

M-6iB™ Series

Basic Description

The M-6iB series is a six-axis, modular construction, electric servo-driven family of robots designed for a variety of industrial applications. Based on its simple and reliable construction, the M-6iB series provides sophisticated motion control and consistent performance with high productivity. The SYSTEM R-J3iB Controller and easy-to-use HandlingTool application software provide accurate and consistent path performance.

The M-6iB series, the latest generation material handling robot, has a compact design with superior motion range and speed. The compact yet flexible design simplifies installation, maximizes reach capability within confined areas and enables high-density installation of robots and peripherals.

M-6iB Series, the Solution for:

- Material handling
- Machine load/unload
- Packing
- Material removal
- Dispensing
- Assembly

Benefits

- Features highest motion speeds in its class for maximum performance and productivity.
- Best in its class reach versus stroke ratio.
- Standard, fail-safe brakes on all six axes increase safety, functionality and control.
- Compact design of the servo motors minimizes interference and simplifies installation of the robot system.
- Extremely fast wrist axes reduce air move times, thus improving throughput.



Features

- *i*Pendant, a color, Internet-ready teach pendant for even easier programming and custom cell user interface design.
- Large work envelope with 1,373 mm (M-6iB) or 951 mm (M-6iB/6S) maximum reach.
- Compact wrist enables the robot to enter into small openings in the workspace.
- Repeatability of +/- 0.08 mm at full speed and full payload within entire work envelope.
- Dedicated pneumatic and electrical (with eight digital inputs and eight digital outputs) connections on J3 axis to simplify user's end-of-arm tooling design, integration and communication.
- Material handling style teach pendant with large LCD screen and ergonomic design offers intuitive control over the process.
- 6 kg payload on faceplate with an additional 12 kg payload on J3 axis.

- Multiple mounting positions include upright, inverted, wall or angle mount with no changes to the mechanical unit.
- Sealed bearings and brushless AC motor drives provide protection and improve reliability.
- RV reducer drivetrain with integral bearings provides rigidity and performance in a compact package.

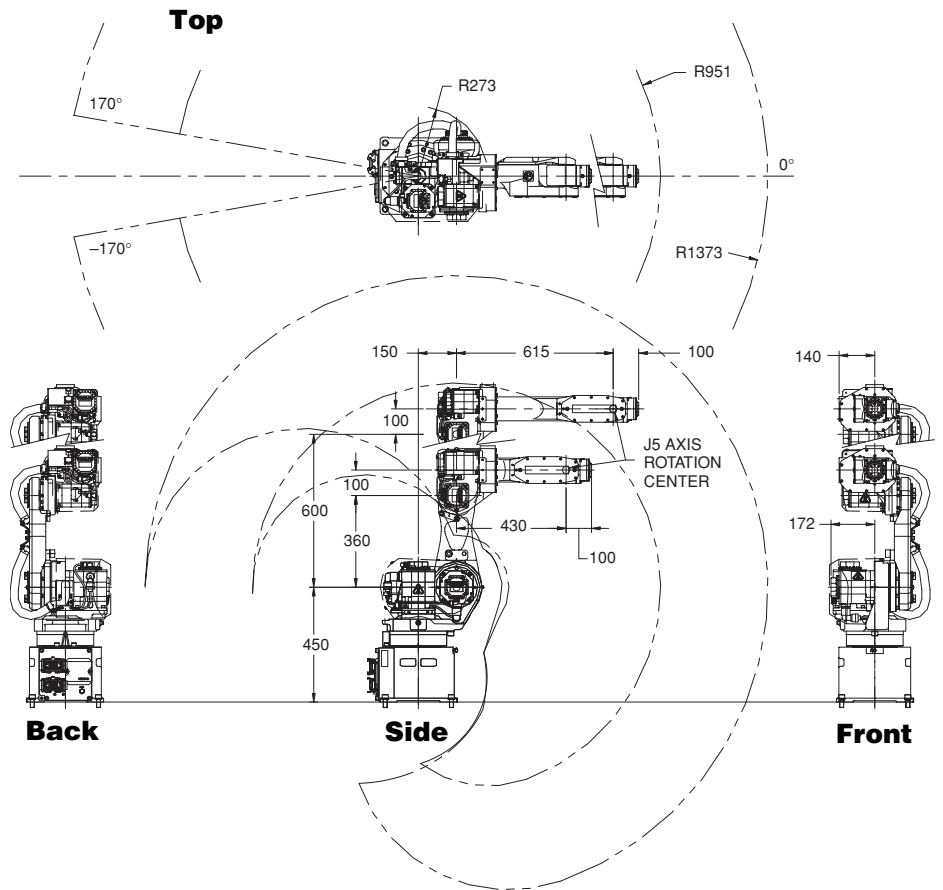
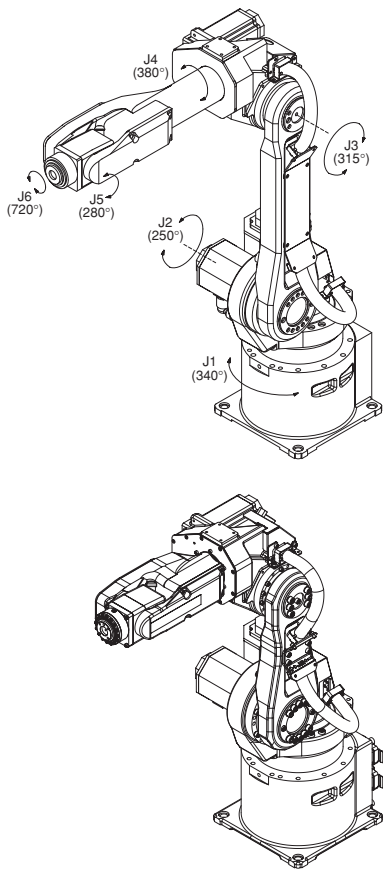
Options

- *i*Pendant is also available with touch screen support.
- J1 stroke modification kit.
- J1 axis 360-degree motion range.
- Various robot connection cable lengths for flexible cabinet placement and optional track rated cables.
- Auxiliary axis packages for integration of peripheral servo-controlled devices.
- Severe dust and liquid protection package for harsh environments.
- Monochrome pendant available.

FANUC
Robotics

M-6iB Series Dimensions

Isometric



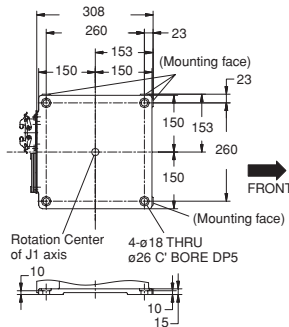
M-6iB Series Specifications

Items	M-6iB	M-6iB/6S
Axes	6	6
Payload (kg)	6	6
Reach (mm)	1373	951
Repeatability (mm)	±0.08	±0.08
Interference radius (mm)	273	273
Motion range (degrees)		
J1	340	340
J2	250	250
J3	315	310
J4	380	380
J5	280	280
J6	720	720
Motion speed (degrees/sec.)		
J1	150	200
J2	160	200
J3	170	260
J4	400	400
J5	400	400
J6	500	720
Wrist moment (kgfcm)		
J4	160	160
J5	100	100
J6	60	60
Wrist inertia (kgfcm²)		
J4	6.4	6.4
J5	2.2	2.2
J6	0.61	0.61
Mechanical brakes	All axes	
Mechanical weight (kg)	138	135
Mounting method	Upright, inverted, wall and angle mount ⁽¹⁾	
Installation environment		
Temperature °C	0 to 45	
Humidity	Normally: 75% or less Short term (within a month): 95% or less No condensation	
Vibration (m/s ²)	4.9 or less	
Payload at axis 3 (kg)	12	

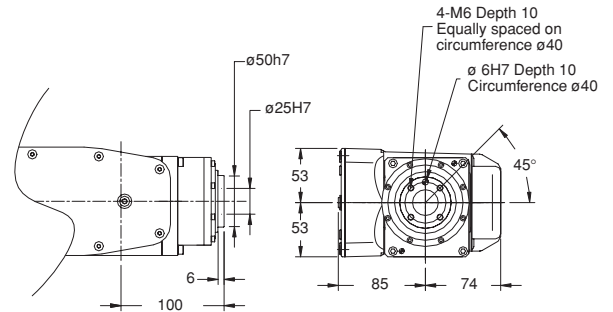
Notes:

(1) Motion range is de-rated for wall and angle mount.

Footprint



Wrist



Note: Dimensions shown in millimeters.



FANUC Robotics America, Inc.
 3900 W. Hamlin Road
 Rochester Hills, MI 48309-3253
 (248) 377-7000
 Fax (248) 276-4133

Charlotte, NC
 (704) 596-5121

Chicago, IL
 (847) 898-6000

Toronto, Canada
 (905) 812-2300

Montréal, Canada
 (450) 492-9001

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

Cincinnati, OH
 (513) 754-2400

Los Angeles, CA
 (949) 595-2700

Aguascalientes, Mexico
 52 (449) 910-8000

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

marketing@fanucrobotics.com
www.fanucrobotics.com

Toledo, OH
 (419) 866-0788