

# FANUC Robot M-800



## FEATURES

The FANUC Robot M-800/60-20B is a high accuracy robot with 60kg payload capacity.

- This robot has significantly enhanced rigidity compared to the conventional robots in the same class by the mechanical design with emphasis on the rigidity.
- *i*RCalibration Signature, a highly accuracy calibration technology, compensates for manufacturing deviations from design values and mechanical torsion due to gravity, etc. to provide higher absolute position accuracy.
- Achieves circular and linear path accuracy of  $\pm 0.1$  mm by applying the latest control technology with further improvements.
- Improved dust resistance so that it can be used with confidence even in environments where there are fumes, dust, etc.
- This robot is ideal for the applications that require high path accuracy, such as 3D laser cutting and water jet cutting that take advantage of the 6 degrees of freedom of the robot.

## Application Examples



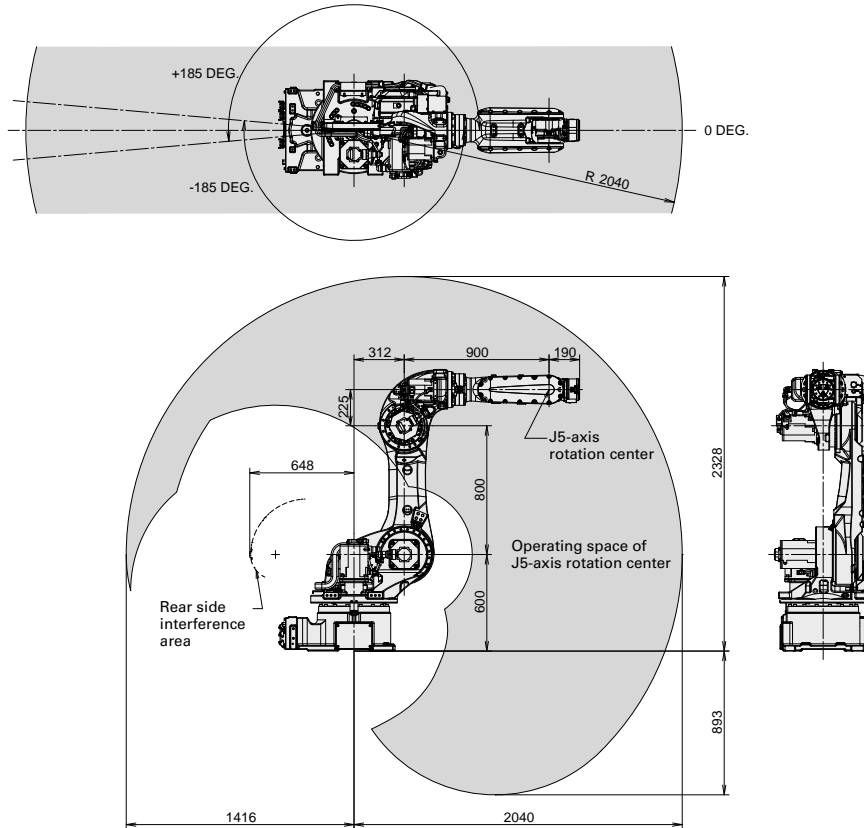
High Accuracy Laser Cutting



High Accuracy Drilling System

# Operating Space

# M-800/60-20B



## Specifications

Model		M-800/60-20B	
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)	
Reach		2040 mm	
Installation		Floor	
Motion range (Maximum speed) (Note 1)	J1 axis	370° (150°/s)	6.46 rad (2.62 rad/s)
	J2 axis	225° (150°/s)	3.93 rad (2.62 rad/s)
	J3 axis	340° (150°/s)	5.93 rad (2.62 rad/s)
	J4 axis	720° (260°/s)	12.6 rad (4.54 rad/s)
	J5 axis	250° (260°/s)	4.36 rad (4.54 rad/s)
	J6 axis	720° (400°/s)	12.6 rad (6.98 rad/s)
Max. load capacity at wrist		60 kg	
Max. load capacity on J3 arm		21 kg (A)	5/3 × (A) + (B) ≤ 35 kg
Max. load capacity on J3 casing		35 kg (B)	
Allowable load moment at wrist	J4 axis	210 Nm	
	J5 axis	210 Nm	
	J6 axis	130 Nm	
Allowable load inertia at wrist	J4 axis	30 kg·m <sup>2</sup>	
	J5 axis	30 kg·m <sup>2</sup>	
	J6 axis	20 kg·m <sup>2</sup>	
Repeatability (Note 2)		± 0.015 mm	
Mass (Note 3)		820 kg	
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity : Normally 75%RH or less (No condensation allowed.) Short term (within one month) Max 95%RH (No condensation allowed.) Vibration acceleration : 4.9m/s <sup>2</sup> (0.5G) or less	

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO 9283.

Note 3) Without controller.

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