Motion Control Solutions for Material Handling
Application Examples

**AGV**

A DC input type motor and driver is offered for AGV/AMR robots with speed regulation, high torque, and positioning. The FR gear saves space and fits in low floor transport vehicles.

**Load Unloader**

The preassembled Rack & Pinion L series is good for loader & unloader applications. Electromagnetic Brake type is offered to hold the position.

- Long stroke (Max 1,000mm/39.3in)
- Transportable mass (Max 100kg/220lb).

**Speed Control Conveyor**

An optimized brushless design saves space with a right-angle hollow shaft gearhead. The BMU series driver is easy to operate with a front mounted dial.

**Parallel Link Robot**

This 3-axis parallel link robot uses the AZ Series motors and a 3 axis driver. It is controlled by an HMI with a directly connected motion network.

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**Product** | **Part Number**
---|---
FR Geared Type | ARM98AK-FR10R
Stored Data Type | ARD-KD

**Product** | **Part Number**
---|---
Rack & Pinion | LM4F40AZMC-10
AZ Series Driver | AZD-AEP

**Product** | **Part Number**
---|---
BMU Series Motor | BLMS200HPK-5XH20C
BMU Series Driver | BMUD200-C

**Product** | **Part Number**
---|---
AZ Series Motor | AZM24AK-HS50
Multi Axis Driver | AZD3A KED

*Oriental Motor sells the motor and driver parts of this robot, we do not sell complete robotic systems*
Select Your Motor and Communication Control System

Motor

- Hollow Shaft
- Flat Gears
- Right Angle
- FC Gears
- EZS/EAC
- Linear Actuators
- Harmonic/Planetary Gears
- Hollow Rotary Actuators
- EH Gripper

Application

- AGV/AMR
- Conveyor
- X-Y-Z Gantry
- Changing Loads
- Robot Motors
- Robot Drivers

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The AZ Series is a “hybrid” stepper motor-based motor & driver system that combines the advantages of the “open loop” setup programming with “closed loop” performance. In addition to high-accuracy positioning and speed control, it can perform control that restricts the motor’s generated torque to a set value for push-motion operation.

**Stopping Accuracy**

![Graph showing stopping accuracy](image)

**High Performance**

![Graph showing high performance](image)

**Drivers**

- Pulse Input
- Built-in Controller
- Pulse Input with RS-485
- EtherCAT
- Multi Axis
- Compact

**Motor/Geared Types**

- Standard
- Tapered Hob
- Harmonic (no backlash)
- Right Angle (face gear)
- Planetary
- Planetary (attach load)
- Planetary (high torque)

**Actuator Types**

- Linear Slides
- Linear Cylinders
- Compact Electric Cylinder
- Rotary Actuators
- Gripper
- Rack & Pinion
Brushless DC Motors

Brushless motors maximize system efficiency and can move heavy loads with a compact drive system. They provide high torque with a wide speed range. Compared to AC motors, Brushless motors save space, offer more speed stability, and reduce power consumption.

**BLH/ BLV Series**

- Input Voltage: 24/48VDC
- Output: BLH Series 15W~100W
  - BLV Series 200W/400W
- Parallel shaft gearhead / Parallel hollow shaft flat gearhead
- Flange output head offers higher permissible load
- Electromagnetic brake is available
- RS-485 communication is available

- Hollow Shaft Flat Gear (FR Type) for AGV
- Stop and Hold Using Electromagnetic Brake

**BMU/ BLE2 Series**

- Input Voltage: 0-10 VDC
- External Control
- Simple Control

**H1 Food Grade Grease**

*Only available with IP66 degree of protection*
CVK-SC Stepper Motor & Driver
Speed Control System

- No pulse generator needed
- 2 speed settings possible
- Compact and higher torque motor
- Improved stop position repeatability
- Maintains torque, even when stopped

The simple motor and driver configuration makes speed control possible. Control is easy. Select 2 speeds, and turn the start input ON or OFF.

● **Speed Selection**

2-speed selection operation

● **Return Operation**

Turn the CW/CCW input ON or OFF

● **Regular Feed Operation**

Turn the forward input ON or OFF

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