

S-500iB™

Basic Description

The S-500iB is a six-axis, modular construction, electric servo-driven robot designed for a variety of industrial processes. The robot is engineered for precision, high-speed operation, user-friendly setup and maximum reliability, supported by our extensive service and parts network.

S-500iB, the Solution for:

- Dispensing
- Material handling
- Material removal
- Machine load/unload
- Arc welding
- Waterjet cutting
- Parts transfer

Benefits

- Large work envelope and payload allow robot operation in a wide range of manufacturing processes.
- Can operate in environments ranging from harsh to traditional factory floor.
- No robot modifications for upright, inverted and wall mounting.
- Absolute serial encoder positioning.
- Slender arm design improves robot repeatability.

Features

- Six axes of motion.
- 15 kg load capacity.
- ± 0.15 mm repeatability.
- Axes speed up to 600 degrees per second.
- *i*Pendant, a color, Internet-ready teach pendant for even easier programming and custom cell user interface design.



Reliability Features

- Grease fittings on all lubrication points for quick and easy maintenance.
- RV speed reducers provide smooth motion at all speeds.
- Sealed bearings and drives provide protection and improve reliability.
- Interfaces with most types of servo-driven or indexing positioners.
- Hollow joint construction encloses all cable routing to eliminate snagging.
- Brushless AC servo motors minimize motor maintenance.
- Maximum speed and torque drive motors.

Options

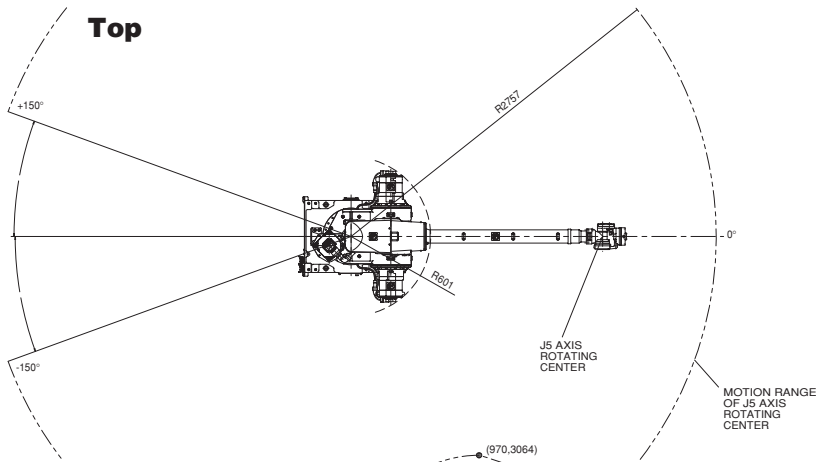
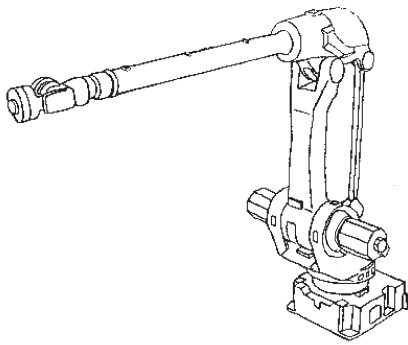
- *i*Pendant is also available with touch screen support.
- Auxiliary axis packages for integration into part positioners.
- Various robot connection cable lengths for flexible cabinet placement and optional track rated cables.
- Monochrome pendant available.

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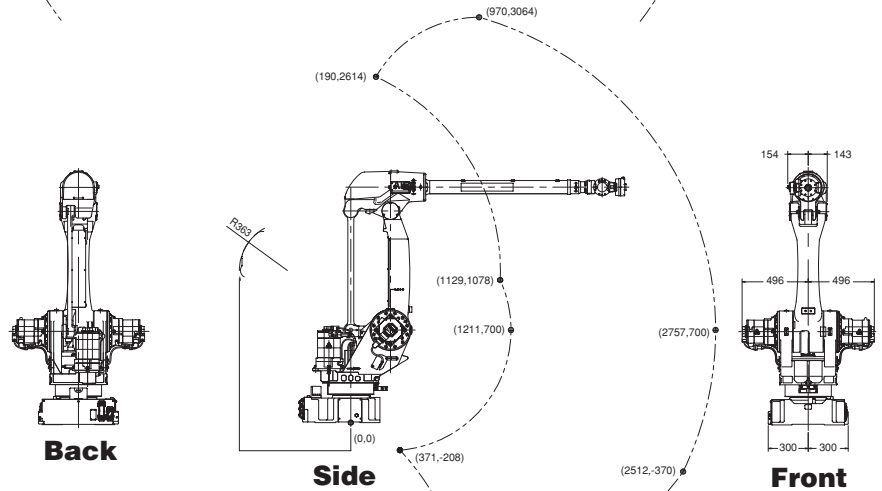
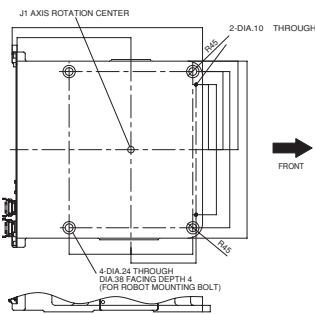
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S-500iB Dimensions

Isometric



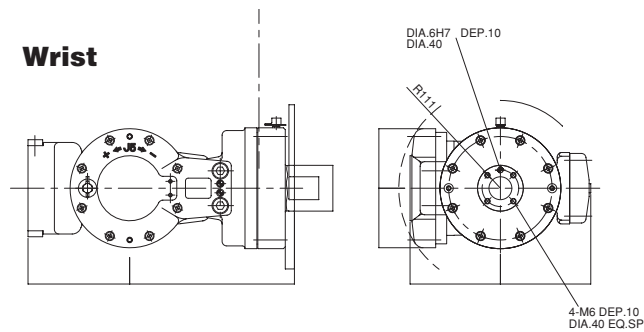
Footprint



S-500iB Specifications

Items		
Configuration	articulated	
Axes	6	
Payload - wrist (kg)	15	
Reach (mm)	2757	
Static Repeatability (mm)	±0.15	
Motion range (degrees)	J1	320
	J2	160
	J3	178
	J4	480
	J5	240
	J6	900
Motion speed (degrees/s)	J1	170
	J2	170
	J3	200
	J4	335
	J5	360
	J6	600
Wrist moment (kgf-m)	J4	3.3
	J5	3.3
	J6	2
Wrist inertia (kgf-cm-s ²)	J4	7.4
	J5	7.4
	J6	2.7
Sealing speed (mm/s)	2000	
Integrated Process Equipment	Available	
Drive Type	AC servo	
Position Encoders	Absolute	
Mechanical brakes	All axis	
Mechanical weight (kg)	610	
Mounting method	Floor, upside-down (wall & angle mount)	
Installation environment		
Ambient temperature °C	0 to 45	
Humidity	Normally: 75% or less Short term (within a month): 95% or less No condensation	
Noise	70 db or less	

Wrist



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



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