Gear-Motor-Specifications

HILBA-drive including:

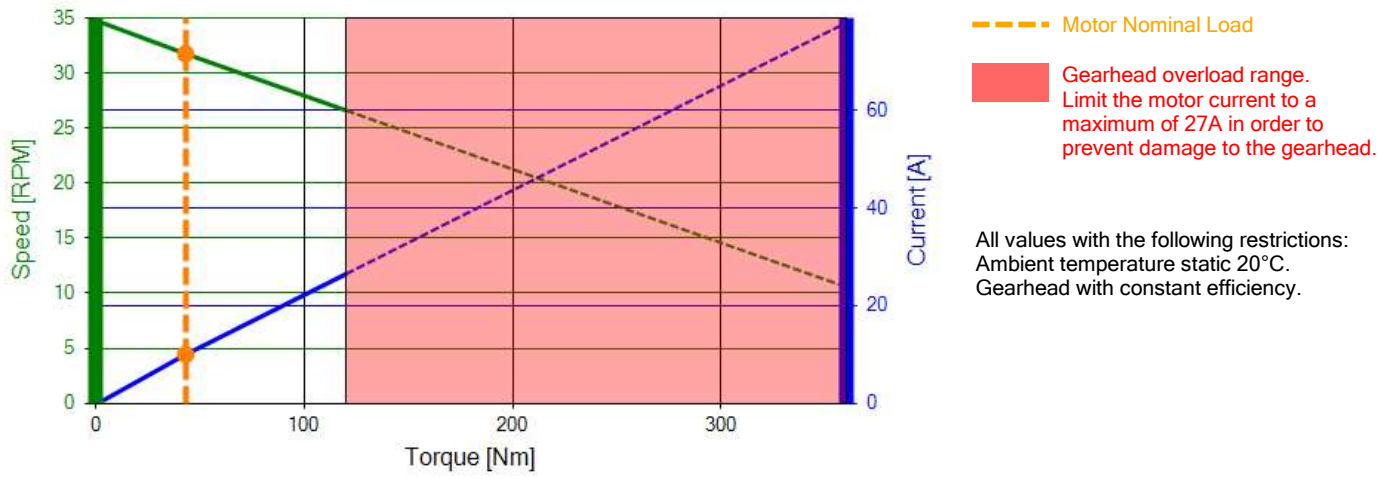
Motor

Name: GR80X80
Typ: DC
Voltage: 24V
Power: 214W
IP code: IP50
Manufacturer: Dunkermotoren
Part number: 88445.01502
Weight: 4kg
Nominal torque: 0.62Nm
Nominal speed: 2944RPM
Nominal current: 10A
Stall current: 112A
No load speed: 3200RPM
Torque constant: 0.067 Nm/A
Speed constant: 0.0022 Nm/RPM

Gearhead

Name: PI81
Typ: Planetengetriebe
IP code: IP54
Ambient temperature range: -30°C bis +90°C
Reduction: 92.7:1
Efficiency: 0.75
Weight: 3.2kg
Nominal torque: 120Nm
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: 3.8Nm
Speed: 35RPM
Current: 0.65A

Motor Nominal Load

Torque: 43Nm
Speed: 32RPM
Current: 10A

Gearhead Nominal Load

Torque: 120Nm
Speed: 27RPM
Current: 27A

Limit the motor current to a maximum of 27A in order to prevent damage to the gearhead.

Stall

Torque: 518Nm
Speed: 0RPM
Current: 112A

Limit the motor current to a maximum of 27A in order to prevent damage to the gearhead.