# 12V/0.2Kg-cm/230RPM 10:1 DC Gear Motor



#### **Product Description**

The 3254 is a 12 volt gear motor, generating 0.2 Kg-cm of torque at 230 RPM. It's a small, inexpensive motor that can output a small amount of power. It is very efficient for its size, so less power is lost in the form of heat.

This family of motors (3254, 3255, 3256, 3257) have the same gearbox type and mounting metrics as the (3258, 3259, 3260) family of motors.

#### Motor Controller and Connection

The 3254 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**

- 3254E 12V/0.2Kg-cm/230RPM 10:1 DC Gear Motor w/ Encoder
- 3255 12V/0.3Kg-cm/127RPM 18:1 DC Gear Motor
- 3256 12V/0.8Kg-cm/46RPM 50:1 DC Gear Motor
- 3257 12V/1.6Kg-cm/23RPM 100:1 DC Gear Motor

#### Resources

- DC Motor and Controller Primer
- Mechanical Drawing

#### **Product Specifications**

# **Motor Properties**

Motor Type	DC Motor
Output Power (Mechanical)	590 mW
Maximum Speed at Rated Voltage	230 RPM
Rated Torque	200 g·cm
Stall Torque	1 kg·cm

# **Electrical Properties**

Rated Voltage	12 V DC
Rated Current	90 mA
Stall Current	260 mA

# **Physical Properties**

Shaft Diameter	6 mm	
Weight	128 g	
Recommended Wire Size (Motor)	20 — 26 AWG	

# **Gearbox Specifications**

Gearbox Type	Spur
Gear Ratio	10 : 1
Number of Gear Trains	2
Maximum Strength of Gears	3 kg⋅cm
Shaft Maximum Axial Load	35 N
Shaft Maximum Radial Load	25 N