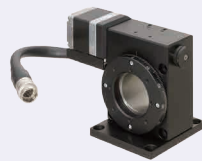
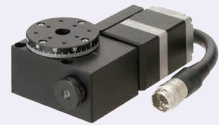


# Motorized Rotary Stages

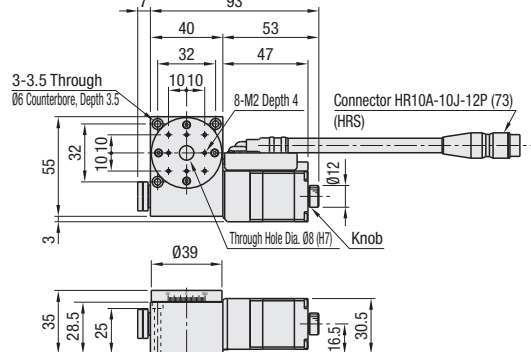
These stages are equipped with sensors compatible with 5VDC~24VDC. RMPG40 and RMPG60 has been discontinued as of April, 2010.

## Motorized Rotary Stages

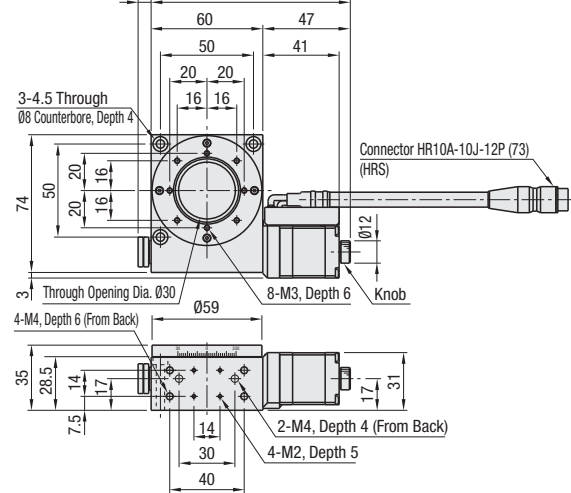


RoHS10

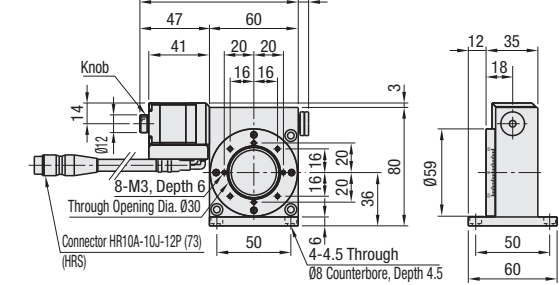
### RMPG40W



### RMPG60W



### RMPG60Z



#### Timing Chart

Type	Graduated Scale Home Position [°]
RMPG40W	0 (CCW Side Edge) 11 (CW Side Edge)
RMPG60W RMPG60Z	0 (CCW Side Edge) 9 (CW Side Edge)

- Material: Aluminum  
Surface Treatment: Black Anodize  
Accessories: Hex Socket Head Cap Screw (Stainless Steel)  
RMPG40W: SCB4-30 (3 pcs.)  
RMPG60W: SCB4-30 (3 pcs.)  
RMPG60Z: SCB4-6 (4 pcs.)

Part Number		Sensor Voltage (V)	Mechanical Specifications				Accuracy Specifications										Unit Price	
Type	No.		Stage Surface (mm)	Travel Distance	Weight (kg)	Motion Mechanism (Reduction Ratio)	Guide	Positioning Accuracy	Moment Rigidity (N·cm)	Resolution (Pulse)	Maximum Speed (sec/Hz)	Repeatability	Load Capacity (N)	Lost Motion	Backlash	Parallelism (μm)		Eccentricity (μm)
RMPG	40W	DC5~24V	Ø39	360°	0.4	Worm Gear (Reduction Ratio 1/120)	Deep Groove Ball Bearing	0.05° or Less	0.74	0.006° (Full)	30°	±0.01° or Less	29.4	0.05° or Less	0.1° or Less	50 or less	5 or less	30 or less
	0.6				Worm Gear (Reduction Ratio 1/180)	0.84			0.004° (Full)	20°	0.05° or Less							
	60W				0.7													
	60Z											9.8						



Ordering Example  
Part Number  
RMPG60W



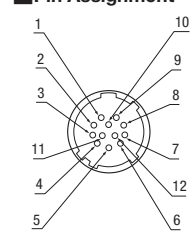
Days to Ship

Configure Online

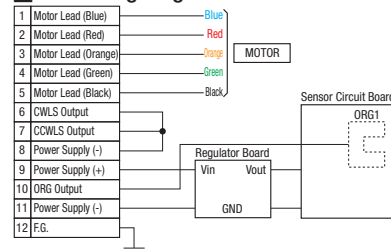
## Electrical Specifications

Stage Type	RMPG40W	RMPG60W	RMPG60Z
Motor	5-Phase Stepping Motor 0.75A/Phase (Oriental Motor Co., Ltd.)		
Step Angle	0.72°		
Connector	Compatible Receptacle Connector HR10A-10J-12P (73) (Hirose Electric Co., LTD.) HR10A-10P-12S (73) (Hirose Electric Co., LTD.)		
Limit Switch	-		
Home Sensor	Provided		
Near Home Sensor	-		
Part Number	Photomicro Sensor EE-SX4134 (OMRON Corp.)		
Power Supply Voltage	DC5~24V ±10%		
Current Consumption	35mA or less		
Control Output	NPN Open Collector Output DC5~24V, 8mA or less Residual Voltage 0.3V or less (when load current is 2mA)		
Output Logic	Detecting (Dark): Output Transistor OFF (Non-Conducting)		

## Pin Assignment



## Connecting Diagram



# Peripherals for Motorized Stages

Controller / Handset Terminal / Cable / Driver

Feature: Controller for the motorized stages. See our web page for MSSOFT control software.

## Controller for Motorized Stages

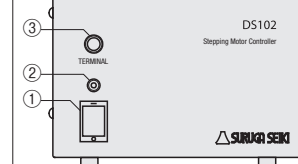
RoHS10



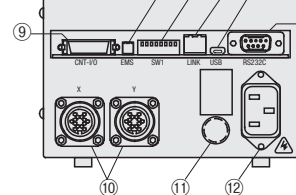
Sensor power supply voltage for MSCTL102 controller is 5VDC. 24VDC sensors cannot be operated from this controller. (however, linear semi-interpolation between the linked stages is possible)

### MSCTL102

#### Front Panel



#### Rear Panel



- Power Switch
- POWER LED
- TERMINAL (Specifications: Connector for Handset Terminal HDT100)
- RS232C (Specification: D-Sub 9P Male)
- USB Connector (Mini B Type)
- LINK Connector
- DIP Switch
- EMS Connector
- I/O Connector for Controller
- Stage Connector
- Fuse Holder
- AC Plug

## Basic Specifications

External Dimensions	140(W)x300(D)x90(H) mm
Operating Environment	0~40°C, 20~80% RH (No Condensation)
Storage Environment	-20~60°C, 20~80% RH (No Condensation)
Input Power Supply	AC100~240V±10%, 50/60Hz

## Driver Performance Specifications

Driver Type	Normal (FULL/HALF Selectable)
Rated Current	0.75A/Phase

## Functions

Homing Function	1 Point/Axis (Configurable freely within effective range)
Link	MSLINK (Link cable is listed on our web) can externally control up to 3 stages, up to 6 axes.
Programming	8 Programs (100 Steps/Program; Starts and stops by control I/O signals)
Teaching	64 Points (positioning is commendable from signal I/O)
Interpolation	2-Axis Linear Interpolation (linear interpolation between linked stages is not possible.)

Feature: Motorized stages can be operated immediately by connecting the Pendant.

## Handset Terminal

RoHS10



Part Number		Unit Price
Type	No.	1~9 pc(s).
HDT	100	

For orders larger than indicated quantity please request a quotation.

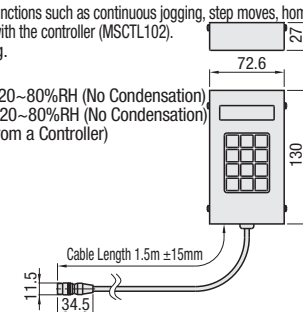
For orders larger than indicated quantity, please request a quotation.

## HDT100

Enables the operator to control various functions such as continuous jogging, step moves, home, and program executions by connecting with the controller (MSCTL102).  
\* PC is required for program editing.

## Basic Specifications

- Operating Environment: 0~40°C, 20~80%RH (No Condensation)
- Storage Environment: -20~60°C, 20~80%RH (No Condensation)
- Power Supply: DC24V (Supplied from a Controller)
- Weight: 0.28kg



## Controller Performance Specifications

Number of Control Axes	2
Coordinate Setting Range	±99,999,999pls
Speed Setting Range	1~999,999pps
Pulse Rate Rise Setting Range	1~9,999pps
Acceleration/Deceleration Time Range	1~9,999ms
Mechanical Limit	2 for Each Axis CW/CCW Direction (Input logic reversal is possible)
Near Home Detection	1 for Each Axis (Input logic reversal is possible)
Home Detection	1 for Each Axis, 12 Routine Types (Input logic reversal is possible)
External Communication I/F	RS232C: 4800~38400bps USB2.0: Compatible with Full/Low Speed only Control I/O: 9 Inputs (24VDC Opto-coupler Inputs), 12 Outputs (Open Collector Outputs)
Max. Power Consumption	70W (for AC100V)
Weight	2.2kg

Feature: Selectable cable lengths for application specific requirements.

## Cable for Motorized Stages

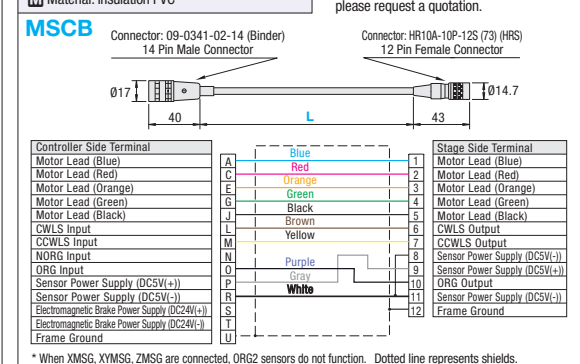
RoHS10



Part Number		Unit Price
Type	L(m)	1-9 pc(s).
MSCB	2	
	4	
	6	

📌 For orders larger than indicated quantity,

For orders larger than indicated quantity, please request a quotation.



## Driver for Motorized Stages

RoHS10

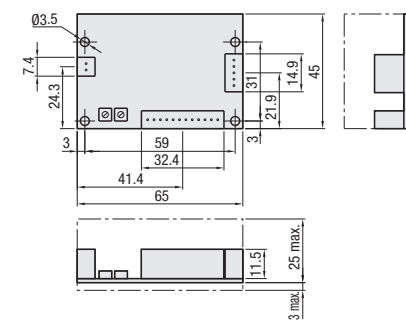


Input Power Supply	DC24V±10%
Rated Current	0.75A/Phase
Resolution	Full/Half
Operating Temperature Range	0~40°C
Weight (kg)	0.04
Signal Input	Opto-coupler Input

Part Number		Unit Price
Type	No.	1~9 pc(s).
MSDR	24	

For orders larger than indicated quantity, please request a quotation.

### MSDR24 (For DC24V)



Assembled components may be projected at portions shown as "XXmax".



Ordering Example  
Part Number  
MSCTL102  
HDT100  
MSCB4  
MSDR24



Days to Ship  
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