

## FANUC Robot **ARC Mate 100*i*Ce** FANUC Robot **M-10*i*Ae**



### FEATURES

FANUC Robot ARC Mate 100*i*Ce, M-10*i*Ae is intelligent arc welding and handling robot which is specialized ARC Mate 100*i*C, M-10*i*A for simple applications. In arc welding of simple small workpiece, there are many welding work done by human hands. To automate these applications, this robot has been demanded.

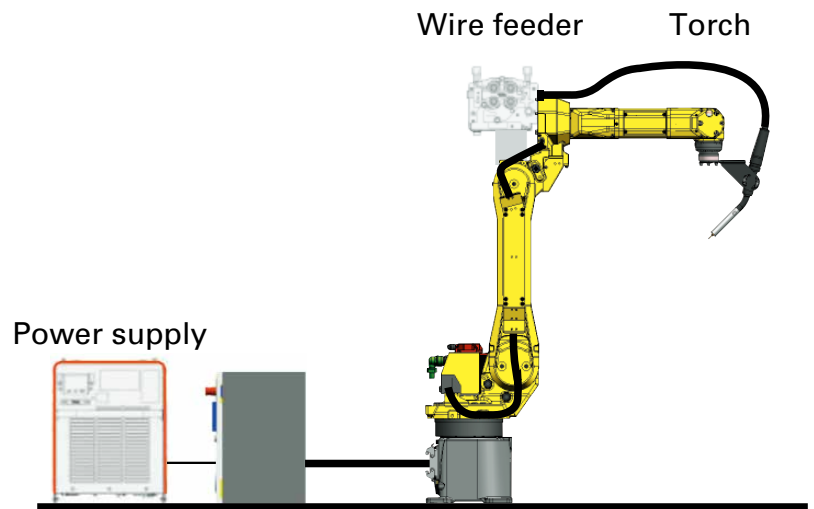
- ARC Mate 100*i*Ce, M-10*i*Ae succeeds high reliability with existing ARC Mate 100*i*C, M-10*i*A and optimizes mechanical unit and controller so as to maximize its performance for simple applications.
- The robot can realize high productivity and high quality welding with highly reliable robot arm.
- The robot uses conventional dress-out cable for its end effector.
- Existing ARC Mate 100*i*C, M-10*i*A can be applied for robot system included aux. (Jig positioner). ARC Mate 100*i*C, M-10*i*A can be used with same engineering and same operation with ARC Mate 100*i*Ce, M-10*i*Ae.

### Application system



Bracket part arc welding system

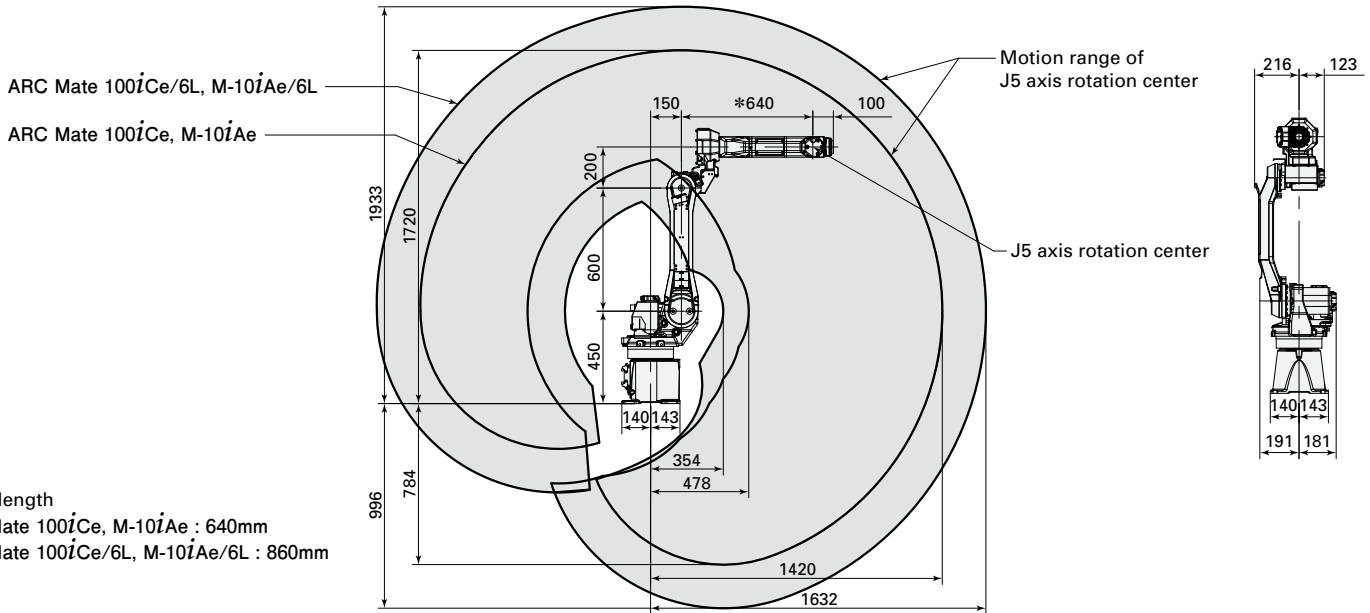
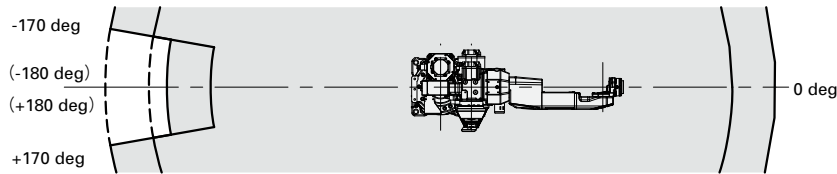
### Example of system configuration



Arc welding robot package

# FANUC Robot ARC Mate 100iCe, M-10iAe

## Operating space



\*Arm length

ARC Mate 100iCe, M-10iAe : 640mm

ARC Mate 100iCe/6L, M-10iAe/6L : 860mm

## Specifications

Model		ARC Mate 100iCe, M-10iAe	ARC Mate 100iCe/6L, M-10iAe/6L
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)	
Reach		1,420mm	1,632mm
Installation		Floor, Upside-down	
Motion range (Maximum speed) (Note 1, 2)	J1 axis rotation	340°/360° (option) (210°/sec) 5.93 rad/6.28 rad (option) (3.67rad/sec)	
	J2 axis rotation	250° (190°/sec) 4.36 rad (3.32 rad/sec)	
	J3 axis rotation	445° (210°/sec) 7.76 rad (3.67 rad/sec) 447° (210°/sec) 7.80 rad (3.67 rad/sec)	
	J4 axis wrist rotation	380° (400°/sec) 6.63 rad (6.98 rad/sec)	
	J5 axis wrist swing	380° (400°/sec) 6.63 rad (6.98 rad/sec)	
	J6 axis wrist rotation	720° (600°/sec) 12.57 rad (10.5 rad/sec)	
Maximum load capacity at wrist		10 kg	6 kg
Allowable load moment at wrist (Note 3)	J4 axis	22.0 N·m	15.7 N·m
	J5 axis	22.0 N·m	10.1 N·m
	J6 axis	9.8 N·m	5.9 N·m
Allowable load inertia at wrist (Note 3)	J4 axis	0.63 kg·m <sup>2</sup>	0.63 kg·m <sup>2</sup>
	J5 axis	0.63 kg·m <sup>2</sup>	0.38 kg·m <sup>2</sup>
	J6 axis	0.15 kg·m <sup>2</sup>	0.061 kg·m <sup>2</sup>
Repeatability		± 0.08 mm	± 0.1 mm
Robot mass (Note 4)		130 kg	135 kg
Installation environment		Ambient temperature : 0 ~ 45°C	
		Ambient humidity : Normal 75%RH or less (No dew not frost allowed) Short term 95%RH or less (within one month)	
		Vibration : 0.5G or less	

Note 1) In case of short distance motion, the axis speed doesn't reach maximum one.

Note 2) Motion range of wrist axis may be restricted by torch to less than the values given.

Note 3) It indicates the value at max. payload. Allowable load moment and inertia at wrist are changed by load.

Note 4) Without controller.

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