

FANUC Robot CR



Features

FANUC Robot CR/50F-16B is a 50kg payload collaborative robot that can work without safety fences.

Collaborative Operation

- This robot and a human operator can work in close proximity without safety fences.
- This robot can work in cooperation with a human operator. (examples: parts assembling, workpiece transfer)
- With 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 after it stops.
- This robot is certified to meet the requirements of international standard ISO 10218-1.

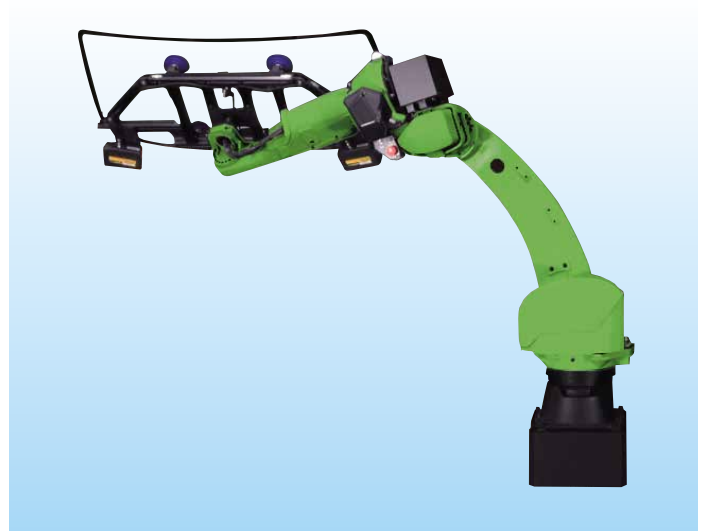
Intelligence and High Reliability

- Advanced intelligent functions such as *iR*Vision (Integrated robot vision) and force sensor are available.
- This robot is designed with the same high reliability as conventional robots.

Application Examples



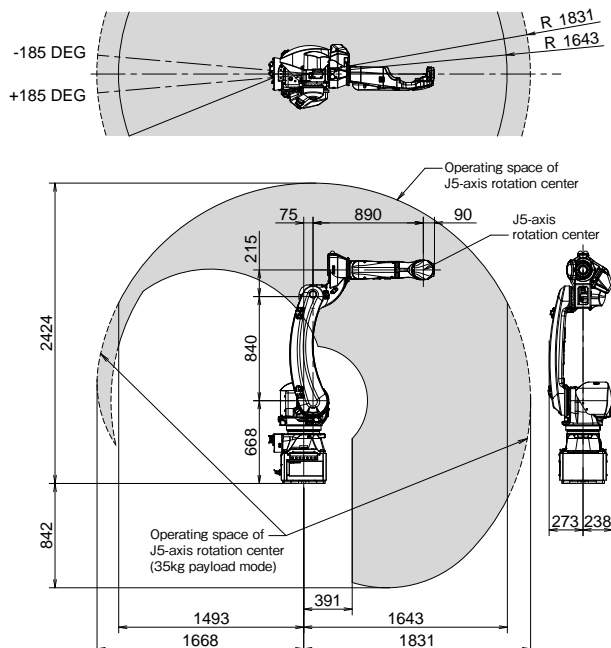
Collaborative Workpieces Transfer



High Inertia Workpieces (Windshield) Transfer

Operating space

CR/50F-16B



Specifications

Model		CR/50F-16B
Type		6 axes (J1,J2,J3,J4,J5,J6)
Reach		1643 mm (1831 mm (Note 7))
Installation		Floor
Motion range (Note 1)	J1 axis	370° 6.46 rad
	J2 axis	215° 3.75 rad
	J3 axis	338° 5.91 rad
	J4 axis	400° 6.98 rad
	J5 axis	280° 4.89 rad
	J6 axis	900° 15.71 rad
Max load capacity at wrist		50 kg
Maximum speed (Note 2)		750 mm/s (Note 3, Note 4)
Allowable load moment at wrist	J4 axis	110.0 N·m
	J5 axis	110.0 N·m
	J6 axis	60.0 N·m
Allowable load inertia at wrist	J4 axis	10.8 kg·m ² (4.00 kg·m ² (Note 8))
	J5 axis	10.8 kg·m ² (4.00 kg·m ² (Note 8))
	J6 axis	4.40 kg·m ² (1.50 kg·m ² (Note 8))
Repeatability (Note 5)		± 0.03 mm
Mass (Note 6)		386 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity : Normally 75%RH or less (No dew nor frost allowed), Short term (within one month) 95%RH or less (No dew nor frost allowed)

Note 1) In case of angle mounting, J1 and J2 axis motion range are restricted.

Note 2) During short distance motions, the axis speed may not reach the maximum value stated.

Note 3) It is necessary to set a motion speed according to risk assessment of system.

Note 4) If the area is monitored by a safety sensor (located separately).

Note 5) Compliant with ISO9283.

Note 6) Without controller.

Note 7) The operating space is expanded when 35kg payload mode is selected.

Note 8) Allowable load inertia at wrist when 35kg payload mode is selected.

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/fth/>
<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, 2024
RCR(E)-02, 2024.7, Printed in Japan