

**DAIHEN**

*Almega Friendly series*

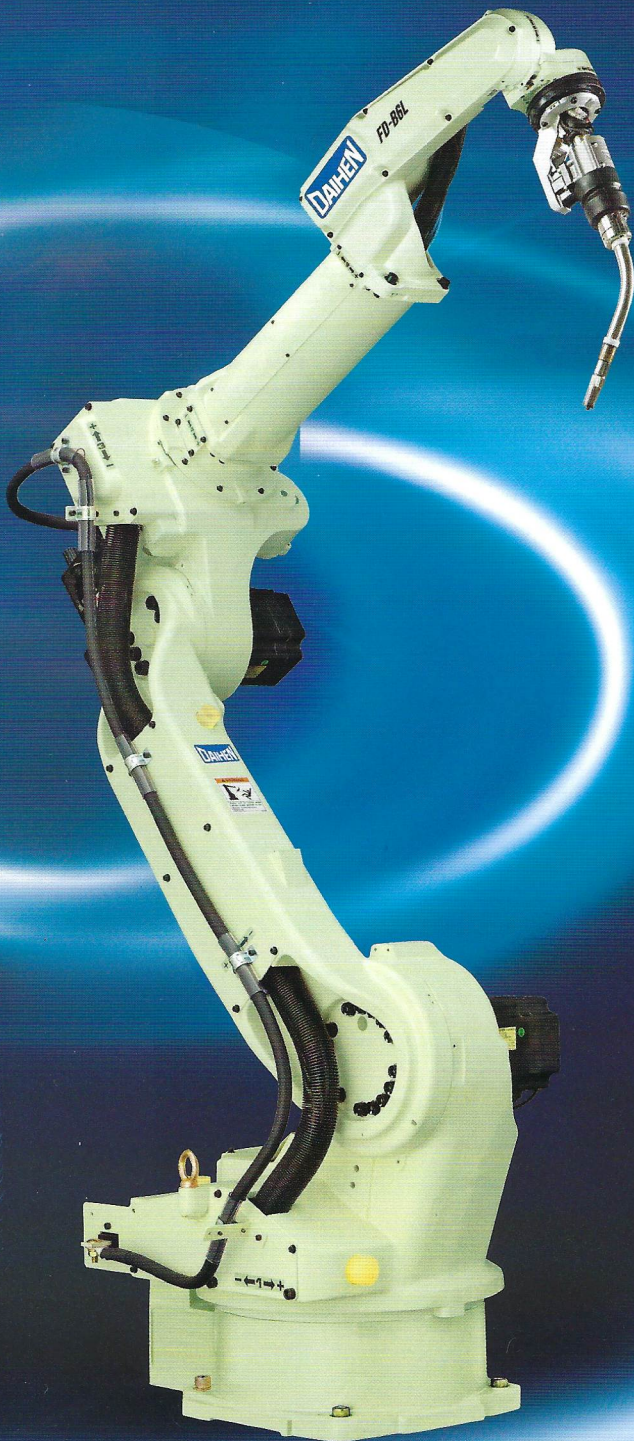
# Arc Welding Robot *FD-B6L*

**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!

### Faster cycle time

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

### Slim design

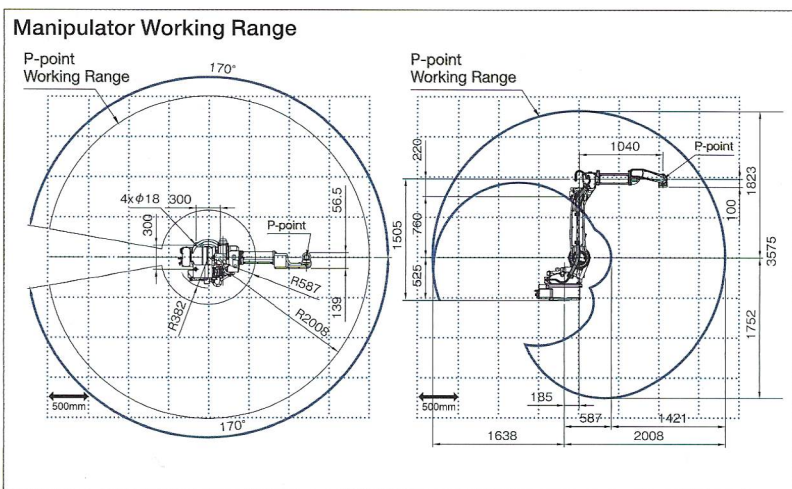
Built-in wrist motors avoid interference with jigs and workpieces.

### 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 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	Arm J1 (Rotation)	±170° (±50°) (Note 2)
	J2 (Lower Arm)	-155°~+100° (Note 3)
	J3 (Upper Arm)	-170°~+190°
	J4 (Swing)	±155°(±170°) (Note 4)
Wrist	J5 (Bending)	-45°~+225° (Note 5)
	J6 (Twist)	±205°(±360°) (Note 4, 5)
Maximum Speed	Arm 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)
	Wrist J5 (Bending)	7.50rad/s(430°/s)
	J6 (Twist)	11.00rad/s(630°/s)
Wrist Allowable Load	Allowable Moment J4 (Swing)	10.5N·m
	J5 (Bending)	10.5N·m
	J6 (Twist)	5.9N·m
	Allowable Moment of Inertia J4 (Swing)	0.28kg·m <sup>2</sup>
	J5 (Bending)	0.28kg·m <sup>2</sup>
	J6 (Twist)	0.06kg·m <sup>2</sup>
Arm Cross-sectional Area		6.37m <sup>2</sup> × 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.

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