

## **RB-Pol-266**

### **200:1 Plastic Gearmotor 90 Degree Shaft**



This 200:1 gearbox with brushed DC motor has a low-current motor and provides power and speed that is comparable to an RC servo at a fraction of the cost. At 6 V, it has a free-run speed of 51 RPM and a stall torque of approximately 100 oz-in.

This 200:1 plastic gearmotor (gearbox with brushed DC motor) is a great low-cost alternative to modified hobby servos or Tamiya gearboxes. The low-current motor is a perfect match for 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 - 12V.

This is a higher-torque, lower-speed version of the 120:1 plastic gearmotor 90-degree output. At 6V, the gearbox and motor provide approximately 100 oz-in of torque and 51 RPM. The free-running current is 70mA, 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 similar gearmotor with an offset output shaft. There are two built-in mounting holes that work with stamped aluminum L-bracket and extended stamped aluminum L-bracket.

#### **Specifications**

- Typical operating voltage: 6 V
- Gear ratio: 200:1
- Free-run speed @ 6V: 51 rpm
- Free-run current @ 6V: 70 mA
- Stall current @ 6V: 800 mA
- Stall torque @ 6V: 100 oz·in

**Dimensions**

- Size: 64.4 x 22.3 x 21mm
- Weight: 32g
- Shaft diameter: 7mm