MotoMini
Compact, Lightweight Design

Key Benefits
Smallest and lightest six-axis robot in the industry
7-kg weight robot is easy to carry, ship and install
Acceleration times are 20% faster over comparable small robots
Single robot-to-controller cable connection enables fast setup

Specifications
0.5 kg payload
350 mm horizontal reach
495 mm vertical reach
±0.02 mm repeatability

Applications
Assembly
Dispensing
Inspection
Kitting
Machine Tending
Material Handling
Packaging
Parts Feeding
Sorting
STEM Education

Controller
YRC1000micro

- Extremely lightweight, six-axis industrial robot offers the highest acceleration in a small-sized robot.
- 7-kg weight robot is easy to carry and ideal for tabletop-, floor-, ceiling-, tilt- or wall-mount installations, saving valuable floor space.
- Acceleration times are 20% faster over comparable small robots to reduce cycle time and increase production output.
- 0.5 kg payload supports a unique variety of tooling and sensors to fulfill diverse project needs.
- Compact footprint (191 mm x 124 mm) allows robot to be mounted close to workpieces and other machinery in existing lines or cells.
- Cables and air lines are routed through robot base to upper arm to increase cable life, enhance safety and reduce teaching time.
- Less than 65 dB (with maximum load and speed) offers extremely quiet operation.
- Single power and control cable reduces wiring time and increases work efficiency.
- New robot harness design for improved diagnostics and maintenance.
- Home position data can be saved without battery connection for easy maintenance.
- The MotoMini is IP30 rated.
- Powerful and precise ultra-compact YRC1000micro controller minimizes installation space and optimizes performance.
- The MotoMini is available with either the standard teach pendant or the Smart Pendant.

2019 Red Dot Design Award
2017 Nikkei Superior Products and Services Award
### SPECIFICATIONS

#### Axes

<table>
<thead>
<tr>
<th>Axes</th>
<th>Maximum motion range [°]</th>
<th>Maximum speed [°/sec.]</th>
<th>Allowable moment [N·m]</th>
<th>Allowable moment of inertia [kg·m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>±170</td>
<td>315</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>L</td>
<td>±120/–175</td>
<td>420</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>U</td>
<td>±140</td>
<td>600</td>
<td>0.42</td>
<td>0.00378</td>
</tr>
<tr>
<td>R</td>
<td>±360</td>
<td>600</td>
<td>0.37</td>
<td>0.00299</td>
</tr>
<tr>
<td>B</td>
<td>±210/-30</td>
<td>600</td>
<td>0.42</td>
<td>0.00378</td>
</tr>
<tr>
<td>T</td>
<td>±360</td>
<td>600</td>
<td>0.7</td>
<td>0.00499</td>
</tr>
</tbody>
</table>

Mounting Options: Floor, Wall, Tilt, Ceiling

#### Item

<table>
<thead>
<tr>
<th>Item</th>
<th>MotoMini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlled axes</td>
<td>6</td>
</tr>
<tr>
<td>Maximum payload [kg]</td>
<td>0.5</td>
</tr>
<tr>
<td>Repeatability [mm]</td>
<td>±0.02</td>
</tr>
<tr>
<td>Horizontal reach [mm]</td>
<td>350</td>
</tr>
<tr>
<td>Vertical reach [mm]</td>
<td>495</td>
</tr>
<tr>
<td>Weight [kg]</td>
<td>7</td>
</tr>
<tr>
<td>Internal user I/O cable</td>
<td>9 conductors w/ ground</td>
</tr>
<tr>
<td>Internal user air line</td>
<td>2 x M5 connection</td>
</tr>
<tr>
<td>Power requirements</td>
<td>1- or 3-phase; 200/230 VAC</td>
</tr>
<tr>
<td>Power rating [kW]</td>
<td>0.5</td>
</tr>
</tbody>
</table>

### Options

Contact Yaskawa Motoman for options available with the MotoMini

### AXES LEGEND

- S-Axis: Swivel Base
- L-Axis: Lower Arm
- U-Axis: Upper Arm
- R-Axis: Arm Roll
- B-Axis: Wrist Bend
- T-Axis: Tool Flange

### All dimensions are metric (mm) and for reference only. Request detailed drawings for all design/engineering requirements.