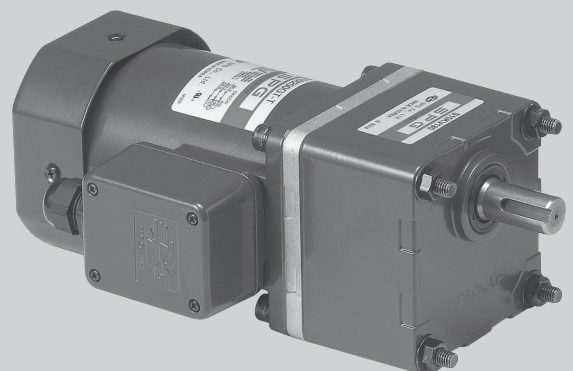
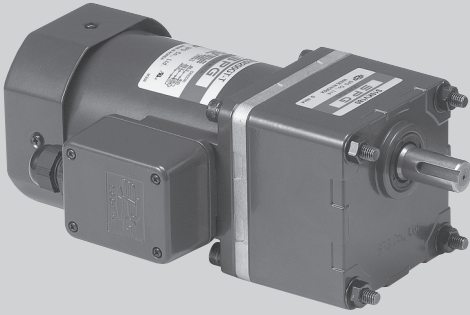


200W □104 MOTOR & GEAR HEAD

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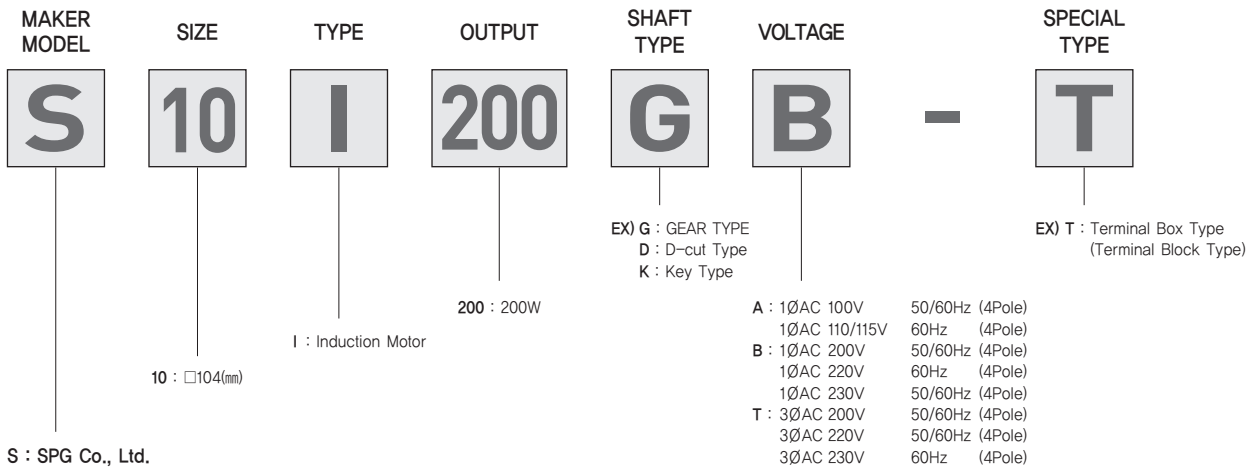
200W

□ 104 MOTOR & GEAR HEAD

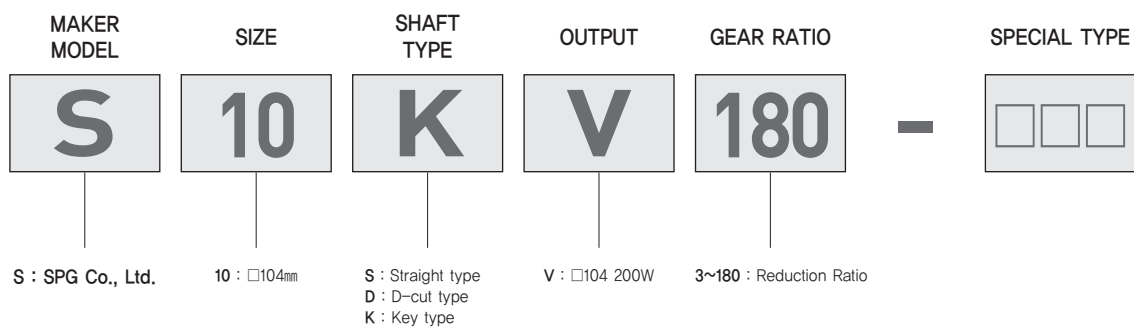
□ Characteristics of 104 MOTOR & GEAR HEAD

- Large output and high strength applicable
: Maximum Permissible TORQUE is 400 kgf · cm, It is applied to BALL BEARING, NEEDLE BEARING of high strength.
- Improvement of strength and noise through precise processing of GEAR BOX.
- Improvement of security for TERMINAL BOX TYPE MOTOR(IP54).
- Applicable in America, Europe & S.E Asia (Basic Type)
- Insulation Class : B Class (130°C).

□ 104 MOTOR CODING SYSTEM



□ 104 GEAR HEAD CODING SYSTEM



| Type | | Poles | Output (W) | Voltage (V) | Freq. (Hz) | Duty | Rated Load | | | Starting Touque (kgf-cm) | Capacitor (μF) |
|--------------|-----------|--------|------------|-------------|------------|-------|-------------|-------------|-----------------|--------------------------|----------------|
| TERMINAL BOX | LEAD WIRE | | | | | | Current (A) | Speed (rpm) | Torque (kgf-cm) | | |
| S10I200□A-T | S10I200□A | 4 | 200 | 1Ø 100 | 50 | CONT. | 3.45 | 1250 | 15.6 | 8.8 | 47 |
| | | | | | 60 | | 3.05 | 1550 | 12.6 | 8.8 | |
| | | | | 1Ø 100 | 60 | | 2.85 | 1550 | 12.6 | 8.8 | 40 |
| | | | | | | | 1Ø 115 | 2.85 | 1600 | 12.2 | |
| S10I200□B-T | S10I200□B | 4 | 200 | 1Ø 200 | 50 | CONT. | 1.65 | 1250 | 15.6 | 8.8 | 12 |
| | | | | | 60 | | 1.57 | 1550 | 12.6 | 8.8 | |
| | | | | 1Ø 220 | 60 | | 1.40 | 1550 | 12.6 | 8.8 | 10 |
| | | | | | | | 1Ø 230 | 50 | 1.66 | 1300 | |
| | | | | 1Ø 230 | 60 | | 1.36 | 1600 | 12.2 | 9.8 | |
| | | | | | | | 3Ø 200 | 50 | 1.10 | 1250 | |
| 3Ø 200 | 60 | 1.05 | 1500 | 13.0 | 13.0 | | | | | | |
| | | 3Ø 220 | 50 | 1.05 | 1300 | 15.0 | 15.0 | | | | |
| 3Ø 220 | 60 | 0.95 | 1550 | 12.6 | 12.6 | | | | | | |
| | | 3Ø 230 | 60 | 0.95 | 1600 | 12.2 | 12.2 | | | | |

50Hz

| MODEL | GEAR RATIO | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
|--------|------------|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|
| | | rpm | 500 | 417 | 300 | 250 | 200 | 167 | 120 | 100 | 83 | 60 | 50 | 42 | 30 | 25 | 20 | 17 | 15 | 12.5 | 10 |
| S10KV□ | kg-cm | 41 | 49 | 68 | 82 | 103 | 123 | 163 | 196 | 235 | 327 | 392 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | N·m | 4.1 | 4.9 | 6.8 | 8.2 | 10.3 | 12.3 | 16.3 | 19.6 | 23.5 | 32.7 | 39.2 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Efficiency | 90% | | | | | | | 86% | | | | | | | 81% | | | | | |

60Hz

| MODEL | GEAR RATIO | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
|--------|------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| | | rpm | 600 | 500 | 360 | 300 | 240 | 200 | 144 | 120 | 100 | 72 | 60 | 50 | 36 | 30 | 24 | 20 | 18 | 15 | 12 |
| S10KV□ | kg-cm | 34 | 41 | 57 | 69 | 86 | 103 | 137 | 164 | 197 | 273 | 328 | 393 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | N·m | 3.4 | 4.1 | 5.7 | 6.9 | 8.6 | 10.3 | 13.7 | 16.4 | 19.7 | 27.3 | 32.8 | 39.3 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Efficiency | 90% | | | | | | | 86% | | | | | | | 81% | | | | | |

- ❖ ■ 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.
- ❖ The efficiency referenced may vary when applied.

PERMISSIBLE LOAD INERTIA MOMENT

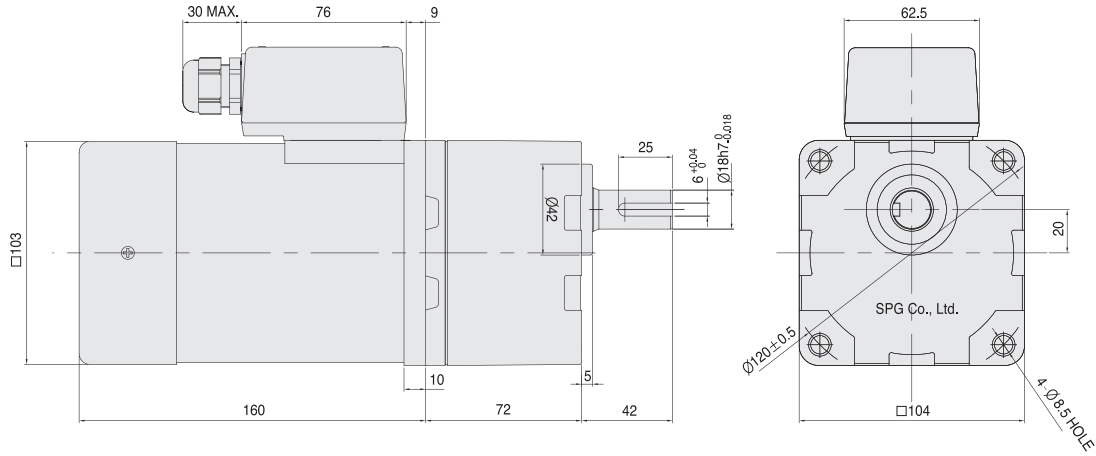
| DIVISION | PERMISSIBLE LOAD INERTIA MOMENT IN OUTPUT SHAFT | | REMARK |
|-----------|---|---|---|
| | $J(\times 10^{-4}\text{kg}\cdot\text{m}^2)$ | $\text{GD}^2(\text{kgf}\cdot\text{cm}^2)$ | |
| MOTOR | 2 | 8 | J_G : Permissible load inertia on the gear head output shaft. J_M : Permissible load inertia on the motor shaft. i : Gear Ratio |
| GEAR HEAD | $J_G = J_M \times i^2$ (Gear ratio 1/3~1/50) $J_G = J_M \times 2500$ (Gear ratio 1/60 or higher) | | |

PERMISSIBLE OVERHUNG, TRUHST LOAD

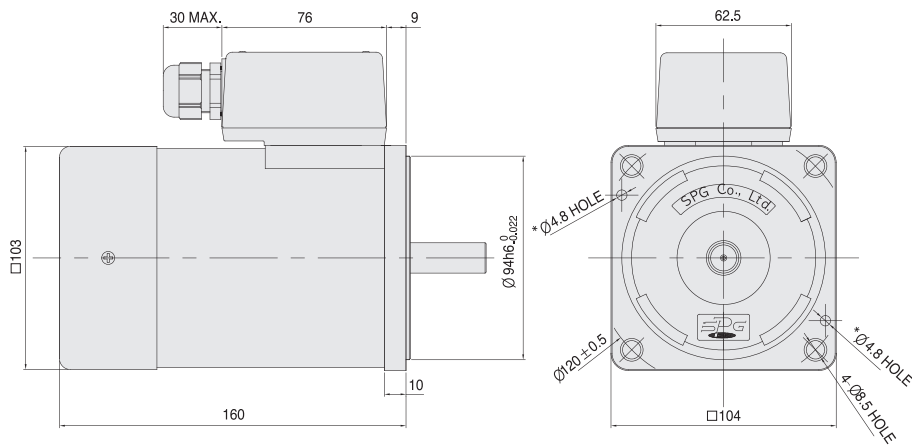
| DIVISION | | PERMISSIBLE OVERHUNG LOAD, N (kgf) | | PERMISSIBLE THRUST LOAD N (kgf) |
|-----------|---------------------|---|-----------|------------------------------------|
| | | DISTANCE FROM FRONT EDGE OF SHAFT (SPINDLE) | | |
| | | 10mm | 20mm | |
| MOTOR | | 320(32) | 350(35) | — |
| GEAR HEAD | GEAR RATIO 1/3~36 | 550(55) | 800(80) | 200(20) |
| | GEAR RATIO 1/50~180 | 650(65) | 1000(100) | |

DIMENSIONS : TERMINAL BOX TYPE

- + GEARED MOTOR** * MOTOR MODEL : S10I200□□ -T
 * GEAR HEAD MODEL : S10KV□



- + MOTOR** * MOTOR MODEL : S10I200□□ -T



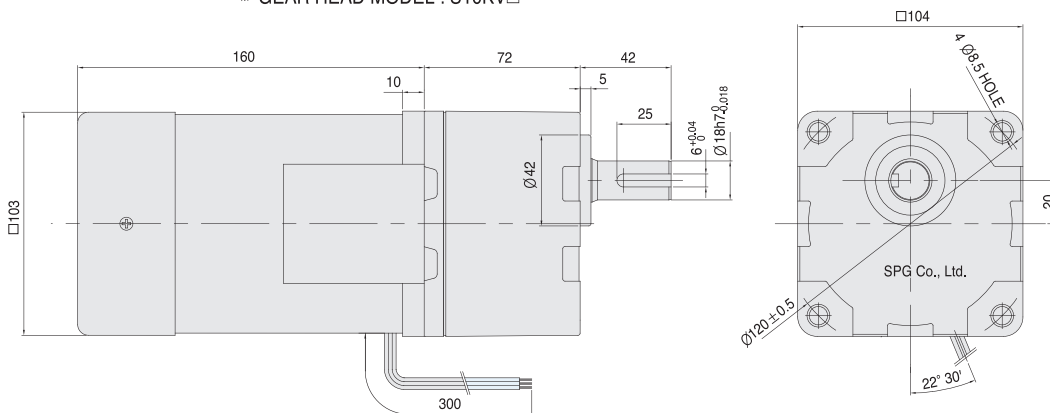
+ SPEC for output shaft of Motor

| MODEL | TYPES OF OUTPUT SHAFT |
|------------|-----------------------|
| GEAR TYPE | |
| D-CUT TYPE | |
| KEY TYPE | |

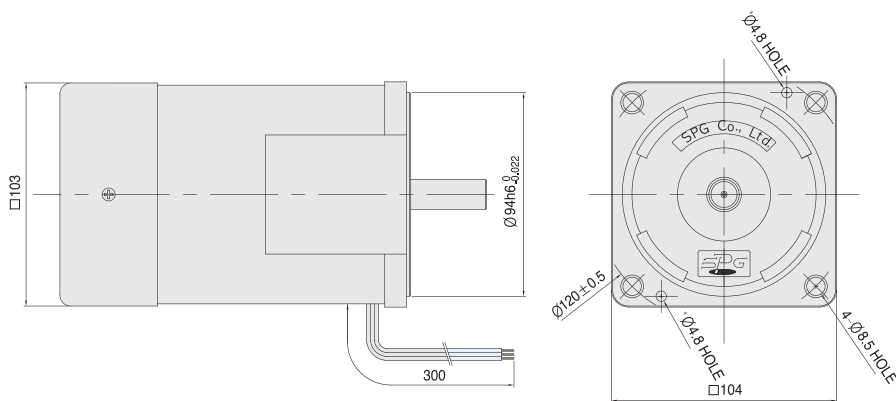
※ Two of Ø4.8 holes shall be used for gear type motor only.

DIMENSIONS : LEAD WIRE TYPE

- + GEARED MOTOR * MOTOR MODEL : S10I200□□
- * GEAR HEAD MODEL : S10KV□



- + MOTOR * MOTOR MODEL : S10I200□□



- + SPEC for output shaft of Motor

| MODEL | TYPES OF OUTPUT SHAFT |
|------------|-----------------------|
| GEAR TYPE | |
| D-CUT TYPE | |
| KEY TYPE | |

* Two of Ø4.8 holes shall be used for gear type motor only.

SCHEMATIC DIAGRAMS

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

| MODEL : S10I200□A, S10I200□A-T POWER : AC 1Ph. 100V 50/60Hz, 110/115V 60Hz | | MODEL : S10I200□B, S10I200□B-T POWER : AC 1Ph. 200V 50/60Hz, 220 60Hz, 230V 50/60Hz | | MODEL : S10I200□T, S10I200□T-T POWER : AC 3Ph. 200V 50/60Hz, 220 50/60Hz, 230V 60Hz | |
|---|-----|--|-----|--|-----|
| CW | CCW | CW | CCW | CW | CCW |
| | | | | | |