F Series Robots

SCARA and Vertically Articulated

F-Series Robots

The F Series offers class leading speed, precision and ease of integration. All units are built to comply with ANSI/RIA/ISO 10218-1-2007 safety standards and are available in CE models for global acceptance. A long list of standard features makes this series a perfect choice for applications across many industries.

SCARA type robots are available in ISO3 clean room and mist-proof versions. Payloads range from 3Kg to 20Kg with 350mm to 1000mm reaches.

Vertically Articulated type robots are available in ISO3 clean room and mist-proof versions. Payloads range from 2KG to 20KG with 504mm to 1503mm reaches.

All Mitsubishi robots come with a full two year parts and labor warranty.
Key Standard Features

- 64 Bit RISC Processing - faster, more precise moves and execution
- Singularity Avoidance - ease of programming in areas of singularity
- Built-in Collision Detection - safety and cost savings
- Compliance Control - user-defined path forgiveness
- Multi-Task Programming - allows tasks to be easily separated and programmed
- Single programming software package for all robot types - efficient program development
- Plug and play interface to Cognex cameras
- Additional axis interface - plug and play SSCNETIII connection to MR-J4 servos
- Serial encoder interface - 2 channels for conveyor tracking
- Ethernet communication port - easy integration to vision or other accessories
- USB and RS232 - quick connect to PC

Vertically Articulated (RV)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RV-2F</th>
<th>RV-4F</th>
<th>RV-4FL</th>
<th>RV-7F</th>
<th>RV-7FL</th>
<th>RV-7FLL</th>
<th>RV-13F</th>
<th>RV-13FL</th>
<th>RV20F</th>
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<tbody>
<tr>
<td>Maximum Load Capacity (kg)</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>7</td>
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<td>13</td>
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<td>20</td>
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<tr>
<td>Maximum Reach Radius (mm)</td>
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<td>515</td>
<td>649</td>
<td>713</td>
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<td>1,503</td>
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Environmental Specifications

- Standard: IP30, IP40, IP40, IP40, IP40, IP40, IP40, IP40, IP40
- Clean: –, ISO class3, ISO class3, ISO class3, ISO class3, ISO class3, ISO class3, ISO class3, ISO class3

Controller: CR750-D/Q, CR750-MB IP54 controller protection box available

Horizontally Articulated SCARA (RH)

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Environmental Specifications

- Standard: IP20, IP20, IP20, IP20, IP20, IP20, IP20, IP20, IP20
- Oil Mist: –, –, –, –, –, –, –, –, –
- Clean: –, –, –, –, –, –, –, –, –


Note:
1. 7_ _ in controller type names differ according to the robot arm.