ROBUSTMOTION

Provide more precise and reliable motion control systems and electric actuators to the world

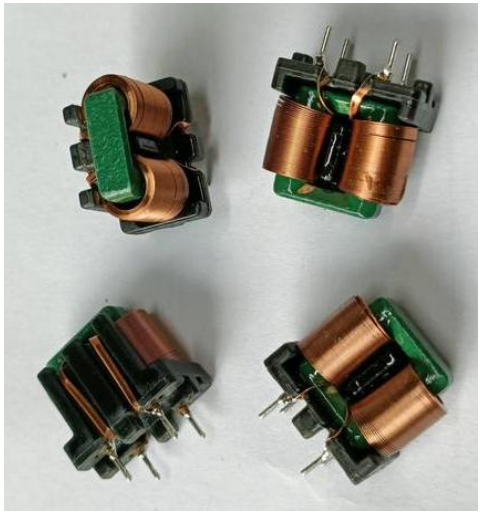
RM-EGB | Application Cases

3C Electronics

3C Electronics - Synchronous Transfer of Inductors in a Compact Space

EGB
Compact Electric Finger

Replacement for pneumatic grippers
Compact size with large output force
Adaptive clamping
Detection for workpiece dropped or empty clamped



Description:

- The customer, an electronics component manufacturer, has purchased multiple sets of EGB Compact Electric Finger for clamping and transferring inductors to the specified position for visual inspection of appearance. The communication method used is I/O, which is easy to use.
- Multiple sets of RM-EGB compact electric finger are used to clamp and transfer electronic components to the specified position, requiring stable gripping force and fast speed in opening and closing.
- It can perform a rapid motion control in a compact space, completing short-stroke, multi-point positioning, and high-frequency operations.

Semiconductor

Semiconductor - Rapid Clamping and Displacement of Crystal Components

EGB-06H-16D
Compact Electric Finger

Fast speed in opening and closing & Fast response
Replacement for pneumatic grippers
Adaptive clamping
Detection for workpiece dropped or empty clamped

Description:

- The EGB is installed on a transverse slider. When the EGB moves horizontally to the specified location, it will be identified by the infrared sensor and trigger a downward command. Then the EGB picks up the crystal component and releases it after arriving at the next specified location. The entire cycle of this motion is approximately 0.5 seconds.
- The EGB has an adjustable gripping force. Previously, the customer used pneumatic grippers which could not automatically adjust the gripping force to match changes in the material of the workpieces, leading to deformation and indentation of the workpieces.
- Because of the limitations of the installation space, it is impossible to install too many air compressors.

Precision Manufacturing / Intelligent Automation

Automated Inspection - Inspection of Triangular Radars for Sweeping Robots

RM-NPLA
Micro Platform-type Linear Actuator

Micro size
Large pushing force
Stable output
Save space

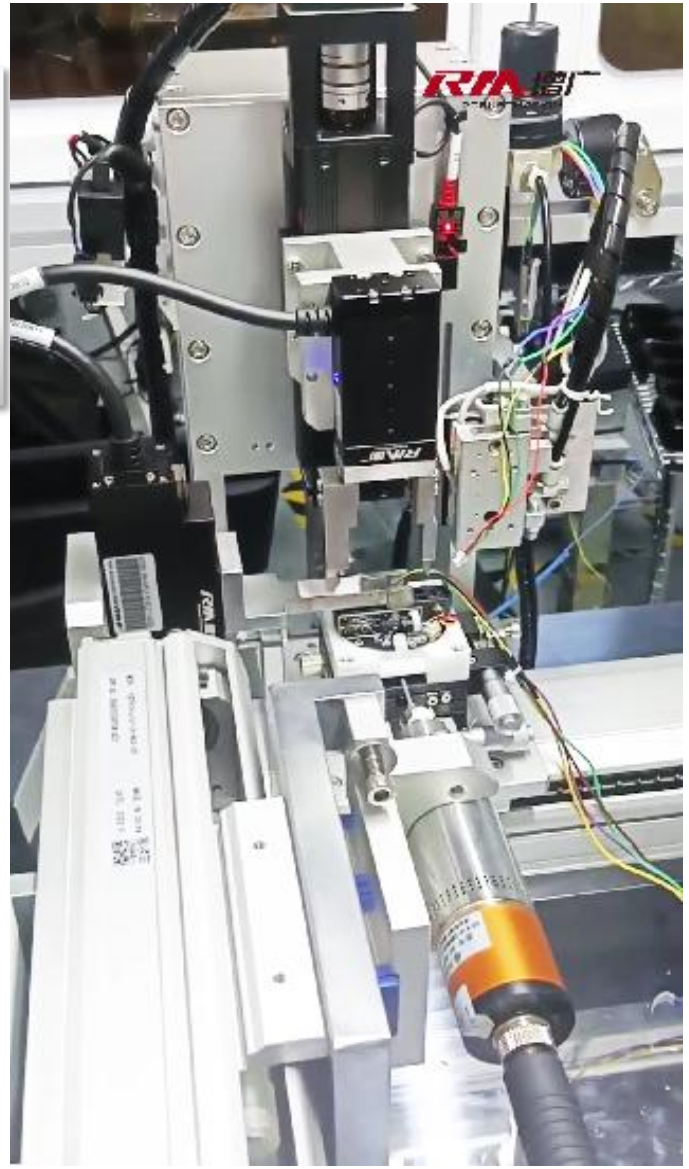
EGB
Compact Electric Finger

Replacement for pneumatic grippers
Compact size with large output force
Adaptive clamping
Detection for workpiece dropped or empty clamped

Description:

- NPLA(Micro Platform-type Linear Actuator) quickly approaches the workpiece in position control mode. Then it presses the triangular radar of the sweeping robot by switching to the torque control mode to apply a force of 50 N. Once the set force value is reached, the EGB(Compact Electric Finger) will pick up the workpiece to make a slight displacement. Once the sensor detects the displacement has reached the set point, the gripper releases, and the operation is completed.

- This process is primarily used to check if the workpiece will deform under pressure.



Agriculture

Agriculture - Transplant Seedlings with the Robotic Arm

EGB
Compact Electric Finger

Replacement for pneumatic grippers
Compact size with large output force
Adaptive clamping
Detection for workpiece dropped or empty clamped

Description:

- The RM-EGB collaborates with the robotic arm to accurately transplant the clamped seedlings to the specified positions.
- Automating the clamping and transplanting processes can save human resources and reduce the required physical labor.