



120:1 Plastic Gearmotor 90-Degree Output



Pololu plastic gearmotor 90 deg. output with opened gearbox.

This 120:1 plastic gearmotor (gearbox with brushed DC motor) is a great low-cost alternative to modified hoy servos or Tamiya gearboxes. The low-current motor is a perfect match for our qik 2s9v1 dual serial motor controller, Baby Orangutan robot controller, or DRV8833 dual motor driver carrier, and the compact size makes this unit an attractive choice for small robot designs. The recommended operating voltage range for this motor is 3 – 12 V.

This is a lower-torque, higher-speed version of the 200:1 plastic gearmotor 90-degree output. At 6 V, the gearbox and motor provide approximately 75 oz-in of torque and 85 RPM. The free-running current is 70 mA, and the stall current is 800 mA. The gearbox is protected by a built-in safety clutch that will typically slip before gear teeth can shear.

This gearmotor comes pre-assembled, with the gears fully enclosed, and the output shaft is 6 mm long and 7 mm in diameter with two sides flattened. The output shaft is at a 90° angle from the axis of the motor shaft; we also sell a version of this gearmotor with an offset output shaft.

There are two built-in mounting holes that work with our stamped aluminum L-bracket and extended stamped aluminum L-bracket, as shown in the pictures below:

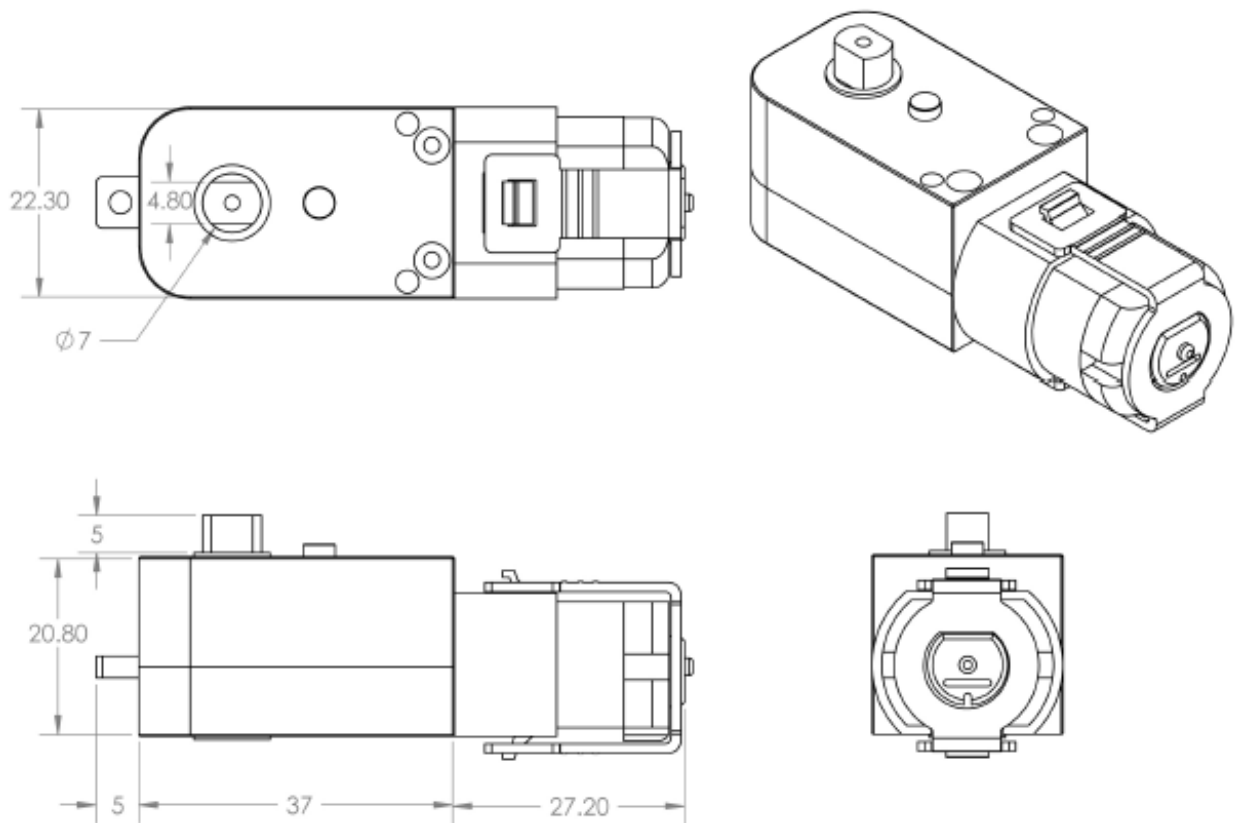


Plastic gearmotor with 90-degree output (item #1120 or #1121) mounted with Pololu stamped aluminum L-bracket.



Plastic gearmotor with 90-degree output (item #1120 or #1121) mounted with Pololu extended stamped aluminum L-bracket.

A custom-molded GMPW plastic wheel for this gearmotor is available in a variety of colors.



Dimensions (in mm) of the 120:1 and 200:1 plastic gearmotors with 90-degree outputs.

You can download a pdf version of this drawing here (104k pdf).

[Documentation on producer website.](#)