# FANUC Robot M-21A



### Application system



Fast arranging of food by M-21A/3S

#### **FEATURES**

FANUC Robot M-21A is a medium-sized parallel link robot for high speed picking and assembly.

- Six models are available to meet a variety degree of freedom at wrist and operating space.
  - FANUC Robot M-2iA/3A, M-2iA/3AL
     Using 3 axes at wrist, this model is suitable for complicated task, for example, arranging and assembling operations which need to change posture freely.
  - FANUC Robot M-2iA/3S, M-2iA/3SL Using single axis rotation at wrist, this model is suitable for high speed picking of plenty work pieces on the conveyor while aligning direction of each work piece.
  - FANUC Robot M-2iA/6H, M-2iA/6HL It is a total 3 axes robot without rotation axis at wrist with 6kg payload. This model is suitable for super high speed picking of work pieces.
  - Among above six models, M-2iA/3AL, M-2iA/3SL and M-2iA/6HL cover wider operating area with its longer arm.
- Withstand a high pressure stream cleaning with IP69K of enclosed mechanical unit.
- Food option is available with appropriate materials and surface treatment for food sanitation as well as food grade grease. It contributes to the automation in the food market.
- Latest intelligent functions can be applied using vision sensor or force sensor.



Fast packaging of gift box by M-21A/3A

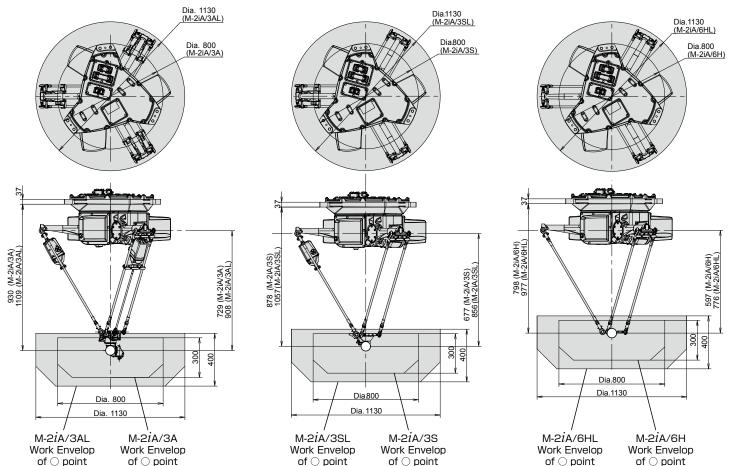
### FANUC Robot M-21A

#### Operating space

#### M-2iA/3A, M-2iA/3AL

#### M-2*i*A/3S. M-2*i*A/3SL

#### M-2*i*A/6H, M-2*i*A/6HL



#### Specifications

ltem		Specifications		
		M-2 <i>i</i> A/3A, M-2 <i>i</i> A/3AL (Note3)	M-21A/3S, M-21A/3SL (Note3)	M-21A/6H, M-21A/6HL (Note3)
Type		Parallel link mechanism		
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)	4 axes (J1, J2, J3, J4)	3 axes (J1, J2, J3)
Installation		Ceiling mount		
Motion range (Maximum speed) (Note1)	J1-J3	Diameter 800 mm, height 300 mm (Note3 Diameter 1130 mm, height 400 mm)		
	J4	720° (1700°/s) 12.57 rad (29.67rad/s)	720° (3500°/s) 12.57 rad (61.06rad/s)	_
	J5	300° (1700°/s) 5.24 rad (29.67rad/s)	ı	_
	J6	720° (1700°/s) 12.57 rad (29.67rad/s)	1	_
Max. payload at wrist		3 kg	3 kg	6 kg
Repeatability		± 0.1 mm		
Drive method		Electric servo drive by AC servo motor		
Mass (Note2)		140 kg	130 kg	125 kg
Installation environment		Ambient temperature : 0~45°C Ambient humidity Normally : 75%RH or less (No dew, nor frost allowed) Short term : Max. 95%RH or less (within one month) Vibration : 4.9 m/s² (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.

Note 3) For long arm specification (M-21A/3AL, M-21A/3SL, M-21A/6HL).

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