

# Gear-Motor-Specifications

HILBA-drive including:

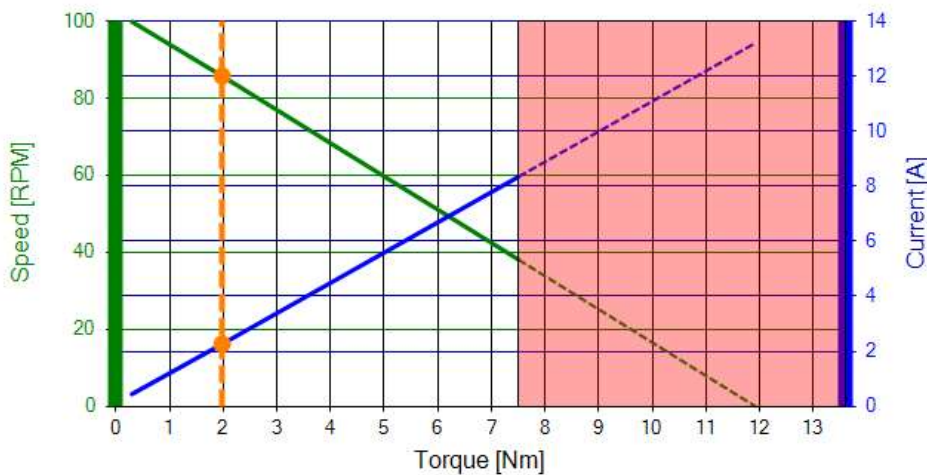
## Motor

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: 45.56:1  
 Efficiency: 0.82  
 Weight: 0.5kg  
 Nominal torque: 7.5Nm  
 Maximal speed: 5000RPM  
 Backlash: 1.4°  
 Self-locking: No

## Drive



--- Motor Nominal Load

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

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

### No-load Operation

Torque: 0.30Nm  
 Speed: 100RPM  
 Current: 0.44A

### Motor Nominal Load

Torque: 2.0Nm  
 Speed: 86RPM  
 Current: 2.3A

### Gearhead Nominal Load

Torque: 7.5Nm  
 Speed: 38RPM  
 Current: 8.3A

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

### Stall

Torque: 12Nm  
 Speed: 0RPM  
 Current: 13A

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