

# R-2000*i*A/EW™ Series

**FANUC**  
Robotics

## Basic Description

The FANUC Robotics' R-2000*i*A 165 and 200 EW robots are designed to provide the user with an engineered solution for body shop dress-out. The R-2000*i*A/EW robots allow total utilization of all axes allowable rotation since the dress-out is incorporated into the arm/wrist assembly. This product provides the customer with a process solution without restrictions for body shop applications.

## R-2000*i*A/EW, the Solution for:

- Spot welding with:
  - Pneumatic Trans-guns
  - Servo Trans-guns
- Heavy duty spot welding
- Combination welding/handling
- Material handling
- Servo grippers
- Application areas with high amounts of downtime due to dress-out failures

## Benefits

- Wrist design includes dress-out.
- Unrestricted wrist rotations.
- Simulation studies accurately represent the total space occupied by the robot and dress-out.
- Total utilization of the wrist axes allowable work space.
- Factory warranty for the robot including dress-out items.
- Faster start-ups with reduced programming time.
- No dress-out adjustments due to programming changes.
- Reduced maintenance costs.



## Features

### Mechanical:

- Proven major axis drive assemblies found in standard R-2000*i*A models
- 6 axes of motion
- 165 kg and 200 kg models available
- Engineered dress-out incorporated in the robot mechanical unit
- RV reducers for all axes
- Process/application cables routed to a wrist manifold
- No motors at wrist

### Control:

- Quick change amplifier <5 min.
- Fast boot time <45 sec.

### Internal Dress-out:

- (1) 1/2" air supply line
- (2) 1/2" water lines (supply/return)
- (3) Weld power cables #1 AWG

- Process cables including:
  - servo motor cables (single or dual)
  - process cables
  - distributed network I/O cables
- Standard Ethernet port
- PCMCIA Software distribution
- Easy connections to a variety of I/O, including a number of distributed I/O networks

### Software:

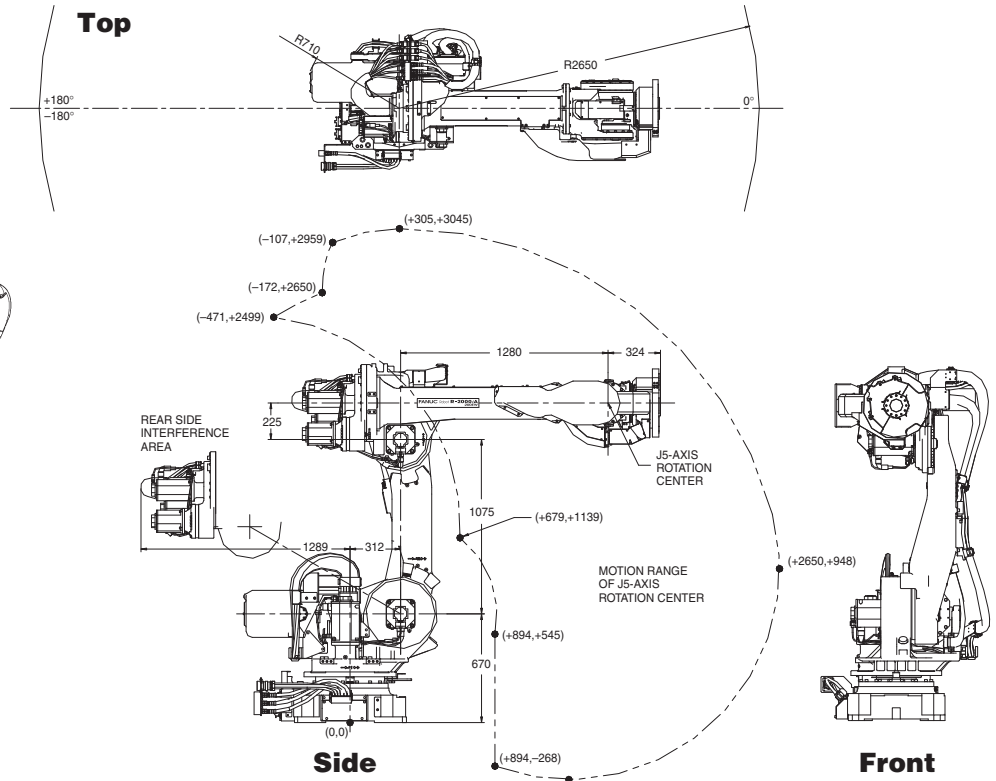
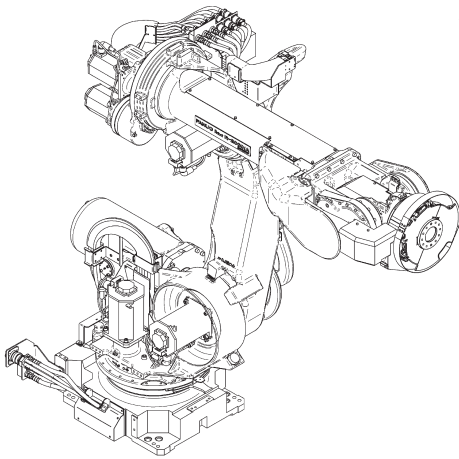
- Process specific software packages for various applications
- Web-based software tools for remote connectivity, diagnostics and production monitoring

### Options

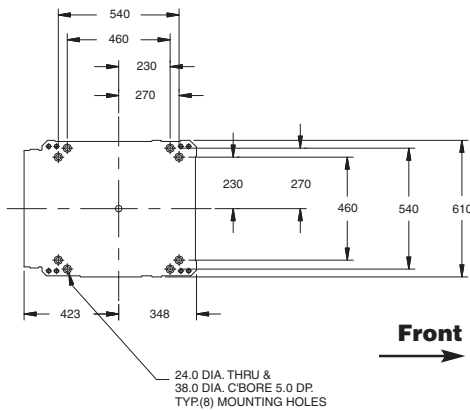
- *i*Pendant availability
- Electrically insulated faceplate
- Precision baseplate for quick robot exchanges
- Integrated auxiliary axes packages
- Extra length connection cables
- Remote operator panel

# R-2000iA/EW Dimensions

## Isometric



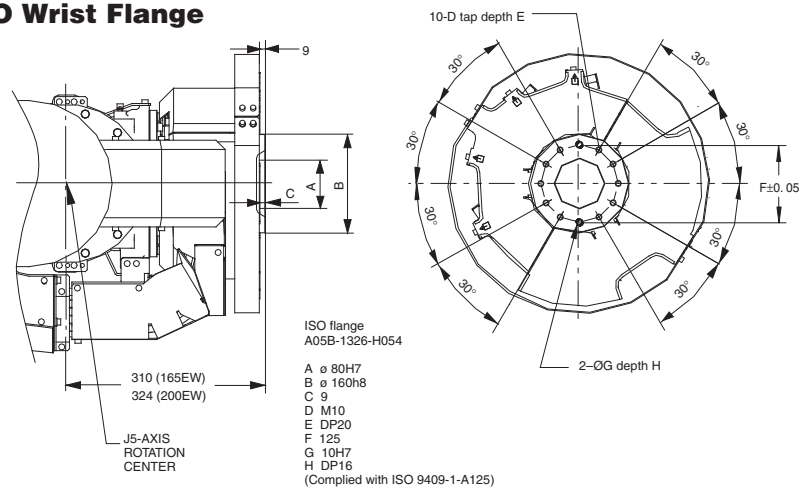
## Footprint (All models)



## R-2000iA/EW Specifications

Items	/165EW	/200EW
<b>Payload (kg)</b>	165	200
<b>Reach (mm)</b>	2650	2650
<b>Repeatability (mm)</b>	±0.03	±0.03
<b>Interference radius (mm)</b>	583	583
<b>Motion range (degrees)</b>	J1	360
	J2	135
	J3	208
	J4	720
	J5	250
	J6	440
<b>Motion speed (degrees/s)</b>	J1	105
	J2	105
	J3	105
	J4	130
	J5	130
	J6	210
<b>Allowable wrist load moment (Nm)</b>	J4	1075
	J5	1075
	J6	461
<b>Wrist inertia (kg*cm*s<sup>2</sup>)</b>	J4	998
	J5	998
	J6	410
<b>Mechanical brakes</b>	All axes	All axes
<b>Mechanical weight (kg)</b>	1430	1510
<b>Mounting method</b>	Upright	

## ISO Wrist Flange



**Note:** Dimensions are shown in millimeters. Detailed CAD data are available upon request.



**FANUC Robotics America, Inc.**  
**3900 W. Hamlin Road**  
**Rochester Hills, MI 48309-3253**  
**(248) 377-7000**  
**Fax (248) 377-7362**

Charlotte, NC  
 (704) 596-5121

Toronto, Canada  
 (905) 812-2300

Chicago, IL  
 (847) 898-6000

Montréal, Canada  
 (450) 492-9001

**For sales or technical information, call:**  
**1-800-47-ROBOT**

Cincinnati, OH  
 (513) 754-2400

Aguascalientes, Mexico  
 52 (449) 922-8000

Los Angeles, CA  
 (949) 595-2700

Sao Paulo, Brazil  
 (55) (11) 3619-0599

**marketing@fanucrobotics.com**  
**www.fanucrobotics.com**

Toledo, OH  
 (419) 866-0788