Gear-Motor-Specifications

HILBA-drive including:

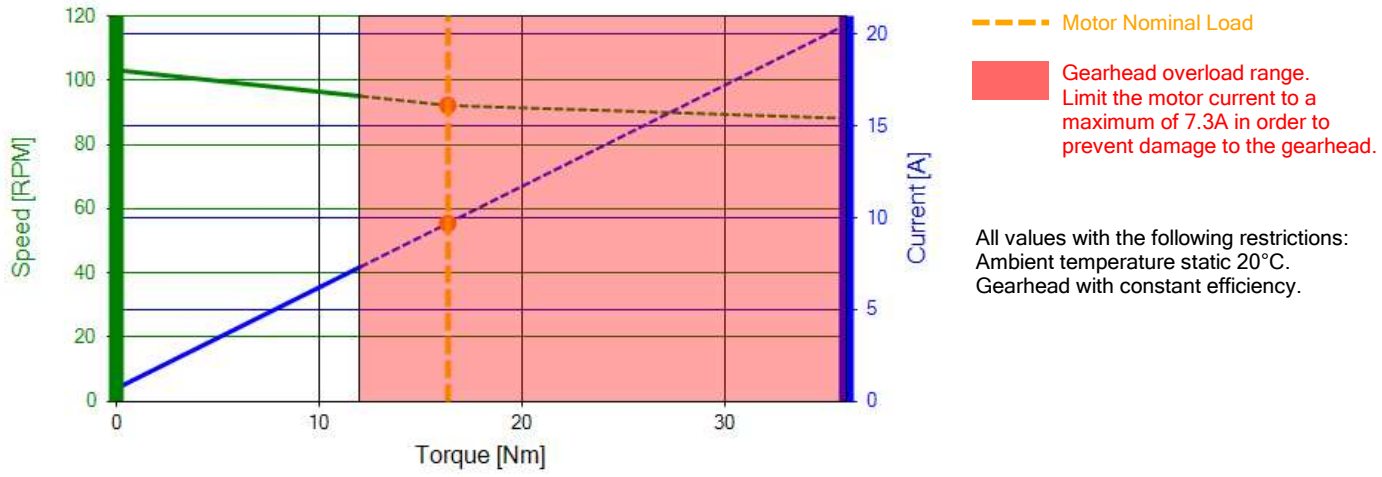
Motor

Name: EC-i 52
Typ: EC
Voltage: 24V
Power: 180W
IP code: IP40
Manufacturer: Maxon Motor
Part number: 574741
Weight: 0.82kg
Nominal torque: 0.44Nm
Nominal speed: 4200RPM
Nominal current: 9.7A
Stall current: 258A
No load speed: 4700RPM
Torque constant: 0.048 Nm/A
Speed constant: 0.0026 Nm/RPM

Gearhead

Name: PI52
Typ: Planetengetriebe
IP code: IP54
Ambient temperature range: -30°C bis +90°C
Reduction: 45.56:1
Efficiency: 0.82
Weight: 0.4kg
Nominal torque: 12Nm
Maximal speed: 5000RPM
Backlash: 1.4°
Self-locking: No

Drive



All values with the following restrictions:
Ambient temperature static 20°C.
Gearhead with constant efficiency.

No-load Operation

Torque: 0Nm
Speed: 103RPM
Current: 0.71A

Motor Nominal Load

Torque: 16Nm
Speed: 92RPM
Current: 9.7A

Limit the motor current to a maximum of 7.3A in order to prevent damage to the gearhead.

Gearhead Nominal Load

Torque: 12Nm
Speed: 95RPM
Current: 7.3A

Limit the motor current to a maximum of 7.3A in order to prevent damage to the gearhead.

Stall

Torque: 467Nm
Speed: 0RPM
Current: 258A

Limit the motor current to a maximum of 7.3A in order to prevent damage to the gearhead.