



Almega Friendly series II **Handling Robot** ***FD-B6L***



**Faster, Slimmer
& more User-Friendly**

**A fully redesigned robot with
built-in cables — completely
new and improved!**



**Long arm & high speed contributes to
reduced cycle times and minimized
system size.**

A fully redesigned robot with built-in cables— completely new and improved!

FD-B6L

Faster cycle time

Due to the industry's fastest speeds, cycle times are reduced.

Slim design

High density layout is possible due to slimly designed arm.

User-friendly operation

Integrated signal cables and air hoses to accommodate a variety of end effectors

More robust

Splash-proof and dust-proof design equivalent to IP64 enclosure rating

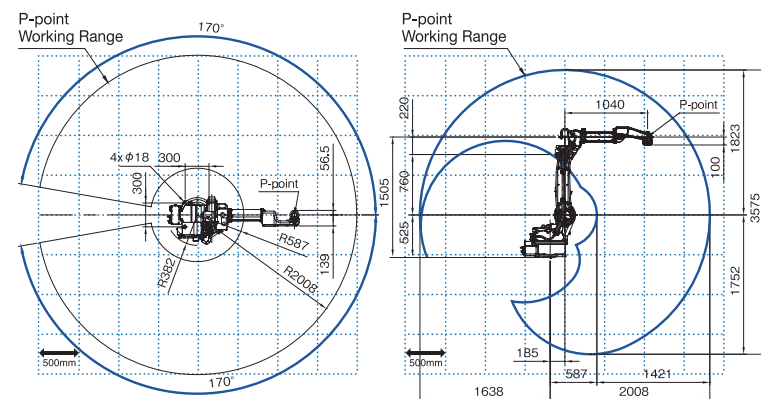
Manipulator Specifications

		FD-B6L
Structure		Vertical articulated type
Number of Axes		6
Max. Payload Capacity		6kg
Positional Repeatability		±0.08mm (Note 1)
Drive System		AC servomotor
Drive Capacity		4832W
Position Feedback		Absolute encoder
Working Range	J1 (Rotation)	±170° (±50°) (Note 2)
	J2 (Lower Arm)	−155°~+100° (Note 3)
	J3 (Upper Arm)	−170°~+190°
	J4 (Swing)	±155°(±170°) (Note 4)
	J5 (Bending)	−45°~+225° (Note 5)
	J6 (Twist)	±205°(±360°) (Note 4, 5)
Maximum Speed	J1 (Rotation)	3.40rad/s (3.05 {195°/s (175°/s)} (Note 2)
	J2 (Lower Arm)	3.49rad/s(200°/s)
	J3 (Upper Arm)	3.49rad/s(200°/s)
	J4 (Swing)	7.50rad/s(430°/s)
	J5 (Bending)	7.50rad/s(430°/s)
	J6 (Twist)	11.00rad/s(630°/s)
Wrist Allowable Load	J4 (Swing)	10.5N·m
	J5 (Bending)	10.5N·m
	J6 (Twist)	5.9N·m
	J4 (Swing)	0.28kg·m ²
	J5 (Bending)	0.28kg·m ²
	J6 (Twist)	0.06kg·m ²
Arm Cross-sectional Area		6.37m ² × 340°
Ambient Conditions		Temp: 0 to 45°C, Hmd: 20 to 80%RH (No Condensation)
Mass (weight)		278kg
Upper Arm Payload Capacity		20kg (Note 6)
Installation Type		Floor, wall, or ceiling
Paint Color		White (Munsell notation 10GY 9/1)

Notes

1. Positional repeatability of the tool center point (TCP) value complies with the JIS-B-8432 Standard.
2. Specifications for wall mounting appear in parentheses.
3. The working range of the J2 axis may be restricted when wall-mounted.
4. This specification applies when a single-wire power cable is fed through the hollow part of J4 and J6. The value in parentheses represents all other specifications.
5. The working range of the J6 axis may be restricted by the specific posture of the J5 axis.
6. The capacity of the upper arm varies with the wrist capacity.

Manipulator Working Range



In accordance with DAIHEN's policy to make continuing improvements, design and/or specifications are subject to change without notice and without any obligation on the part of manufacturer.

DAIHEN Corporation

4-1, Koyochi-nishi, Higashinada-ku, Kobe, Hyogo 658-0033, Japan
Phone: (Country Code 81) 78-275-2006
Fax: (Country Code 81) 78-845-8159

Distributed by:

Note This product and the technologies (including software) used in the product are subject to Catch-All Controls. When exporting any of them, verify the users, applications, etc. according to the applicable laws and regulations and take appropriate procedures such as applications for export permission to the Minister of Economy, Trade and Industry if required.

●The information contained in this catalog is current as of November 2019 and is subject to revision without notice.
●This catalog was printed with environmentally-friendly vegetable oil ink.

CAT NO.R21643A TP PRINTED IN JAPAN