

## FANUC Robot M-900iB



### FEATURES

FANUC Robot M-900iB is the intelligent heavy payload robot with the wrist capacity of 280 kg - 700 kg.

- Four models are available to meet a variety of applications.

#### - FANUC Robot M-900iB/700

This model is a heavy payload type which has a 700 kg payload capacity. It can be applied to handling of large glass, drilling and riveting for aircraft body panel.

#### - FANUC Robot M-900iB/400L

This model is a long arm type which has a 400 kg payload and 3.7 m reach. This model has wide motion envelope and it can be applied to lifting car body and handling large size structures.

#### - FANUC Robot M-900iB/360

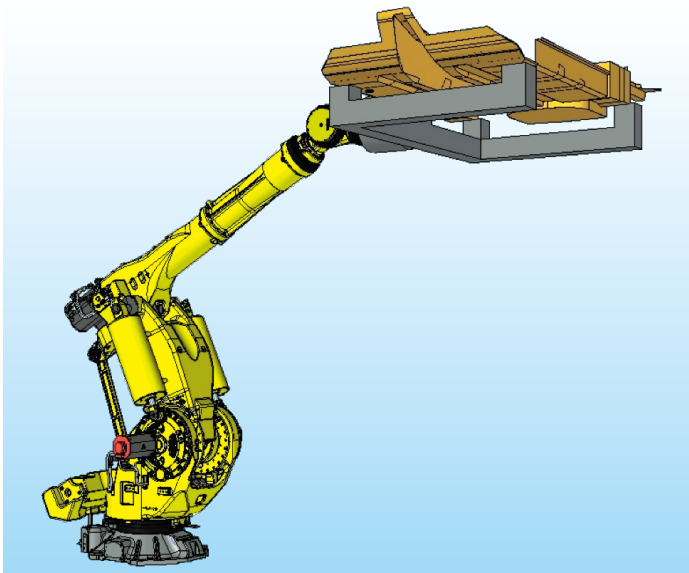
This model is a high speed type which has a 360 kg payload capacity. Compact wrist and high speed motion will meet your needs in various applications, such as transferring, spot welding and so on. This model can be also mounted on a ceiling.

#### - FANUC Robot M-900iB/280L

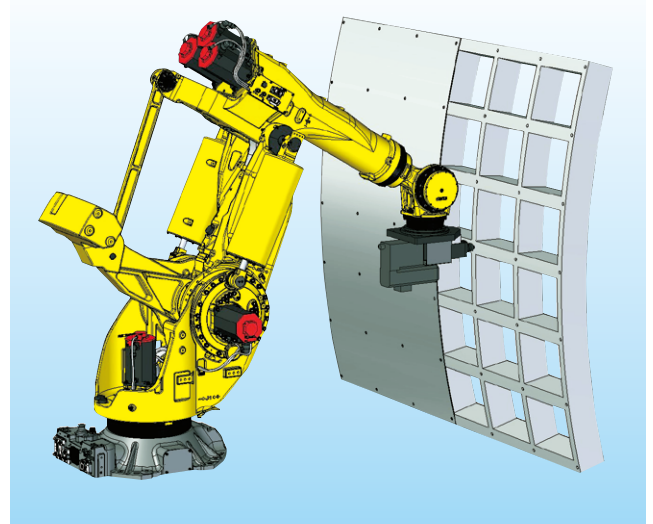
This model is a long arm type which has 280 kg payload capacity and 3.1 m reach, and can be also mounted on a ceiling.

- The wrist can be used in severe environment because it has IP67-equivalent durability (dust and drip).
- Latest intelligent functions with iRVision (integrated vision) are available.

### Application system



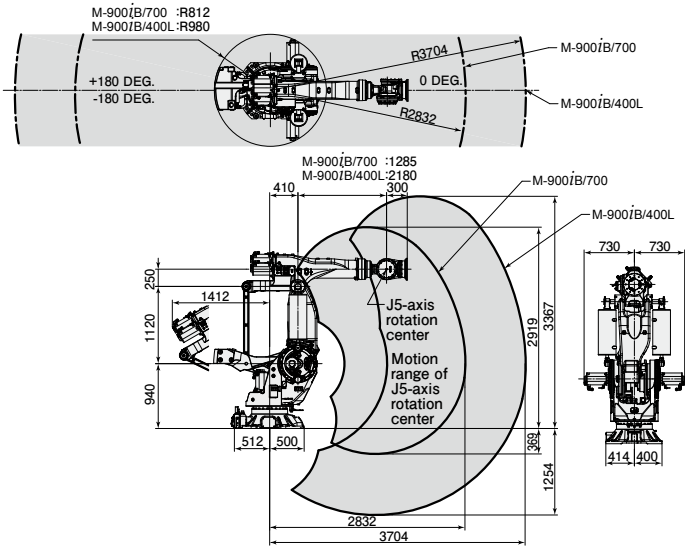
Car body panel lifting



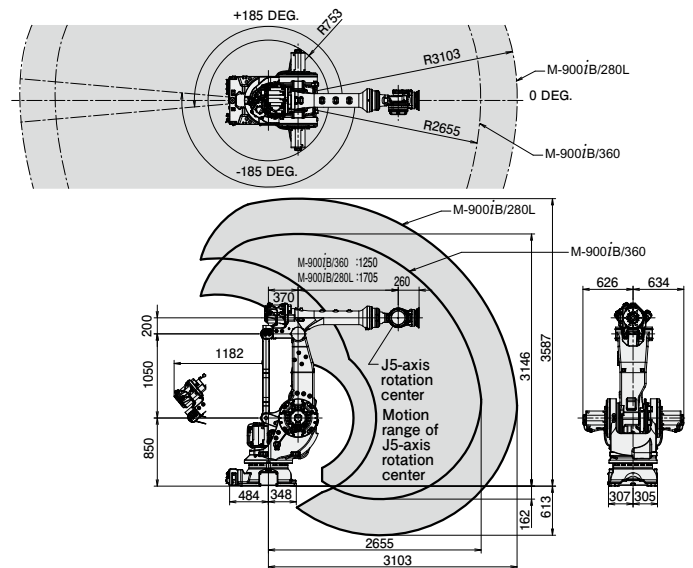
Aircraft body panel drilling

## Operating space

### M-900iB/700,/400L



### M-900iB/360,/280L



## Specifications

Item	Specifications				
	M-900iB/700	M-900iB/400L	M-900iB/360	M-900iB/280L	
Type	Articulated Type				
Controlled axes	6 axes (J1, J2, J3, J4, J5, J6)				
Reach	2832 mm	3704 mm	2655 mm	3103 mm	
Installation	Floor		Floor, Upside-down (Angle mount)		
Motion range (Maximum speed) (Note 1)	J1 axis rotation	360°(80°/s) 6.28 rad (1.40 rad/s)		370°(110°/s) 6.46 rad (1.92 rad/s)	
	J2 axis rotation	154°(80°/s) 2.69 rad (1.40 rad/s)		151°(105°/s) 2.64 rad (1.83 rad/s)	
	J3 axis rotation	160°(80°/s) 2.79 rad (1.40 rad/s)		223.7°(100°/s) 3.90 rad (1.75 rad/s)	
	J4 axis wrist rotation	720°(100°/s) 12.57 rad (1.75 rad/s)		720°(110°/s) 12.57 rad (1.92 rad/s)	720°(125°/s) 12.57 rad (2.18 rad/s)
	J5 axis wrist swing	244°(100°/s) 4.26 rad (1.75 rad/s)		250°(110°/s) 4.36 rad (1.92 rad/s)	250°(125°/s) 4.36 rad (2.18 rad/s)
	J6 axis wrist rotation	720°(160°/s) 12.57 rad (2.79 rad/s)		720°(180°/s) 12.57 rad (3.14 rad/s)	720°(205°/s) 12.57 rad (3.58 rad/s)
Max. load capacity at wrist	700 kg	400 kg	360 kg	280 kg	
Max. load capacity at J2 base	550 kg				
Max. load capacity at J3 arm	25 kg		50 kg		
Allowable load moment at wrist	J4 axis	3400 N·m 347 kgf·m	2744 N·m 280 kgf·m	1960 N·m 200 kgf·m	1700 N·m 174 kgf·m
	J5 axis	3400 N·m 347 kgf·m	2744 N·m 280 kgf·m	1960 N·m 200 kgf·m	1700 N·m 174 kgf·m
	J6 axis	1725 N·m 176 kgf·m		1050 N·m 107 kgf·m	950 N·m 97 kgf·m
Allowable load inertia at wrist	J4 axis	1098 kg·m <sup>2</sup>	11200 kgf·cm·s <sup>2</sup>	260 kg·m <sup>2</sup> 2653 kgf·cm·s <sup>2</sup>	215 kg·m <sup>2</sup> 2194 kgf·cm·s <sup>2</sup>
	J5 axis	1098 kg·m <sup>2</sup>	11200 kgf·cm·s <sup>2</sup>	260 kg·m <sup>2</sup> 2653 kgf·cm·s <sup>2</sup>	215 kg·m <sup>2</sup> 2194 kgf·cm·s <sup>2</sup>
	J6 axis	444 kg·m <sup>2</sup>	4532 kgf·cm·s <sup>2</sup>	160 kg·m <sup>2</sup> 1633 kgf·cm·s <sup>2</sup>	140 kg·m <sup>2</sup> 1429 kgf·cm·s <sup>2</sup>
Drive method	Electric servo drive by AC servo motor				
Repeatability	±0.3 mm	±0.5 mm	±0.3 mm		
Mass (Note 2)	2800 kg	3150 kg	1540 kg	1600 kg	
Installation environment	Ambient temperature	: 0~45°C			
	Ambient humidity	: Normally 75 %RH or less (No dew nor frost allowed) Short term 95 %RH or less (within one month)			
	Vibration acceleration	: 4.9 m/s <sup>2</sup> (0.5G) or less			

Note 1) In case of short distance motion, the axis speed may not reach the maximum value stated.

Note 2) Without controller.

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