

# Hybrid Stepper Motor

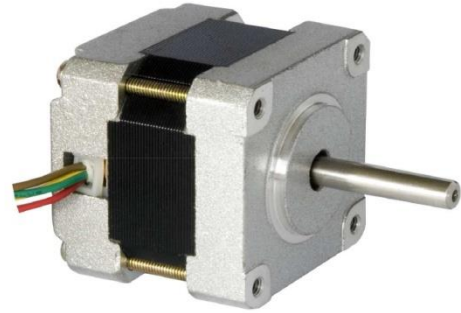
## 39BYG Series

Without Pulse-Torque Characteristics

### General Specifications

|                           |                     |
|---------------------------|---------------------|
| Step Accuracy             | ± 5%                |
| Temperature Rise          | 80°C Max            |
| Ambient Temperature Range | -20°C ~ +50°C       |
| Insulation Resistance     | 100 MΩ Min. 500 VDC |
| Dielectric Strength       | 500 VAC 1 minute    |

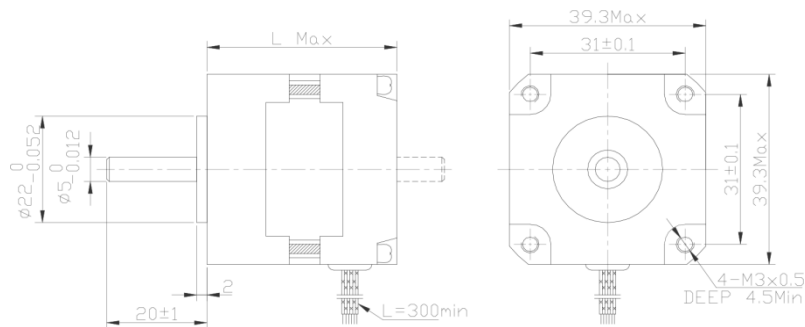
**Customized solutions on request.**



### Electrical Specifications

| Model       | Step Angle<br>° | Motor Length<br>L (mm) | Rate Voltage<br>V | Rate Current<br>A | Phase Resistance<br>Ω | Phase Inductance<br>mH | Holding Torque<br>mNm | Detent Torque<br>mNm | Rotor Inertia<br>gcm <sup>2</sup> | Lead Wire<br>NO. | Motor Weight<br>kg |
|-------------|-----------------|------------------------|-------------------|-------------------|-----------------------|------------------------|-----------------------|----------------------|-----------------------------------|------------------|--------------------|
| 39BYG003-03 | 1.8             | 20                     | 12                | 0.48              | 25                    | 26                     | 98.1                  | 4.9                  | 11                                | 4                | 0.12               |
| 39BYG013    | 1.8             | 20                     | 2.72              | 0.4               | 6.8                   | 6.5                    | 54.0                  | 4.9                  | 11                                | 4                | 0.12               |
| 39BYG104-01 | 1.8             | 26                     | 6.3               | 0.42              | 15                    | 7.3                    | 86.3                  | 6.9                  | 13                                | 6                | 0.14               |
| 39BYG301    | 1.8             | 31                     | 4.5               | 0.5               | 9.0                   | 4.0                    | 98.1                  | 9.8                  | 18                                | 6                | 0.16               |
| 39BYG215    | 1.8             | 34                     | 12                | 0.4               | 30                    | 34                     | 206.0                 | 11.8                 | 20                                | 4                | 0.18               |
| 39BYG221    | 1.8             | 34                     | 5.0               | 1.0               | 5.0                   | 3.0                    | 176.5                 | 11.8                 | 20                                | 4                | 0.18               |
| 39BYG404-13 | 1.8             | 38                     | 6.0               | 0.8               | 7.5                   | 7.0                    | 196.1                 | 17.7                 | 24                                | 6                | 0.2                |
| 39BYG408-02 | 1.8             | 38                     | 13                | 0.5               | 26                    | 30                     | 176.5                 | 17.7                 | 24                                | 4                | 0.2                |
| 39BYG601    | 1.8             | 45                     | 12                | 0.3               | 40                    | 60                     | 274.6                 | 24.5                 | 40                                | 4                | 0.25               |

### Mechanical Dimensions



### Wiring Diagram

