



Almega Friendly series II **Arc Welding Robot** ***FD-V8***



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

**Improved in every aspect of
performance!**



**The maximum payload is increased to 8kg.
Application for the welding usage has been
expanded.**

Improved in every aspect of performance!

Faster cycle time

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

Slim design

Slimmed lower arm and reduced rotating radius. Avoiding the interference with jigs or workpieces.

User-friendly operation

All cables required for Synchro-feed welding are also built in the lower arm. Avoiding the interference behind the arm.

Stronger structure

The maximum payload has been increased by 30%, up to 8kg. Enabling the use of a variety of torches and sensors. It is also good for handling application.

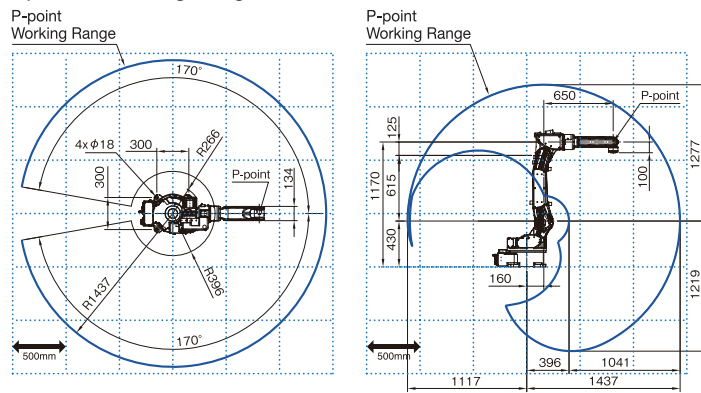
Manipulator Specifications

		FD-V8
Structure		Vertical articulated type
Number of Axes		6
Max. Payload Capacity		8kg
Positional Repeatability		±0.08mm (Note 1)
Drive System		AC servomotor
Drive Capacity		3016W
Position Feedback		Absolute encoder
Working Range	J1 (Rotation)	±170° (±50°) (Note 2)
	Arm	
	J2 (Lower arm)	−155°~+90°
	J3 (Upper arm)	−170°~+190°
	J4 (Swing)	±180°
	Wrist	
Maximum Speed	J5 (Bending)	−50°~+230°
	J6 (Twist)	±360° (Note 3)
	J1 (Rotation)	4.19rad/s (240°/s) (3.32rad/s (190°/s)) (Note 2)
	Arm	
	J2 (Lower arm)	4.19rad/s(240°/s)
	J3 (Upper arm)	4.01rad/s(230°/s)
Wrist Allowable Load	J4 (Swing)	17.6N·m
	J5 (Bending)	17.6N·m
	J6 (Twist)	7.8N·m
	Allowable Moment of Inertia	
Wrist Allowable Load	J4 (Swing)	0.43kg·m ²
	J5 (Bending)	0.43kg·m ²
	J6 (Twist)	0.09kg·m ²
Arm Cross-sectional Area		3.11m ² ×340°
Ambient Conditions		Temp: 0 to 45°C, Hmd: 20 to 80%RH (No Condensation)
Mass (weight)		140kg
Upper Arm Payload Capacity		10kg (Note 4)
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. 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.

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 ●This catalog was printed with environmentally-friendly vegetable oil ink.