∅ 100	50	30min.	90-1400	1.10	0.110	0.60	0.060	1.00	0.100	6.0
						60		90-1700	0.90	0.090					
	S7R15GD-ES24 S7R15GD-ES24(TP) S7R15GD-ES24CE	SSD02-SRSS SSD03-SRSS	4	15	1 ∅ 200	50	30min.	90-1400	1.10	0.110	0.60	0.060	1.00	0.100	1.5
						60		90-1700	0.90	0.090					
	S7R15GX-ES24 S7R15GX-ES24CE	SSX02-SRSS SSX03-SRSS	4	15	1 ∅ 220	50	30min.	90-1400	1.00	0.100	0.55	0.055	0.90	0.090	1.2
					1 ∅ 240			90-1400	1.15	0.115	0.60	0.060	1.00	0.100	

- ❖ CE marked at the end of motor model name indicates that it is thermally 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.
- S7R15GX-ES24, S7R15GX-ES24CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

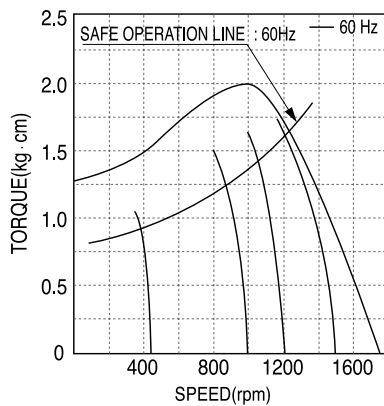
50Hz

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	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	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	4.900

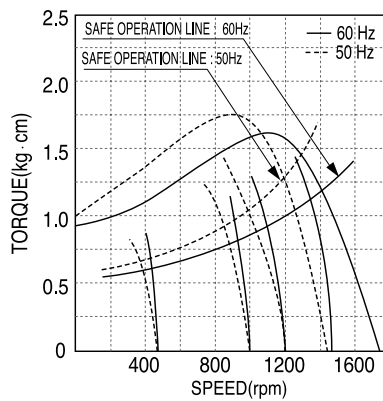
60Hz

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	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

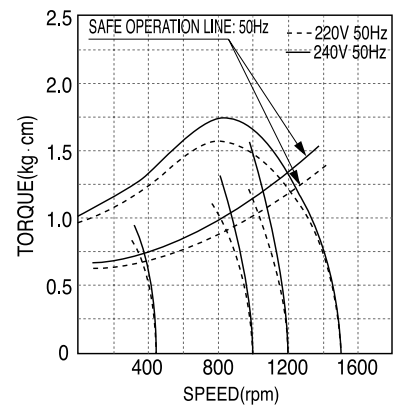
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor.
Others indicate rotation in the opposite direction.
- ❖ 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.



- ▲ S7R15GA-ES12 S7R15GA-ES24
 S7R15GA-ES12(TP) S7R15GA-ES24(TP)
 S7R15GA-ES12CE S7R15GA-ES24CE
 S7R15GB-ES12 S7R15GB-ES24
 S7R15GB-ES12(TP) S7R15GB-ES24(TP)
 S7R15GB-ES12CE S7R15GB-ES24CE



- ▲ S7R15GC-ES12 S7R15GC-ES24
 S7R15GC-ES12(TP) S7R15GC-ES24(TP)
 S7R15GC-ES12CE S7R15GC-ES24CE
 S7R15GD-ES12 S7R15GD-ES24
 S7R15GD-ES12(TP) S7R15GD-ES24(TP)
 S7R15GD-ES12CE S7R15GD-ES24CE



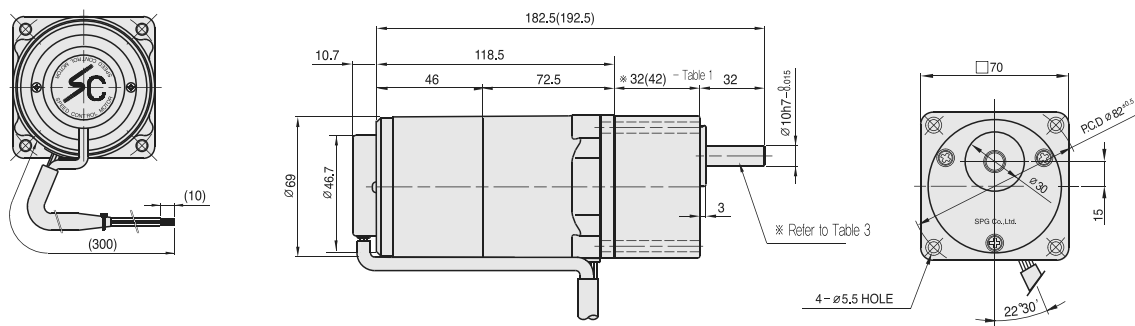
- ▲ S7R15GX-ES12 S7R15GX-ES24
 S7R15GX-ES12CE S7R15GX-ES24CE

DIMENSIONS

+ GEARED MOTOR

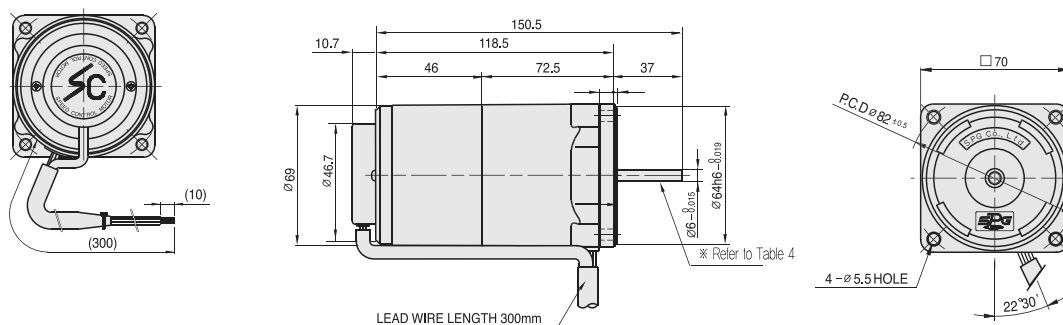
※ MOTOR MODEL : S7R15G□-ES12, S7R15G□-ES24

※ HEAD MODEL : S7□A3□~S7□A200□



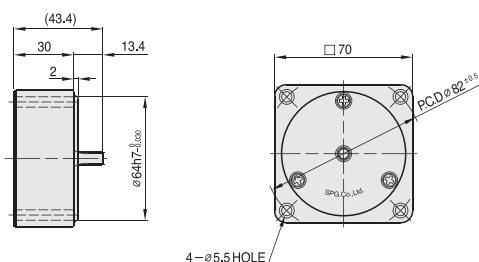
+ MOTOR

* MOTOR MODEL : S7R15□□-ES12, S7R15□□-ES24



+ INTER-DECIMAL GEAR HEAD

※ MODEL : S7GX10B



+ KEY SPEC

GEAR HEAD



Technical drawing of a gear head showing two views: a side view and a front view. The side view shows a cylindrical component with a length dimension of 25 ± 0.2 and a diameter dimension of 4 ± 0.03 . The front view shows a square cross-section with a side length dimension of 4 ± 0.03 .

✚ ※26(35) – (Table 1)

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

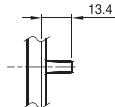
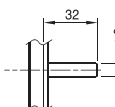
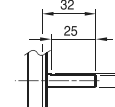
+ WEIGHT – (Table2)

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□A200□	0.52

✚ 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 – (Table 4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
STRAIGHT TYPE	
D-CUT TYPE	



15W

E · S MOTOR □ 80mm LEAD WIRE TYPE

SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output	Voltage	Freq.	Duty	Speed Range	Permissible Torque				Starting Torque		Cap.
				(W)	(V)	(Hz)			(rpm)	at 1200rpm		at 90rpm		(kg-cm)	
80	S8R15GA-ES12 S8R15GA-ES12(TP) S8R15GA-ES12CE	SRA02 SRA02CE	4	15	1 ∅ 110	60	30min.	90-1700	1.45	0.145	0.60	0.060	0.90	0.090	6.0
	S8R15GB-ES12 S8R15GB-ES12(TP) S8R15GB-ES12CE	SRB02 SRB02CE	4	15	1 ∅ 220	60	30min.	90-1700	1.45	0.145	0.55	0.055	0.90	0.090	1.5
	S8R15GC-ES12 S8R15GC-ES12(TP) S8R15GC-ES12CE	SRC02 SRC02CE	4	15	1 ∅ 100	50	30min.	90-1400	1.32	0.132	0.50	0.050	0.75	0.075	6.0
						60		90-1700	1.15	0.115					
	S8R15GD-ES12 S8R15GD-ES12(TP) S8R15GD-ES12CE	SRD02 SRD02CE	4	15	1 ∅ 200	50	30min.	90-1400	1.32	0.132	0.50	0.050	0.75	0.075	1.5
						60		90-1700	1.15	0.115					
	S8R15GX-ES12 S8R15GX-ES12CE	SRX02 SRX02CE	4	15	1 ∅ 220	50	30min.	90-1400	1.35	0.135	0.50	0.050	0.75	0.075	1.2
					1 ∅ 240				1.44	0.144	0.50	0.050	0.86	0.086	

❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.

❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.

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

S8R15GX-ES12, S8R15GX-ES12CE is thermally protected type with TP mounted.

❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output	Voltage	Freq.	Duty	Speed Range	Permissible Torque				Starting Torque		Cap.
				(W)	(V)	(Hz)			(rpm)	at 1200rpm		at 90rpm		(kg-cm)	
80	S8R15GA-ES24 S8R15GA-ES24(TP) S8R15GA-ES24CE	SSA02-SRSS SSA03-SRSS	4	15	1 ∅ 110	60	30min.	90-1700	1.45	0.145	0.60	0.060	0.90	0.090	6.0
	S8R15GB-ES24 S8R15GB-ES24(TP) S8R15GB-ES24CE	SSB02-SRSS SSB03-SRSS	4	15	1 ∅ 220	60	30min.	90-1700	1.45	0.145	0.55	0.055	0.90	0.090	1.5
	S8R15GC-ES24 S8R15GC-ES24(TP) S8R15GC-ES24CE	SSC02-SRSS SSC03-SRSS	4	15	1 ∅ 100	50	30min.	90-1400	1.32	0.132	0.50	0.050	0.75	0.075	6.0
						60		90-1700	1.15	0.115					
	S8R15GD-ES24 S8R15GD-ES24(TP) S8R15GD-ES24CE	SSD02-SRSS SSD03-SRSS	4	15	1 ∅ 200	50	30min.	90-1400	1.32	0.132	0.50	0.050	0.75	0.075	1.5
						60		90-1700	1.15	0.115					
	S8R15GX-ES24 S8R15GX-ES24CE	SSX02-SRSS SSX03-SRSS	4	15	1 ∅ 220	50	30min.	90-1400	1.35	0.135	0.50	0.050	0.75	0.075	1.2
					1 ∅ 240				1.44	0.144					

❖ CE marked at the end of motor model name indicates that it is thermally 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.

S8R15GX-ES24, S8R15GX-ES24CE is thermally protected type with TP mounted.

❖ "L" or "H" type does not apply to motors under 40W.

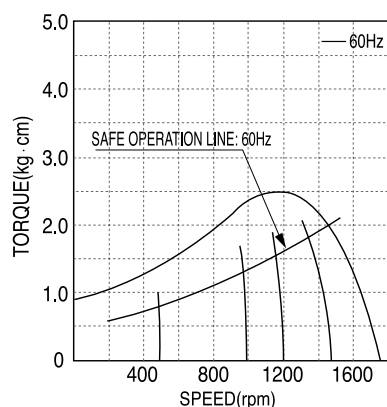
50Hz

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	7.5
	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
S8KA□B	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

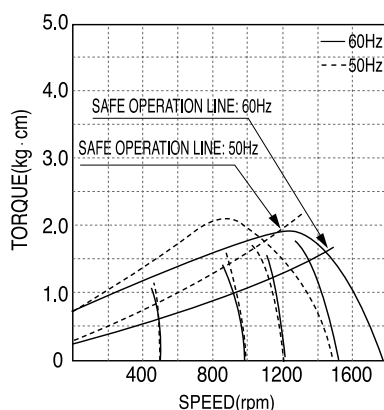
60Hz

GEAR RATIO		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	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

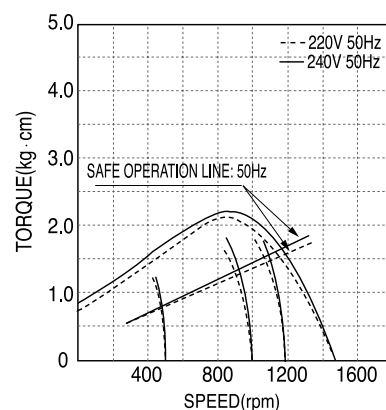
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as 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.



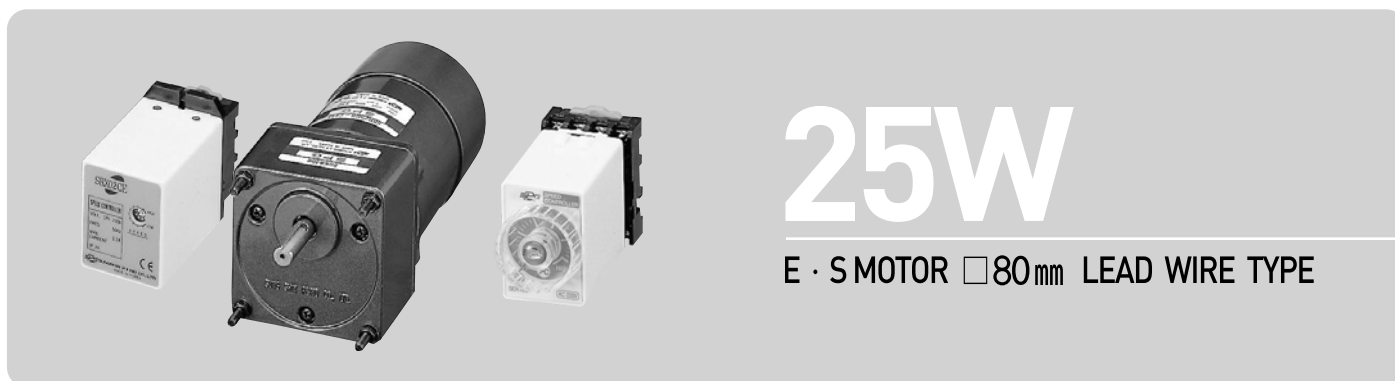
- ▲ S8R15GA-ES12 S8R15GA-ES24
- S8R15GA-ES12(TP) S8R15GA-ES24(TP)
- S8R15GA-ES12CE S8R15GA-ES24CE
- S8R15GB-ES12 S8R15GB-ES24
- S8R15GB-ES12(TP) S8R15GB-ES24(TP)
- S8R15GB-ES12CE S8R15GB-ES24CE



- ▲ S8R15GC-ES12 S8R15GC-ES24
- S8R15GC-ES12(TP) S8R15GC-ES24(TP)
- S8R15GC-ES12CE S8R15GC-ES24CE
- S8R15GD-ES12 S8R15GD-ES24
- S8R15GD-ES12(TP) S8R15GD-ES24(TP)
- S8R15GD-ES12CE S8R15GD-ES24CE



- ▲ S8R15GX-ES12 S8R15GX-ES24
- S8R15GX-ES12CE S8R15GX-ES24CE



SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output	Voltage	Freq.	Duty	Speed Range	Permissible Torque				Starting Torque		Cap.
				(W)	(V)	(Hz)		(rpm)	at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
80	S8R25GA-ES12 S8R25GA-ES12(TP) S8R25GA-ES12CE	SRA02 SRA02CE	4	25	1 ∅ 110	60	30min.	90-1700	2.45	0.245	0.90	0.090	1.90	0.190	10.0
	S8R25GB-ES12 S8R25GB-ES12(TP) S8R25GB-ES12CE	SRB02 SRB02CE	4	25	1 ∅ 220	60	30min.	90-1700	2.45	0.245	0.90	0.090	1.90	0.190	2.5
	S8R25GC-ES12 S8R25GC-ES12(TP) S8R25GC-ES12CE	SRC02 SRC02CE	4	25	1 ∅ 100	50	30min.	90-1400	2.25	0.225	0.75	0.075	1.75	0.175	10.0
						60		90-1700	2.00	0.200					
	S8R25GD-ES12 S8R25GD-ES12(TP) S8R25GD-ES12CE	SRD02 SRD02CE	4	25	1 ∅ 200	50	30min.	90-1400	2.25	0.225	0.75	0.075	1.75	0.175	2.5
						60		90-1700	2.00	0.200					
	S8R25GX-ES12 S8R25GX-ES12CE	SRX02 SRX02CE	4	25	1 ∅ 220	50	30min.	90-1400	2.30	0.230	0.75	0.075	1.75	0.175	2.0
					1 ∅ 240				2.45	0.245	0.75	0.075	1.860	0.186	

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S8R25GX-ES12, S8R25GX-ES12CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output	Voltage	Freq.	Duty	Speed Range	Permissible Torque				Starting Torque		Cap.
				(W)	(V)	(Hz)		(rpm)	at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
80	S8R25GA-ES24 S8R25GA-ES24(TP) S8R25GA-ES24CE	SSA02-SRSS SSA03-SRSS	4	25	1 ∅ 110	60	30min.	90-1700	2.45	0.245	0.90	0.090	1.90	0.190	10.0
	S8R25GB-ES24 S8R25GB-ES24(TP) S8R25GB-ES24CE	SSB02-SRSS SSB03-SRSS	4	25	1 ∅ 220	60	30min.	90-1700	2.45	0.245	0.90	0.090	1.90	0.190	2.5
	S8R25GC-ES24 S8R25GC-ES24(TP) S8R25GC-ES24CE	SSC02-SRSS SSC03-SRSS	4	25	1 ∅ 100	50	30min.	90-1400	2.25	0.225	0.75	0.075	1.75	0.175	10.0
						60		90-1700	2.00	0.200					
	S8R25GD-ES24 S8R25GD-ES24(TP) S8R25GD-ES24CE	SSD02-SRSS SSD03-SRSS	4	25	1 ∅ 200	50	30min.	90-1400	2.25	0.225	0.75	0.075	1.75	0.175	2.5
						60		90-1700	2.00	0.200					
	S8R25GX-ES24 S8R25GX-ES24CE	SSX02-SRSS SSX03-SRSS	4	25	1 ∅ 220	50	30min.	90-1400	2.30	0.230	0.75	0.075	1.75	0.175	2.0
					1 ∅ 240				2.45	0.245			0.75	0.075	

- ❖ CE marked at the end of motor model name indicates that it is thermally 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.
S8R25GX-ES24, S8R25GX-ES24CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

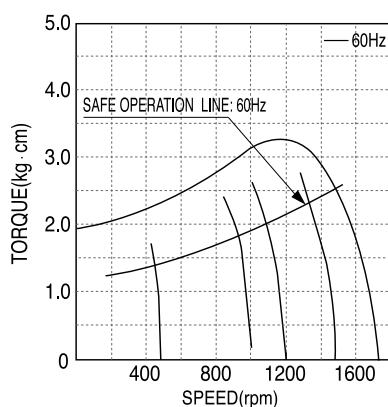
50Hz

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	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

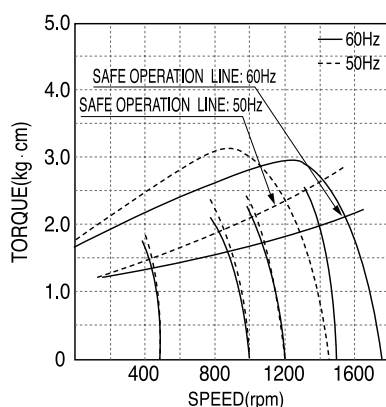
60Hz

GEAR RATIO		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	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

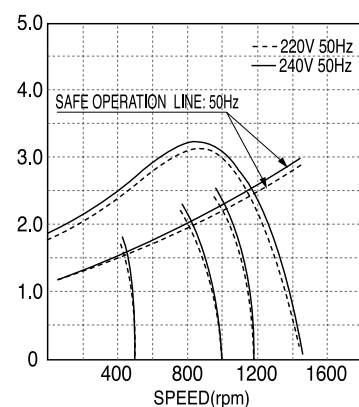
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg·cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as 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.



- ▲ S8R25GA-ES12 S8R25GA-ES24
S8R25GA-ES12(TP) S8R25GA-ES24(TP)
S8R25GA-ES12CE S8R25GA-ES24CE
S8R25GB-ES12 S8R25GB-ES24
S8R25GB-ES12(TP) S8R25GB-ES24(TP)
S8R25GB-ES12CE S8R25GB-ES24CE



- ▲ S8R25GC-ES12 S8R25GC-ES24
S8R25GC-ES12(TP) S8R25GC-ES24(TP)
S8R25GC-ES12CE S8R25GC-ES24CE
S8R25GD-ES12 S8R25GD-ES24
S8R25GD-ES12(TP) S8R25GD-ES24(TP)
S8R25GD-ES12CE S8R25GD-ES24CE



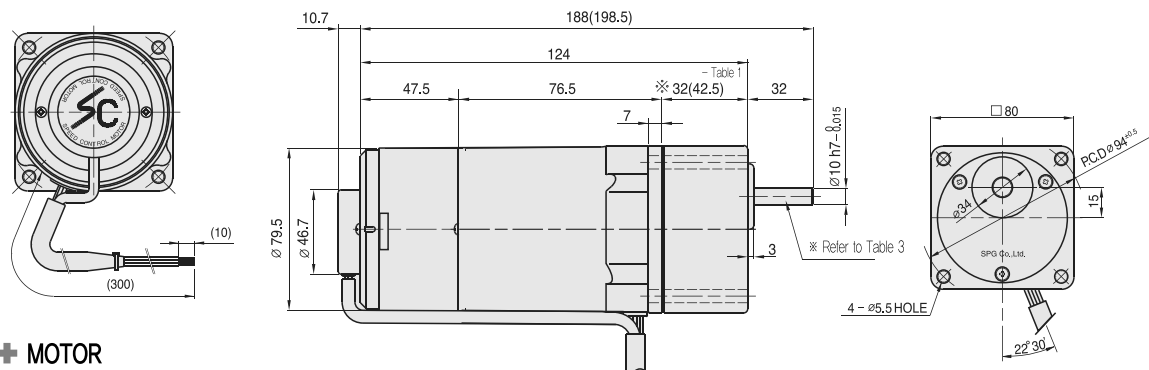
- ▲ S8R25GX-ES12 S8R25GX-ES24
S8R25GX-ES12CE S8R25GX-ES24CE

DIMENSIONS

✦ GEARED MOTOR

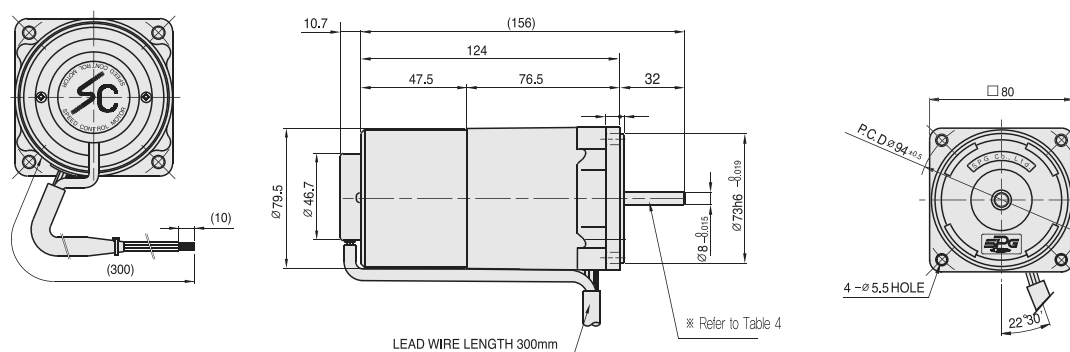
※ MOTOR MODEL : S8R(15,25)G□-ES12, S8R(15,25)G□-ES24

※ HEAD MODEL : S8□A3□~S8□A200□



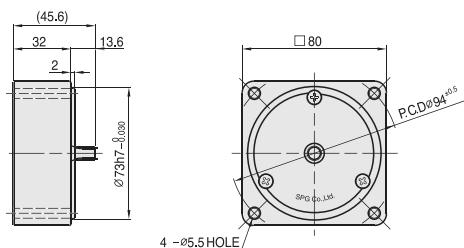
✦ MOTOR

※ MOTOR MODEL : S8R(15,25)□□-ES12, S8R(15,25)□□-ES24



✦ INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



✦ ※26(35) - (Table1)

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

✦ WEIGHT - (Table2)

PART	WEIGHT(kg)
15W MOTOR	2.00
25W MOTOR	2.00
DECIMAL GEAR HEAD	0.43
GEAR HEAD	S8□A3□ ~ S8□A18□
	0.43
	S8□A20□ ~ S8□A40□
	0.57
GEAR HEAD	S8□A50□ ~ S8□A200□
	0.61

✦ SPEC for output shaft of gearhead - (Table3)

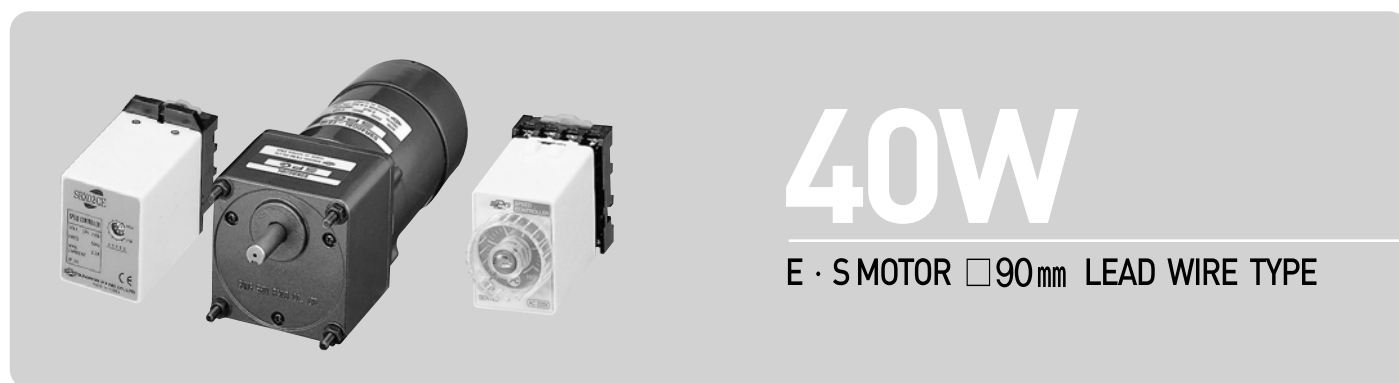
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	32 ø10
S8SA3□ ~ S8SA200□	32 ø10
D-CUT TYPE	32 25 ø10 9-3.1
S8DA3□ ~ S8DA200□	32 25 ø10 9-3.1
KEY TYPE	32 25 ø10 2.5*3.1
S8KA3□ ~ S8KA200□	32 25 ø10 2.5*3.1

✦ KEY SPEC

GEAR HEAD	MOTOR
25 ^{+0.2} 4-3.03	25 ^{+0.2} 3-0.005

✦ SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	13.6
S8R15G□-ES12 S8R25G□-ES12 S8R15G□-ES24 S8R25G□-ES24	13.6
STRAIGHT TYPE	32 ø8
S8R15S□-ES12 S8R25S□-ES12 S8R15S□-ES24 S8R25S□-ES24	32 ø8
D-CUT TYPE	32 25 7-3.1 ø8
S8R15D□-ES12 S8R25D□-ES12 S8R15D□-ES24 S8R25D□-ES24	32 25 7-3.1 ø8
KEY TYPE	32 25 ø8 1.8*3.1
S8R15K□-ES12 S8R15K□-ES24 S8R15K□-ES12 S8R15K□-ES24	32 25 ø8 1.8*3.1



SPECIFICATION SR TYPE SPEED CONTROL MOTORS

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	S9R40GA()-ES12 S9R40GA()-ES12(TP) S9R40GA()-ES12CE	SRA02 SRA02CE	4	40	1 ∅ 110	60	30min.	90-1700	3.00	0.300	1.20	0.120	3.75	0.375	15.0
	S9R40GB()-ES12 S9R40GB()-ES12(TP) S9R40GB()-ES12CE	SRB02 SRB02CE	4	40	1 ∅ 220	60	30min.	90-1700	3.00	0.300	1.20	0.120	3.75	0.375	4.0
	S9R40GC()-ES12 S9R40GC()-ES12(TP) S9R40GC()-ES12CE	SRC02 SRC02CE	4	40	1 ∅ 100	50	30min.	90-1400	3.10	0.310	1.00	0.100	3.20	0.320	15.0
						60		90-1700	2.20	0.220					
	S9R40GD()-ES12 S9R40GD()-ES12(TP) S9R40GD()-ES12CE	SRD02 SRD02CE	4	40	1 ∅ 200	50	30min.	90-1400	3.10	0.310	1.00	0.100	3.20	0.320	4.0
						60		90-1700	2.20	0.220					
	S9R40GX()-ES12 S9R40GX()-ES12CE	SRX02 SRX02CE	4	40	1 ∅ 220	50	30min.	90-1400	2.50	0.250	1.20	0.120	3.20	0.320	3.0
					1 ∅ 240				3.10	0.310					

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- ❖ S9R40GX-ES12, S9R40GX-ES12CE 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'.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

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	S9R40GA()-ES24 S9R40GA()-ES24(TP) S9R40GA()-ES24CE	SSA02-SRSS SSA03-SRSS	4	40	1 ∅ 110	60	30min.	90-1700	3.00	0.300	1.20	0.120	3.75	0.375	15.0
	S9R40GB()-ES24 S9R40GB()-ES24(TP) S9R40GB()-ES24CE	SSB02-SRSS SSB03-SRSS	4	40	1 ∅ 220	60	30min.	90-1700	3.00	0.300	1.20	0.120	3.75	0.375	4.0
	S9R40GC()-ES24 S9R40GC()-ES24(TP) S9R40GC()-ES24CE	SSC02-SRSS SSC03-SRSS	4	40	1 ∅ 100	50	30min.	90-1400	3.10	0.310	1.00	0.100	3.20	0.320	15.0
						60		90-1700	2.20	0.220					
	S9R40GD()-ES24 S9R40GD()-ES24(TP) S9R40GD()-ES24CE	SSD02-SRSS SSD03-SRSS	4	40	1 ∅ 200	50	30min.	90-1400	3.10	0.310	1.00	0.100	3.20	0.320	4.0
						60		90-1700	2.20	0.220					
	S9R40GX()-ES24 S9R40GX()-ES24CE	SSX02-SRSS SSX03-SRSS	4	40	1 ∅ 220	50	30min.	90-1400	2.50	0.250	1.20	0.120	3.20	0.320	3.0
					1 ∅ 240				3.10	0.310					

- ❖ CE marked at the end of motor model name indicates that it is thermally 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.
- ❖ S9R40GX-ES24, S9R40GX-ES24CE 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'.

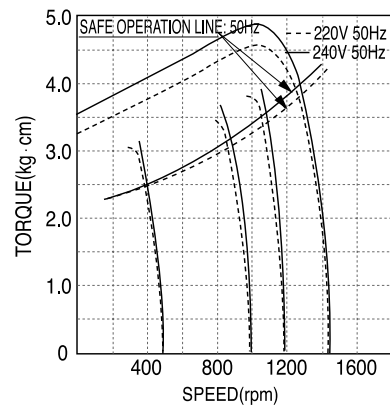
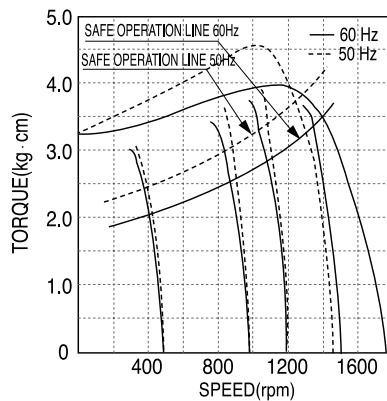
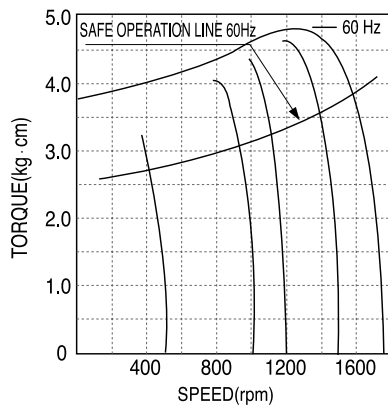
50Hz

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	7.5
S9KB□()	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	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	9.800

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	9
	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	9.800
S9KB□B()	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	100

- ❖ 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'.



▲ S9R40GA()-ES12 S9R40GA()-ES24
 S9R40GA()-ES12(TP) S9R40GA()-ES24(TP)
 S9R40GA()-ES12CE S9R40GA()-ES24CE
 S9R40GB()-ES12 S9R40GB()-ES24
 S9R40GB()-ES12(TP) S9R40GB()-ES24(TP)
 S9R40GB()-ES12CE S9R40GB()-ES24CE

▲ S9R40GC()-ES12 S9R40GC()-ES24
 S9R40GC()-ES12(TP) S9R40GC()-ES24(TP)
 S9R40GC()-ES12CE S9R40GC()-ES24CE
 S9R40GD()-ES12 S9R40GD()-ES24
 S9R40GD()-ES12(TP) S9R40GD()-ES24(TP)
 S9R40GD()-ES12CE S9R40GD()-ES24CE

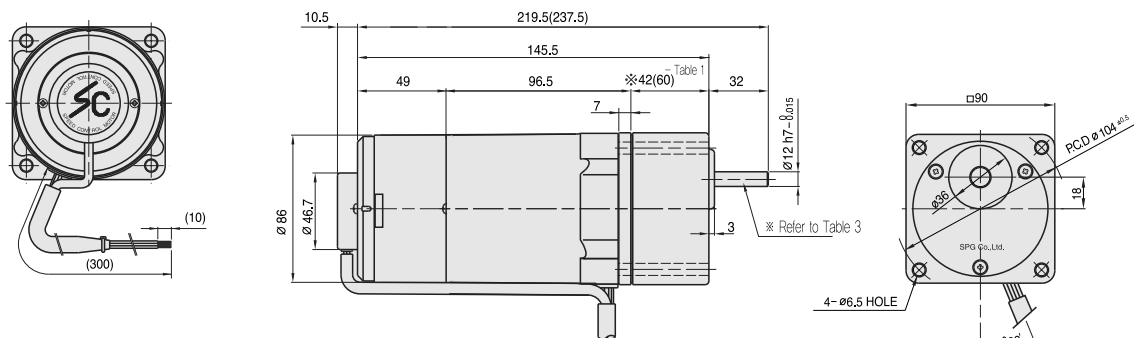
▲ S9R40GX()-ES12 S9R40GX()-ES24
 S9R40GX()-ES12CE S9R40GX()-ES24CE

DIMENSIONS

GEARED MOTOR

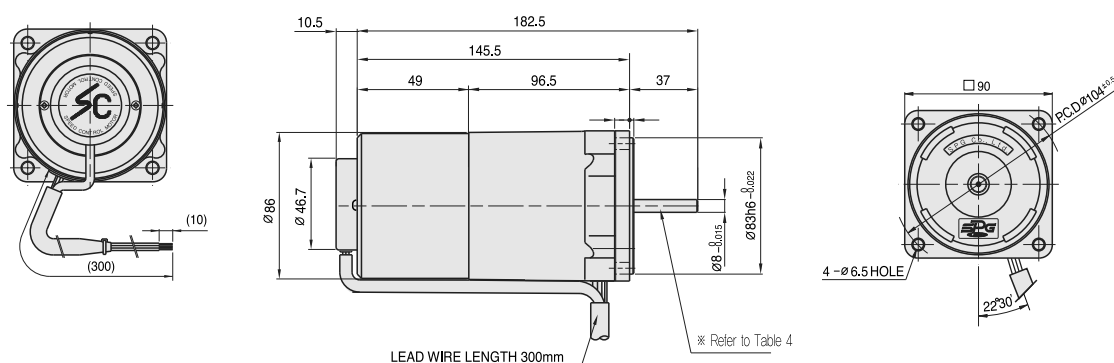
※ MOTOR MODEL : S9R40G□□-ES12, S9R40G□□-ES24

※ HEAD MODEL : S9□B3□~S9□B200□□



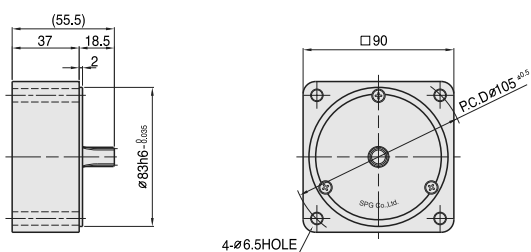
MOTOR

※ MOTOR MODEL : S9R40□□□-ES12, S9R40□□□-ES24



INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



KEY SPEC

GEAR HEAD	MOTOR

SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9R40G□□-ES12 S9R40G□□-ES24	
STRAIGHT TYPE	
S9R40S□□-ES12 S9R40S□□-ES24	
D-CUT TYPE	
S9R40D□□-ES12 S9R40D□□-ES24	
KEY TYPE	
S9R40K□□-ES12 S9R40K□□-ES24	

※26(35) - (Table1)

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

WEIGHT - (Table2)

PART	WEIGHT(kg)
MOTOR	2.87
DECIMAL GEAR HEAD	0.60
GEAR HEAD	S9□B3□□ ~ S9□B18□□
	0.73
	S9□B20□□ ~ S9□B40□□
	1.03
GEAR HEAD	S9□B50□□ ~ S9□B200□□
	1.13

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□□	



60W

E · S MOTOR □ 90mm LEAD WIRE TYPE

SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

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	S9R60GA()-ES12 S9R60GA()-ES12CE	SRA02 SRA02CE	4	60	1 ∅ 110	60	30min.	90-1700	5.50	0.550	3.92	0.392	6.10	0.610	25.0
	S9R60GB()-ES12 S9R60GB()-ES12CE	SRB02 SRB02CE	4	60	1 ∅ 220	60	30min.	90-1700	5.50	0.550	3.92	0.392	6.10	0.610	6.0
	S9R60GC()-ES12 S9R60GC()-ES12CE	SRC02 SRC02CE	4	60	1 ∅ 100	50	30min.	90-1400	5.11	0.511	3.61	0.361	6.04	0.604	25.0
						60		90-1700	4.42	0.442					
	S9R60GD()-ES12 S9R60GD()-ES12CE	SRD02 SRD02CE	4	60	1 ∅ 200	50	30min.	90-1400	5.11	0.511	3.61	0.361	6.04	0.604	6.0
						60		90-1700	4.42	0.442					
	S9R60GX()-ES12 S9R60GX()-ES12CE	SRX02 SRX02CE	4	60	1 ∅ 220	50	30min.	90-1400	5.25	0.525	3.01	0.301	6.02	0.602	5.0
					1 ∅ 240				5.90	0.590					

❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted

S9R60GX-ES12 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

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	7.5
	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

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	9
	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

❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible TORQUE of the assembled motor and gearhead.

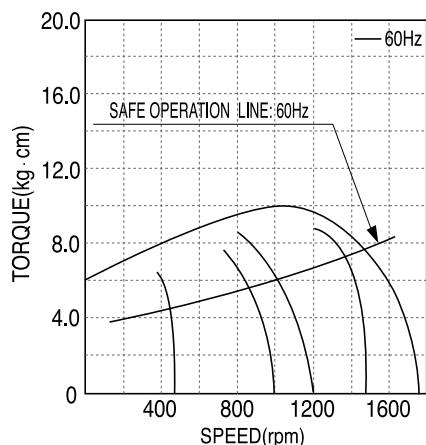
❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.

❖ ■ 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.

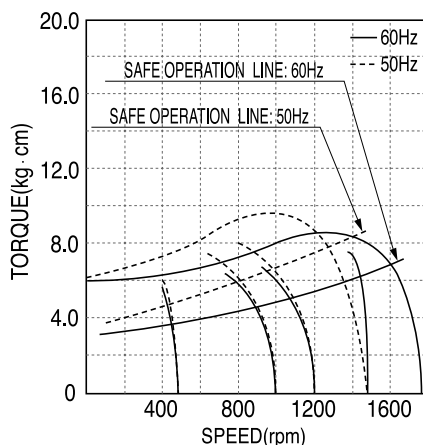
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.

The actual rotation speed can be 2~20% less than displayed value depending on the load.

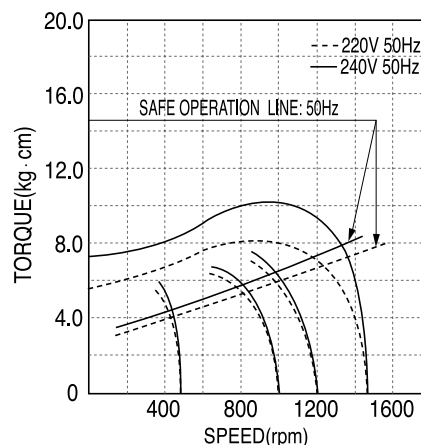
❖ () is for marking 'L' type or 'H'. 'L' should be used with motor 'L' and 'H' should be used with motor 'H'.



▲ S9R60GA()-ES12 S9R60GB()-ES12
S9R60GA()-ES12(TP) S9R60GB()-ES12(TP)



▲ S9R60GC()-ES12 S9R60GD()-ES12
S9R60GC()-ES12(TP) S9R60GD()-ES12(TP)

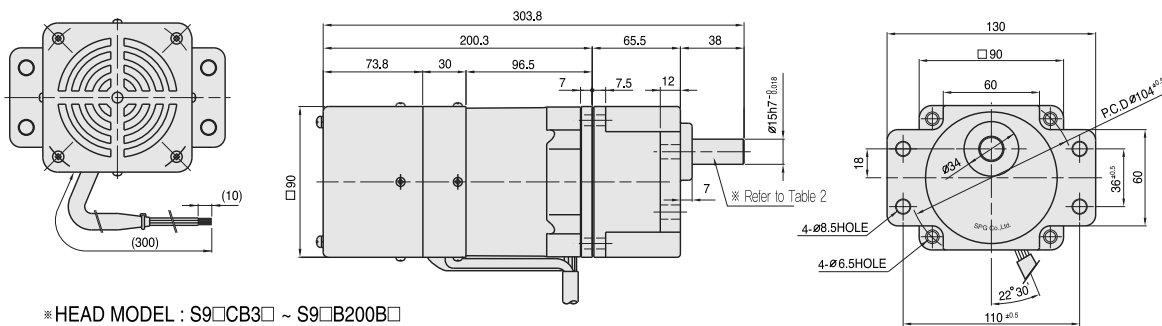


▲ S9R60GX()-ES12

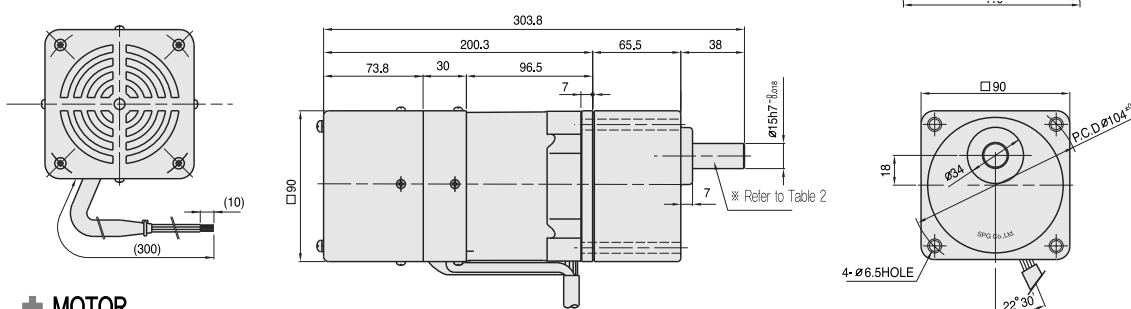
DIMENSIONS

GEARED MOTOR

- ※ MOTOR MODEL : S9R60G□□-ES12
 ※ HEAD MODEL : S9□C3B□~S9□C200B□-S

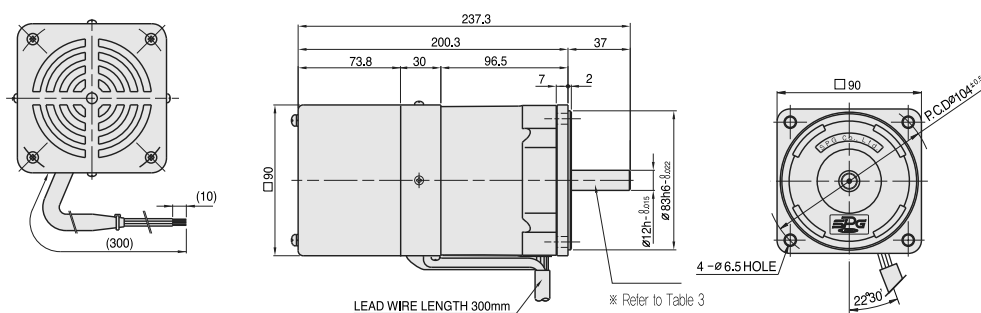


- ※ HEAD MODEL : S9□CB3□ ~ S9□B200B□



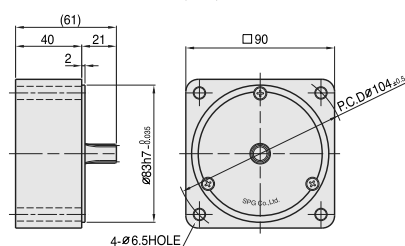
MOTOR

- ※ MOTOR MODEL : S9R60□□□-ES12



INTER-DECIMAL GEAR HEAD

- ※ MODEL : S9GX10B(H,L)



WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		3.45
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

SPEC for output shaft of gearhead - (Table2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	38 Ø15
S9SC3B□ ~S9SC200B□	38 25 14.8 ^{+0.1} Ø15
D-CUT TYPE	38 25 14.8 ^{+0.1} Ø15
S9SDC3B□ ~S9SDC200B□	38 27.5 Ø15 5 ^{+0.03} 3°8'1
KEY TYPE	38 27.5 Ø15 5 ^{+0.03} 25
S9KC3B□ ~S9KC200B□	38 27.5 Ø15 5 ^{+0.03} 25

KEY SPEC

GEAR HEAD	MOTOR
27.5 ^{+0.2} 5-8.03	25 ^{+0.2} 4-8.03

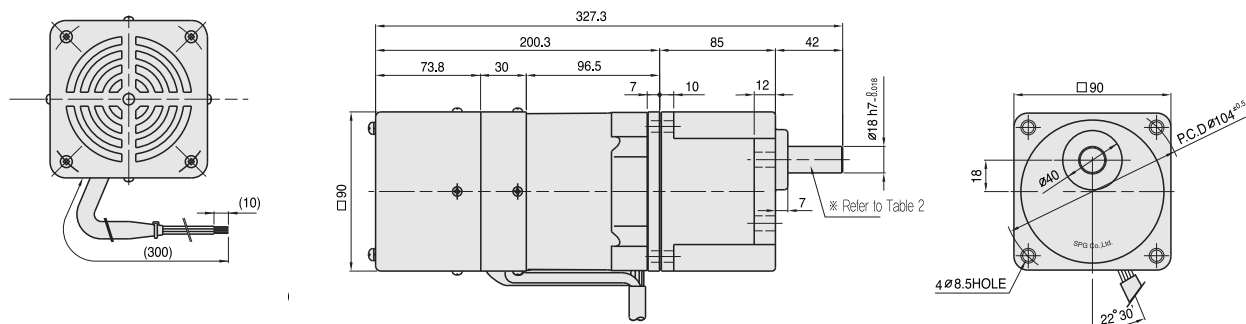
SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	21
S9R60G□-ES12	21
STRAIGHT TYPE	37 Ø12
S9R60S□-ES12	37 Ø12
D-CUT TYPE	37 30 Ø12 11-13.2
S9R60D□-ES12	37 30 Ø12 11-13.2
KEY TYPE	37 25 Ø12 4 ^{+0.03} 2.5°8'1
S9R60K□-ES12	37 25 Ø12 4 ^{+0.03} 2.5°8'1

DIMENSIONS

✦ GEARED MOTOR

- * MOTOR MODEL : S9R60G□H-ES12
- * HEAD MODEL : S9□D3B□~S9□D200B



✦ WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		3.45
DECIMAL GEAR HEAD		1.65
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 SHAFT
STRAIGHT TYPE	
S9SD3B□ ~S9SD200B□	
D-CUT TYPE	
S9DD3B□ ~S9DD200B□	
KEY TYPE	
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.



90W

E · S MOTOR □ 90mm LEAD WIRE TYPE

SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output	Voltage	Freq.	Duty	Speed Range	Permissible Torque				Starting Torque		Cap.
				(W)	(V)	(Hz)			(rpm)	at 1200rpm		at 90rpm		(kg-cm)	
90	S9R90GA()-ES12 S9R90GA()-ES12(CE)	SRA02 SRA02CE	4	90	1 ∅ 110	60	30min.	90-1700	8.02	0.802	5.42	0.542	7.65	0.765	30.0
	S9R90GB()-ES12 S9R90GB()-ES12(CE)	SRB02 SRB02CE	4	90	1 ∅ 220	60	30min.	90-1700	8.02	0.802	5.42	0.542	7.65	0.765	8.0
	S9R90GC()-ES12 S9R90GC()-ES12(CE)	SRC02 SRC02CE	4	90	1 ∅ 100	50 60	30min.	90-1400 90-1700	7.22 6.32	0.722 0.632	4.92	0.492	6.90	0.690	30.0
	S9R90GD()-ES12 S9R90GD()-ES12(CE)	SRD02 SRD02CE	4	90	1 ∅ 200	50 60	30min.	90-1400 90-1700	7.22 6.32	0.722 0.632	4.92	0.492	6.90	0.690	8.0
	S9R90GX()-ES12 S9R90GX()-ES12(CE)	SRX02 SRX02CE	4	90	1 ∅ 220 1 ∅ 240	50	30min.	90-1400	5.98 6.35	0.598 0.635	3.79 4.09	0.379 0.409	5.90 7.20	0.590 0.720	6.0

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

S9R90GX() -ES12 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

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	7.5
	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
MODEL	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
	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		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	9
	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
MODEL	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
	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 TORQUE of the assembled motor and gearhead.

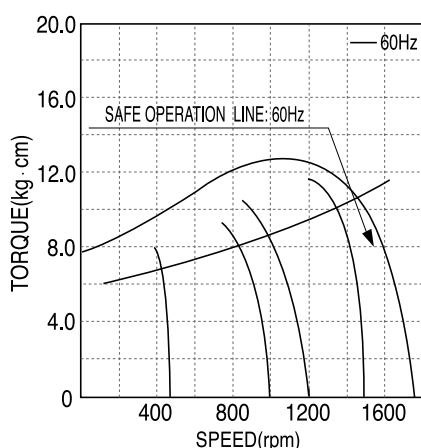
❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.

❖ ■ 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.

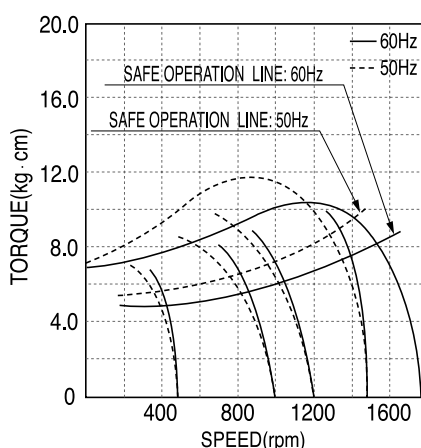
❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio.

The actual rotation speed can be 2~20% less than displayed value depending on the load.

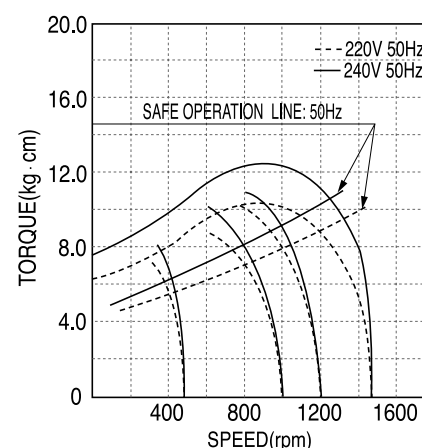
❖ () is for marking 'L' type or 'H'. 'L' should be used with motor 'L' and 'H' should be used with motor 'H'.



▲ S9R90GA()-ES12 S9R90GB()-ES12
S9R90GA()-ES12(TP) S9R90GB()-ES12(TP)



▲ S9R90GC()-ES12 S9R90GD()-ES12
S9R90GC()-ES12(TP) S9R90GD()-ES12(TP)



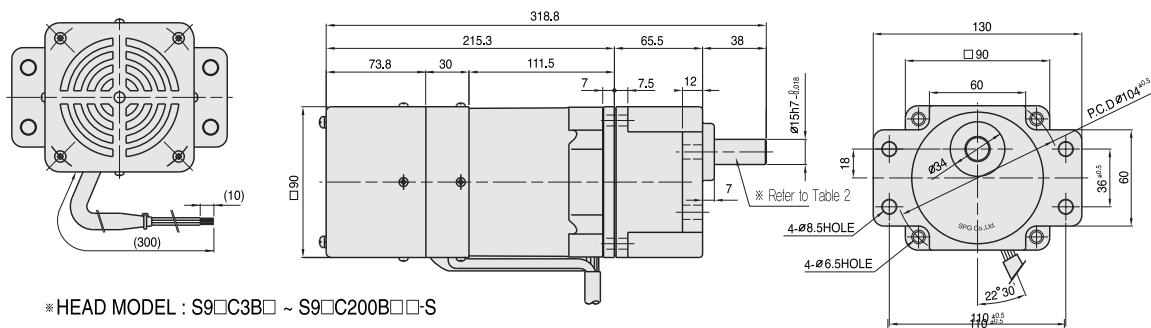
▲ S9R90GX()-ES12

DIMENSIONS

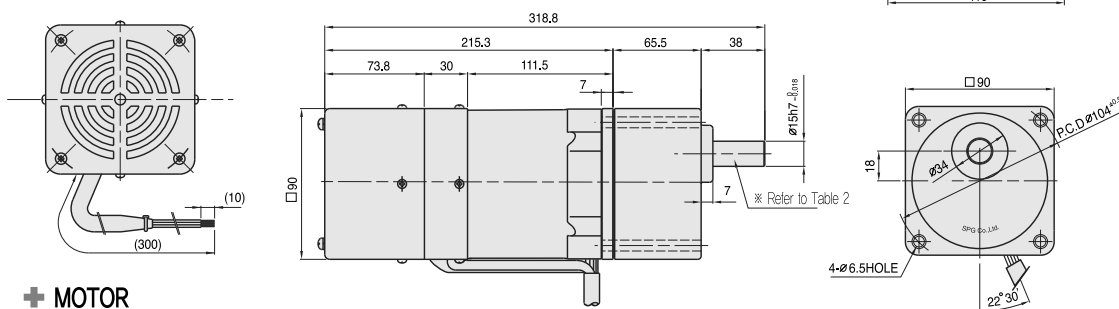
GEARED MOTOR

※ MOTOR MODEL : S9R90□□-ES12

※ HEAD MODEL : S9□C3B□-S-S9□C200B□-S

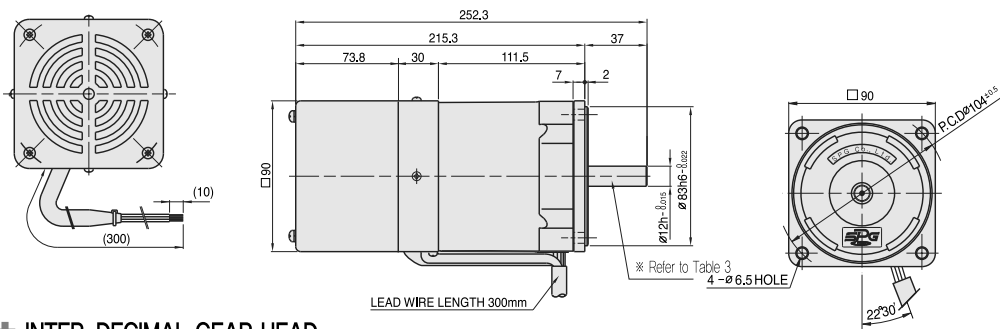


※ HEAD MODEL : S9□C3B□ ~ S9□C200B□-S



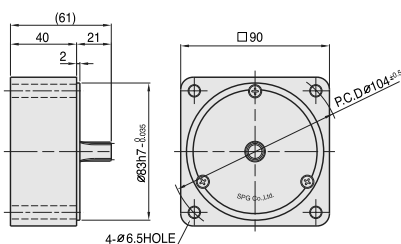
MOTOR

※ MOTOR MODEL : S9R90□□-ES12



INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



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□	

KEY SPEC

GEAR HEAD	MOTOR

SPEC for output shaft of motor - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9R90G□-ES12	
STRAIGHT TYPE	
S9R90S□-ES12	
D-CUT TYPE	
S9R90D□-ES12	
KEY TYPE	
S9R90K□-ES12	

WEIGHT - (Table1)

PART		WEIGHT(kg)
MOTOR		3.97
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

- | 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 | 9 |
| | 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 |
| S9KD□□ | 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 |