Gear-Motor-Specifications

HILBA-drive including:

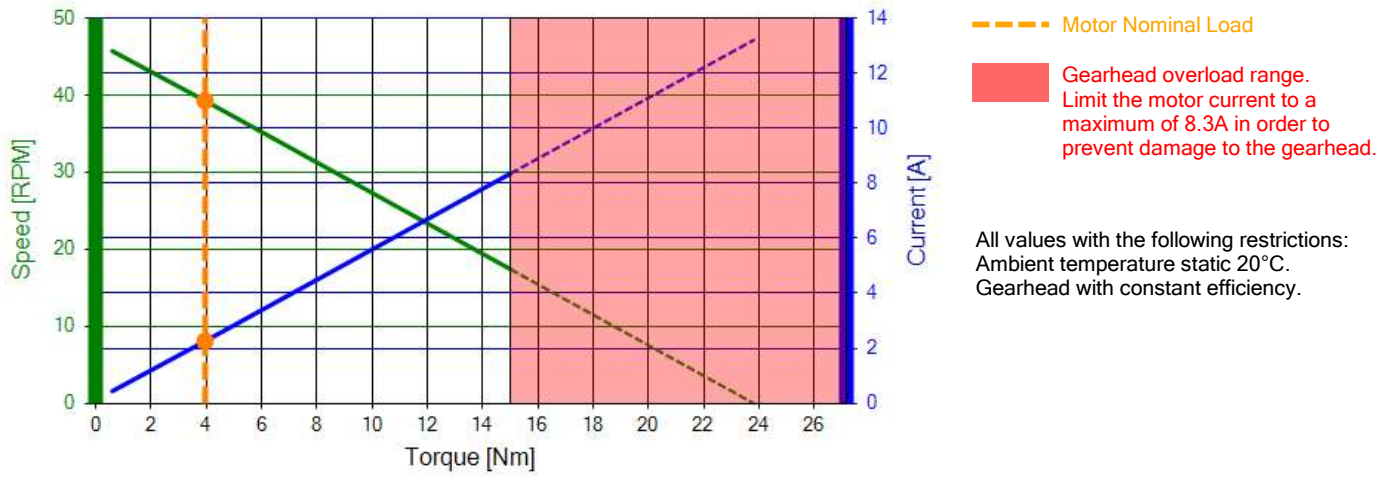
Motor

Name: GR42X40
Typ: DC
Voltage: 12V
Power: 20.8W
IP code: IP50
Manufacturer: Dunkermotoren
Part number: 88427.02004
Weight: 0.49kg
Nominal torque: 0.053Nm
Nominal speed: 3907RPM
Nominal current: 2.3A
Stall current: 13A
No load speed: 4550RPM
Torque constant: 0.025 Nm/A
Speed constant: 0.00007 Nm/RPM

Gearhead

Name: PI42
Typ: Planetengetriebe
IP code: IP54
Ambient temperature range: -30°C bis +90°C
Reduction: 99.5:1
Efficiency: 0.75
Weight: 0.6kg
Nominal torque: 15Nm
Maximal speed: 5000RPM
Backlash: 2.1°
Self-locking: No

Drive



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

No-load Operation

Torque: 0.60Nm
Speed: 46RPM
Current: 0.44A

Motor Nominal Load

Torque: 4.0Nm
Speed: 39RPM
Current: 2.3A

Gearhead Nominal Load

Torque: 15Nm
Speed: 17RPM
Current: 8.3A

Limit the motor current to a maximum of 8.3A in order to prevent damage to the gearhead.

Stall

Torque: 24Nm
Speed: 0RPM
Current: 13A

Limit the motor current to a maximum of 8.3A in order to prevent damage to the gearhead.