

FANUC Robot **CR-4iA, 7iA, 7iA/L** FANUC Robot **CR-14iA/L**



FEATURES

FANUC Robot CR-4iA, 7iA, 7iA/L, and 14iA/L are human arm sized mini-collaborative robots.

- 4 models with different load capacity and reach are available, depending on the application.
- A floor space can be used effectively by up-side down and wall installation.

Collaborative Operation

- This robot and a human operator can work separately in close proximity without safety fences.
- This robot can work in cooperation with a human operator. (examples: parts assembling, workpiece transfer)
- With Small Hand Guidance(option), intuitive operation and easy teaching are possible.

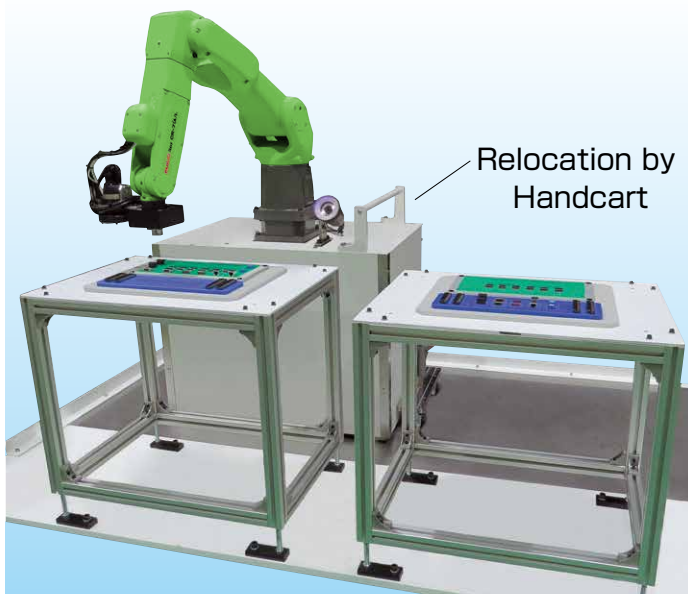
Safety Function

- This robot stops safely when it touches a human operator.
- A human operator can move the robot by pushing it.
- This robot is certified to meet the requirements of international standard ISO 10218-1.

Intelligence and High Reliability

- Latest intelligent functions such as *iR*Vision (Integrated vision) and force sensor are available.
- This robot is designed with high reliability, based on the proven LR Mate models.

Application Examples



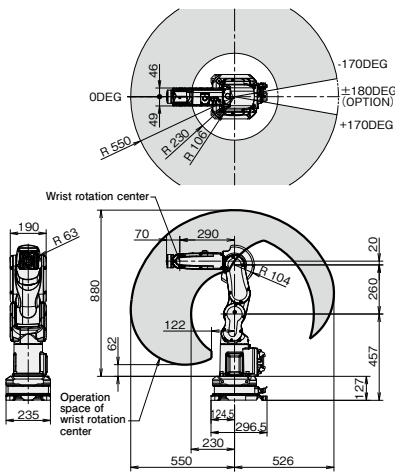
Circuit Board Assembly



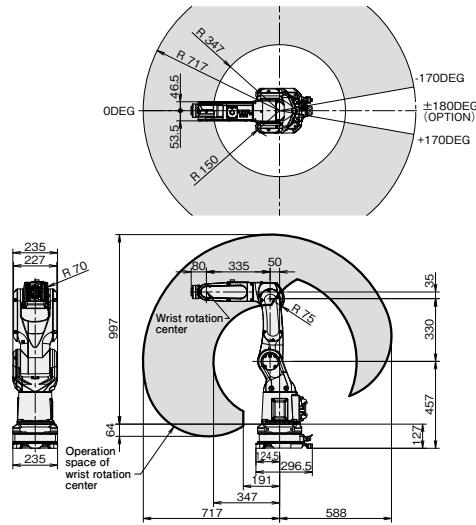
Apply Adhesive to Windshield (Up-side Down)

Operating space

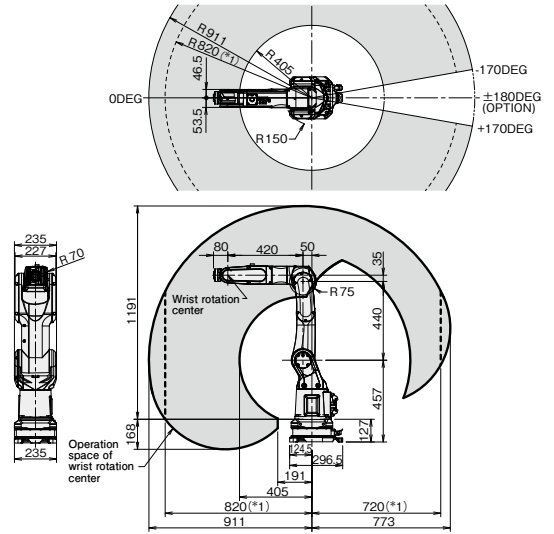
CR-4iA



CR-7iA



CR-7iA/L CR-14iA/L



(*1) In case of CR-14iA/L with 12kg load or more

Specifications

Model	CR-4iA	CR-7iA	CR-7iA/L	CR-14iA/L
Controlled axes	6 axes (J1, J2, J3, J4, J5, J6)			
Reach	550 mm	717 mm	911 mm	911 mm (load capacity <12kg) 820 mm (load capacity ≥12kg)
Installation (Note 1)	Floor, Upside-down, Angle mount			
Motion range	J1 axis	340° 5.93 rad	340° 5.93 rad	340° 5.93 rad
	J2 axis	150° 2.61 rad	166° 2.89 rad	166° 2.89 rad
	J3 axis	354° 6.17 rad	373° 6.51 rad	383° 6.68 rad
	J4 axis	380° 6.63 rad	380° 6.63 rad	380° 6.63 rad
	J5 axis	200° 3.49 rad	240° 4.18 rad	240° 4.18 rad
	J6 axis	720° 12.57 rad	720° 12.57 rad	720° 12.57 rad
Max. load capacity at wrist (Note 2)	4 kg	7 kg	7 kg	14 kg
Maximum speed (Note 3, Note 4)	1000 mm/s			500 mm/s
Allowable load moment at wrist	J4 axis	8.86 N·m	16.6 N·m	16.6 N·m
	J5 axis	8.86 N·m	16.6 N·m	16.6 N·m
	J6 axis	4.90 N·m	9.4 N·m	9.4 N·m
Allowable load inertia at wrist	J4 axis	0.20 kg·m ²	0.47 kg·m ²	0.47 kg·m ²
	J5 axis	0.20 kg·m ²	0.47 kg·m ²	0.47 kg·m ²
	J6 axis	0.067 kg·m ²	0.15 kg·m ²	0.15 kg·m ²
Repeatability (Note 5)	±0.01 mm			
Mass (Note 6)	48 kg	53 kg	55 kg	
Installation environment	Ambient temperature : 0 to 45°C Ambient humidity : Normally 75 %RH or less (No dew nor frost allowed) Short time (within one month) Max.95%RH Vibration acceleration : 4.9 m/s ² (0.5G) or less			

Note 1) In case of the wall mount, the operation space will be restricted according with the payload.

Note 2) A total weight including the equipment and connection cables and its swing must not exceed this value when you install the equipment.

Note 3) During short distance motions, the speed may not reach the maximum value stated.

Note 4) It is necessary to set a motion speed according to risk assessment of system.

Note 5) Compliant with ISO9283.

Note 6) Without controller.

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