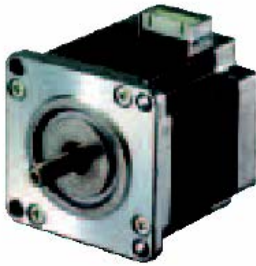


## 스텝핑 모터 9kg SE-SM9 데이터쉬트



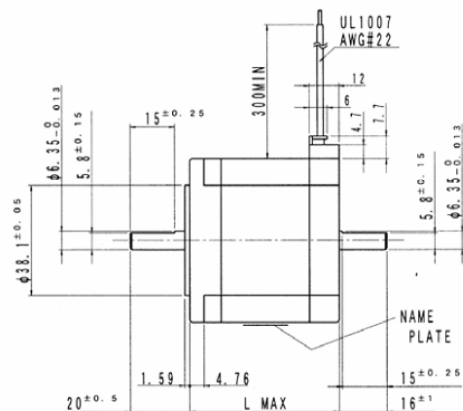
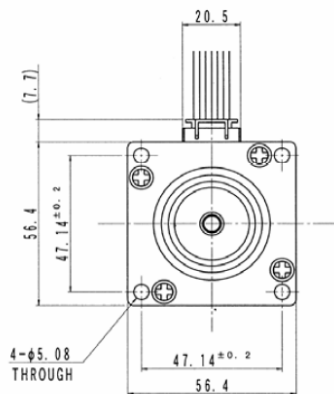
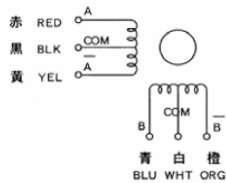
뉴테크놀로지 컴패니

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작성일 : 2007년 03월 06일

### DIMENSIONS (mm) & WIRING DIAGRAM

| L/W<br>STEP | 赤<br>RED | 青<br>BLU | 黄<br>YEL | 橙<br>ORG | 黒・白<br>BLK<br>WHT |
|-------------|----------|----------|----------|----------|-------------------|
| 1           | —        | —        | 0        | 0        | +                 |
| 2           | 0        | —        | —        | 0        | +                 |
| 3           | 0        | 0        | —        | —        | +                 |
| 4           | —        | 0        | 0        | —        | +                 |



### GENERAL SPECIFICATIONS

|                                     |                         |
|-------------------------------------|-------------------------|
| Motor Length (mm)                   | 54                      |
| Coil Construction                   | Unipolar**              |
| Step Angle                          | 1.8°                    |
| Step Angle Tolerance*               | ± 0.09°                 |
| Steps per Revolution                | 200                     |
| Max Temperature Rise                | 80°C                    |
| Ambient Temperature Range Operating | -20°C to 50°C           |
| Ambient Temperature Range Storage   | -20°C to 60°C           |
| Bearing Type                        | Ball, Double Shielded   |
| Insulation Resistance at 500Vdc     | 100 megohms             |
| Dielectric Withstanding Voltage     | 500 Vac for 1 minute    |
| Radial Play                         | 0.02mm Max. (450g Load) |
| End Play                            | 0.08mm Max. (450g Load) |
| Weight (g)                          | 680                     |

\* Measured with 2 phases energized

\*\* You can use motor as bipolar by changing the wiring as follows

Phase A : RED(or YEL) & BLK , Phase B : BLU(or ORG) & WHT = Resistance is same as unipolar

Phase A : RED & YEL , Phase B : BLU & ORG = Resistance will be twice as much of unipolar

## MODEL SPECIFICATIONS

| Part Number                                  | 23KM-K048-04VA | 23KM-K035-41VA | 23KM-K033-13VA |
|----------------------------------------------|----------------|----------------|----------------|
|                                              | 23KM-K048-04VB | 23KM-K035-41VB | 23KM-K033-13VB |
| Drive Method                                 | Chopper        | Chopper        | Chopper        |
| DC Supply Voltage (V)                        | 24             | 24             | 24             |
| DC Motor Voltage (V)                         | 7.2            | 3.8            | 2.7            |
| Rated Current per Phase (A)                  | 1              | 2              | 3              |
| Resistance per Phase ( $\Omega$ )            | 7.2            | 1.9            | 0.9            |
| Inductance per Phase (mH)                    | 15             | 3.8            | 1.8            |
| Holding Torque (Kgf-cm)*                     | 9              | 9              | 9              |
| Rotor Moment of Inertia (g-cm <sup>2</sup> ) | 320            | 320            | 320            |

\* Measured with 2 phases energized

## SPEED TORQUE CURVES

