



Nema 24

1.8° Hybrid Stepper Motor



Design

Main Feature Maximum efficiency/optimal power consumption Low noise and vibrations design Low heat generation High torque at low speed High Accuracy

Features

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Options

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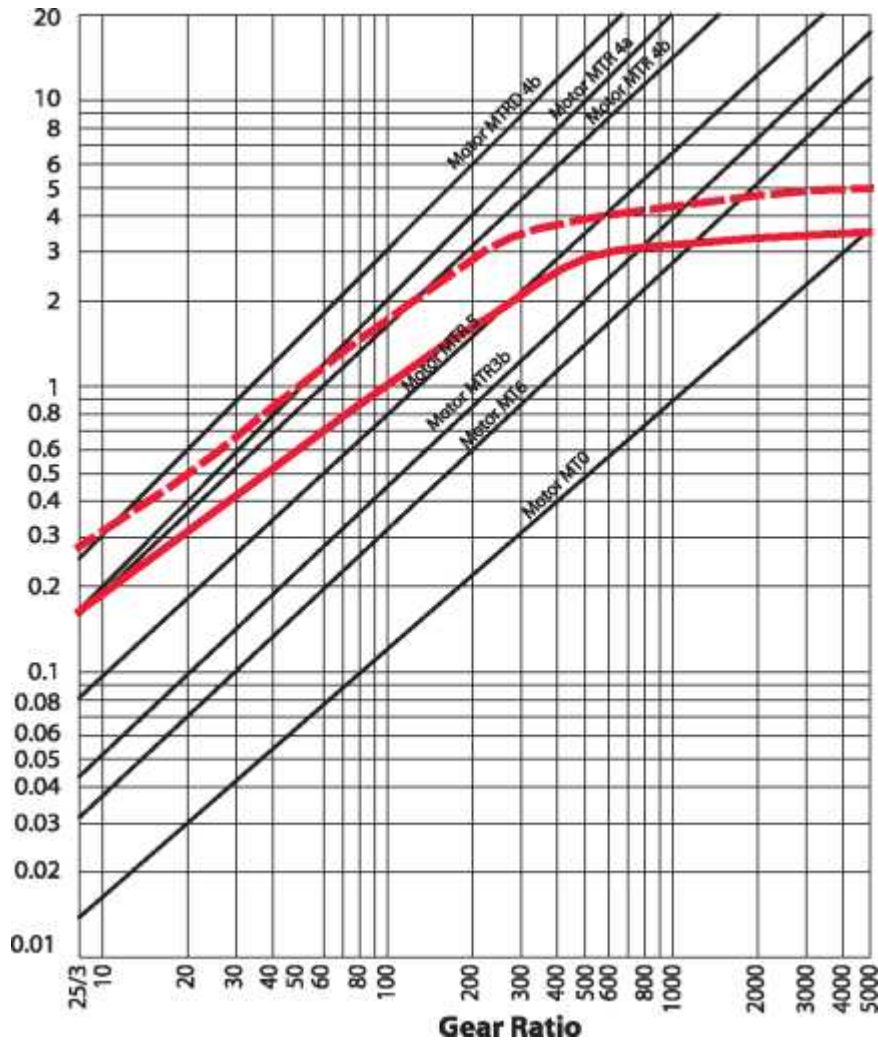
Standard Data

| Parameter | Value | Unit |
|-----------------------|---|------|
| Motor type | Hybrid Stepper Motor | |
| Electrical Enclosure | 40 | IP |
| Mounting | Ø 0 5.0 X 4 holes Through | |
| Connection | Fly out Flexible leads 22AWG, 200mm length, ends stripped 10mm/Connector (on request) | |
| No. of steps/rotation | 200 | |
| Step Angle Accuracy | ±5%(full step,no load) | |
| Insulation Class | A | |
| Temperature Rise | 80°C Max(rated current,2 phase on) | °C |
| Ambient Temperature | -20°C~+50°C | °C |
| Shaft Radial Play | 0.02 Max(450 g-load) | mm |
| Shaft Axial Play | 0.08 Max(450 g-load) | mm |

Technical Data

| Parameter | Value | Unit |
|-------------------|---------|---------|
| Step Angle | 1.8° | ° |
| Operating Voltage | 24-48 | V |
| Winding Type | Bipolar | |
| Current/ Phase | 2.3 | A |
| Resistance/ Phase | 1.5 | Ω |
| Inductance/ Phase | 4.5 | mH |
| Detent Torque | 5 | Ncm |
| Holding Torque | 180 | Ncm |
| Rotor Inertia | 600 | gcm*gcm |
| Weight | 1035 | g |
| Length | 67 | mm |
| No of Leads | 4 | |

Dimensional Drawing



Reversible Synchronous Motor - 500 RPM

| Speed | Available Ratios | Torque (Nm) | Torque x-winding | Torque y-winding | Torque z-winding | Shafts Available |
|----------|------------------|-------------|------------------|------------------|------------------|------------------|
| 40 | 12.5 | 0.2025 | 0.2625 | 0.3375 | 0.45 | OS |
| 33.33333 | 15 | 0.243 | 0.315 | 0.405 | 0.54 | OA |
| 30.012 | 16.66 | 0.269892 | 0.34986 | 0.44982 | 0.59976 | OB |
| 25 | 20 | 0.324 | 0.42 | 0.54 | 0.72 | OC |
| 20 | 25 | 0.405 | 0.525 | 0.675 | 0.9 | OD |
| 16.66667 | 30 | 0.486 | 0.63 | 0.81 | 1.08 | OE |
| 16 | 31.25 | 0.50625 | 0.65625 | 0.84375 | 1.125 | OF |
| 15.0015 | 33.33 | 0.539946 | 0.69993 | 0.89991 | 1.19988 | OG |
| 12.5 | 40 | 0.648 | 0.84 | 1.08 | 1.44 | OH |
| 12.00192 | 41.66 | 0.674892 | 0.87486 | 1.12482 | 1.49976 | OI |
| 11.11111 | 45 | 0.729 | 0.945 | 1.215 | 1.62 | OJ |
| 10 | 50 | 0.81 | 1.05 | 1.35 | 1.8 | OK |
| 8.333333 | 60 | 0.972 | 1.26 | 1.62 | 2.16 | OL |
| 8 | 62.5 | 1.0125 | 1.3125 | 1.6875 | 2.25 | OM |
| 7.50075 | 66.66 | 1.079892 | 1.39986 | 1.79982 | 2.39976 | ON |