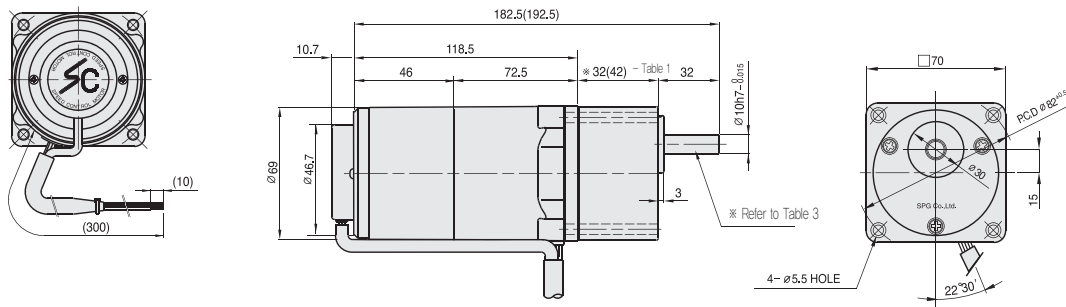


# DIMENSIONS

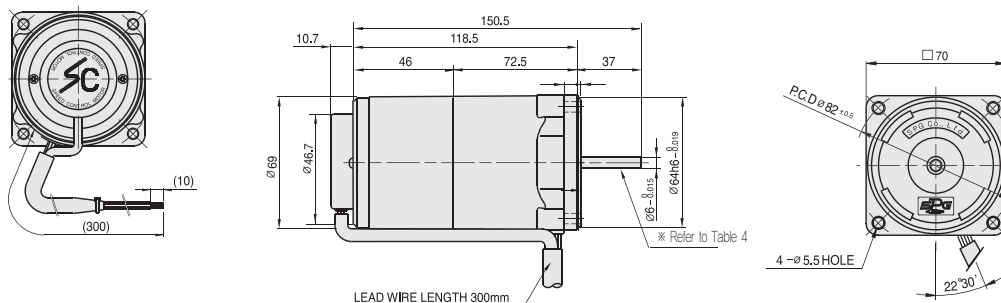
## + GEARED MOTOR

※ MOTOR MODEL : S7R15G□-ES12, S7R15G□-ES24  
 ※ HEAD MODEL : S7□A3□~S7□A200□



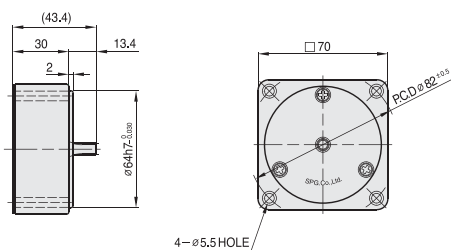
## + MOTOR

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

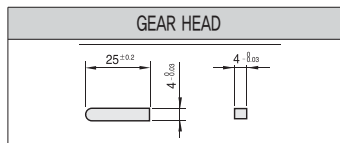


## + INTER-DECIMAL GEAR HEAD

※ MODEL : S7GX10B



## + KEY SPEC



## + ※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□A200□ | 0.52 |

## + SPEC for output shaft of gearhead - (Table3)

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

## + SPEC for output shaft of motor - (Table4)

| MODEL                        | TYPES OF OUTPUT SHAFT |
|------------------------------|-----------------------|
| S7R15G□-ES12<br>S7R15G□-ES24 | GEAR TYPE             |
|                              | STRAIGHT TYPE         |
| S7R15S□-ES12<br>S7R15S□-ES24 | STRAIGHT TYPE         |
|                              | D-CUT TYPE            |



# 15W

E · S MOTOR □80mm LEAD WIRE TYPE

## SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

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

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

- ❖ 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.

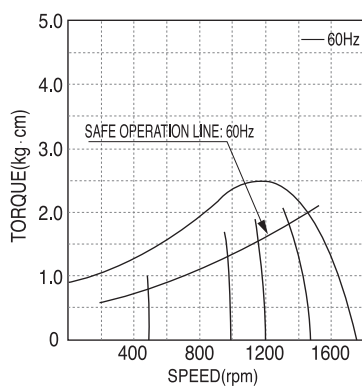
## 50Hz

| 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   |
| 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 |

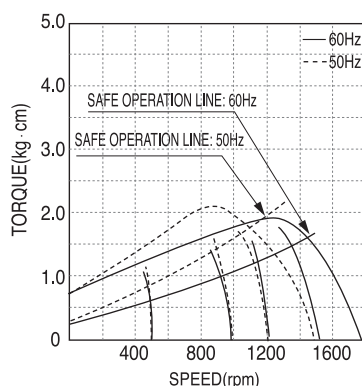
## 60Hz

| 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     |
| 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 |

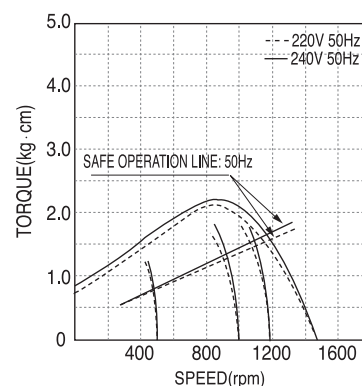
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as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



# 25W

E · S MOTOR □ 80mm LEAD WIRE TYPE

## SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

| SIZE<br>mm sq. | Motor<br>Type                                      | Controller<br>Type | Poles | Output<br>(W) | Voltage<br>(V)               | Freq.<br>(Hz) | Duty   | Speed<br>Range<br>(rpm) | Permissible Torque |                |          |       | Starting Torque |       | Cap.<br>( $\mu$ F) |
|----------------|--|--------------------|-------|---------------|------------------------------|---------------|--------|-------------------------|--------------------|----------------|----------|-------|-----------------|-------|--------------------|
|                |  |                    |       |               |                              |               |        |                         | at 1200rpm         |                | at 90rpm |       | (kg-cm)         | (N-m) |                    |
| 80             | S8R25GA-ES12<br>S8R25GA-ES12(TP)<br>S8R25GA-ES12CE | SRA02<br>SRA02CE   | 4     | 25            | 1 $\phi$ 110                 | 60            | 30min. | 90-1700                 | 2.45               | 0.245          | 0.90     | 0.090 | 1.90            | 0.190 | 10.0               |
|                | S8R25GB-ES12<br>S8R25GB-ES12(TP)<br>S8R25GB-ES12CE | SRB02<br>SRB02CE   | 4     | 25            | 1 $\phi$ 220                 | 60            | 30min. | 90-1700                 | 2.45               | 0.245          | 0.90     | 0.090 | 1.90            | 0.190 | 2.5                |
|                | S8R25GC-ES12<br>S8R25GC-ES12(TP)<br>S8R25GC-ES12CE | SRC02<br>SRC02CE   | 4     | 25            | 1 $\phi$ 100                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 2.25<br>2.00       | 0.225<br>0.200 | 0.75     | 0.075 | 1.75            | 0.175 | 10.0               |
|                | S8R25GD-ES12<br>S8R25GD-ES12(TP)<br>S8R25GD-ES12CE | SRD02<br>SRD02CE   | 4     | 25            | 1 $\phi$ 200                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 2.25<br>2.00       | 0.225<br>0.200 | 0.75     | 0.075 | 1.75            | 0.175 | 2.5                |
|                | S8R25GX-ES12<br>S8R25GX-ES12CE                     | SRX02<br>SRX02CE   | 4     | 25            | 1 $\phi$ 220<br>1 $\phi$ 240 | 50            | 30min. | 90-1400                 | 2.30<br>2.45       | 0.230<br>0.245 | 0.75     | 0.075 | 1.75            | 0.175 | 2.0                |
|                |  |                    |       |               |                              |               |        |                         |                    |                |          |       | 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<br>mm sq. | Motor<br>Type                                      | Controller<br>Type       | Poles | Output<br>(W) | Voltage<br>(V)               | Freq.<br>(Hz) | Duty   | Speed<br>Range<br>(rpm) | Permissible Torque |                |          |       | Starting Torque |       | Cap.<br>( $\mu$ F) |
|----------------|--|--------------------------|-------|---------------|------------------------------|---------------|--------|-------------------------|--------------------|----------------|----------|-------|-----------------|-------|--------------------|
|                |  |                          |       |               |                              |               |        |                         | at 1200rpm         |                | at 90rpm |       | (kg-cm)         | (N-m) |                    |
| 80             | S8R25GA-ES24<br>S8R25GA-ES24(TP)<br>S8R25GA-ES24CE | SSA02-SRSS<br>SSA03-SRSS | 4     | 25            | 1 $\phi$ 110                 | 60            | 30min. | 90-1700                 | 2.45               | 0.245          | 0.90     | 0.090 | 1.90            | 0.190 | 10.0               |
|                | S8R25GB-ES24<br>S8R25GB-ES24(TP)<br>S8R25GB-ES24CE | SSB02-SRSS<br>SSB03-SRSS | 4     | 25            | 1 $\phi$ 220                 | 60            | 30min. | 90-1700                 | 2.45               | 0.245          | 0.90     | 0.090 | 1.90            | 0.190 | 2.5                |
|                | S8R25GC-ES24<br>S8R25GC-ES24(TP)<br>S8R25GC-ES24CE | SSC02-SRSS<br>SSC03-SRSS | 4     | 25            | 1 $\phi$ 100                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 2.25<br>2.00       | 0.225<br>0.200 | 0.75     | 0.075 | 1.75            | 0.175 | 10.0               |
|                | S8R25GD-ES24<br>S8R25GD-ES24(TP)<br>S8R25GD-ES24CE | SSD02-SRSS<br>SSD03-SRSS | 4     | 25            | 1 $\phi$ 200                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 2.25<br>2.00       | 0.225<br>0.200 | 0.75     | 0.075 | 1.75            | 0.175 | 2.5                |
|                | S8R25GX-ES24<br>S8R25GX-ES24CE                     | SSX02-SRSS<br>SSX03-SRSS | 4     | 25            | 1 $\phi$ 220<br>1 $\phi$ 240 | 50            | 30min. | 90-1400                 | 2.30<br>2.45       | 0.230<br>0.245 | 0.75     | 0.075 | 1.75            | 0.175 | 2.0                |
|                |  |                          |       |               |                              |               |        |                         |                    |                |          |       | 1.860           | 0.186 |                    |
|                |  |                          |       |               |                              |               |        |                         |                    |                |          |       |                 |       |                    |
|                |  |                          |       |               |                              |               |        |                         |                    |                |          |       |                 |       |                    |
|                |  |                          |       |               |                              |               |        |                         |                    |                |          |       |                 |       |                    |
|                |  |                          |       |               |                              |               |        |                         |                    |                |          |       |                 |       |                    |

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- ❖ 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.

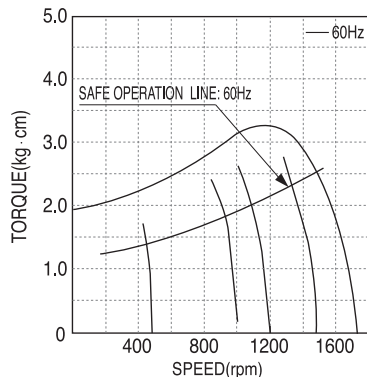
### 50Hz

| 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   |
|            | 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  |
| S8KA□B     | 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 |

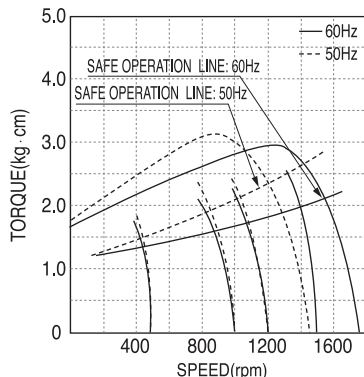
### 60Hz

| 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     |
|            | 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  |
| S8KA□B     | 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 |

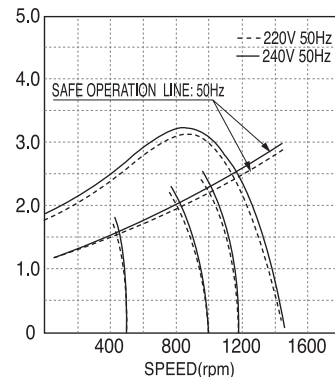
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as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

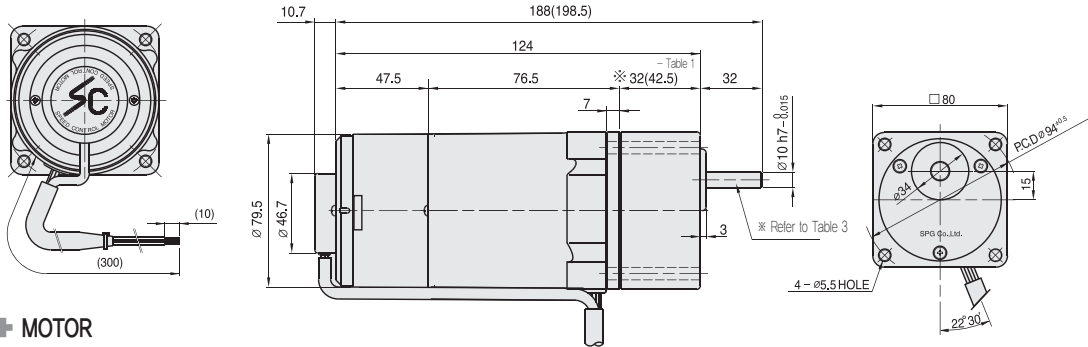


- ▲ S8R25GX-ES12 S8R25GX-ES24
- S8R25GX-ES12CE S8R25GX-ES24CE

# DIMENSIONS

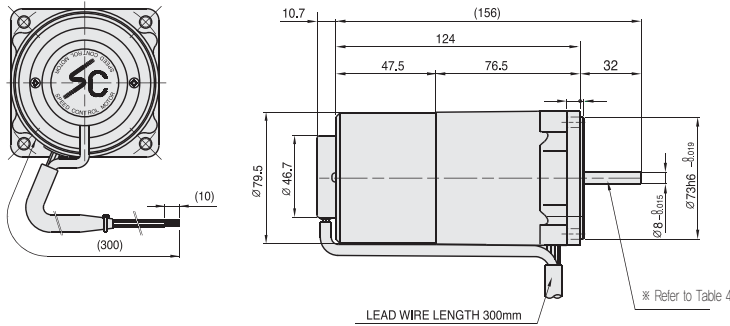
## + GEARED MOTOR

※ MOTOR MODEL : S8R(15,25)G□-ES12, S8R(15,25)G□-ES24  
 ※ HEAD MODEL : S8□A3□~S8□A200□



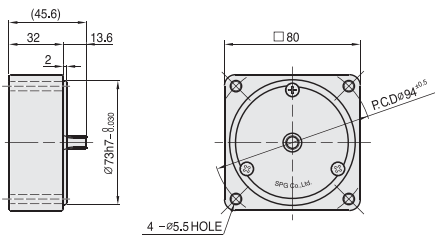
## + MOTOR

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



## + INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



## + ※26(35) - (Table 1)

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

## + WEIGHT - (Table 2)

| 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 |
|                   | S8□A50□ ~ S8□A200□ | 0.61 |

## + SPEC for output shaft of gearhead - (Table 3)

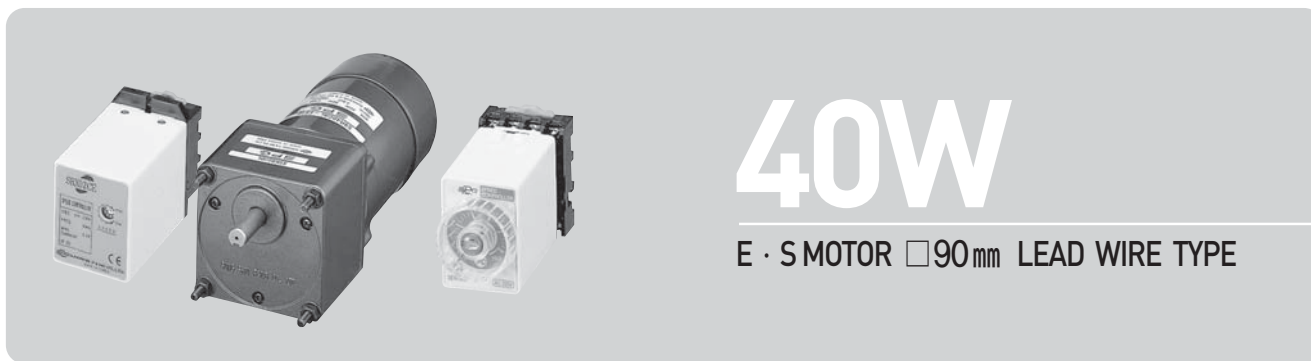
| MODEL         | TYPES OF OUTPUT SHAFT |
|---------------|-----------------------|
| STRAIGHT TYPE |                       |
|               |                       |
| D-CUT TYPE    |                       |
|               |                       |

## + KEY SPEC

| GEAR HEAD | MOTOR |
|-----------|-------|
|           |       |

## + SPEC for output shaft of motor - (Table 4)

| MODEL     | TYPES OF OUTPUT SHAFT |
|-----------|-----------------------|
| GEAR TYPE |                       |
|           |                       |
|           |                       |
|           |                       |



### SPECIFICATION SR TYPE SPEED CONTROL MOTORS

| SIZE<br>mm sq. | Motor<br>Type  | Controller<br>Type | Poles | Output<br>(W) | Voltage<br>(V)               | Freq.<br>(Hz) | Duty   | Speed<br>Range<br>(rpm) | Permissible Torque |                |          |       | Starting Torque |       | Cap.<br>( $\mu$ F) |
|----------------|--|--------------------|-------|---------------|------------------------------|---------------|--------|-------------------------|--------------------|----------------|----------|-------|-----------------|-------|--------------------|
|                |  |                    |       |               |                              |               |        |                         | at 1200rpm         |                | at 90rpm |       | (kg-cm)         | (N-m) |                    |
| 90             | S9R40GA()-ES12<br>S9R40GA()-ES12(TP)<br>S9R40GA()-ES12CE | SRA02<br>SRA02CE   | 4     | 40            | 1 $\phi$ 110                 | 60            | 30min. | 90-1700                 | 3.00               | 0.300          | 1.20     | 0.120 | 3.75            | 0.375 | 15.0               |
|                | S9R40GB()-ES12<br>S9R40GB()-ES12(TP)<br>S9R40GB()-ES12CE | SRB02<br>SRB02CE   | 4     | 40            | 1 $\phi$ 220                 | 60            | 30min. | 90-1700                 | 3.00               | 0.300          | 1.20     | 0.120 | 3.75            | 0.375 | 4.0                |
|                | S9R40GC()-ES12<br>S9R40GC()-ES12(TP)<br>S9R40GC()-ES12CE | SRC02<br>SRC02CE   | 4     | 40            | 1 $\phi$ 100                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 3.10<br>2.20       | 0.310<br>0.220 | 1.00     | 0.100 | 3.20            | 0.320 | 15.0               |
|                | S9R40GD()-ES12<br>S9R40GD()-ES12(TP)<br>S9R40GD()-ES12CE | SRD02<br>SRD02CE   | 4     | 40            | 1 $\phi$ 200                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 3.10<br>2.20       | 0.310<br>0.220 | 1.00     | 0.100 | 3.20            | 0.320 | 4.0                |
|                | S9R40GX()-ES12<br>S9R40GX()-ES12CE                       | SRX02<br>SRX02CE   | 4     | 40            | 1 $\phi$ 220<br>1 $\phi$ 240 | 50            | 30min. | 90-1400                 | 2.50<br>3.10       | 0.250<br>0.310 | 1.20     | 0.120 | 3.20            | 0.320 | 3.0                |

- ❖ 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<br>mm sq. | Motor<br>Type  | Controller<br>Type       | Poles | Output<br>(W) | Voltage<br>(V)               | Freq.<br>(Hz) | Duty   | Speed<br>Range<br>(rpm) | Permissible Torque |                |          |       | Starting Torque |       | Cap.<br>( $\mu$ F) |
|----------------|--|--------------------------|-------|---------------|------------------------------|---------------|--------|-------------------------|--------------------|----------------|----------|-------|-----------------|-------|--------------------|
|                |  |                          |       |               |                              |               |        |                         | at 1200rpm         |                | at 90rpm |       | (kg-cm)         | (N-m) |                    |
| 90             | S9R40GA()-ES24<br>S9R40GA()-ES24(TP)<br>S9R40GA()-ES24CE | SSA02-SRSS<br>SSA03-SRSS | 4     | 40            | 1 $\phi$ 110                 | 60            | 30min. | 90-1700                 | 3.00               | 0.300          | 1.20     | 0.120 | 3.75            | 0.375 | 15.0               |
|                | S9R40GB()-ES24<br>S9R40GB()-ES24(TP)<br>S9R40GB()-ES24CE | SSB02-SRSS<br>SSB03-SRSS | 4     | 40            | 1 $\phi$ 220                 | 60            | 30min. | 90-1700                 | 3.00               | 0.300          | 1.20     | 0.120 | 3.75            | 0.375 | 4.0                |
|                | S9R40GC()-ES24<br>S9R40GC()-ES24(TP)<br>S9R40GC()-ES24CE | SSC02-SRSS<br>SSC03-SRSS | 4     | 40            | 1 $\phi$ 100                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 3.10<br>2.20       | 0.310<br>0.220 | 1.00     | 0.100 | 3.20            | 0.320 | 15.0               |
|                | S9R40GD()-ES24<br>S9R40GD()-ES24(TP)<br>S9R40GD()-ES24CE | SSD02-SRSS<br>SSD03-SRSS | 4     | 40            | 1 $\phi$ 200                 | 50<br>60      | 30min. | 90-1400<br>90-1700      | 3.10<br>2.20       | 0.310<br>0.220 | 1.00     | 0.100 | 3.20            | 0.320 | 4.0                |
|                | S9R40GX()-ES24<br>S9R40GX()-ES24CE                       | SSX02-SRSS<br>SSX03-SRSS | 4     | 40            | 1 $\phi$ 220<br>1 $\phi$ 240 | 50            | 30min. | 90-1400                 | 2.50<br>3.10       | 0.250<br>0.310 | 1.20     | 0.120 | 3.20            | 0.320 | 3.0                |

- ❖ 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'.

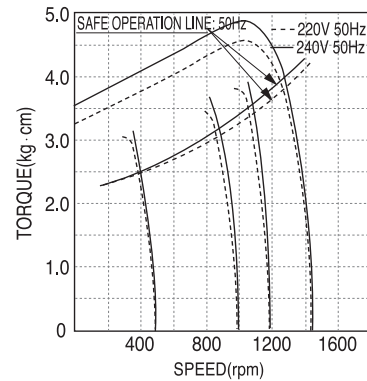
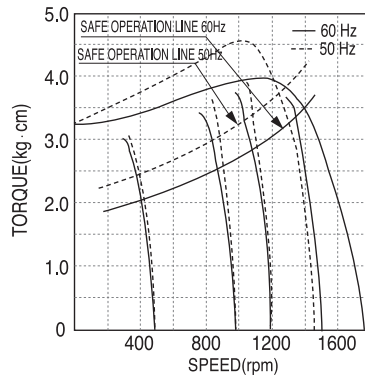
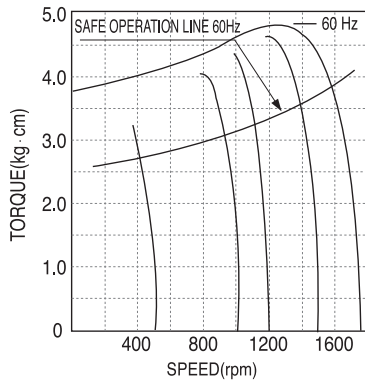
### 50Hz

| 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   |
|            | 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   |
| S9KB□B( )  | 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 |       | 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

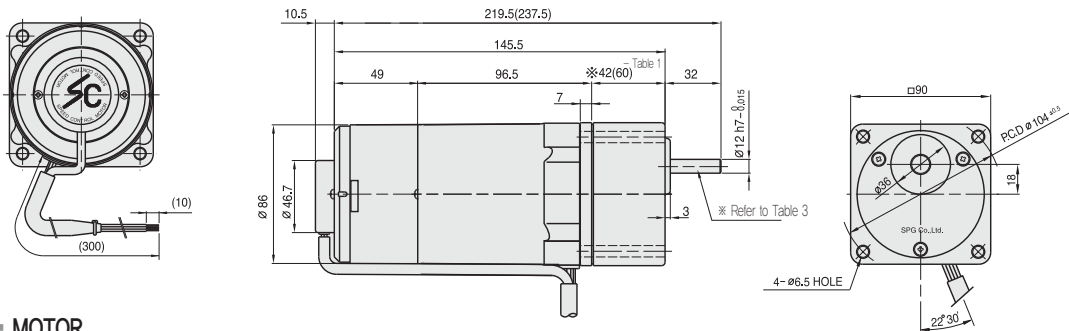
- ▲ S9R40GX()-ES12      S9R40GX()-ES24
- S9R40GX()-ES12CE    S9R40GX()-ES24CE



# DIMENSIONS

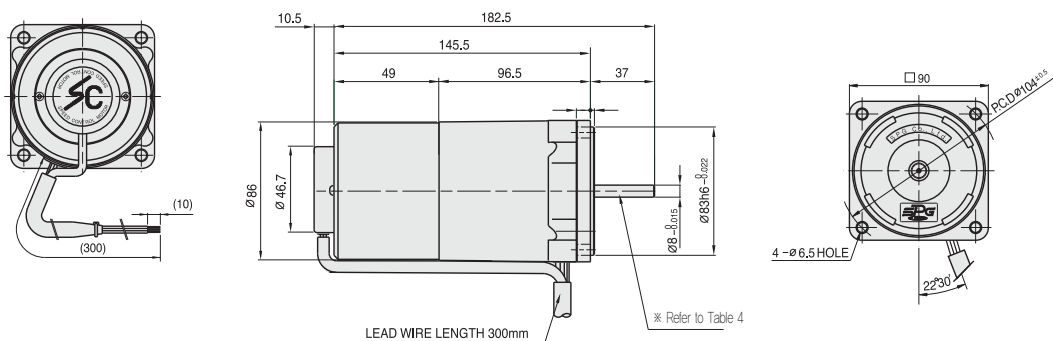
## + GEARED MOTOR

※ MOTOR MODEL : S9R40G□□-ES12, S9R40G□□-ES24  
 ※ HEAD MODEL : S9□B3□~S9□B200□□



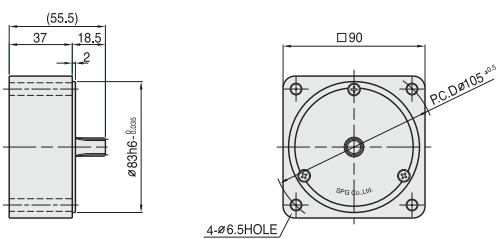
## + MOTOR

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

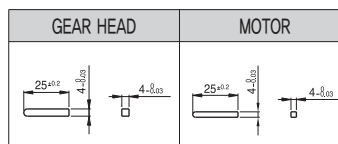


## + INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



## + KEY SPEC



## + SPEC for output shaft of motor - (Table 4)

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

## + ※26(35) - (Table 1)

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

## + WEIGHT - (Table 2)

| 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 |
|                   | S9□B50□□ ~ S9□B200□□ | 1.13 |

## + SPEC for output shaft of gearhead - (Table 3)

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



**SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS**

| SIZE<br>mm sq. | Motor<br>Type                        | Controller<br>Type | Poles | Output<br>(W) | Voltage<br>(V)     | Freq.<br>(Hz) | Duty   | Speed<br>Range<br>(rpm) | Permissible Torque |                |              |                | Starting Torque |                | Cap.<br>(μF) |
|----------------|--------------------------------------|--------------------|-------|---------------|--------------------|---------------|--------|-------------------------|--------------------|----------------|--------------|----------------|-----------------|----------------|--------------|
|                |                                      |                    |       |               |                    |               |        |                         | at 1200rpm         |                | at 90rpm     |                | (kg-cm)         | (N-m)          |              |
|                |                                      |                    |       |               |                    |               |        |                         | (kg-cm)            | (N-m)          | (kg-cm)      | (N-m)          |                 |                |              |
| 90             | S9R60GA( )-ES12<br>S9R60GA( )-ES12CE | SRA02<br>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<br>S9R60GB( )-ES12CE | SRB02<br>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<br>S9R60GC( )-ES12CE | SRC02<br>SRC02CE   | 4     | 60            | 1 ∅ 100            | 50<br>60      | 30min. | 90-1400<br>90-1700      | 5.11<br>4.42       | 0.511<br>0.442 | 3.61         | 0.361          | 6.04            | 0.604          | 25.0         |
|                | S9R60GD( )-ES12<br>S9R60GD( )-ES12CE | SRD02<br>SRD02CE   | 4     | 60            | 1 ∅ 200            | 50<br>60      | 30min. | 90-1400<br>90-1700      | 5.11<br>4.42       | 0.511<br>0.442 | 3.61         | 0.361          | 6.04            | 0.604          | 6.0          |
|                | S9R60GX( )-ES12<br>S9R60GX( )-ES12CE | SRX02<br>SRX02CE   | 4     | 60            | 1 ∅ 220<br>1 ∅ 240 | 50            | 30min. | 90-1400                 | 5.25<br>5.90       | 0.525<br>0.590 | 3.01<br>3.25 | 0.301<br>0.325 | 6.02<br>6.32    | 0.602<br>0.632 | 5.0          |

❖ 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'.

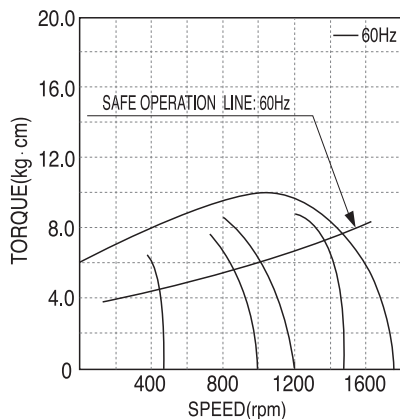
**50Hz**

| 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   |
|            |       | 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 |

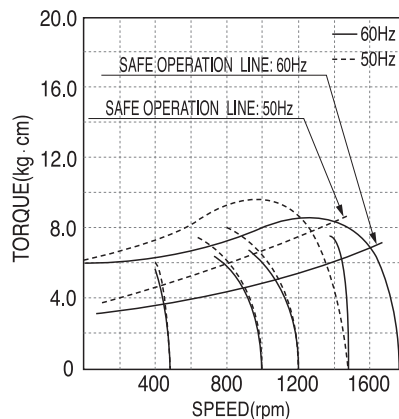
**60Hz**

| 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   |
|            |       | 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 |

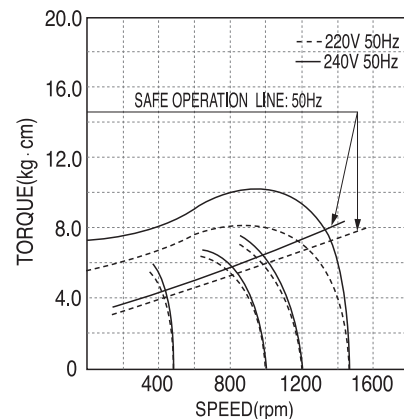
- ❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible TORQUE of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as 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)

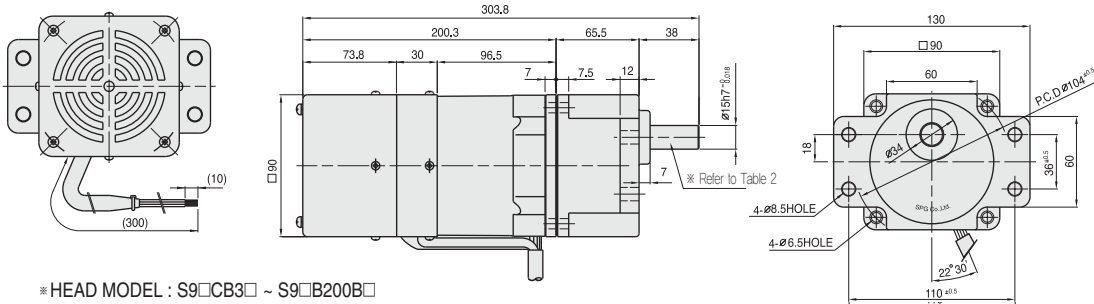


▲ S9R60GX()-ES12

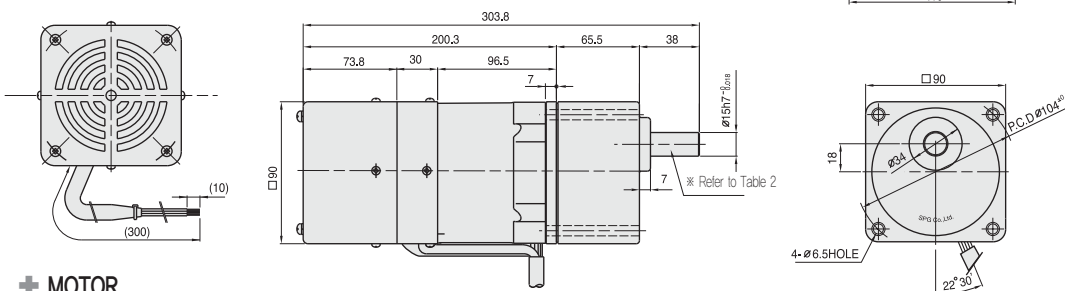
# DIMENSIONS

## + GEARED MOTOR

※ MOTOR MODEL : S9R60□□-ES12  
 ※ HEAD MODEL : S9□C3B□~S9□C200B□-S

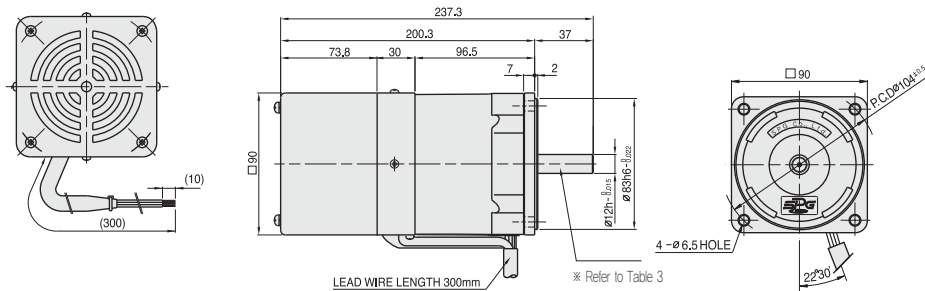


※ HEAD MODEL : S9□CB3□ ~ S9□B200B□



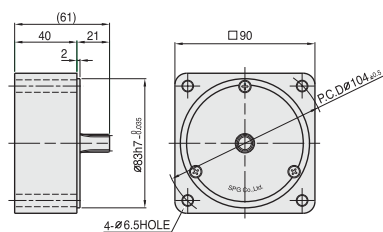
## + MOTOR

※ MOTOR MODEL : S9R60□□□-ES12



## + INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



## + SPEC for output shaft of gearhead - (Table2)

| MODEL                                  | TYPES OF OUTPUT SHAFT |
|--|-----------------------|
| STRAIGHT TYPE<br>S9SC3B□<br>~S9SC200B□ |                       |
| D-CUT TYPE<br>S9SDC3B□<br>~S9SDC200B□  |                       |
| KEY TYPE<br>S9KC3B□<br>~S9KC200B□      |                       |

## + SPEC for output shaft of motor - (Table3)

| MODEL                         | TYPES OF OUTPUT SHAFT |
|-------------------------------|-----------------------|
| GEAR TYPE<br>S9R60G□-ES12     |                       |
| STRAIGHT TYPE<br>S9R60S□-ES12 |                       |
| D-CUT TYPE<br>S9R60D□-ES12    |                       |
| KEY TYPE<br>S9R60K□-ES12      |                       |

## + WEIGHT - (Table1)

| PART              | WEIGHT(kg)              |      |
|-------------------|-------------------------|------|
| MOTOR             | 3.45                    |      |
| DECIMAL GEAR HEAD | 0.65                    |      |
| GEAR HEAD         | S9□C3B□<br>~S9□C10B□    | 1.21 |
|                   | S9□C12.5B□<br>~S9□C20B□ | 1.30 |
|                   | S9□C25B□<br>~S9□C60B□   | 1.40 |
|                   | S9□C75B□<br>~S9□C200B□  | 1.45 |

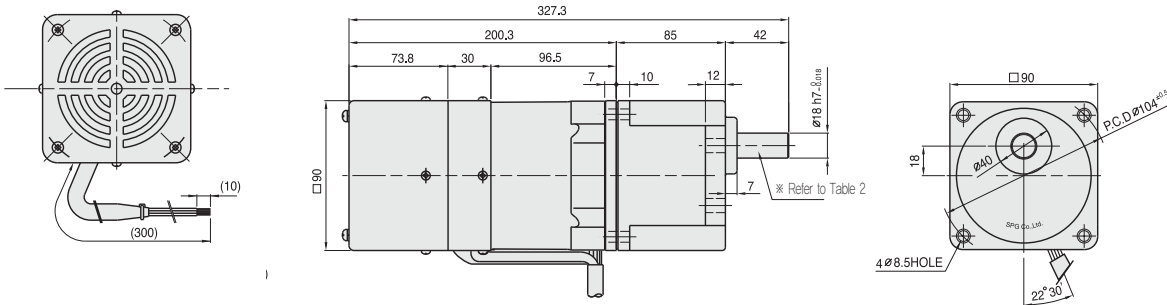
## + KEY SPEC

| GEAR HEAD | MOTOR |
|-----------|-------|
|           |       |

## DIMENSIONS

### + GEARED MOTOR

- \* MOTOR MODEL : S9R60□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□<br>~S9□D10B□    | 1.65       |
|                   | S9□D12.5B□<br>~S9□D20B□ | 1.80       |
|                   | S9□D25B□<br>~S9□D60B□   | 1.90       |
|                   | S9□D75B□<br>~S9□D200B□  | 1.95       |

### + SPEC for output shaft of gearhead - (Table2)

| MODEL                 | TYPES OF OUTPUT SHAFT |
|-----------------------|-----------------------|
| STRAIGHT TYPE         |                       |
| S9SD3B□<br>~S9SD200B□ |                       |
| D-CUT TYPE            |                       |
| S9DD3B□<br>~S9DD200B□ |                       |
| KEY TYPE              |                       |
| S9KD3B□<br>~S9KD200B□ |                       |

### + KEY SPEC

| GEAR HEAD |  |
|-----------|--|
|           |  |

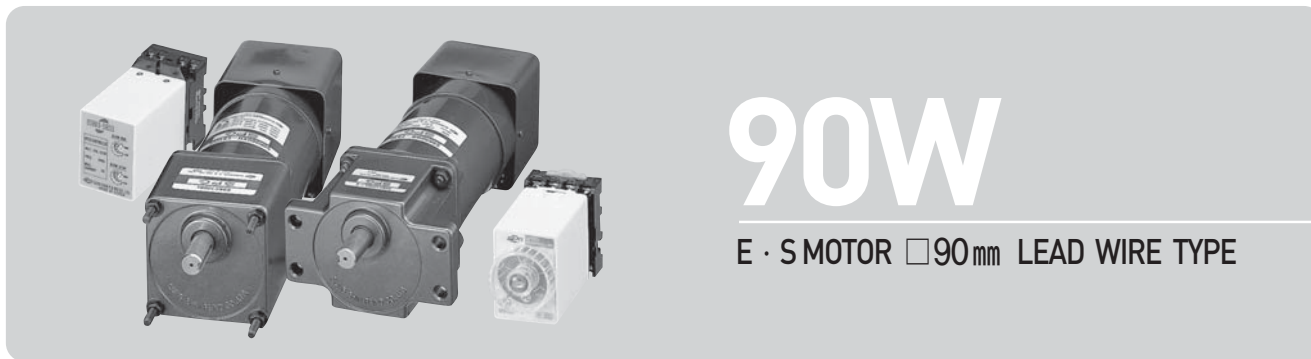
## 50Hz

| 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   |     |
|        | 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 |     |

## 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   |     |
|        | 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 |     |

- ❖ 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.



### SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

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

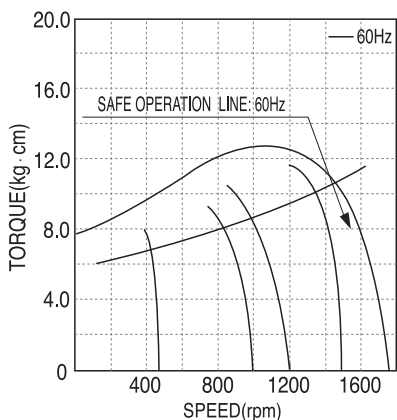
### 50Hz

| 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   |       |
| S9KC□( )   | 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   | 200   | 200   |
| S9KC□( )-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 | 19.60 | 19.60 |

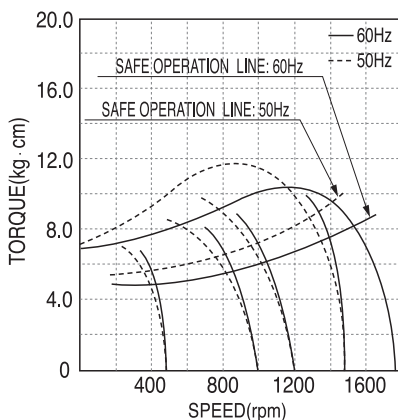
### 60Hz

| 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     |       |
| S9KC□( )   | 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   | 200   | 200   |
| S9KC□( )-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 | 19.60 | 19.60 |

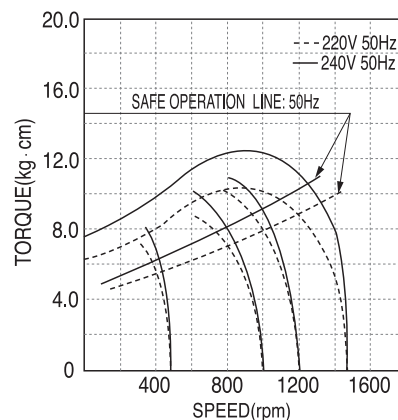
- ❖ The code in □ of gearhead model is for gear ratio. ❖ It is the permissible TORQUE of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 200 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as 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)

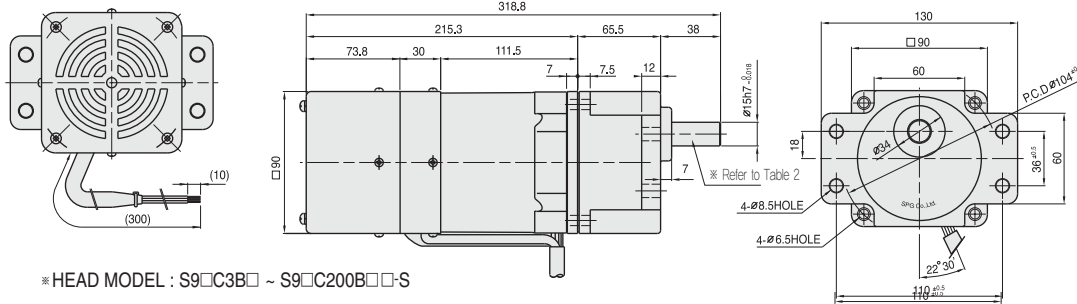


▲ S9R90GX()-ES12

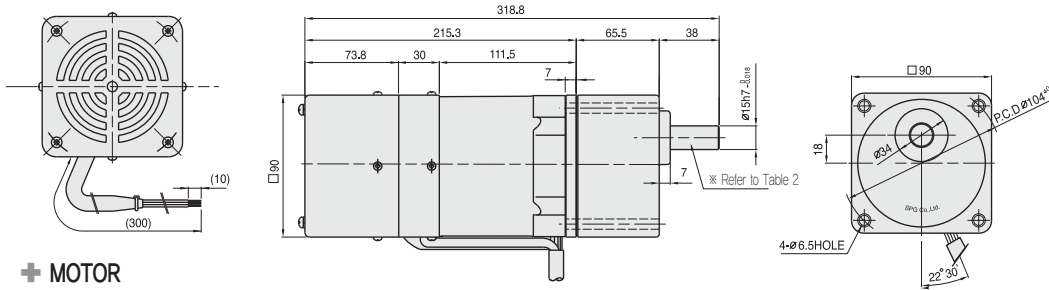
# DIMENSIONS

## + GEARED MOTOR

※ MOTOR MODEL : S9R90G□□-ES12  
 ※ HEAD MODEL : S9□C3B□-S~S9□C200B□-S

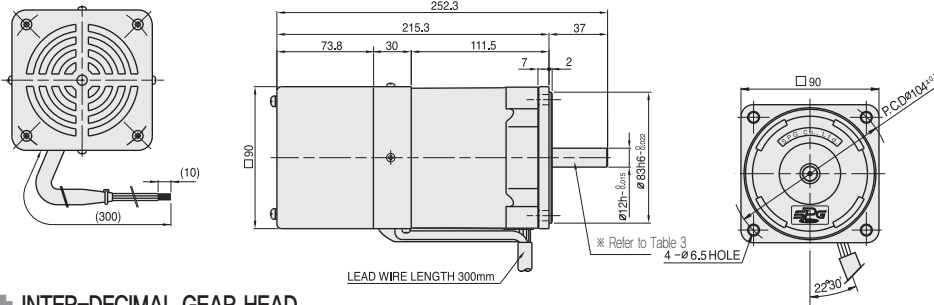


※ HEAD MODEL : S9□C3B□ ~ S9□C200B□□-S



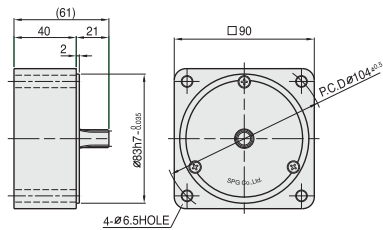
## + MOTOR

※ 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□<br>~S9SC200B□ |                       |
| D-CUT TYPE            |                       |
| S9DC3B□<br>~S9DC200B□ |                       |
| KEY TYPE              |                       |
| S9KC3B□<br>~S9KC200B□ |                       |

## + 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□<br>~S9□C10B□    | 1.21 |
|                   | S9□C12.5B□<br>~S9□C20B□ | 1.30 |
|                   | S9□C25B□<br>~S9□C60B□   | 1.40 |
|                   | S9□C75B□<br>~S9□C200B□  | 1.45 |

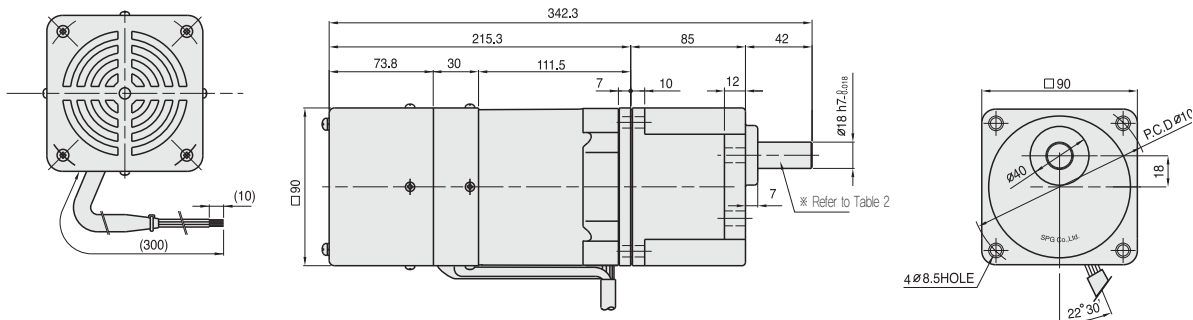
## + KEY SPEC

| GEAR HEAD | MOTOR |
|-----------|-------|
|           |       |

## DIMENSIONS

### + GEARED MOTOR

- \* MOTOR MODEL : S9R90G□H-ES12
- \* HEAD MODEL : S9□D3B□~S9□D200B



### + WEIGHT - (Table 1)

| PART      |                         | WEIGHT(kg) |
|-----------|-------------------------|------------|
| MOTOR     |                         | 3.97       |
| GEAR HEAD | S9□D3B□<br>~S9□D10B□    | 1.65       |
|           | S9□D12.5B□<br>~S9□D20B□ | 1.80       |
|           | S9□D25B□<br>~S9□D60B□   | 1.90       |
|           | S9□D75B□<br>~S9□D200B□  | 1.95       |

### + SPEC for output shaft of gearhead - (Table 2)

| MODEL                 | TYPES OF OUTPUT SHAFT |
|-----------------------|-----------------------|
| STRAIGHT TYPE         |                       |
| S9SD3B□<br>~S9SD200B□ |                       |
| D-CUT TYPE            |                       |
| S9DD3B□<br>~S9DD200B□ |                       |
| KEY TYPE              |                       |
| S9KD3B□<br>~S9KD200B□ |                       |

### + KEY SPEC

| GEAR HEAD |
|-----------|
|           |

## 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.