This cylindrical, 1.89" x 0.98" x 0.98" gearmotor uses a motor with extra-strong magnets and a 9.7:1 metal gearbox to deliver a lot of power in a relatively small package. These units have a 0.315"-long, 4 mm-diameter D-shaped output shaft. We also carry a lower-power version of this gearmotor.

Key specs at 6 V: 1010 RPM and 450 mA free-run, 17 oz-in (1.2 kg-cm) and 6 A stall.

Select options: 9.7:1 6000 mA

Compare all products in Pololu Metal Gearmotors or 4mm Shaft Gearmotors.

**Gearmotor Dimensions:**

These gearmotors have output shafts with a diameter of 4 mm. The Pololu universal aluminum mounting hub for 4mm shafts can be used to mount our larger Pololu wheels (60mm-, 70mm-, 80mm-, and 90mm-diameter) or custom wheels and mechanisms to the gearmotor’s output shaft (see the left picture below). These are the same type of motors used in the Wild Thumper all-terrain chassis, and the gearbox’s output shaft works directly with the 120mm-diameter Wild Thumper wheels.
Pololu 60×8mm wheel on a Pololu 25D mm metal gearmotor.

Dagu Wild Thumper wheel 120×60mm (chrome) with Pololu 25D mm metal gearmotor.

The face plate has two mounting holes threaded for M3 screws. You can use our custom-designed 25D mm metal gearmotor bracket (shown in the picture below) to mount the gearmotor to your project via these mounting holes and the screws that come with the bracket.

The diagram below shows the dimensions (in mm) of the 25D mm line of gearmotors. The value of \( L \) is shown in the table below.
These motors are intended for use at 6 V. In general, these kinds of motors can run at voltages above and below this nominal voltage, so they should comfortably operate in the 3 – 9 V range. Lower voltages might not be practical, and higher voltages could start negatively affecting the life of the motor.

Selecting the Right Gearmotor

We offer a wide selection of metal gearmotors that offer different combinations of speed and torque. Our [metal gearmotor comparison table](http://www.pololu.com/catalog/product/1571) can help you find the motor that best meets your project’s requirements.