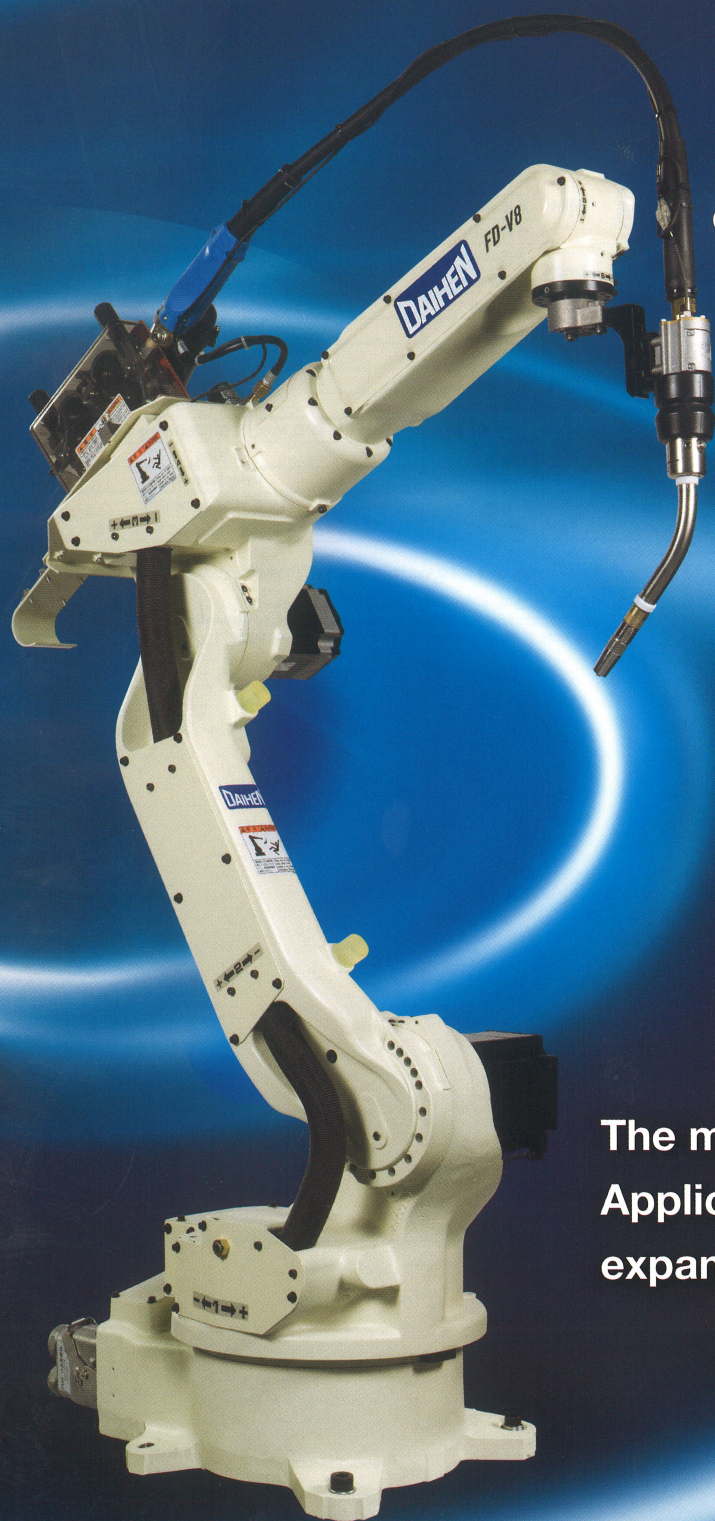




*Almega Friendly series*  
**Arc Welding Robot**  
**FD-V8**



**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.

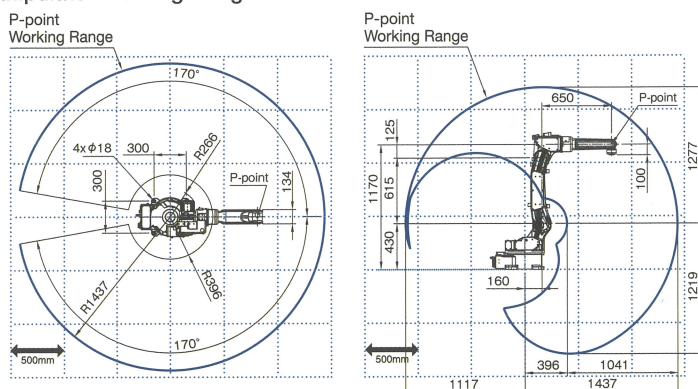
## Manipulator Specifications

	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 J5 (Bending) -50°~+230°
	J6 (Twist) ±360° (Note 3)
Maximum Speed	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}
	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	J4 (Swing) 17.6N·m
	J5 (Bending) 17.6N·m
	J6 (Twist) 7.8N·m
	J4 (Swing) 0.43kg·m <sup>2</sup>
	J5 (Bending) 0.43kg·m <sup>2</sup>
	J6 (Twist) 0.09 kg·m <sup>2</sup>
Arm Cross-sectional Area	3.11m <sup>2</sup> ×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.