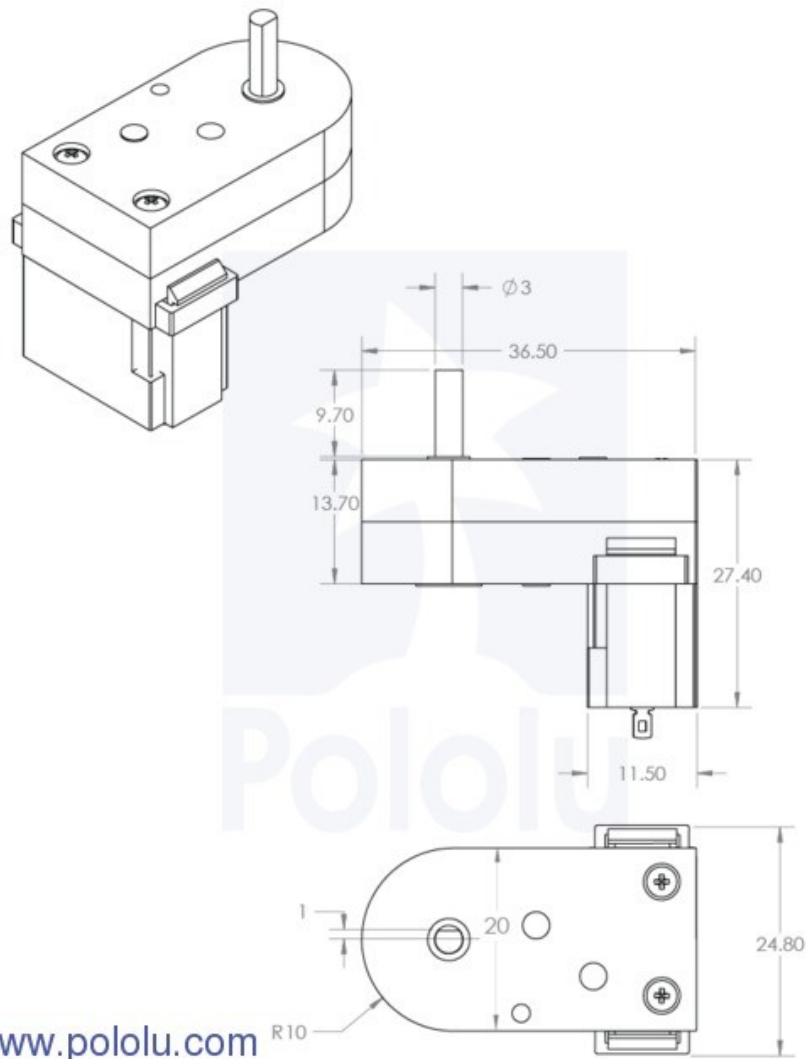


# POLOLU

## 180:1 Mini Plastic Gearmotor Offset 3mm D-Shaft Output

Pololu item #: 1594



[www.pololu.com](http://www.pololu.com)

## Overview

This gearmotor is very compact and weighs only 0.7 ounces (19.5 grams) — perfect for building a quick, miniature robot. The recommended operating voltage range for this motor is 3 to 6 V, though the gearmotor can start rotating at voltages as low as 0.6 V. At 4.5 V, the motor has a free-run current of 80 mA and a stall current of 800 mA; this relatively low current draw makes this a great match for our [qik 2s9v1 dual serial motor controller](#) and programmable [Orangutan robot controllers](#). The stall current, torque, and rotation speed will approximately scale linearly with the motor voltage. The gearbox is protected by a built-in safety clutch that will typically slip before gear teeth can shear.

You can download a pdf version of this drawing [here](#) (44k pdf).

This gearmotor features a 3 mm D-shaped output shaft that matches those on our [micro metal gearmotors](#) and works with the [Pololu wheels](#) and [3mm universal aluminum mounting hub](#):



**Mini plastic gearmotor offset 3mm D-shaft output with Pololu wheel.**

The gearbox output shaft is offset from but parallel to the motor shaft.

## Gearmotor Versions

This gearmotor is available with two different output shaft orientations—offset from but parallel to the motor shaft or perpendicular to the motor shaft—and in two gear ratios—120:1 (for higher speed) or 180:1 (for higher torque). The 120:1 gear ratio versions are also available with a 2mm-diameter spline output shaft that can be used with custom wheels or our [adapter for LEGO wheels](#). In all, we offer six different versions of this gearmotor:

- [120:1 Mini Plastic Gearmotor Offset 2mm Spline Output](#)
- [120:1 Mini Plastic Gearmotor 90-Degree 2mm Spline Output](#)
- [120:1 Mini Plastic Gearmotor 90-Degree 3mm D-Shaft Output](#)
- [120:1 Mini Plastic Gearmotor Offset 3mm D-Shaft Output](#)
- [180:1 Mini Plastic Gearmotor 90-Degree 3mm D-Shaft Output](#)