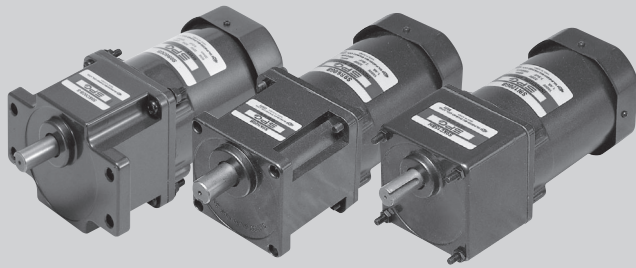


Powermec



60W

REVERSIBLE MOTOR □ 90mm LEAD WIRE TYPE

| SIZE mm sq. | Type | Poles | Output (W) | Voltage (V) | Frequency (Hz) | Duty | Rated Load | | | | Starting Torque | | Capacitor (uF) |
|----------------|--|-------|---------------|----------------|-------------------|--------|----------------|----------------|-------------------------|-------|-----------------|-------|-------------------|
| | | | | | | | Current (A) | Speed (rpm) | Torque (kg-cm) (N-m) | | (kg-cm) | (N-m) | |
| 90 | S9R60GA() S9R60GA()(TP) S9R60GA()CE | 4 | 60 | 1 ∅ 110 | 60 | 30min. | 1.60 | 1600 | 3.80 | 0.380 | 7.00 | 0.700 | 25.0 |
| | S9R60GB() S9R60GB()(TP) S9R60GB()CE | 4 | 60 | 1 ∅ 220 | 60 | 30min. | 0.75 | 1600 | 3.80 | 0.380 | 7.00 | 0.700 | 6.0 |
| | S9R60GC() S9R60GC()(TP) S9R60GC()CE | 4 | 60 | 1 ∅ 100 | 50 | 30min. | 1.40 | 1250 | 4.80 | 0.480 | 6.00 | 0.600 | 25.0 |
| | 60 | | | | 1.60 | | 1550 | 3.90 | 0.390 | | | | |
| | S9R60GD() S9R60GD()(TP) S9R60GD()CE | 4 | 60 | 1 ∅ 200 | 50 | 30min. | 0.70 | 1250 | 4.80 | 0.480 | 5.50 | 0.550 | 6.0 |
| | 60 | | | | 0.76 | | 1550 | 3.90 | 0.390 | | | | |
| | S9R60GE() S9R60GE()CE | 4 | 60 | 1 ∅ 100 | 50 | 30min. | 1.40 | 1250 | 4.80 | 0.480 | 5.90 | 0.590 | 25.0 |
| | 60 | | | | 1.60 | | 1550 | 3.90 | 0.390 | | | | |
| | 1 ∅ 115 | | | | 1.30 | | 1600 | 3.90 | 0.390 | 6.00 | | | |
| | S9R60GX() S9R60GX()CE | 4 | 60 | 1 ∅ 220 | 50 | 30min. | 0.63 | 1250 | 4.80 | 0.480 | 5.90 | 0.590 | 5.0 |
| | 1 ∅ 240 | | | | | | 0.67 | | 5.00 | 0.500 | 6.30 | 0.630 | |

- ❖ S9R60GE is UL approved (UL FILE No. E172720) thermally protected type.
- ❖ Appropriate capacitors shall be used according to the voltage for S9R60GE type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
- ❖ CE marked at the end of model name indicates that it is thermally protected type which has received CE with built-in TP. S9R60GE()CE is available only for 115V specification.
- ❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted. S9R60GE, S9R60GX is thermally protected type with TP mounted.
- ❖ Data is measured with friction brake 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 | 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 | 200 | 200 |
| S9KC□()-S | Nm | 1.196 | 1.431 | 1.989 | 2.381 | 2.989 | 3.577 | 3.969 | 4.469 | 5.370 | 6.439 | 7.154 | 8.085 | 9.702 | 11.66 | 12.94 | 16.17 | 19.40 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 |

60Hz

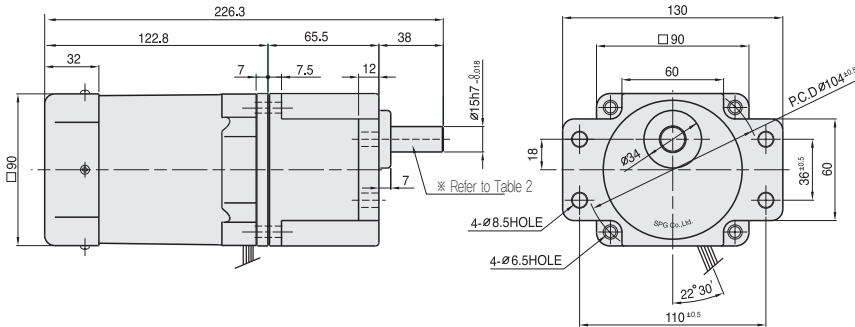
| GEAR RATIO | 3 3.6 5 6 7.5 9 10 12.5 15 18 20 25 30 36 40 50 60 75 90 100 120 150 180 200 | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 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 | 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 | 200 |
| S9KC□()-S | Nm | 0.953 | 1.147 | 1.588 | 1.901 | 2.381 | 2.862 | 3.175 | 3.577 | 4.292 | 5.155 | 5.723 | 6.468 | 7.762 | 9.310 | 10.39 | 12.94 | 15.48 | 17.35 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 |

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

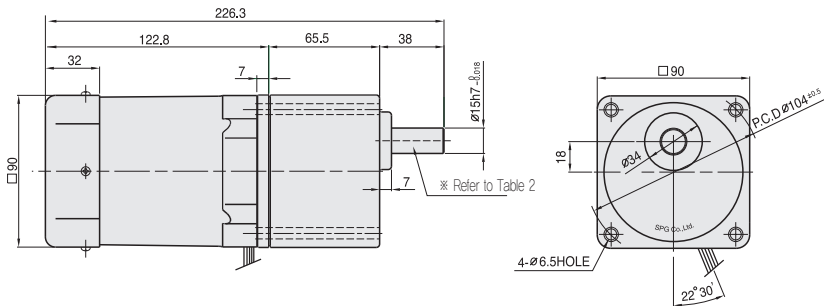
DIMENSIONS

+ GEARED MOTOR

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

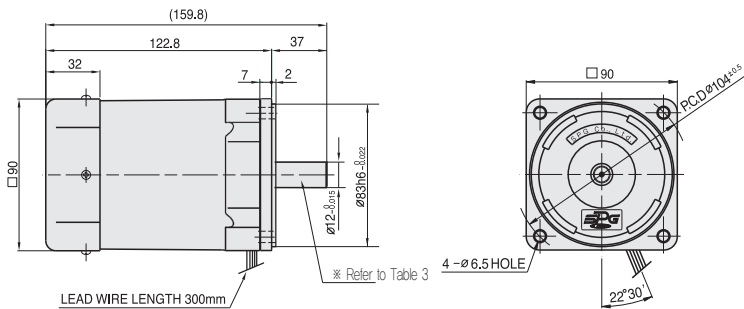


- * HEAD MODEL : S9□C3B□~S9□C200B□



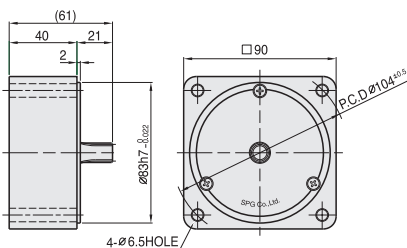
+ MOTOR

- * MOTOR MODEL : S9R60□□□□



+ INTER-DECIMAL GEAR HEAD

- * MODEL : S9GX10B(H,L)-S



+ WEIGHT - (Table 1)

| PART | WEIGHT(kg) | |
|-------------------|-------------------------|------|
| MOTOR | 2.48 | |
| DECIMAL GEAR HEAD | 0.65 | |
| GEAR HEAD | S9□C3B□ ~S9□C10B□ | 1.21 |
| | S9□C12.5B□ ~S9□C20B□ | 1.30 |
| | S9□C25B□ ~S9□C60B□ | 1.40 |
| | S9□C75B□ ~S9□C200B□ | 1.45 |

+ KEY SPEC

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

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

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

+ SPEC for output shaft of motor - (Table 3)

| MODEL | TYPES OF OUTPUT SHAFT |
|---------------|-----------------------|
| GEAR TYPE | |
| S9R60G□□ | |
| STRAIGHT TYPE | |
| S9R60S□ | |
| D-CUT TYPE | |
| S9R60D□ | |
| KEY TYPE | |
| S9R60□ | |