



Almega Friendly series
Arc Welding Robot
FD-B6L

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

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



**Best for large structures by its long arm
All cables required for synchro-feed
welding are already built into the robot.**

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

Built-in wrist motors avoid interference with jigs and workpieces.

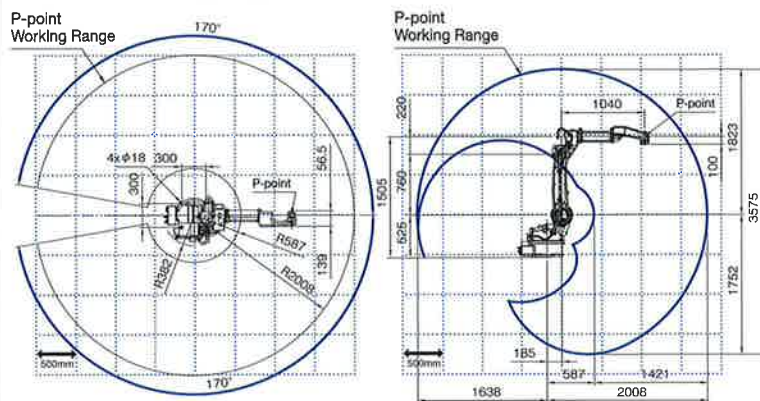
User-friendly operation

Designed to avoid interference behind the arm (All cables required for synchro-feed welding are already built into the robot)

Stronger structure

Maximum payload is 6kg. Can be equipped with various torches and sensors. It is good for handling application.

Manipulator Working Range



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.

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, Koyochonishi, 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 2017 and is subject to revision without notice.
●This catalog was printed with environmentally-friendly vegetable oil ink.