

Stepper Motors

307 mNm

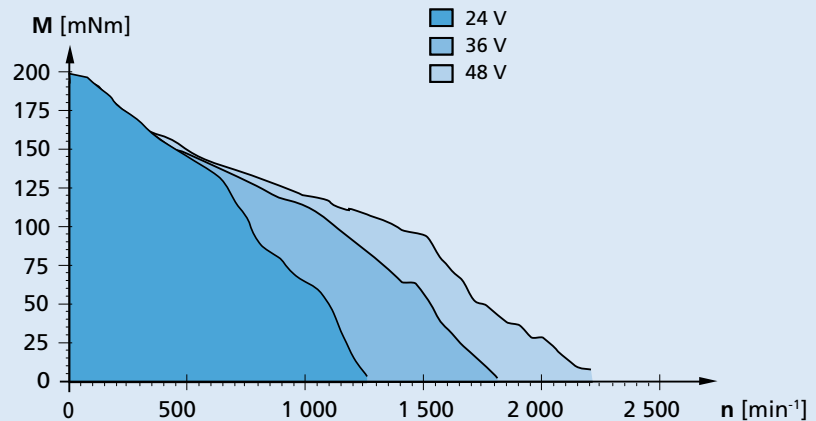
Two phase, 200 steps per revolution

Series DM66200H

| Values at 20°C | DM66200H | 1000 | |
|--|---|------|--------------------|
| Nominal current per phase (both phases ON) | | 1 | A |
| Boosted current per phase (both phases ON) | | 2 | A |
| Phase resistance | | 3,8 | Ω |
| Phase inductance (1 kHz) | | 2,3 | mH |
| Holding torque (at nominal current in both phases) | | 307 | mNm |
| Holding torque at boosted current | | 581 | mNm |
| Residual torque, typ. | | 10 | mNm |
| Back-EMF amplitude | | 4,4 | V/k step/s |
| Electrical time constant | 0,6 | | ms |
| Rotor inertia | $363 \cdot 10^{-7}$ | | kgm ² |
| Step angle (full step) | 1,8 | | ° |
| Angular accuracy | ± 5 | | % |
| Angular acceleration, max. | $16 \cdot 10^3$ | | rad/s ² |
| Resonance frequency (at no load) | 15 | | Hz |
| Thermal resistance | 1,4 / 6,9 | | K/W |
| Thermal time constant | 16 / 1 000 | | s |
| Operating temperature range | -30 ... +70 | | °C |
| Winding temperature, max. | +130 | | °C |
| Shaft bearings | one ball bearing, preloaded (Bearing code: 1R) | | |
| Shaft load max.: | | | |
| – radial at 2 000 min ⁻¹ | 300 | | N |
| – axial at 2 000 min ⁻¹ | 100 | | N |
| – axial at standstill | 700 | | N |
| Shaft play: | | | |
| – radial | 0,015 | | mm |
| – axial | 0 | | mm |
| Housing material | aluminium, black anodized | | |
| Mass | 218 | | g |
| Magnet material | NdFeB | | |

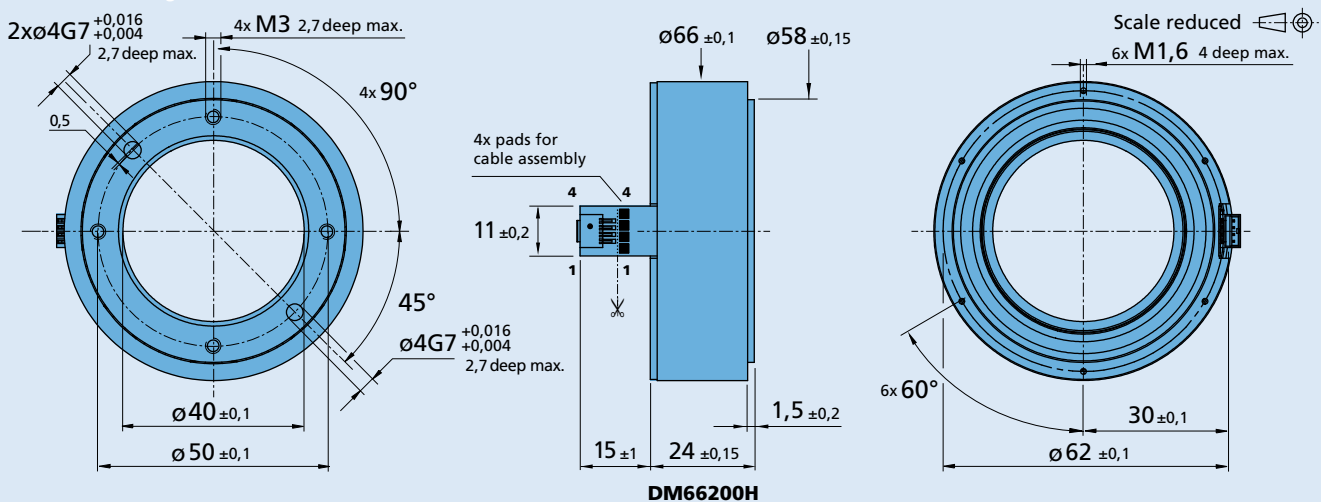
Driver settings

Curve measured with a load inertia of $396 \cdot 10^{-7}$ kgm² on the DM66200H motor using a ISCM8005 controller in sin/cos control mode, 256 micro-steps per full step and a peak phase current of 1,41A.



Possible operation areas

Dimensional drawing



Options and connection information

Example product designation: **DM66200H1R100001**

| Motor executions | Description | Connection |
|------------------|---|--|
| 01 | Motor with standard flexboard | No. Function |
| 02 | Motor with 160 mm cables | 1 Phase A + |
| 11 | Motor with standard flexboard and mounting flange | 2 Phase A - |
| 12 | Motor with 160 mm cables and mounting flange | 3 Phase B + |
| | | 4 Phase B - |
| | | Standard cable Flex PCB bending radius min. 3mm Molex 874380443 |
| | | Recommended connector Molex 87439-0400 or similar. |

Product combination

| Precision Gearheads / Lead Screws | Encoders | Drive Electronics | Cables / Accessories |
|-----------------------------------|----------|-------------------|----------------------|
| | | MCST 3601 | |