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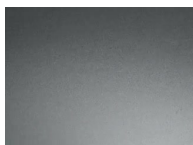
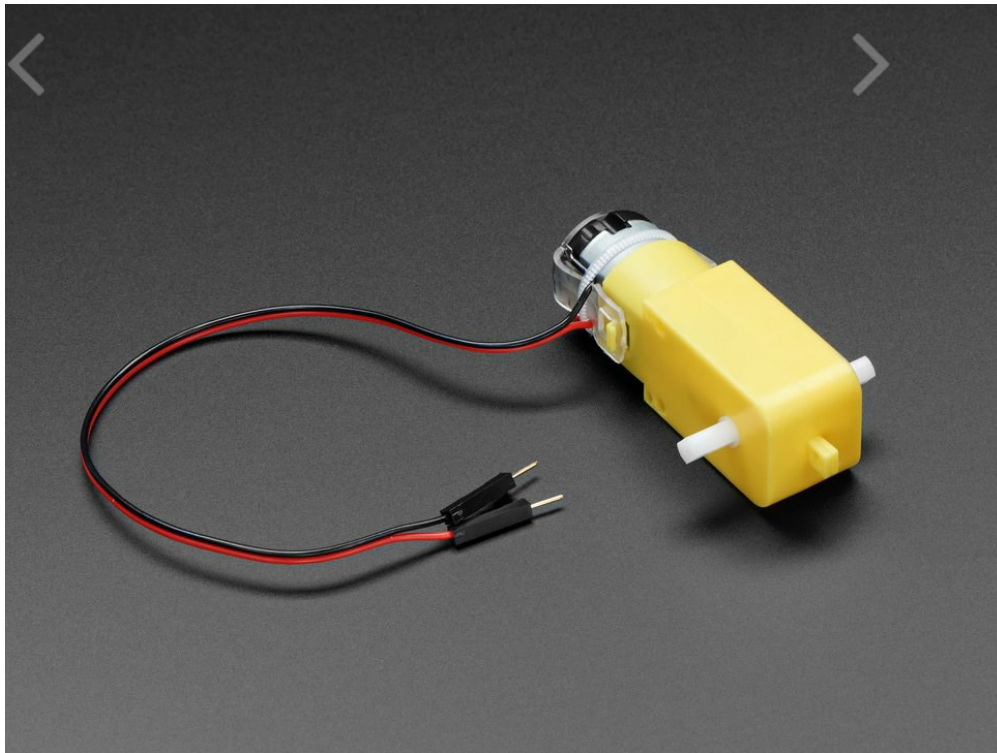
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Company Address

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

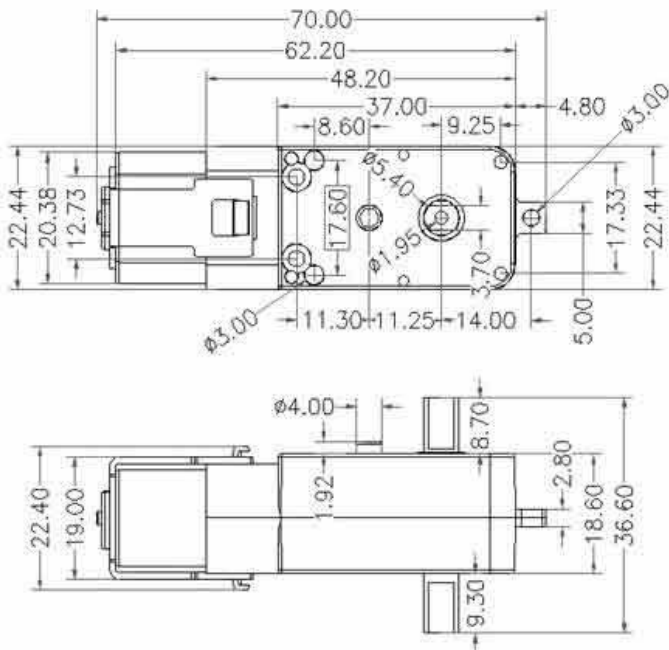
Note that these are very basic motors, and have no built-in encoders, speed control or positional feedback. Voltage goes in, rotation goes out! There will be variation from motor to motor, so a separate feedback system is required if you need precision movement.

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



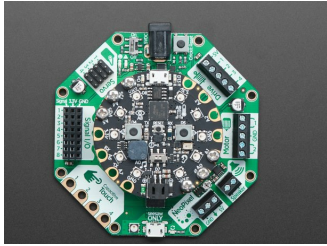
[Diagram](#)

LEARN



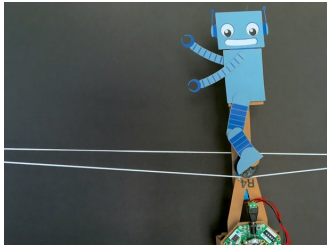
[Living Starry Night Painting](#)

Build your own animated version of Starry Night



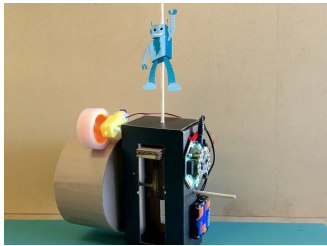
[Introducing Adafruit Crickit #MakeRobotFriend](#)

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



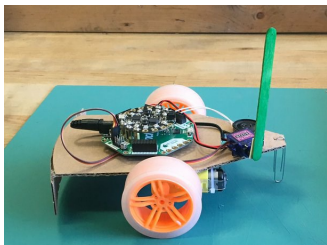
[Tightrope Unicycle Bot](#)

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!



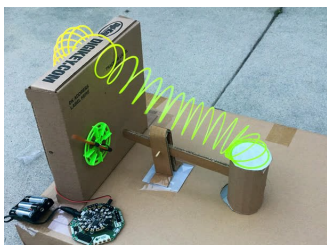
[Mini Golf Course with Circuit Playground and Crickit](#)

Make an interactive miniature golf course



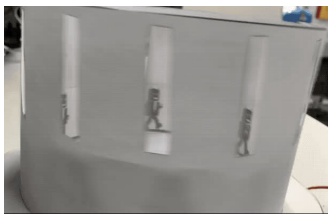
[AdaBox 008](#)

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!

MAY WE ALSO SUGGEST...



Skinny Wheel for TT DC



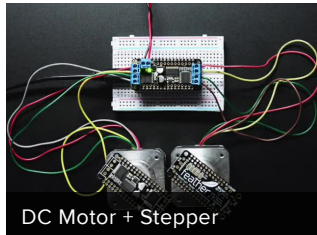
Orange and Clear TT Motor



Supporting Swivel Caster



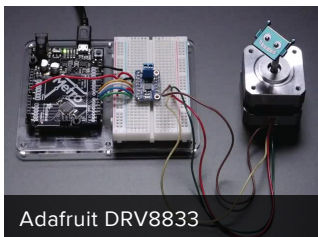
DC Toy / Hobby Motor - 130



DC Motor + Stepper



Anodized Aluminum Metal



Adafruit DRV8833



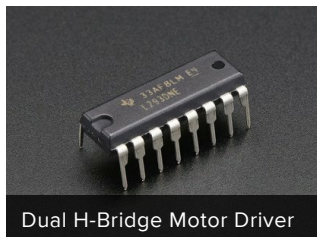
Continuous Rotation Servo



Snap-on Hub for TT Motor



Mini 3-Layer Round Robot



Dual H-Bridge Motor Driver



Adafruit DC & Stepper

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