

FANUC Robot M-900iB



FEATURES

FANUC Robot M-900iB is an intelligent heavy payload robot series with the capacity of 280 kg - 700 kg.

- Five models are available to meet a variety of applications.

- **FANUC Robot M-900iB/700**

This model is a heavy payload type which has a 700 kg payload capacity. It can be applied to handling of large glass, drilling and riveting for aircraft body panel.

- **FANUC Robot M-900iB/400L**

This model is a long arm type which has a 400 kg payload and 3.7 m reach. This model has wide operating space and it can be applied to lifting car body and handling large size structures.

- **FANUC Robot M-900iB/360**

This model is a high speed type which has a 360 kg payload capacity. Compact wrist and high speed motion will meet your needs in various applications, such as transferring, spot welding and so on. This model can be also mounted on a ceiling.

- **FANUC Robot M-900iB/280L**

This model is a long arm type which has 280 kg payload capacity and 3.1 m reach, and can be also mounted on a ceiling.

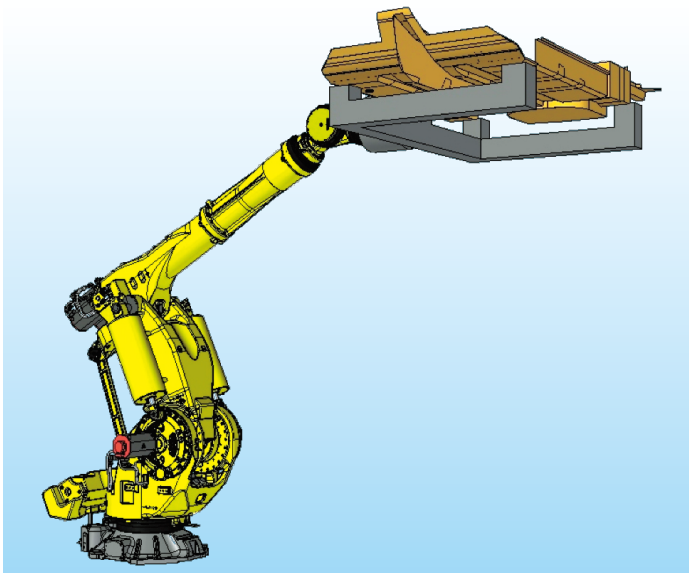
- **FANUC Robot M-900iB/280**

This model is a high rigidity type which has 280 kg payload capacity and the same operating space as M-900iB/360.

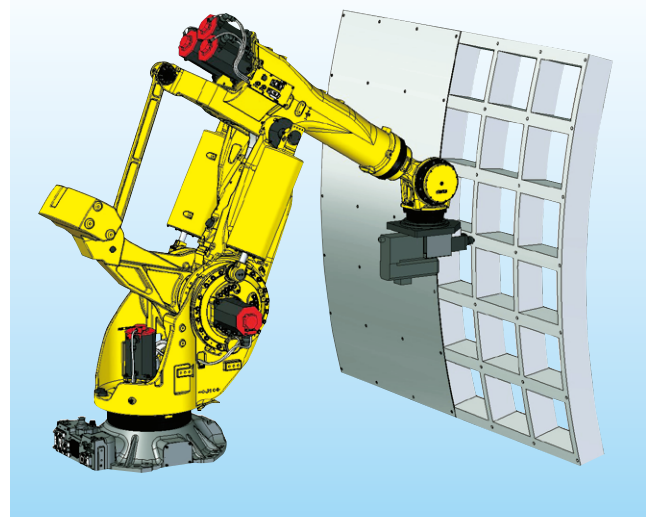
- The wrist can be used in severe environment because it has IP67-equivalent durability (dust and drip).

- Latest intelligent functions with *iR*Vision (integrated vision) are available.

Application Examples



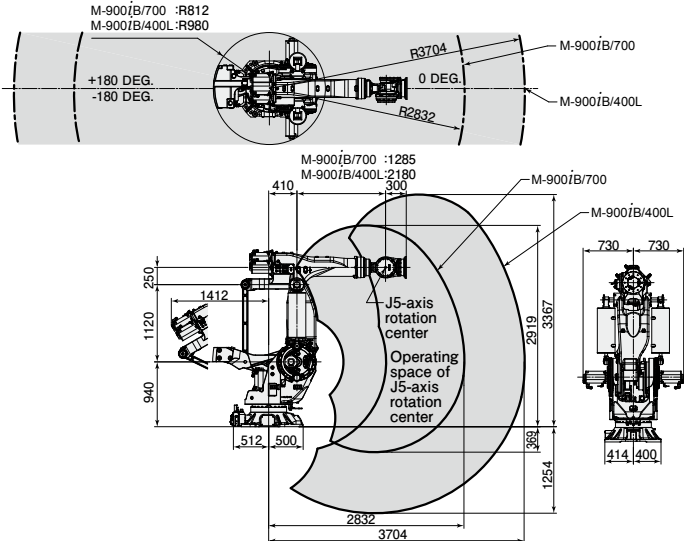
Car body panel lifting



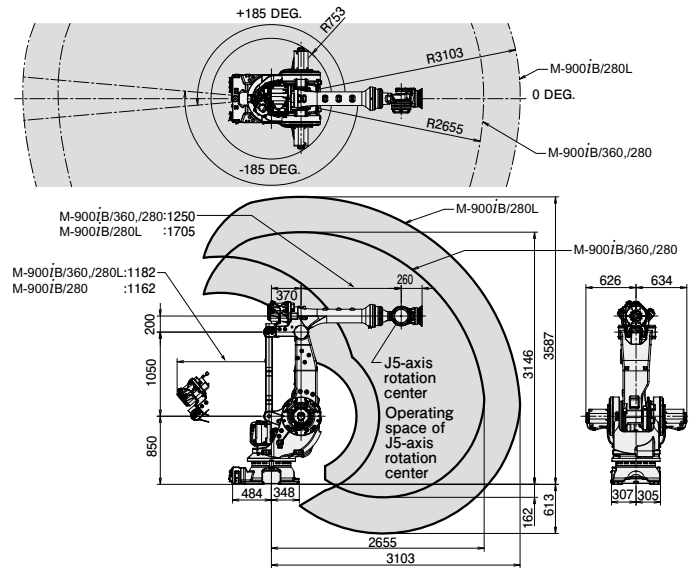
Aircraft body panel drilling

Operating space

M-900iB/700,/400L



M-900iB/360,/280L,/280



Specifications

Model		M-900iB/700	M-900iB/400L	M-900iB/360,/280	M-900iB/280L	
Type		Articulated Type				
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)				
Reach		2832 mm	3704 mm	2655 mm	3103 mm	
Installation		Floor		Floor, Upside-down, Angle mount		
Motion range (Maximum speed) Note 1)	J1 axis rotation	360°(80°/s) 6.28 rad (1.40 rad/s)		370°(110°/s) 6.46 rad (1.92 rad/s)		
	J2 axis rotation	154°(80°/s) 2.69 rad (1.40 rad/s)		151°(105°/s) 2.64 rad (1.83 rad/s)		
	J3 axis rotation	160°(80°/s) 2.79 rad (1.40 rad/s)		223.7°(100°/s) 3.90 rad (1.75 rad/s)		
	J4 axis wrist rotation	720°(100°/s) 12.57 rad (1.75 rad/s)		720°(110°/s) 12.57 rad (1.92 rad/s)	720°(125°/s) 12.57 rad (2.18 rad/s)	
	J5 axis wrist swing	244°(100°/s) 4.26 rad (1.75 rad/s)		250°(110°/s) 4.36 rad (1.92 rad/s)	250°(125°/s) 4.36 rad (2.18 rad/s)	
	J6 axis wrist rotation	720°(160°/s) 12.57 rad (2.79 rad/s)		720°(180°/s) 12.57 rad (3.14 rad/s)	720°(205°/s) 12.57 rad (3.58 rad/s)	
Max. load capacity at wrist		700 kg	400 kg	360kg (M-900iB/360) 280kg (M-900iB/280)	280 kg	
Max. load capacity at J2 base		550 kg				
Max. load capacity at J3 arm		25 kg		50 kg		
Allowable load moment at wrist	J4 axis	3400 N·m 347 kgf·m	2744 N·m 280 kgf·m	1960 N·m 200 kgf·m	1700 N·m 174 kgf·m	
	J5 axis	3400 N·m 347 kgf·m	2744 N·m 280 kgf·m	1960 N·m 200 kgf·m	1700 N·m 174 kgf·m	
	J6 axis	1725 N·m 176 kgf·m		1050 N·m 107 kgf·m	950 N·m 97 kgf·m	
Allowable load inertia at wrist	J4 axis	1098 kg·m ²	11200 kgf·cm·s ²	260 kg·m ² 2653 kgf·cm·s ²	215 kg·m ² 2194 kgf·cm·s ²	
	J5 axis	1098 kg·m ²	11200 kgf·cm·s ²	260 kg·m ² 2653 kgf·cm·s ²	215 kg·m ² 2194 kgf·cm·s ²	
	J6 axis	444 kg·m ²	4532 kgf·cm·s ²	160 kg·m ² 1633 kgf·cm·s ²	140 kg·m ² 1429 kgf·cm·s ²	
Drive method		Electric servo drive by AC servo motor				
Repeatability Note 2)		±0.1 mm				
Mass Note 3)		2800 kg	3150 kg	1540kg (M-900iB/360) 1700kg (M-900iB/280)	1600 kg	
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity : Normally 75 %RH or less (No dew nor frost allowed) Short term 95 %RH or less (within one month) Vibration acceleration : 4.9 m/s ² (0.5G) or less				

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO 9283.

Note 3) Without controller.

FANUC CORPORATION

•Headquarters Oshino-mura, Yamanashi 401-0597, Japan
Phone: 81-555-84-5555 Fax: 81-555-84-5512 <http://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

3900 West Hamlin Road, Rochester Hills, MI 48309-3253, U.S.A.
Zone Industrielle, L-6468 Echternach, Grand-Duché de Luxembourg
No. 1500 Fulian Road, Baoshan Area, Shanghai, China
101, Wanam-ro(st), Seongsan-gu, Changwon-si, Gyeongsangnam-do, 642-290 Republic of Korea
No.10, 16th Road, Taichung Industrial Park, Taichung, Taiwan
41-A, Electronics City, Bangalore, 560 100, India
No.1 Teban Gardens Crescent, Singapore 608919, Singapore
1301 Pattanakorn Road, Kwaeng Suanluang, Khet Suanluang, Bangkok 10250 Thailand
No.32, Jalan Pengacara U1/48, Temasya Industrial Park, Section U1, Glenmarie, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia
JL. Boulevard Bukit Gading Raya Blok R, Jakarta 14240 Indonesia
10 Healey Circuit, Huntingwood, NSW 2148, Australia
17 Loper Ave. Aeroport Industrial Ests. Spartan Ext.2 P.O.Box 219, Isando 1600, Republic of South Africa

Phone: 1-248-377-7000 Fax: 1-855-774-7051
Phone: 352-727777-1 Fax: 352-727777-403
Phone: 86-21-5032-7700 Fax: 86-21-5032-7711
Phone: 82-55-278-1200 Fax: 82-55-284-9826
Phone: 886-4-2359-0522 Fax: 886-4-2359-0771
Phone: 91-80-2852-0057 Fax: 91-80-2852-0051
Phone: 65-6567-8566 Fax: 65-6566-5937
Phone: 66-2-714-6111 Fax: 66-2-714-6120

Phone: 60-3-7628-0110 Fax: 60-3-7628-0220
Phone: 62-21-4584-7285 Fax: 62-21-4584-7288
Phone: 61-2-8822-4600 Fax: 61-2-8822-4666
Phone: 27-11-392-3610 Fax: 27-11-392-3615

•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, 2012

RM-900iB(E)-06, 2017.3, Printed in Japan