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## 9.7:1 Metal Gearmotor 25Dx63L mm LP 6V with 48 CPR Encoder



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

**Pololu item #:** 4822 **23** in stock

**Brand:** [Pololu](#)

**Status:** Active and Preferred [?](#)

**✓ RoHS3**

**Free shipping in USA** [?](#)

Price break	Unit price (US\$)
1	34.95
10	31.46

**Quantity:**

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This gearmotor consists of a **low-power, 6 V** brushed DC motor combined with a **9.68:1** metal spur gearbox, and it has an integrated 48 CPR quadrature encoder on the motor shaft, which provides **464.64 counts per revolution** of the gearbox's output shaft. The gearmotor is cylindrical, with a diameter just under 25 mm, and the D-shaped output shaft is 4 mm in diameter and extends 12.5 mm from the face plate of the gearbox. This gearmotor is also available [without an encoder](#).

Key specifications:

voltage	no-load performance	stall extrapolation
6 V	590 RPM, 250 mA	1.2 kg·cm (17 oz·in), 2.4 A

Alternatives available with variations in these parameter(s): gear ratio motor type encoders? [Select variant...](#)

**Description**   **Specs (11)**   **Pictures (11)**   **Resources (4)**   **FAQs (2)**   On the blog (0)

Dimensions

Size:	25D x 63L mm <sup>1</sup>
Weight:	95 g
Shaft diameter:	4 mm

General specifications

Gear ratio:	9.68:1
No-load speed @ 6V:	590 rpm
No-load current @ 6V:	250 mA
Stall current @ 6V:	2400 mA
Stall torque @ 6V:	17 oz·in
Motor type:	2.4A stall @ 6V (LP 6V)
Lead length:	8 in <sup>2</sup>
Encoders?:	Y

Notes:

1

Length measurement is from gearbox face plate to back of encoder cap (it does not include the output shaft). See dimension diagram for details.

**2** May vary by a few inches.