

S-500™

Basic Description

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

S-500, the Solution for:

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

- 6 axes of motion
- 15kg (33 lbs) load capacity



- $\pm 0.25\text{mm}$ ($\pm 0.010''$) repeatability
- Axes speed up to 320° per second

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

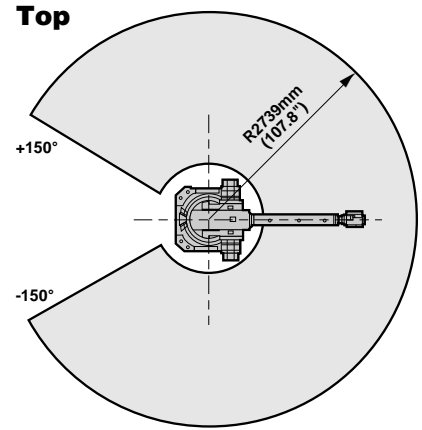
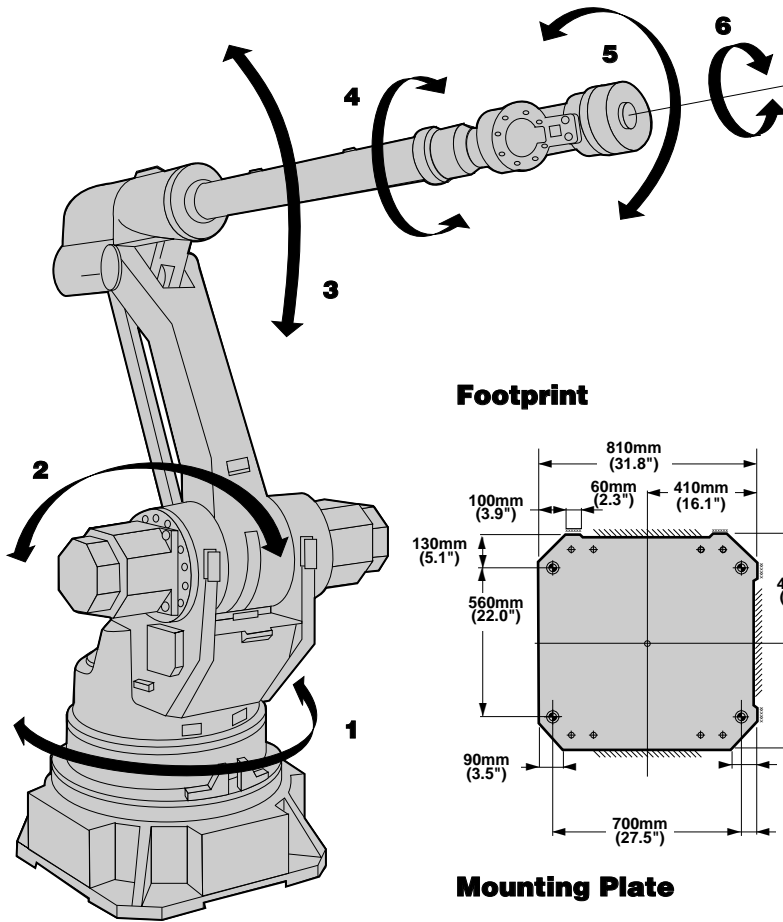
- Brushless AC servo motors minimize motor maintenance
- Maximum speed and torque drive motors

Options

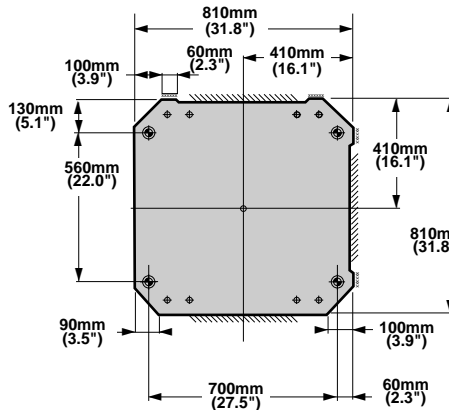
- Axis 6 speed up to 600° per second
- 3.5" floppy disk drive for off-line storage
- Program/data printer
- RS-232-C communication port
- Integrated auxiliary axes

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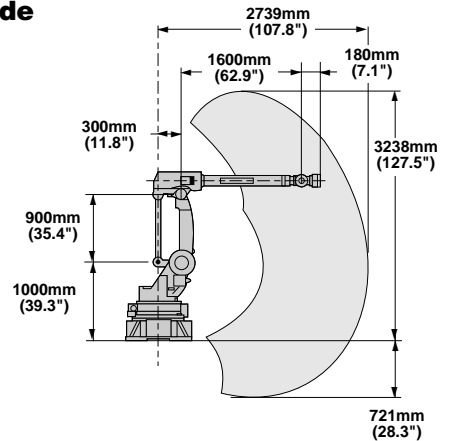
S-500 Dimensions



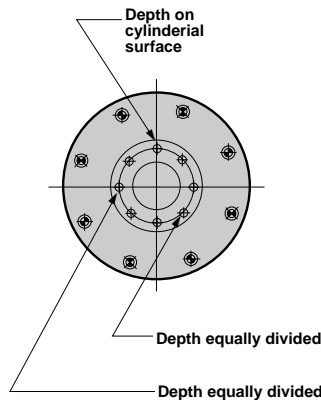
Footprint



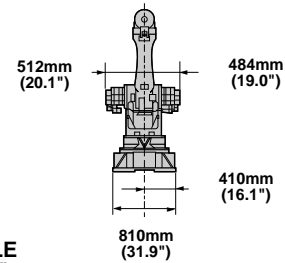
Side



Mounting Plate



Front



SCALE
1/100"

S-500 Specifications

Items		Range	Speed
Motion range and speed	Axis 1	300°	90°/sec.
	Axis 2	160°	90°/sec.
	Axis 3	160°	320°/sec.
	Axis 4	480°	320°/sec.
	Axis 5	240°	320°/sec.
	Axis 6	900°	320°/sec.
Moments	Axis 1	2.0 kgf • cm	
	Axis 2	3.0 kgf • cm	
	Axis 3	3.0 kgf • cm	
Load inertia	Axis 1	2.2 kgf • cm • sec ²	
	Axis 2	6.2 kgf • cm • sec ²	
	Axis 3	6.2 kgf • cm • sec ²	
Repeatability	±0.25mm(±0.010")		
Max. load capacity	15kg (33 lbs)		
Mounting method	Floor/ceiling/angle		
Mechanical brakes	All axes		
Mechanical weight	900 kg (1985 lbs)		

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