

## [High Precision] Motorized Rotary Stages - Worm Gear

Stage Surface Size Ø75~Ø180



■ Features: Suitable for large angle-positioning with high accuracy or being rotated 360° repeatedly.

## ■ Rotary

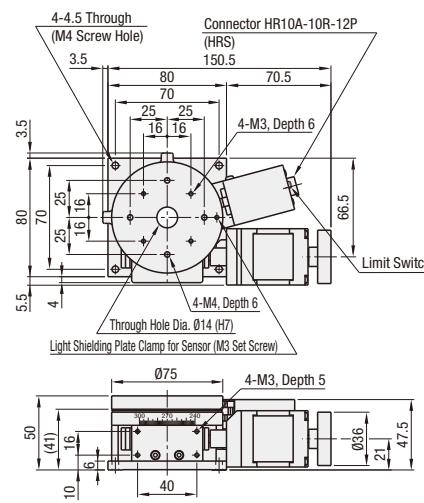


**M** Material: Aluminum Alloy  
**S** Surface Treatment: Black Anodize  
**A** Accessory: RMWG75: SCB4-10 (4 pcs.)  
 RMWG100C: SCB6-16 (4 pcs.)  
 RMWG180C: SCB6-12 (4 pcs.)

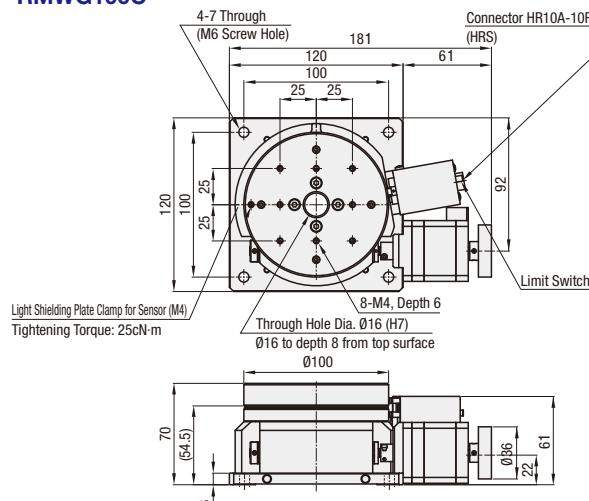
RoHS10

For Controllers, Handset Terminals, see P.1-1735-93~P.1-1735-94

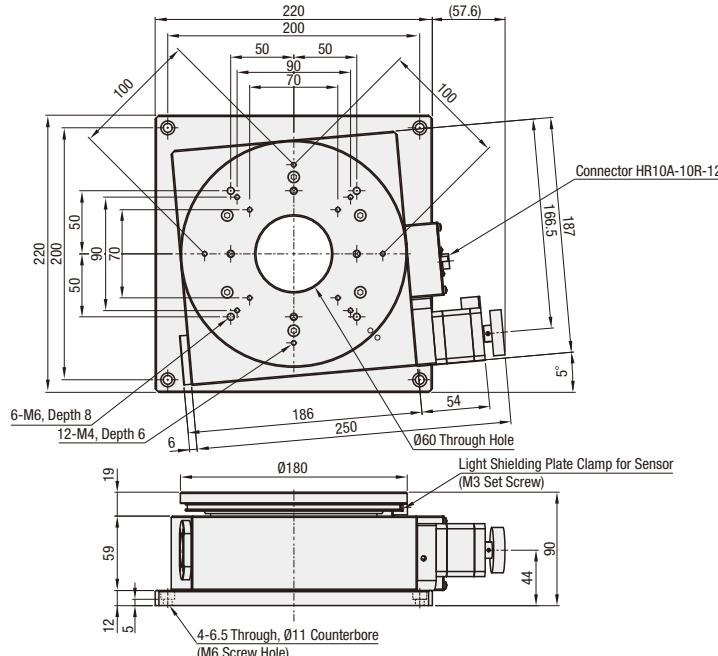
## RMWG75



## RMWG100C



## RMWG180C



See the CAD data for detailed dimensions.

For CAD data, see the MISUMI website.

Part Number		Cable	Mechanical Standards			Accuracy Standards	
Type	No.		Stage Surface	Travel Distance (°)	Weight (kg)	Positioning Accuracy	Moment Rigidity ("/N•cm)
RMWG	75	N (Cable not included (separately sold) For cables separately sold, see MSCB_ option on P.1-1735-95	Ø75	360°	1.1	0.03° or Less	0.15
	100C		Ø100		2.5		0.07
	180C		Ø180		9.7	0.05° or Less	0.02



Ordering Example

Part Number - Cable



Days to Ship

Configure Online

## ■ Electrical Specifications

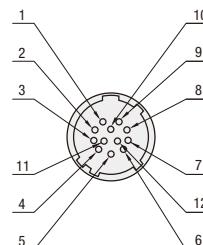
Motor	Type	75	100C	180C
		C7214-9015-1	5-Phase Stepping Motor 0.75A/Phase (Oriental Motor Co., Ltd.)	PK544PB-C18
Connector	Step Angle	0.36°	0.72°	
	Part Number		HR10A-10J-12P (73) (Hirose Electric Co., LTD.)	HR10A-10P-12S (73) (Hirose Electric Co., LTD.)
	Compatible Receptacle Connector			
	Limit Sensor			
	Home Position Sensor (ORG1)	Provided (PM-F25)		
	Slit Home Origin Sensor (ORG2)	Provided (PM-F25)		
	Part Number		Photomicrosensor: PM-25 (Panasonic Industrial Devices SUNX Co., Ltd.)	
	Power Supply Voltage		DC5~24V ±10%	
	Current Consumption		45mA or less	
	Control Output		NPN Open Collector Output DC30V, 50mA or less Residual Voltage 2V or less (when load current is 50mA) Residual Voltage 1V or less (when load current is 16mA)	
	Output Logic		CWLS, CCWLS Detecting (Dark): Output Transistor OFF (Non-Conducting) ORG Detecting (Dark): Output Transistor OFF (Non-Conducting)	Detecting (Dark): Output Transistor OFF (Non-Conducting)

Sensors with Part Number PM-□24 are to be discontinued and replaced by next-generation products with Part Number PM-□25 from April 2017.

## ■ Common Specifications

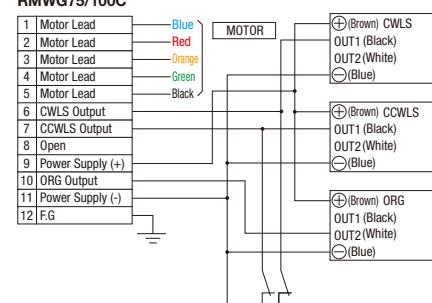
No.	75	100C	180C
Feeding Method	Worm Gear Type (Reduction Ratio 1/144)	Worm Gear Type (Reduction Ratio 1/180)	
Guide	Cross Roller Bearing	Combined Angular Contact Ball Bearings	
Resolution	Full	0.0025°	0.004°
Max. Speed	25°/sec[5kHz]	20°/sec[5kHz]	
Positioning repeatability		Within ±0.005°	
Load Capacity	98N	147N	294N
Lost Motion	0.005° or Less	0.004° or Less	0.01° or Less
Backlash	0.005° or Less	0.004° or Less	0.01° or Less
Parallelism	120μm or less	100μm or less	
Eccentricity	5μm or less / Full Stroke		
Surface Runout	20μm or less	60μm or less	

## ■ Connector Pin Configuration

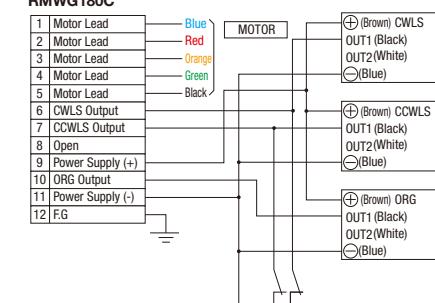


## ■ Wiring Diagram

RMWG75/100C



RMWG180C



## ■ Timing Chart

- When MSCTL102/112 Series controller is used and when the Homing Routine Type 4 is executed, the home position is detected with Division 0 [°] (with light in). (This is applicable only for RMWG180C.)
- CW limit / CCW limit can be repositioned to any arbitrary point.
- For details about Homing, see P.1-1735-97