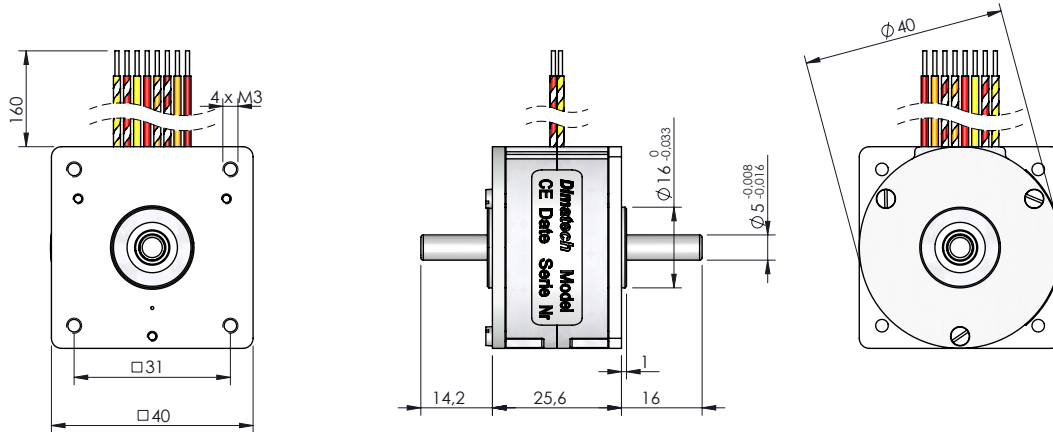
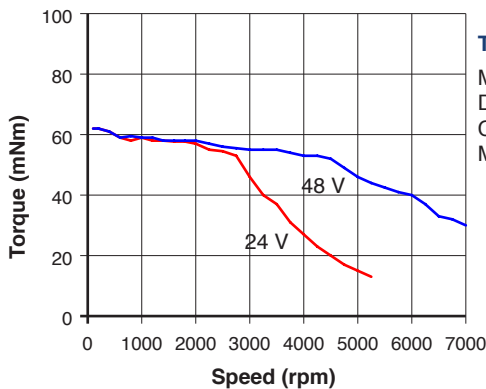


2-phase stepper motor, 100 steps per revolution, microstepping



| | | | WINDING | | | | | | |
|------------|------------------------------------|------------------------------------|----------|------------|----------|--------|----------|--------|-------|
| | | | A | | B | | C | | |
| Connection | | | parallel | serial | parallel | serial | parallel | serial | |
| 1 | Phase resistance | ohm | ± 14% | 0.9 | 3.8 | 2.9 | 11.8 | 7.5 | 30 |
| 2 | Phase inductance | mH | ± 20% | 1.15 | 4.6 | 3.3 | 13.2 | 9 | 36 |
| 3 | Nominal current (1 phase ON) | A | typical | 2.63 | 1.32 | 1.55 | 0.78 | 0.94 | 0.47 |
| 4 | Boosted current (1 phase ON) | A | typical | 5.09 | 2.55 | 4.6 | 2.3 | 1.81 | 0.91 |
| 5 | Induced voltage at 600 rpm | V | ± 10% | 1.47 | 2.95 | 2.5 | 5 | 4.14 | 8.27 |
| 6 | Torque constant | mNm/A | ± 10% | 23.4 | 46.9 | 39.8 | 79.6 | 65.8 | 131.6 |
| 7 | Static torque | mNm | ± 10% | 62 | | | | | |
| 8 | Boosted static torque | mNm | typical | 120 | | | | | |
| 9 | Reluctant torque | mNm | typical | 3 | | | | | |
| 10 | Friction torque | mNm | max | 1 | | | | | |
| 11 | Thermal resistance (coil-air) | °C/W | typical | 14 | | | | | |
| 12 | Thermal time constant | min | typical | 12 | | | | | |
| 13 | Max temperature for coils | °C | max | +100 | | | | | |
| 14 | Recom. ambient temperature range | °C | typical | -20 to +50 | | | | | |
| 15 | Number of pole pairs | - | - | 25 | | | | | |
| 16 | Phase shift | degree | ± 5 | 90 | | | | | |
| 17 | Phase fluctuation | degree | max | 5 | | | | | |
| 18 | Maximum speed | rpm | max | 10000 | | | | | |
| 19 | Rotor inertia | kgm ² · e ⁻⁷ | typical | 2.7 | | | | | |
| 20 | Weight | g | typical | 125 | | | | | |
| 21 | Electrical time constant | ms | typical | 1.2 | | | | | |
| 22 | Max angular acceleration (boosted) | rad/s ² | typical | 444000 | | | | | |
| 23 | Insulation voltage | V | typical | 500 | | | | | |



Test conditions:
Motor: DM40 coil A
Driver: IDS640
Current: 2.63 A
Mode: micro-steps