Gear-Motor-Specifications

HILBA-drive including:

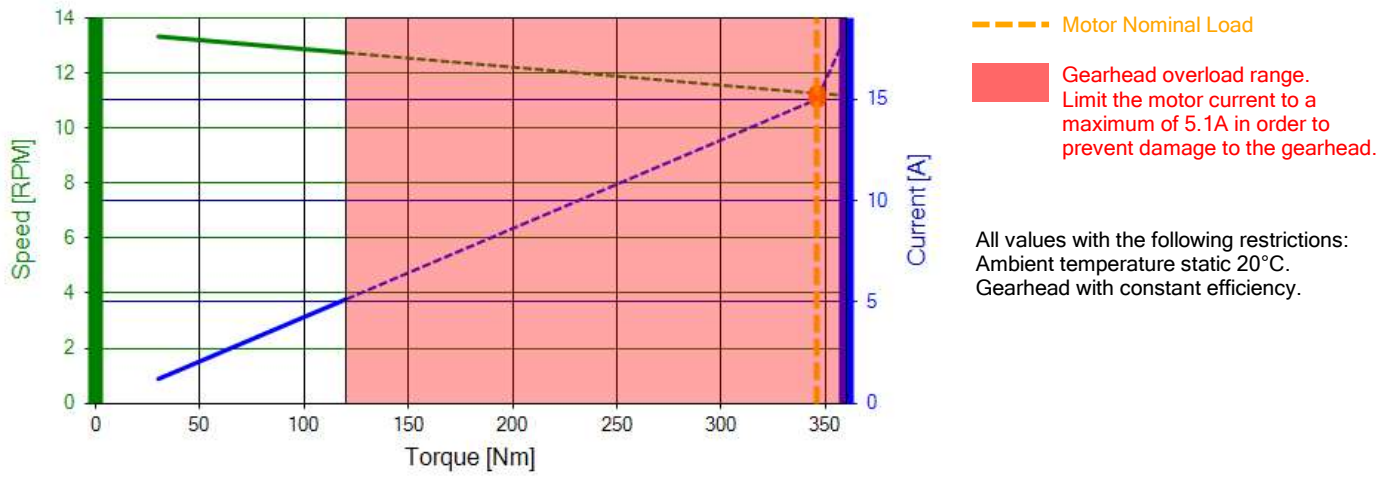
Motor

Name: BG75X75
Typ: EC
Voltage: 40V
Power: 530W
IP code: IP50
Manufacturer: Dunkermotoren
Part number:
Weight: 2.8kg
Nominal torque: 1.5Nm
Nominal speed: 3463RPM
Nominal current: 15A
Stall current: 570A
No load speed: 4100RPM
Torque constant: 0.12 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: 307.54:1
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: 30Nm
Speed: 13RPM
Current: 1.2A

Motor Nominal Load

Torque: 346Nm
Speed: 11RPM
Current: 15A

Limit the motor current to a maximum of 5.1A in order to prevent damage to the gearhead.

Gearhead Nominal Load

Torque: 120Nm
Speed: 13RPM
Current: 5.1A

Limit the motor current to a maximum of 5.1A in order to prevent damage to the gearhead.

Stall

Torque: 2768Nm
Speed: 0RPM
Current: 570A

Limit the motor current to a maximum of 5.1A in order to prevent damage to the gearhead.