Features

The M-710iC is a medium payload robot with a wrist payload of 20, 50 or 70kg.

• Five models are available which can be used in a wide variety of applications.

- **FANUC Robot M-710iC/50, /70**
  Wide motion envelope and enough wrist load capacity to handle a large panel.
  
  M-710iC/50 : Payload capacity 50kg
  M-710iC/70 : Payload capacity 70kg

- **FANUC Robot M-710iC/50S**
  This model has a compact body that is suitable for narrow work environments. (Payload capacity 50kg)

- **FANUC Robot M-710iC/20L**
  Long reach and high motion performance make it suitable for various applications, such as material handling, sealing and arc welding. (Payload capacity 20kg)

- **FANUC Robot M-710iC/50H**
  This five-axes model is designed for the high speed transferring of parts. The ceiling mount option is ideal for compact handling systems. (Payload capacity 50kg)

• The full cover provides IP67-equivalent resistance to environmental conditions (dust and liquid). The M-710iC is reliable for various applications, such as load/unload for machined parts, de-burring and die cast loading.

Application system

- **Bin picking of cylindrical parts**
- **Car body sealing**
### Specifications

#### M-710iC/50, /70

<table>
<thead>
<tr>
<th>Item</th>
<th>M-710iC/50</th>
<th>M-710iC/70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Articulated Type</td>
<td>Articulated Type</td>
</tr>
<tr>
<td>Controlled axes</td>
<td>6 axes (J1, J2, J3, J4, J5, J6)</td>
<td>6 axes (J1, J2, J3, J4, J5, J6)</td>
</tr>
</tbody>
</table>

#### Drive method
- Electric servo drive by AC servo motor

#### Installation Environment
- Ambient temperature: 0~45°C
- Ambient humidity: Normally 75%RH or less (No dew nor frost allowed)
- Short term 95%RH or less (within one month)
- Vibration: 0.5G or less

#### Installation Environment
- Controller: Without controller

#### Installation Environment
- Controller: Without controller

#### Total Capacity
- Mass (Note 1): 50kg

#### Operating Space (Note 1)
- Operating space: 360° (175°/s)
- Operating space: 360° (175°/s)

#### Motion Range (Maximum speed)
- Motion range (Maximum speed) (Note 2):
  - J1 axis rotation: 360° (175°/s)
  - J2 axis rotation: 225° (175°/s)
  - J3 axis rotation: 225° (175°/s)
  - J4 axis rotation: 225° (175°/s)
  - J5 axis rotation: 225° (175°/s)
  - J6 axis rotation: 225° (175°/s)

#### Maximum Load Capacity at J3 Arm
- Maximum load capacity at J3 arm (Note 3):
  - 127 N.m / 13 kgf·m

#### Max. Load Capacity at Wrist
- Max. load capacity at wrist: 50kg

#### Max. Load Capacity at J3 Arm (Note 3)
- Max. load capacity at J3 arm (Note 3): 50kg

#### Allowable Load Moment at Wrist
- Allowable load moment at wrist:
  - J5 axis: 11 kg.m (112 kgf cm)
  - J6 axis: 11 kg.m (112 kgf cm)

#### Drive Method
- Electric servo driven by AC servo motor

#### Repeatability
- ±0.07 mm

#### Dimensions (Note 4)
- Max. load capacity at J3 arm (Note 3): 50kg

#### Note 1: In case of the angle mounting, the J1 and J2 axis motion range are restricted.

#### Note 2: In case of short distance motion, the axis speed doesn't reach maximum one.

#### Note 3: Max. load capacity at J3 casting is limited by payload at wrist.

#### Note 4: Without controller.

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### Specifications

#### M-710iC/50S

<table>
<thead>
<tr>
<th>Item</th>
<th>M-710iC/50S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Articulated Type</td>
</tr>
<tr>
<td>Controlled axes</td>
<td>6 axes (J1, J2, J3, J4, J5, J6)</td>
</tr>
<tr>
<td>Reach</td>
<td>3.0m</td>
</tr>
</tbody>
</table>

#### Installation Environment
- Controller: Without controller

#### Total Capacity
- Mass (Note 1): 40kg

#### Operating Space (Note 1)
- Operating space: 360° (175°/s)
- Operating space: 360° (175°/s)

#### Motion Range (Maximum speed)
- Motion range (Maximum speed) (Note 2):
  - J1 axis rotation: 360° (175°/s)
  - J2 axis rotation: 225° (175°/s)
  - J3 axis rotation: 225° (175°/s)
  - J4 axis rotation: 225° (175°/s)
  - J5 axis rotation: 225° (175°/s)
  - J6 axis rotation: 225° (175°/s)

#### Maximum Load Capacity at J3 Arm
- Maximum load capacity at J3 arm (Note 3):
  - 127 N.m / 13 kgf·m

#### Max. Load Capacity at Wrist
- Max. load capacity at wrist: 50kg

#### Max. Load Capacity at J3 Arm (Note 3)
- Max. load capacity at J3 arm (Note 3): 50kg

#### Allowable Load Moment at Wrist
- Allowable load moment at wrist:
  - J5 axis: 11 kg.m (112 kgf cm)
  - J6 axis: 11 kg.m (112 kgf cm)

#### Drive Method
- Electric servo driven by AC servo motor

#### Repeatability
- ±0.07 mm

#### Dimensions (Note 4)
- Max. load capacity at J3 arm (Note 3): 50kg

#### Note 1: In case of the angle mounting, the J1 and J2 axis motion range are restricted.

#### Note 2: In case of short distance motion, the axis speed doesn't reach maximum one.

#### Note 3: Max. load capacity at J3 casting is limited by payload at wrist.

#### Note 4: Without controller.

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### Specifications

#### M-710iC/20L

<table>
<thead>
<tr>
<th>Item</th>
<th>M-710iC/20L</th>
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</thead>
<tbody>
<tr>
<td>Type</td>
<td>Articulated Type</td>
</tr>
<tr>
<td>Controlled axes</td>
<td>6 axes (J1, J2, J3, J4, J5, J6)</td>
</tr>
<tr>
<td>Reach</td>
<td>1.1m</td>
</tr>
</tbody>
</table>

#### Installation Environment
- Controller: Without controller

#### Total Capacity
- Mass (Note 1): 40kg

#### Operating Space (Note 1)
- Operating space: 360° (175°/s)
- Operating space: 360° (175°/s)

#### Motion Range (Maximum speed)
- Motion range (Maximum speed) (Note 2):
  - J1 axis rotation: 360° (175°/s)
  - J2 axis rotation: 225° (175°/s)
  - J3 axis rotation: 225° (175°/s)
  - J4 axis rotation: 225° (175°/s)
  - J5 axis rotation: 225° (175°/s)
  - J6 axis rotation: 225° (175°/s)

#### Maximum Load Capacity at J3 Arm
- Maximum load capacity at J3 arm (Note 3):
  - 206 N.m / 21 kgf·m

#### Max. Load Capacity at Wrist
- Max. load capacity at wrist: 50kg

#### Max. Load Capacity at J3 Arm (Note 3)
- Max. load capacity at J3 arm (Note 3): 50kg

#### Allowable Load Moment at Wrist
- Allowable load moment at wrist:
  - J5 axis: 11 kg.m (112 kgf cm)
  - J6 axis: 11 kg.m (112 kgf cm)

#### Drive Method
- Electric servo driven by AC servo motor

#### Repeatability
- ±0.15 mm

#### Dimensions (Note 4)
- Max. load capacity at J3 arm (Note 3): 50kg

#### Note 1: In case of the angle mounting, the J1 and J2 axis motion range are restricted.

#### Note 2: In case of short distance motion, the axis speed doesn't reach maximum one.

#### Note 3: Max. load capacity at J3 casting is limited by payload at wrist.

#### Note 4: Without controller.
### Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Articulated Type</td>
</tr>
<tr>
<td><strong>Controlled axes</strong></td>
<td>5 axes (J1, J2, J3, J4, J5)</td>
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<tr>
<td><strong>Reach</strong></td>
<td>2.00m</td>
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<tr>
<td><strong>Installation</strong></td>
<td>Floor, Upside-down</td>
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<tr>
<td><strong>Motion range (Maximum speed)</strong></td>
<td>(Note 1)</td>
</tr>
<tr>
<td>J1 axis rotation</td>
<td>360° (175°/s)</td>
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<tr>
<td></td>
<td>6.28 rad (3.05 rad/s)</td>
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<tr>
<td>J2 axis rotation</td>
<td>225° (175°/s)</td>
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<td>3.93 rad (3.05 rad/s)</td>
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<td>J3 axis rotation</td>
<td>440° (175°/s)</td>
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<td>7.68 rad (3.05 rad/s)</td>
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<td>J4 axis wrist swing</td>
<td>234° (175°/s)</td>
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<td>4.08 rad (3.05 rad/s)</td>
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<tr>
<td>J5 axis wrist rotation</td>
<td>720° (720°/s)</td>
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<td>12.57 rad (12.57 rad/s)</td>
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<tr>
<td><strong>Max. load capacity at wrist</strong></td>
<td>50kg</td>
</tr>
<tr>
<td><strong>Max. load capacity at J3 arm (Note 2)</strong></td>
<td>15kg</td>
</tr>
<tr>
<td><strong>Allowable load moment at wrist J4 axis</strong></td>
<td>150 N·m 15.3 kgf·m</td>
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<tr>
<td><strong>Allowable load inertia at wrist J4 axis</strong></td>
<td>68 N·m 6.9 kgf·m</td>
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<tr>
<td><strong>Allowable load inertia at wrist J5 axis</strong></td>
<td>6.3 kg·m² 64.3 kgf·cm·s²</td>
</tr>
<tr>
<td></td>
<td>2.5 kg·m² 25.5 kgf·cm·s²</td>
</tr>
<tr>
<td><strong>Drive method</strong></td>
<td>Electric servo drive by AC servo motor</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>± 0.15 mm</td>
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<tr>
<td><strong>Mass (Note 3)</strong></td>
<td>540kg</td>
</tr>
</tbody>
</table>

Note 1) In case of short distance motion, the axis speed doesn't reach maximum one.

Note 2) Max. load capacity at J3 casting is limited by payload at wrist.

Note 3) Without controller.