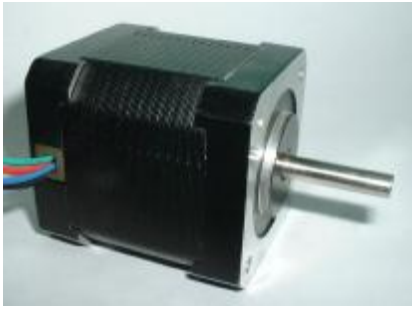


# 1.8° Size 42mm High Torque Hybrid Stepping Motor

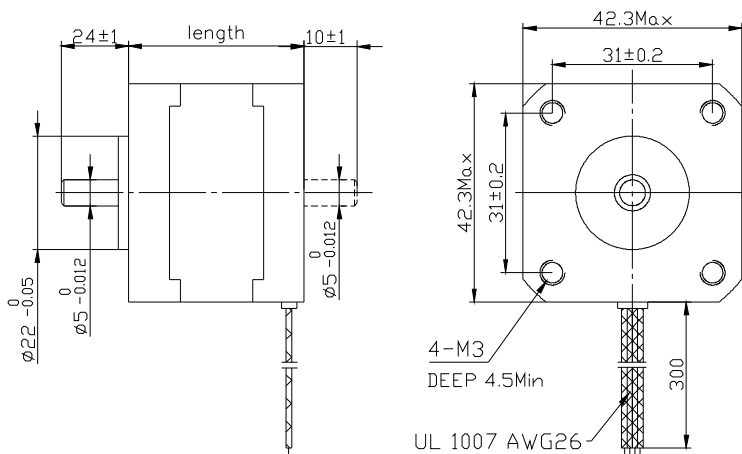


| Item                  | Specifications                       |
|-----------------------|--------------------------------------|
| Step Angle            | 1.8°                                 |
| Step Angle Accuracy   | ±5% (full step, no load)             |
| Resistance Accuracy   | ±10%                                 |
| Inductance Accuracy   | ±20%                                 |
| Temperature Rise      | 80° C Max.(rated current,2 phase on) |
| Ambient Temperature   | -20° C~+50° C                        |
| Insulation Resistance | 100M Ω Min. ,500VDC                  |
| Dielectric Strength   | 500VAC for one minute                |
| Shaft Radial Play     | 0.02Max. (450 g-load)                |
| Shaft Axial Play      | 0.08Max. (450 g-load)                |
| Max. radial force     | 28N (20mm from the flange)           |
| Max. axial force      | 10N                                  |

## I Size 42mm High Torque Hybrid Stepping Motor Specifications

| Model No.       |                 | Rated Voltage | Current /Phase | Resistance /Phase | Inductance /Phase | Holding Torque | # of Leads | Rotor Inertia     | Weight | Detent Torque | Length |
|-----------------|-----------------|---------------|----------------|-------------------|-------------------|----------------|------------|-------------------|--------|---------------|--------|
| Single Shaft    | Double Shaft    | V             | A              | Ω                 | mH                | Kg-cm          |            | g-cm <sup>2</sup> | kg     | g-cm          | mm     |
| FL42STH25-0404A | FL42STH25-0404B | 9.6           | 0.4            | 24                | 36                | 1.7            | 4          | 20                | 0.15   | 75            | 25     |
| FL42STH33-0956A | FL42STH33-0956B | 4             | 0.95           | 4.2               | 2.5               | 1.6            | 6          | 35                | 0.22   | 120           | 34     |
| FL42STH33-0406A | FL42STH33-0406B | 9.6           | 0.4            | 24                | 15                | 1.6            | 6          |                   |        |               |        |
| FL42STH33-0316A | FL42STH33-0316B | 12            | 0.31           | 38.5              | 21                | 1.6            | 6          |                   |        |               |        |
| FL42STH33-1334A | FL42STH33-1334B | 2.8           | 1.33           | 2.1               | 2.5               | 2.2            | 4          |                   |        |               |        |
| FL42STH38-1206A | FL42STH38-1206B | 4             | 1.2            | 3.3               | 3.2               | 2.6            | 6          | 54                | 0.28   | 150           | 40     |
| FL42STH38-0806A | FL42STH38-0806B | 6             | 0.8            | 7.5               | 6.7               | 2.6            | 6          |                   |        |               |        |
| FL42STH38-0406A | FL42STH38-0406B | 12            | 0.4            | 30                | 30                | 2.6            | 6          |                   |        |               |        |
| FL42STH38-1684A | FL42STH38-1684B | 2.8           | 1.68           | 1.65              | 3.2               | 3.6            | 4          |                   |        |               |        |
| FL42STH47-1206A | FL42STH47-1206B | 4             | 1.2            | 3.3               | 2.8               | 3.17           | 6          | 68                | 0.35   | 200           | 48     |
| FL42STH47-0806A | FL42STH47-0806B | 6             | 0.8            | 7.5               | 6.3               | 3.17           | 6          |                   |        |               |        |
| FL42STH47-0406A | FL42STH47-0406B | 12            | 0.4            | 30                | 25                | 3.17           | 6          |                   |        |               |        |
| FL42STH47-1684A | FL42STH47-1684B | 2.8           | 1.68           | 1.65              | 2.8               | 4.4            | 4          |                   |        |               |        |
| FL42STH60-1206A | FL42STH60-1206B | 7.2           | 1.2            | 6                 | 7                 | 6.5            | 6          | 102               | 0.5    | 280           | 60     |

### Dimension



### Wiring Diagram

