

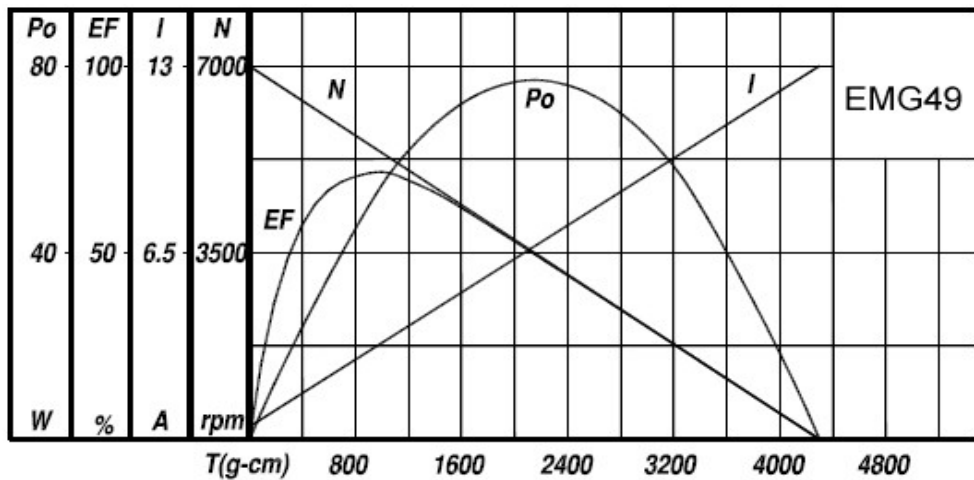
# RB-Dev-38

## Devantech 24V, 49:1 Gear Motor w/ Encoder

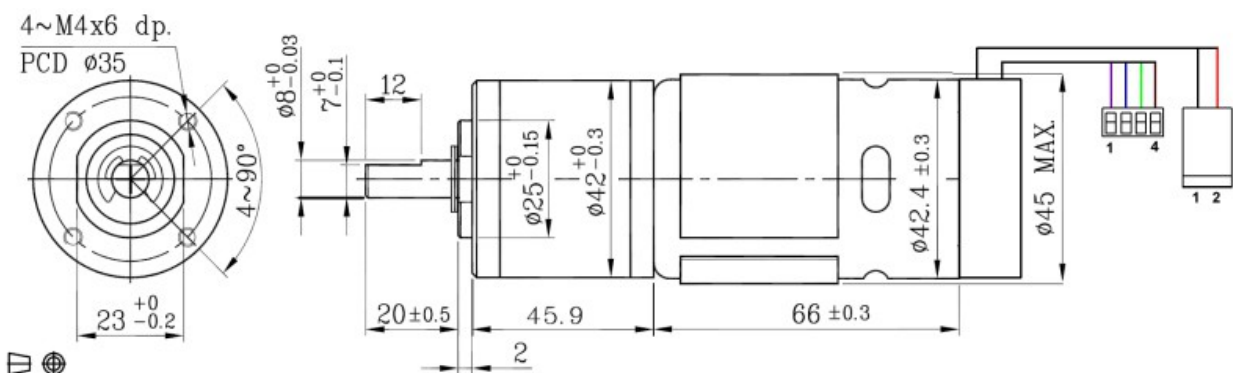


The Devantech 24V, 49:1 Gear Motor w/ Encoder is a 24v motor fully equipped with encoders and a 49:1 reduction gearbox. It is ideal for medium to large robotic applications, providing cost effective drive and feedback for the user. It also includes a standard noise suppression capacitor across the motor windings.

### Motor Characteristics



### Measurements



## Connectors

Motor power is connected with a two way 3.96mm pitch terminal Excon type 3961 and has 300mm of cable as standard.

- Black (1): -Motor
- Red (2): +Motor

The encoders connect using a 4 way JST connector (part no PHR-4) at the end of approx 300mm of cable as standard.

## The connections are:

### Wires      Connections

- Purple (1): Hall Sensor B Vout
- Blue (2): Hall sensor A Vout
- Green (3): Hall sensor ground
- Brown (4): Hall sensor VCC

- Wires are the colours from the actual cable
- The hall sensors accept voltages between 3.5v and 20v
- The outputs are open collector and require pull-ups to whatever signal level is required
- On the MD49 they are powered from 12v and pulled up to 5v for the signals

## Specifications

- Rated voltage: 24V
- Rated torque: 16 kg/cm
- Rated speed: 122rpm
- Rated current: 2100mA
- No load speed: 143
- No load current: 500mA
- Stall current: 13A
- Rated output: 34.7W
- Encoder counts per output shaft turn: 980

## EMG49 Mounting Bracket

Providing easy mounting of the EMG49 to the robot, the bracket is made from a 2mm thick strong aluminum and finished in blue enamel.



**Wheel 125**

A 125mm diameter wheel with 8mm diameter hub for easy attachment to the EMG49, the wheel has a 28mm wide rubber tread.

