

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.

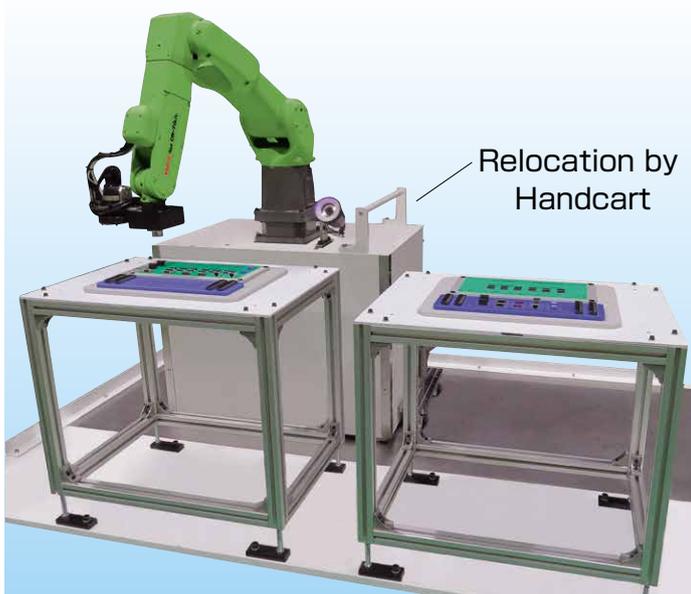
Safety Function

- 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 *i*RVision (Integrated vision) and force sensor are available.
- This robot is designed with high reliability, based on the proven LR Mate models.

Application Examples



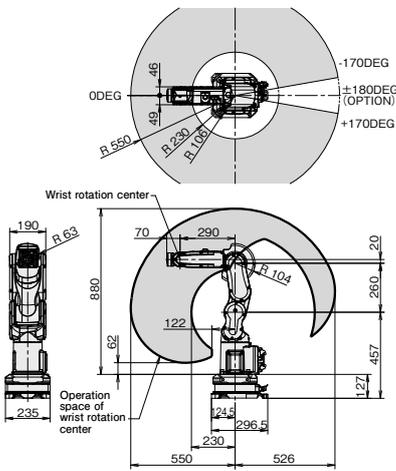
Circuit Board Assembly



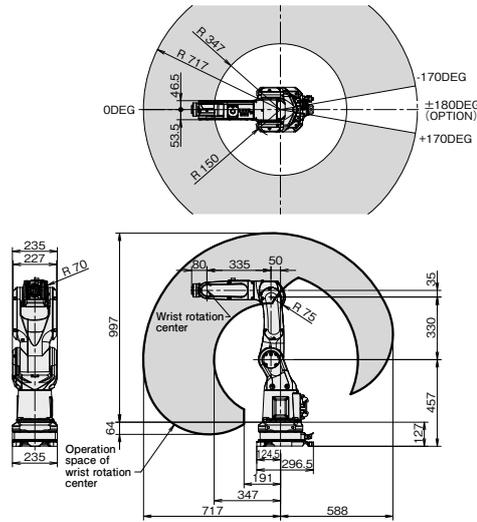
Apply Adhesive to Windshield (Up-side Down)

Operating space

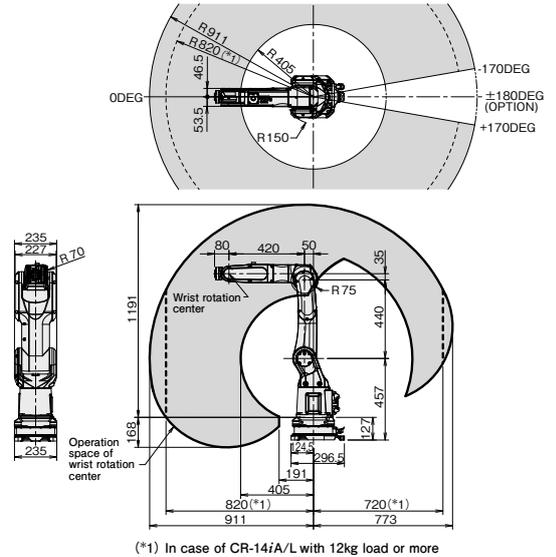
CR-4iA



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	340° 5.93 rad
	J2 axis	150° 2.61 rad	166° 2.89 rad	166° 2.89 rad	166° 2.89 rad
	J3 axis	354° 6.17 rad	373° 6.51 rad	383° 6.68 rad	383° 6.68 rad
	J4 axis	380° 6.63 rad	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	240° 4.18 rad
	J6 axis	720° 12.57 rad	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			
Allowable load moment at wrist	J4 axis	8.86 N·m	16.6 N·m	16.6 N·m	31.0 N·m
	J5 axis	8.86 N·m	16.6 N·m	16.6 N·m	31.0 N·m
	J6 axis	4.90 N·m	9.4 N·m	9.4 N·m	13.4 N·m
Allowable load inertia at wrist	J4 axis	0.20 kg·m ²	0.47 kg·m ²	0.47 kg·m ²	0.66 kg·m ²
	J5 axis	0.20 kg·m ²	0.47 kg·m ²	0.47 kg·m ²	0.66 kg·m ²
	J6 axis	0.067 kg·m ²	0.15 kg·m ²	0.15 kg·m ²	0.30 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.

FANUC CORPORATION

•Headquarters 3580, Shibokusa, Oshino-mura, Minamitsuru-gun

Yamanashi, 401-0597, JAPAN

Phone: (+81)555-84-5555 <https://www.fanuc.co.jp/>

•Overseas Affiliated Companies

FANUC America Corporation
 FANUC Europe Corporation, S.A.
 SHANGHAI-FANUC Robotics CO., LTD.
 KOREA FANUC CORPORATION
 TAIWAN FANUC CORPORATION
 FANUC INDIA PRIVATE LIMITED
 FANUC SINGAPORE PTE. LTD.
 FANUC THAI LIMITED
 FANUC MECHATRONICS (MALAYSIA) SDN. BHD.
 PT. FANUC INDONESIA
 FANUC OCEANIA PTY. LIMITED
 FANUC SOUTH AFRICA (PROPRIETARY) LIMITED

Phone: (+1)248-377-7000
 Phone: (+352)727777-1
 Phone: (+86)21-5032-7700
 Phone: (+82)55-278-1200
 Phone: (+886)4-2359-0522
 Phone: (+91)80-2852-0057
 Phone: (+65)6567-8566
 Phone: (+66)2-714-6111
 Phone: (+60)3-3082-1222
 Phone: (+62)21-4584-7285
 Phone: (+61)2-8822-4600
 Phone: (+27)11-392-3610

<https://www.fanucamerica.com/>
<https://www.fanuc.eu/>
<https://www.shanghai-fanuc.com.cn/>
<https://www.fkc.co.kr/>
<https://www.fanuctaiwan.com.tw/>
<https://www.fanucindia.com/>
<https://www.fanuc.com/fsp/>
<https://www.fanuc.com/ftth/>
<https://www.fanuc.com/fmm/>
<https://www.fanuc.com/fin/>
<https://www.fanucoceania.com.au/>
<https://fanuc.co.za/>

•All specifications are subject to change without notice.

•No part of this catalog may be reproduced in any form.

•The products in this catalog are controlled based on Japan's "Foreign Exchange and Foreign Trade Law". The export from Japan may be subject to an export license by the government of Japan. Further, re-export to another country may be subject to the license of the government of the country from where the product is re-exported. Furthermore, the product may also be controlled by re-export regulations of the United States government. Should you wish to export or re-export these products, please contact FANUC for advice.

© FANUC CORPORATION, 2016

RCR-7iA(E)-03b, 2022.4, Printed in Japan