



[High Precision] Motorized Rotary Stages

Similar Products Comparison Points | Travel Accuracy Positioning Accuracy: 0.05° or Less

Features: Equipped with sensors compatible with 5VDC ~ 24VDC.

CAD Data Folder Name: 28_Stage

| | | | |
|------------------|-------------|---|-------|
| Ordering Example | Part Number | - | Cable |
| | RMPG60W | - | N |

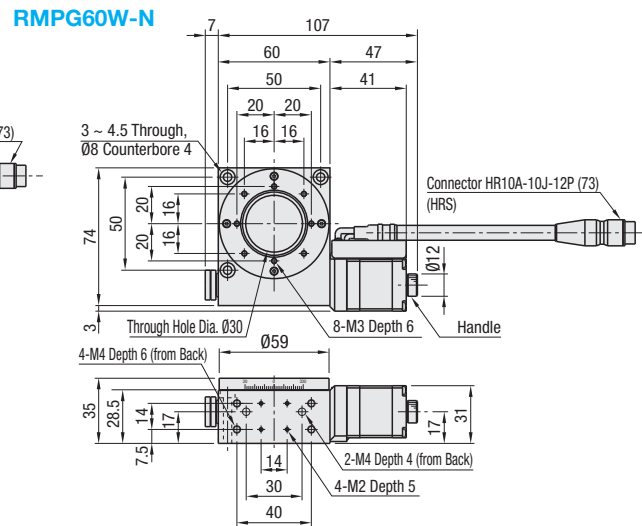
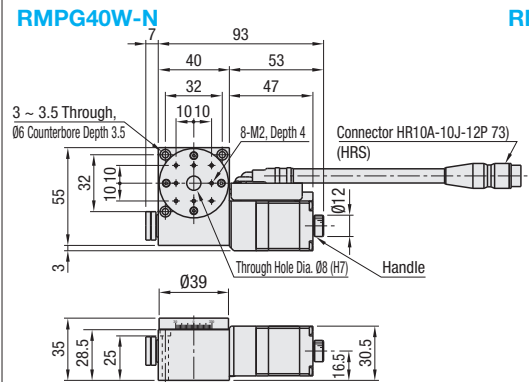
Rotary



Cable is sold separately. Order separately by following the table below.
The products shown here are reference images. Hole positions and shapes may differ from actual products.



MMaterial Aluminum Alloy
SSurface Treatment Black Anodize
AAccessory Hex Socket Head Cap Screw (Stainless Steel)
 RMPG40W: SCB4-30 (3 pcs.)
 RMPG60W: SCB4-30 (3 pcs.)



Timing Chart

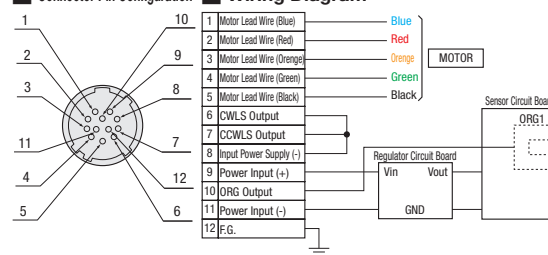
| Type | Graduated Scale Home Position [°] |
|---------|--|
| RMPG40W | 0 (CCW Side Edge) 11 (CW Side Edge) |
| RMPG60W | 0 (CCW Side Edge) 9 (CW Side Edge) |

| Part Number | Type | No. | Cable | Sensor Voltage (V) | Mechanical Specification | | | | | | | | | | Accuracy Standards | | | | | | |
|-------------|------|-----|----------|--------------------|--------------------------|-----------------|-------------|-----------------------------------|--------------------------|---------------|------------------------|--------------------|---------------------------|----------------|--------------------|---------------|--------------|------------------|-------------------|----------------------------------|-----|
| | | | | | Stage Surface (mm) | Travel Distance | Weight (kg) | Floating Unit (Reduction Ratio) | Guide | Positioning | Moment Rigidity (N-cm) | Resolution (Pulse) | Maximum Speed / sec (kHz) | Repeatability | Load Capacity (N) | Lost Motion | Back | Parallelism (µm) | Eccentricity (µm) | Unilateral Deviation Amount (µm) | |
| RMPG | | 40W | N (None) | 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 | |
| | | 60W | N (None) | | Ø59 | | | | | | | | | | | | | | | | 0.6 |

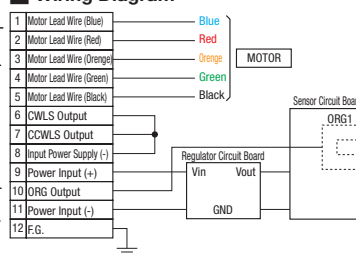
Electrical Specifications

| Stage Type | RMPG40W | RMPG60W |
|-----------------------------|--|---------|
| Motor | 5-Phase Stepping Motor 0.75A/Phase (Oriental Motor Co., Ltd.) | |
| Step Angle | 0.72° | |
| Connector | Receiving Side Connector: HR10A-10J-12P(73) (Hirose Electric Co., Ltd.) Limit Switch: HR10A-10P-12S(73) (Hirose Electric Co., Ltd.) | |
| Home Sensor | Provided | |
| Near Home Sensor | - | |
| Part Number | Photomicro Sensors 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 | When Detecting (Dark), Output Transistor is OFF. (Non-Conducting) | |

Connector Pin Configuration



Wiring Diagram



Days to Ship: 7 Days

| Order Quantity | Standard Service | | Non-Standard Service | |
|----------------|------------------|----------------|----------------------|----------------|
| | Regular Quantity | Large Quantity | Regular Quantity | Large Quantity |
| Quantity | 1-5 | 6~ | 1-5 | 6~ |
| Days to ship | Standard | To Be Quoted | Standard | To Be Quoted |

C-VALUE [Medium Precision] Motorized Rotary Stages

Large Volume Order

Price reduced 33% max. Compared to conventional

Similar Products Comparison Points | Travel Accuracy Positioning Accuracy: 0.1° or Less

Features: Suitable for positioning at wide angle or for continuous 360° rotation.

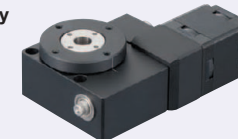
CAD Data Folder Name: 28_Stage

| | | | |
|------------------|-------------|---|-------|
| Ordering Example | Part Number | - | Cable |
| | RMTS40 | - | N |

Rotary

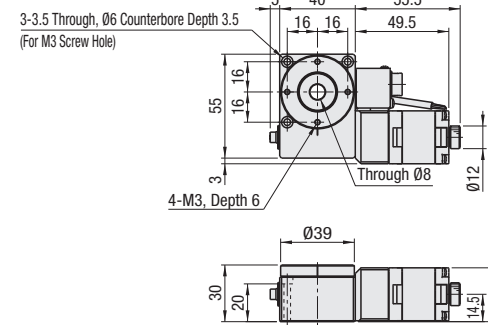


Cable is sold separately. Order separately by following the table below.
The products shown here are reference images. Hole positions and shapes may differ from actual products.

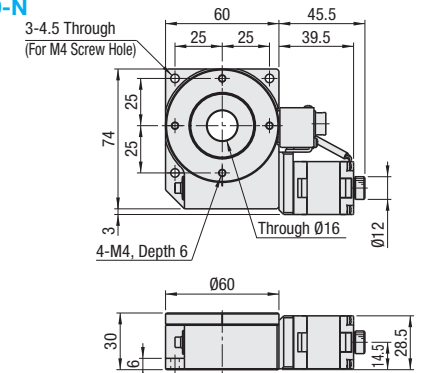


MMaterial Aluminum
SSurface Treatment Black Anodize
AAccessory RMTS40: SCB3-25 (3 pcs.)
 RMTS60: SCB4-12 (3 pcs.)

RMTS40-N



RMTS60-N



| Part Number | Type | No. | Cable | Mechanical Specification | | | | Accuracy Standards | | | | Sensor | | | | | |
|-------------|------|-----|----------|--------------------------|------------|---------------------------------|--------------------------|--------------------|-------------------|--------------------|------------------|---------------|----------------|--------------|--------------|----------------------------|----------|
| | | | | Stage Surface (mm) | Stroke (°) | Floating Unit (Reduction Ratio) | Travel Guide | Weight (kg) | Load Capacity (N) | Resolution (Pulse) | Max. Positioning | Repeatability | Lost Motion | Parallel | Limit Sensor | Home Position Sensor (ORG) | |
| RMTS | | 40 | N (None) | Ø39 | 360° | Turbine (Reduction Ratio 1/90) | Deep Groove Ball Bearing | 0.36 | 29.4 | 0.008° (Full) | 40°/sec | 0.1° or Less | ±0.05° or Less | 0.1° or Less | 50µm or Less | - | Provided |
| | | 60 | N (None) | | | | | | | | | | | | | | |

Days to Ship: 7 Days

| Order Quantity | Standard Service | | Non-Standard Service | |
|----------------|------------------|----------------|----------------------|----------------|
| | Regular Quantity | Large Quantity | Regular Quantity | Large Quantity |
| Quantity | 1-2 | 3-10 | 1-2 | 11~ |
| Days to ship | Standard | +5 Days | Standard | To Be Quoted |

Large Volume Order: +5 Days, 3-10

Recommended Homing Method

- Type3** Inspection in CCW direction is conducted, and inspection process of CCW side of ORG Signal is performed.
- Type4** Inspection in CW direction is conducted, and inspection process of CW side of ORG Signal is performed.
- Type9** After completion of inspection of Type 3, inspection process of CCW side of TIMING Signal is performed.
- Type10** After completion of inspection of Type 4, inspection process of CW side of TIMING Signal is conducted.

Timing Chart

| | Graduated Scale Home Position [°] |
|--------|--|
| RMTS40 | 0°(Home Position Edge: CCW side of light shield) 6°(Reverse Side Edge: CW side of light shield) |
| RMTS60 | 0°(Home Position Edge: CCW side of light shield) 4°(Reverse Side Edge: CW side of light shield) |

Homing Routine Above: When MSCLT102 controller is used, and Homing Routine Type 4 is executed.
The coordinates shown are design values. There may be approx. ±0.5° on the physical dimensions.

Cable for Motorized Stages

| Part Number | Size |
|-------------|--|
| MSCB2-R | Cable for Actuator 2m |
| MSCB2B-R | Cable for Actuator 2m, One Side Loose Wire |
| MSCB4-R | Cable for Actuator 4m |
| MSCB4B-R | Cable for Actuator 4m, One Side Loose Wire |

Electrical Specifications

| Motor | Type | 5-Phase Stepping Motor 0.75A/Phase (Sanyo Denki Co., Ltd.) |
|------------------|----------------------------|--|
| | Step Angle | 0.72° |
| Connector | Part Number | HR10A-10R-12PC (71) (Hirose Electric Co., Ltd.) |
| | Recipient Side Part Number | HR10A-10P-12S (73) (Hirose Electric Co., Ltd.) |
| Sensor | Part Number | Photomicro Sensors EE-SX4134 (OMRON Corp.) |
| | Power Supply Voltage | DC5~24V ±10% |
| | Current Consumption | Total 60mA 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 | When Detecting (Dark), Output Transistor is OFF. (Non-Conducting) |

Connector Pin Configuration

