12V/3.0Kg-cm/78RPM 51:1 DC Gear Motor



Product Description

The 3263 is a 12 volt gear motor, generating 3.06 Kg-cm of torque at 78 RPM. This motor is quite compact considering the amout of power it can output.

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 3263 DC motor connects to either of the following controllers:

- 1064 PhidgetMotorControl HC
- 1065 PhidgetMotorControl 1-Motor

You'll need to solder wires to the contacts of the motor in order to connect it to a controller.

Related Products

- 3263E 12V/3.0Kg-cm/78RPM 51:1 DC Gear Motor w/ Encoder
- 3261 12V/0.2Kg-cm/1080RPM 3.7:1 DC Gear Motor
- 3262 12V/0.9Kg-cm/285RPM 14:1 DC Gear Motor
- 3264 12V/8.4Kg-cm/28RPM 139:1 DC Gear Motor

Resources

- DC Motor and Controller Primer
- Mechanical Drawing

Product Specifications

Motor Properties

Motor Type	DC Motor	
Output Power (Mechanical)	2.9 W	
Maximum Speed at Rated Voltage	78 RPM	
Rated Torque	3.1 kg·cm	
Stall Torque	18.2 kg⋅cm	

Electrical Properties

Rated Voltage	12 V DC
Rated Current	410 mA
Stall Current	1.5 A

Physical Properties

Shaft Diameter	6 mm	
Weight	193 g	
Recommended Wire Size (Motor)	20 – 25 AWG	

Gearbox Specifications

Gearbox Type	Planetary	
Gear Ratio	50 ⁸⁰¹ ? ₈₉₅ : 1	
Number of Gear Trains	3	
Maximum Strength of Gears	30 kg·cm	
Shaft Maximum Axial Load	35 N	
Shaft Maximum Radial Load	25 N	