

FANUC Robot CR-4*i*A, 7*i*A, 7*i*A/L



Features

The FANUC compact collaborative robot line-up is a small, human arm sized six-axis 4kg-7kg payload robot with short, standard and long arm variants available. The collaborative robot can be wall or invert mounted to save floor space.

Three models are available for various reach/payload needs:

- FANUC Robot CR-4*i*A - short arm variant with 4kg payload
- FANUC Robot CR-7*i*A - standard arm with 7kg payload
- FANUC Robot CR-7*i*A/L - long arm variant with 7kg payload

Collaborative Operation

- The CR line-up of robots can operate in cooperation with or alongside humans in a shared workspace without safety fences or sensors.

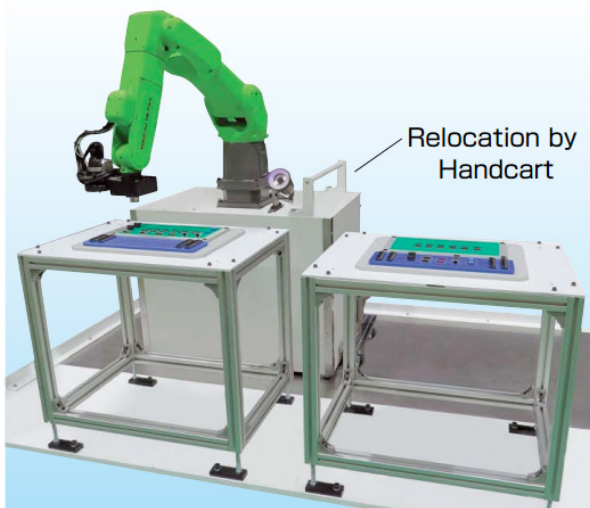
Safety Function

- The collaborative robots stop safely in the event of contact with a human operator.
- The collaborative robots can be pushed out of the way at anytime with minimal force.
- The CR line-up is certified to meet the requirements of ISO 10218-1 for collaborative robots.

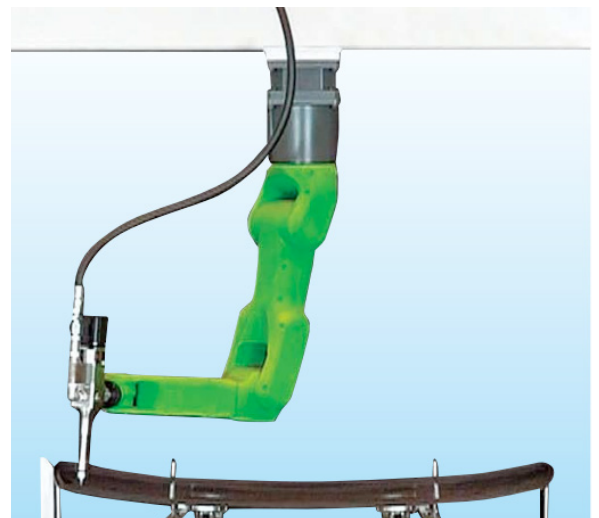
Intelligence and High Reliability

- Robot is immediately ready for use with on board solenoid operated air valves as standard equipment.
- Latest intelligent functions such as force sensing and *i*RVision (Integrated vision) are available.
- The FANUC collaborative robots are designed with the same high reliability as all FANUC robots.

Application Examples

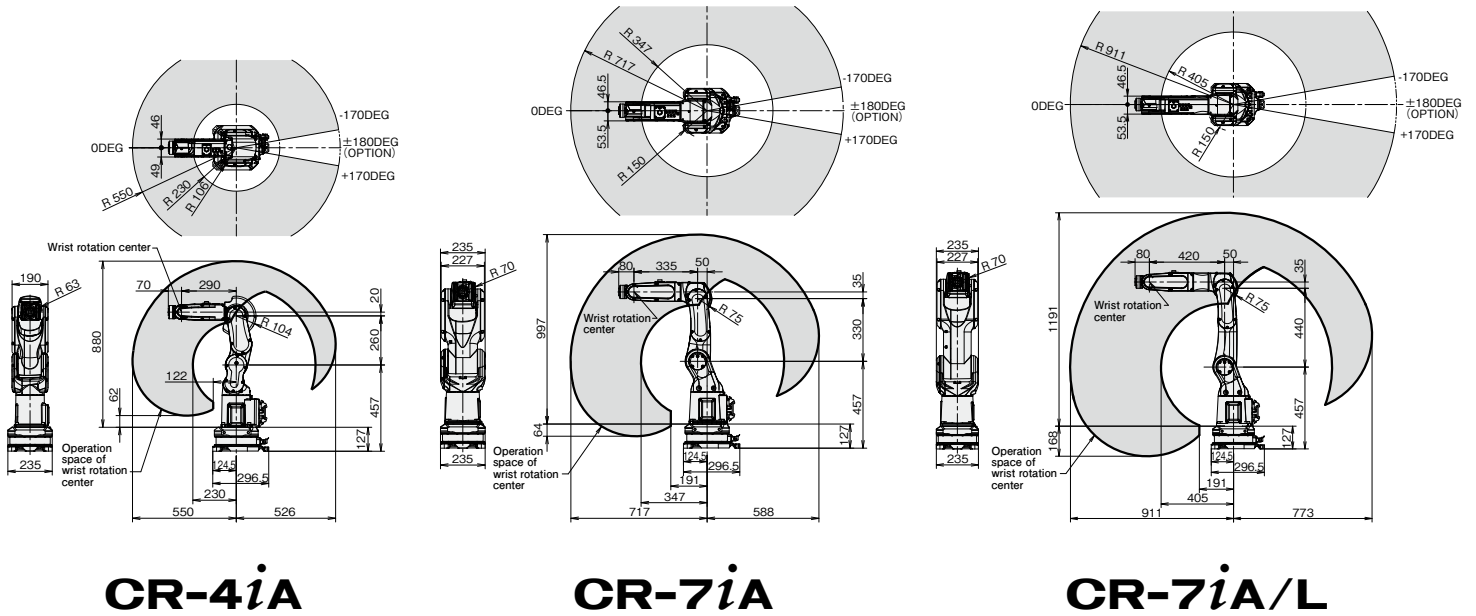


Circuit Board Assembly



Apply Adhesive to Windshield (Up-side Down)

Operating space



Specifications

Model		CR-4iA	CR-7iA	CR-7iA/L
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)		
Reach		550 mm	717 mm	911 mm
Installation (Note 1)		Floor, Upside-down, Wall		
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
Maximum speed (Note 3)		500 mm/s (Max 1000 mm/s Note 4)		
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		±0.02 mm	±0.02 mm	±0.03 mm
Mass (Note 5)		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 term Max.95 %RH or less (within one month) 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) If the area is monitored by a safety sensor (located separately).

Note 5) Without controller.



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