

12V/17.3Kg-cm/18RPM 139:1 DC Gear Motor



Product Description

The 3268 is a 12 volt gear motor, generating 17.3 Kg-cm of torque at 18 RPM. Since this motor has a lower power output for its size, you can expect it to have a longer lifespan than other motors.

The planetary gearbox on this motor is more sophisticated than a typical spur gearbox and will provide greater efficiency, higher torque, and quieter motor operation.

Motor Controller and Connection

The 3268 DC motor connects to either of the following controllers:

- 1064 – PhidgetMotorControl HC
- 1065 – PhidgetMotorControl 1-Motor

Related Products

- 3268E – 12V/17.3Kg-cm/18RPM 139:1 DC Gear Motor w/ Encoder
- 3265 – 12V/0.5Kg-cm/670RPM 3.7:1 DC Gear Motor
- 3266 – 12V/1.9Kg-cm/175RPM 14:1 DC Gear Motor
- 3267 – 12V/6.6Kg-cm/49RPM 51:1 DC Gear Motor

Resources

- DC Motor and Controller Primer
- Mechanical Drawing

Warnings



The torque this motor produces when it stalls exceeds the rated strength of the gearbox. This means that stalling or very heavily loading this motor can cause serious damage to the gearbox. To avoid damage, avoid sudden loads or any load higher than the Maximum Strength of Gears spec.

Product Specifications

Motor Properties

Motor Type	DC Motor
Output Power (Mechanical)	3.8 W
Maximum Speed at Rated Voltage	18 RPM
Rated Torque	17.3 kg·cm
Stall Torque	128 kg·cm

Electrical Properties

Rated Voltage	12 V DC
Rated Current	650 mA
Stall Current	2.4 A

Physical Properties

Shaft Diameter	8 mm
Weight	526 g

Gearbox Specifications

Gearbox Type	Planetary
Gear Ratio	$139 \frac{184}{1221} : 1$
Number of Gear Trains	3
Maximum Strength of Gears	61 kg·cm
Shaft Maximum Axial Load	50 N
Shaft Maximum Radial Load	35 N