**MOTORIZED ROTATION STAGE DIRECT DRIVE**

**High Precision** Motorized Rotary Stages - Direct Drive

- **Features:** Stages suitable for being rotated 360° at a high speed.

**Rotary**

- **Material:** Aluminum Alloy
- **Surface Treatment:** Black Anodized

**Connector HR10A-10J-12P**

*For Controllers, Handset Terminals, see P.1735-93, P.1735-94 *

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**24V-compatible Sensor Amplifier Circuit Board**

When driving a motorized stage based on the EE-SX1103 sensor by using the motion control board and programmable logic controller instead of the controller manufactured by MISUMI, the 24V-compatible Sensor Amplifier Circuit Board is required. In general, the Photo Coupler is used on the sensor input circuit of these control devices. However, since MISUMI's Motorized Stage with built-in EE-SX1103 sensor operates at DC24V and can output only 1mA level current, it cannot be wired directly to the above control devices. In this situation, incorporate the 24V-compatible sensor amplifier circuit board, so 24V of Power Supply voltage and up to 50mA of output current become available.

**External Dimension Diagram**

**Entire Configuration Diagram**

**Example of Connecting Sensor Amplifier Circuit Board and Driver**

**24V-compatible Sensor Amplifier Circuit Board**

*For CAD data, see the MISUMI website.*

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**Electrical Specifications**

**Type:** 3-Phase Stepping Motor 0.75A/Phase

**Motor**
- **Type:** 3-Phase Stepping Motor 0.75A/Phase
- **Step Angle:** 0.72°

**Connector**
- **Part Number:** HR10A-10J-12P (Tyco Electronics Japan G.K.)
- **General Connector:** HR10A-10J-12P
- **Limit Sensor (ORG):** Not Provided
- **Sti Home Angle Sensor (ORG):** Not Provided

**Sensor**
- **Part Number:** Photomicro Sensor EE-SX1103 (OMRON Corp.)
- **Power Supply Voltage:** DC24V
- **Current Consumption:** 25mA or less
- **Control Output:** NPN Open Collector Output

**Control Output:** DC0V or less (when load current is 0.3mA)

**Output Logic:** Detecting (Dark): Output Transistor OFF (Non-Conducting)

**Connector Pin Configuration**

**Wiring Diagram**

**Timing Chart**

**Home Detection Range (°)**

**Recommended Homing Method / Sequence for RMDG40**

- **Type 1:** After detection is executed in CW direction, the process of detecting in the CW direction edge is begun based on the ORG signal.
- **Type 2:** After detection is executed in CCW direction, the process of detecting in the CCW direction edge is begun based on the ORG signal.
- **Type 3:** After Type 2 is executed, the process of detecting in the CW direction edge is begun based on the TMMS signal.
- **Type 10:** After Type 4 is executed, the process of detecting in the CW direction edge is begun based on the TMMS signal.