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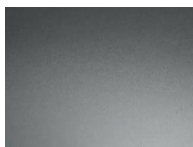
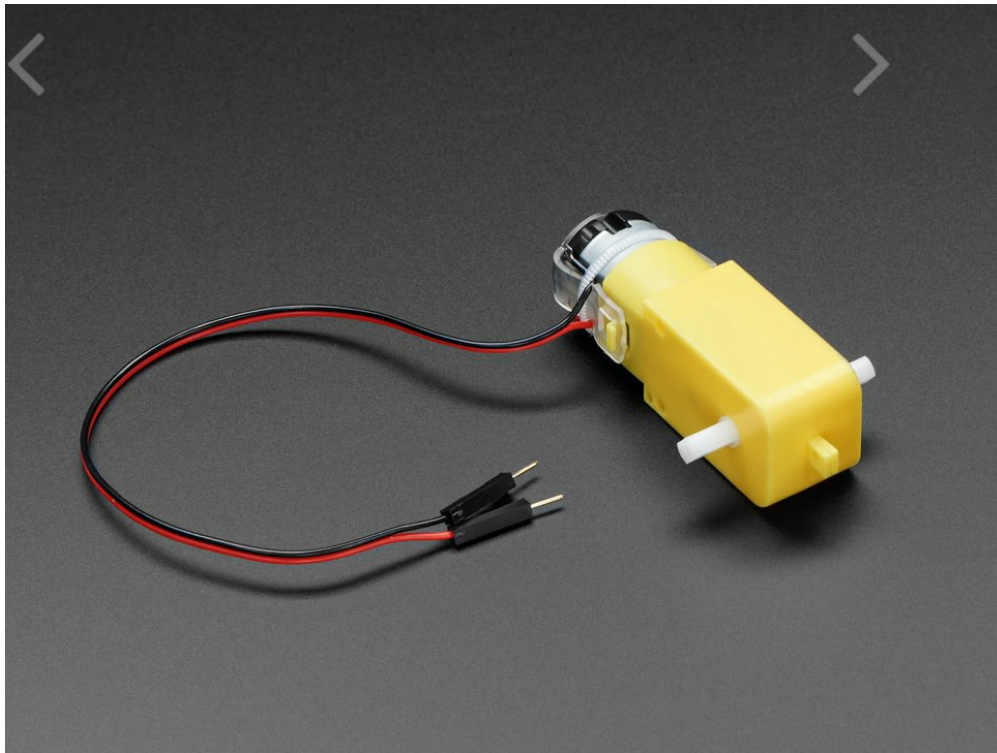
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## Company Address

Arrow Electronics, Inc  
9201 East Dry Creek Road  
Centennial, CO 80112

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## DC Gearbox Motor - "TT Motor" - 200RPM - 3 to 6VDC

PRODUCT ID: 3777

IN STOCK

1

ADD TO CART

☐ Also include 1 x [Adafruit DRV8833 DC/Stepper Motor Driver Breakout Board](#) ()☐ Also include 1 x [Adafruit TB6612 1.2A DC/Stepper Motor Driver Breakout Board](#) ()☐ Also include 1 x [Orange and Clear TT Motor Wheel for TT DC Gearbox Motor](#) ()☐ Also include 1 x [Skinny Wheel for TT DC Gearbox Motors](#) ()☐ Also include 1 x [Thin White Wheel for TT DC Gearbox Motors - 65mm Diameter](#) ()

1-9

10-99

100+

ADD TO WISHLIST

DESCRIPTION

TECHNICAL DETAILS

LEARN

## DESCRIPTION

Perhaps you've been assembling a new robot friend, adding a computer for a brain and other fun personality touches. Now the time has come to let it leave the nest and fly on its own wings—err, *wheels*!

These durable (but affordable!) plastic gearbox motors (also known as 'TT' motors) are an easy, low-cost way to get your projects moving. This is a **TT DC Gearbox Motor** with a gear ratio of **1:48**, and it comes with 2 x 200mm wires with breadboard-friendly 0.1" male connectors. Perfect for plugging into a breadboard or terminal blocks.

You can power these motors with 3VDC up to 6VDC, they'll of course go a little faster at the higher voltages. We grabbed one motor and found these stats when running it from a bench-top supply

- At **3VDC** we measured 150mA @ 120 RPM no-load, and 1.1 Amps when stalled
- At **4.5VDC** we measured 155mA @ 185 RPM no-load, and 1.2 Amps when stalled
- At **6VDC** we measured 160mA @ 250 RPM no-load, and 1.5 Amps when stalled

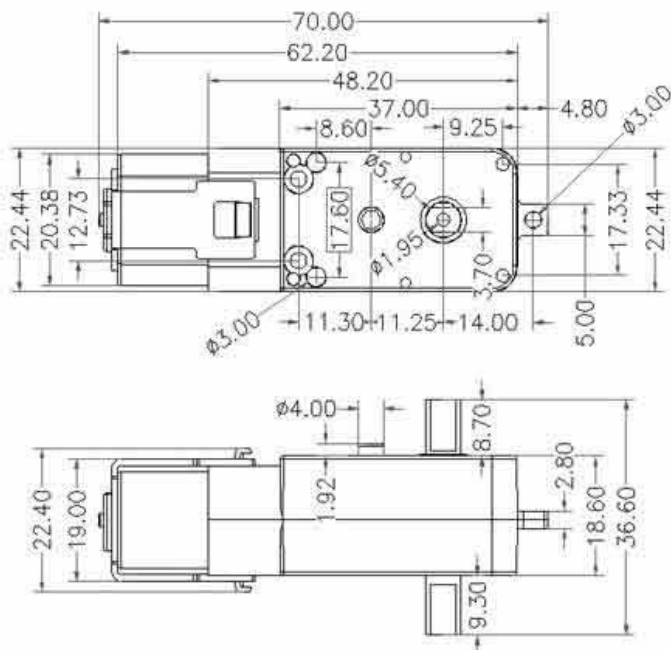
Note that these are very basic motors, and have no built-in encoders, speed control or positional feedback. Voltage goes in, rotation goes out! There will be variation from motor to motor, so a separate feedback system is required if you need precision movement.

Comes 1 x per order, with just the motor + wires. You *cannot* drive these directly from a microcontroller, **a high-current motor driver is required!** [We recommend our DRV8833 motor driver for these motors](#), as it works well down to 3V and can be set up with current limiting since the stall current on these can get high. [The TB6612 can also be used](#), it's on our shields and wings, but you'll need to supply at least 4.5V - which is what you'll likely want to run these motors at anyhow!

We have a range of wheels, add-ons and accessories for these motors so you can bling out your bot just the way you like.

## TECHNICAL DETAILS

- Rated Voltage: 3~6V
- Continuous No-Load Current: 150mA +/- 10%
- Min. Operating Speed (3V): 90+/- 10% RPM
- Min. Operating Speed (6V): 200+/- 10% RPM
- Torque: 0.15Nm ~0.60Nm
- Stall Torque (6V): 0.8kg.cm
- Gear Ratio: 1:48
- Body Dimensions: 70 x 22 x 18mm
- Wires Length: 200mm & 28 AWG
- Weight: 30.6g



Product Weight: 30.6g / 1.1oz



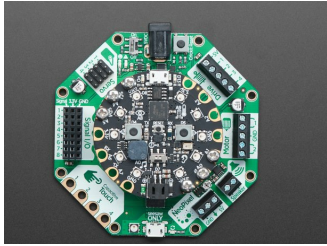
## Diagram

# LEARN



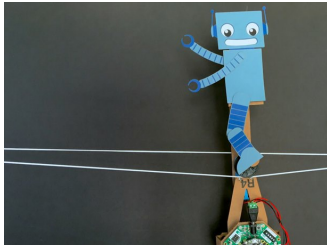
## [Living Starry Night Painting](#)

Build your own animated version of Starry Night



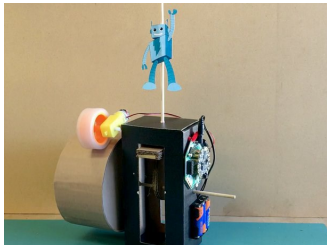
## [Introducing Adafruit Crickit #MakeRobotFriend](#)

Make your robot pal who's fun to be with using Crickit!



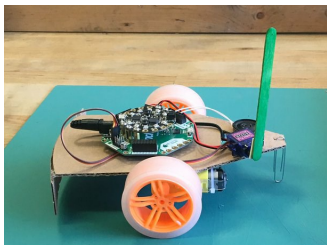
## [Tightrope Unicycle Bot](#)

Step right up and build a robot that rides a unicycle on a tightrope!



## [Cam Follower Automaton](#)

You can make this fun automaton that jumps up and down with cardboard, Crickit, Circuit Playground Express, and MakeCode!



## [Crickit Carnival Bumper Bot](#)

Make a bumper car that navigates by sense of touch. When it hits an object, it backs up, turns, and drives on!



## [Mini Golf Course with Circuit Playground and Crickit](#)

Make an interactive miniature golf course



## [AdaBox 008](#)

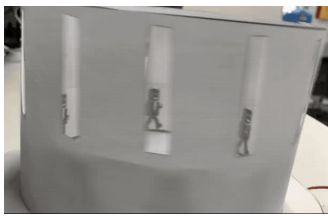
Explore and use the contents of your AdaBox 008



## [Hammer Time Mini Golf Hazard with Crickit](#)

Build a mini golf hole with crushing hammer hazard!





### [Paper Craft Zoetrope with Crickit](#)

Make a spinning optical illusion toy with some paper and a motor



### [Stroboscopic Zoetrope](#)

Use blinking light to animate spinning faces, all synced up by Crickit!

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## MAY WE ALSO SUGGEST...



Skinny Wheel for TT DC



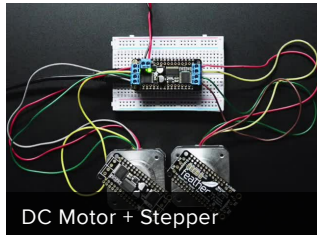
Orange and Clear TT Motor



Supporting Swivel Caster



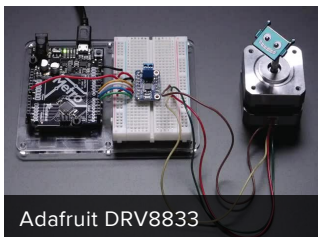
DC Toy / Hobby Motor - 130



DC Motor + Stepper



Anodized Aluminum Metal



Adafruit DRV8833



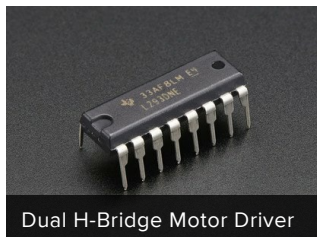
Continuous Rotation Servo



Snap-on Hub for TT Motor



Mini 3-Layer Round Robot



Dual H-Bridge Motor Driver



Adafruit DC & Stepper

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