Operating Range

- Continuous operation
  - In observation of above listed thermal resistances (lines 19 and 20) the maximum permissible rotor temperature will be reached during continuous operation at 25°C ambient.

- Short term operation
  - The motor may be briefly overloaded (recurring).

Motor Data (provisional)

2. Nominal voltage Volt 9 12 15 18 18 24 24 36 42 48 48 48
3. No load speed rpm 8620 7970 8780 9410 8490 8980 8010 9700 9150 7880 5580 5030
4. Stall torque mNm 39.6 43.6 50.2 54.7 48.8 57.9 47 57.5 54 46 31.6 29
5. Speed / torque gradient rpm / mNm 222 186 174 176 173 173 171 173 176
6. No load current mA 4070 3080 3120 3030 2440 2530 1660 1640 1250 800 390 323
7. Starting current mA 222057 222048 222049 222050 222051 222052 222053 222054 222055 222056 222057 222058 222059

- Motor with high resistance winding
- Motor with low resistance winding

Order Number

Stock program
- Special program (on request!)

Motor Data

- Axial play 0.05 - 0.15 mm
- Max. sleeve bearing loads
  - Axial (dynamic) 1.0 N
  - Radial (5 mm from flange) 2.8 N
- Force for press fits (static) 80 N (static, shaft supported)
- Max. ball bearing loads
  - Axial (dynamic) 3.3 N
  - Radial (5 mm from flange) 12.3 N
- Force for press fits (static) 45 N (static, shaft supported)
- Radial play sleeve bearing 0.012 mm
- Radial play ball bearing 0.025 mm
- Ambient temperature range -30 ... +85°C
- Max. rotor temperature +125°C
- Number of commutator segments 9
- Weight of motor 71 g

Specifications

- For applicable tolerances see page 43.
- For additional details please use the maxon selection program on the enclosed CD-Rom.

Operating Range

- Recommended operating range
  - Continuous operation
    - In observation of above listed thermal resistances (lines 19 and 20) the maximum permissible rotor temperature will be reached during continuous operation at 25°C ambient.
    - Thermal limit
    - Short term operation
      - The motor may be briefly overloaded (recurring).

- Motor with high resistance winding
- Motor with low resistance winding

Maxon Modular System

- Digital MR Encoder 32 CPT, 2 / 3 channels Details page 201
- Digital MR Encoder 128 / 256 / 512 CPT, 2 / 3 channels Details page 211

Planetary Gearhead
- 0.5 - 2.0 Nm Details page 191

Spur Gearhead
- 0.1 - 0.6 Nm Details page 200

Recommended Electronics:
- LSC 30/2 page 231
- ADS 50/5
- ADS_E 50/5
- MIP 10
- Notes 17

Option: Ball bearings in place of sleeve bearings and pigtails in place of terminals.