

F-200iB

Basic Description

The F-200iB is a six degrees of freedom servo-driven parallel link robot designed for use in a variety of manufacturing and automotive assembly processes. The F-200iB is engineered for applications requiring extreme rigidity and exceptional repeatability in a compact, powerful package.

F-200iB, the Solution for:

- Sub-compact robot welding
- Pedestal welding
- Part loading/positioning
- Nut running
- Vehicle lift and locate
- Flexible/convertible fixturing
- Material Removal
- Dispense

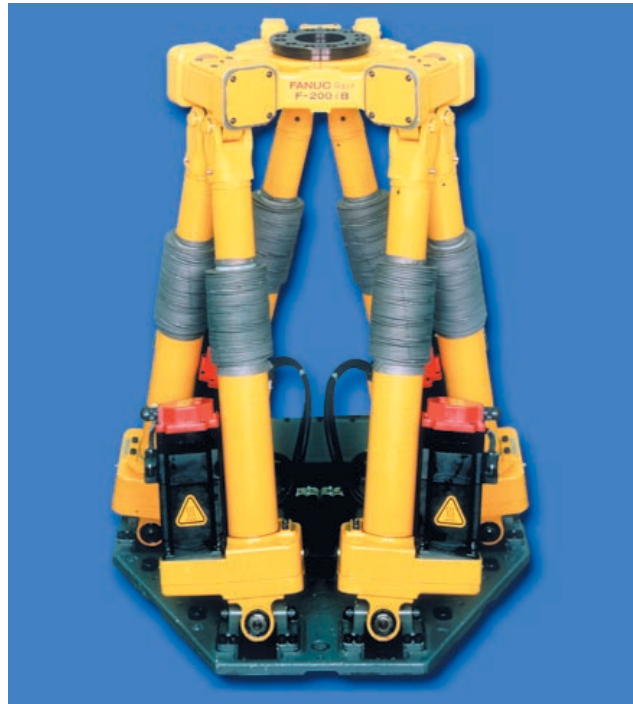
Features

Mechanical:

- Six degrees of freedom
- Simple, robust, low-maintenance design
- Electric AC servo motors
- Precision gear drives
- Fail-safe brake on each leg
- Components protected from weld flash, grease, chemicals and water
- Spare part requirements minimized by commonality of design; six identical actuators
- ISO faceplate
- 31,000 hour life at 100% duty cycle

Control:

- R-J3iB Controller
- Common controller components with other FANUC robot controllers
- Easy connection to built-in digital I/O



Software:

- F-200iB is supported on the following "Tool" packages
 - DispenseTool
 - HandlingTool
 - Sealing Tool

Benefits

- Provides flexibility and convertibility – the ability to reprogram the F-200iB facilitates rapid and cost-effective model changeovers.
- Reduces capital expense F-200iB process solutions take less time and money to process and design. They also reduce tooling and build costs.
- Lowers operating expense – using the F-200iB reduces tooling complexity, resulting in less maintenance and down time.
- Optimizes use of floorspace – the sub-compact F-200iB can fit in spaces too cramped for serial link robots.
- Makes it feasible to perform more welds per station, thus reducing the number of stations

per system.

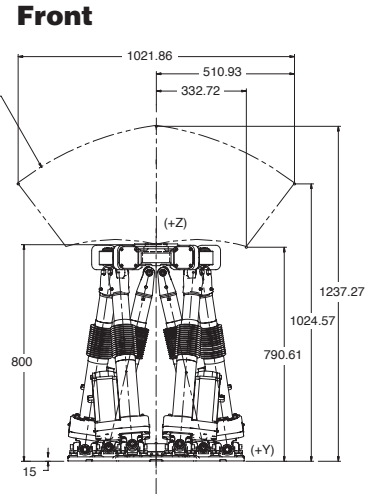
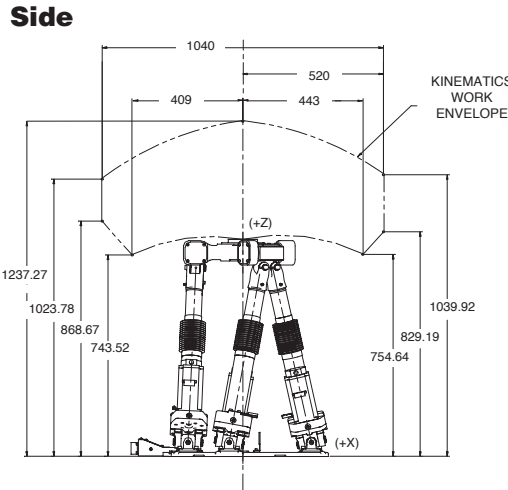
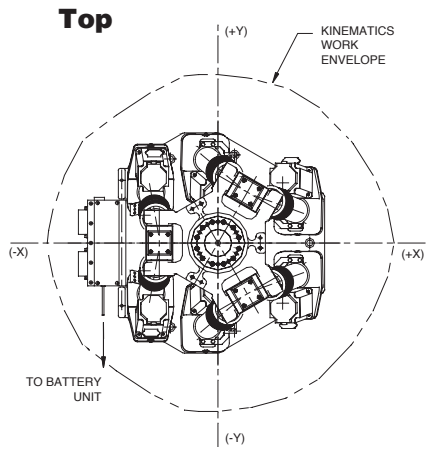
- New process possibilities – the F-200iB opens the door to new process solutions not available with current tools.
- Provides additional options for line balancing.
- Easy and quick to set up, tune-in and debug – F-200iB uses the same software as other FANUC robots.
- No special electrical or mechanical training needed – basics are the same as any other robot.
- Standardized system requires less retraining at changeover.
- Compact size adds application versatility.

Options

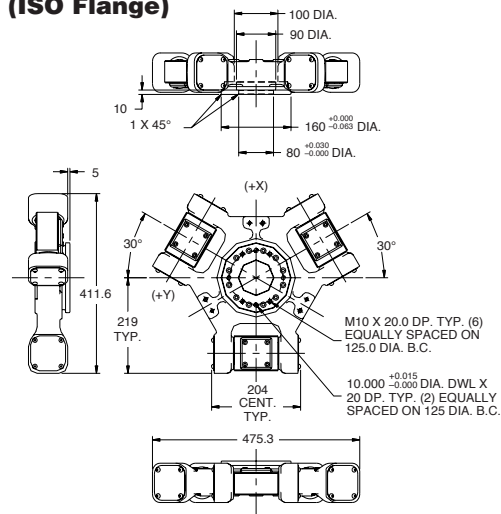
- Auxiliary Axis Control
- ControlNet
- DeviceNet
- Insulated Faceplate
- INTERBUS-S
- Line Tracking
- PROFIBUS
- Vision

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F-200iB Dimensions



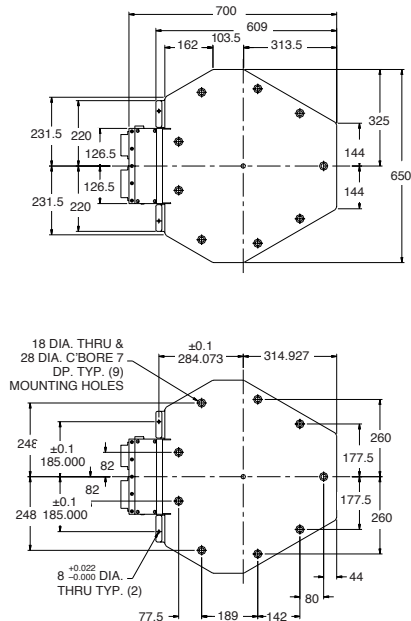
Faceplate (ISO Flange)



F-200iB Specifications

Items	
Degrees of freedom	Six
Payload (kg)	100 (Higher payloads permissible with FANUC approval)
Allowable load moment at faceplate (N·m)	588
Allowable load inertia at faceplate (kg·m ²)	36
Motion range (degrees)	As noted (pitch, yaw and roll vary depending upon the position of the faceplate within the envelope)
Motion speed (mm/sec)	
Vertical (Z)	300
Horizontal (X & Y)	1500
Repeatability (mm)	± 0.1
Mounting method	Floor and inverted. Wall mount permissible with FANUC approval.
Installation environment	
Ambient temperature °C	0 to 45
Humidity	Normally: 75% or less Short term (within a month): 95% or less. No condensation
Vibration (m/s ²)	0.5G or less
Mechanical brakes	All actuator legs
Mechanical weight (kg)	190
Controller	R-J3iB
Level of protection:	
Mechanical	IP54
Electrical	IP54
Controller	IP54

Baseplate



Note: Dimensions are shown in millimeters.

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Perpetual Motion

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