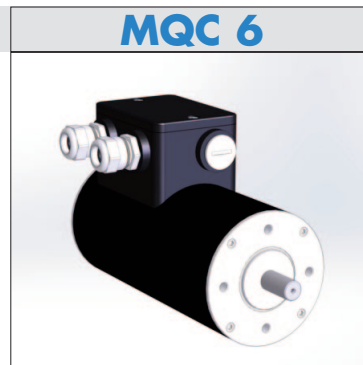


Brushless DC drive

with integrated commutation

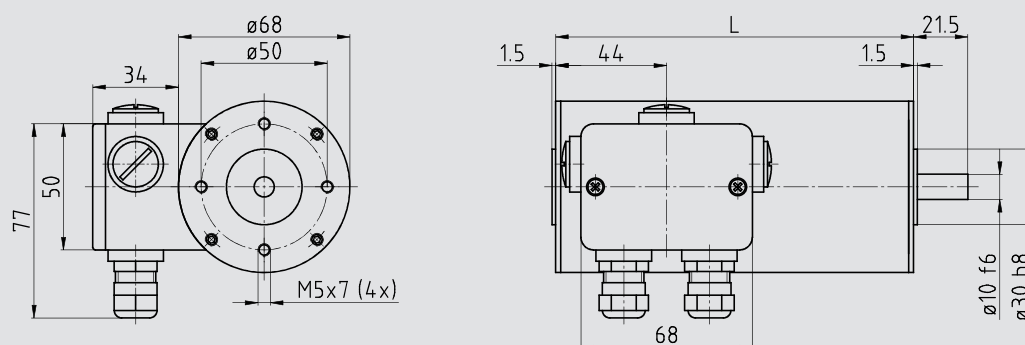
- Properties:**
- Operation: Rotor position sensing by 3 hall sensors
 - Connection: K4 terminal box for power supply and sensors
 - Rotor: 8-pole neodymium magnet
 - Controlling: by CAN-Bus (CANopen, Drive Profile DSP-402) or digital/analogue I/O
 - Service life: 20,000 h, S1 duty
 - Insulation mat. class: F (155°C)
 - System of protection: IP 44, optional up to IP 65 (IP 69)
 - Special Versions: Design for short-time duty with higher performance, additional voltages and speeds upon request
 - Options: Thermal protection, special shafts, special flanges, stainless steel



| Type | Name | U | Volt DC | MQC 637 | MQC 667 | MQC 667 |
|----------------------------------|------------------------------|---------------------|------------------|-----------------------|-----------------------|-----------------------|
| | Nominal voltage | | | 24 | 24 | 48 |
| Rate | Nominal power | P ₂ | W | 147 | 165 | 205 |
| | Nominal speed | n _{nenn} | rpm | 3500 | 3350 | 3550 |
| | Nominal torque | M _{nenn} | Nm | 0.4 | 0.47 | 0.55 |
| | Nominal current | I _{nennDC} | A | 7.3 | 8.1 | 4.7 |
| | Nominal efficiency | η | | 0.84 | 0.85 | 0.91 |
| | Input power | P ₁ | W | 175 | 194 | 226 |
| | Torque constant | k _M | Ncm/A | 5.4 | 5.8 | 11.5 |
| | Max. current (2sec) | I _{max} | A | 20 | 20 | 20 |
| | Max. torque | M _{max} | Nm | 3 x M _{nenn} | 3 x M _{nenn} | 3 x M _{nenn} |
| | Cogging torque | | mNm | - | - | - |
| Idling | Idling speed | n ₀ | rpm | 4300 | 3700 | 4050 |
| | Idling current | I ₀ | A | 0.4 | 0.6 | 0.3 |
| Short-time duty (S2 5min) | Speed | n _{nenn} | rpm | 2650 | 2900 | - |
| | Torque | M _{nenn} | Nm | 0.88 | 0.95 | - |
| | Current | I _{nennDC} | A | 14.9 | 15.0 | - |
| Connection | Terminal resistance | R | mOhm | - | - | - |
| | Terminal inductance | L | μH | - | - | - |
| Dynamics | Weight | m | kg | 1.1 | 1.7 | 1.7 |
| | Moment of inertia | J | gcm ² | 450 | 750 | 750 |
| Thermal | Adm. ambient temperature | T _U | °C | -20 to +40 | -20 to +40 | -20 to +40 |
| | Max. adm. stator temperature | T _{max} | °C | +155 „ISO F“ | +155 „ISO F“ | +155 „ISO F“ |
| Coupling | Shaft diameter | d | mm | 10 | 10 | 10 |
| | Max. axial force | F _a | N | 40 | 40 | 40 |
| | Max. radial force | F _r | N | 400 | 400 | 400 |

Dimensions

| Type | L / mm |
|---------|--------|
| MQC 637 | 112 |
| MQC 667 | 142 |



System technology

| | | | | |
|--|----------------|------------|-------|------|
| Recommended combinations other gears and extensions upon request | Worm gear | S 769 | S 668 | GS 3 |
| | Spur gear | M 10 | | |
| | Planetary gear | PM 60 | | |
| | Rotary encoder | RV 30 | RI 30 | |
| | Brake | B 77 | | |
| | Electronics | integrated | | |