

# EV3 TECHNOLOGY

## EV3 Motors

### Large Motor

The Large Motor is a powerful “smart” motor. It has a built-in Rotation Sensor with 1-degree resolution for precise control. The Large Motor is optimized to be the driving base on your robots.

By using the Move Steering or Move Tank Programming Block, the Large Motors will coordinate the action simultaneously.

### Medium Motor

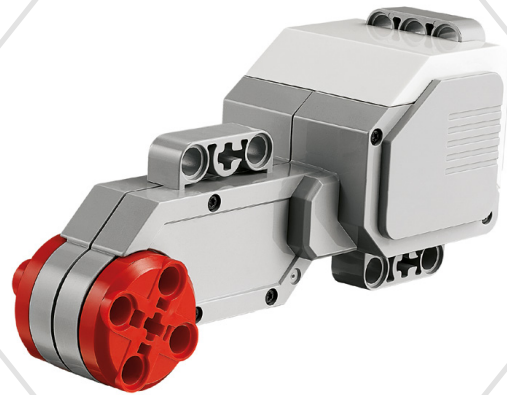
The Medium Motor also includes a built-in Rotation Sensor (with 1-degree resolution), but it is smaller and lighter than the Large Motor. That means it is able to respond more quickly than the Large Motor.

The Medium Motor can be programmed to turn on or off, control its power level, or to run for a specified amount of time or rotations.

#### COMPARE THE TWO MOTORS:

- + The Large Motor runs at 160–170 rpm, with a running torque of 20 Ncm and a stall torque of 40 Ncm (slower, but stronger).
- + The Medium Motor runs at 240–250 rpm, with a running torque of 8 Ncm and a stall torque of 12 Ncm (faster, but less powerful).
- + Both motors are Auto ID supported.

For more information on using the Rotation Sensor in your programming, see **Using the Motor Rotation Sensor** in the EV3 Software Help.



Large Motor



Medium Motor