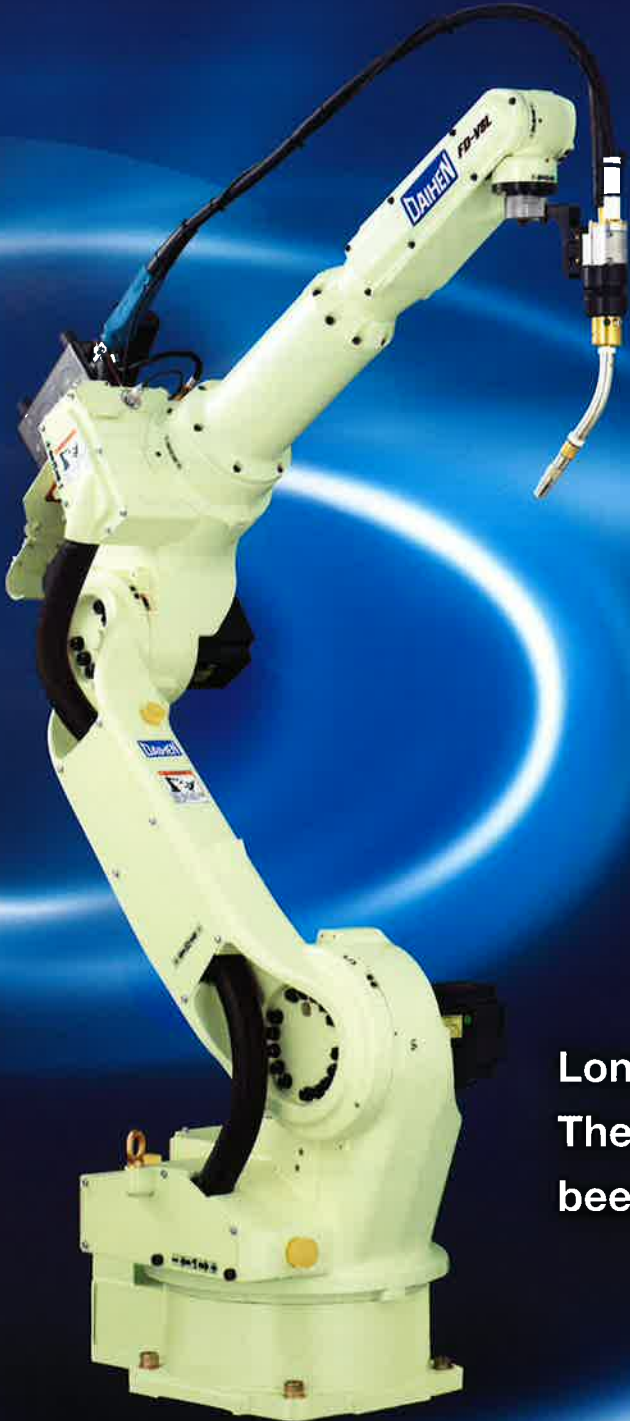


DAIHEN

Almega Friendly series
Arc Welding Robot
FD-V8L



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

Improved in every aspect of
performance!



Long arm with a maximum payload of 8kg
The range of welding applications has
been expanded.

Improved in every aspect of performance! Slim rear design!

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 workpiece.

User-friendly operation

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

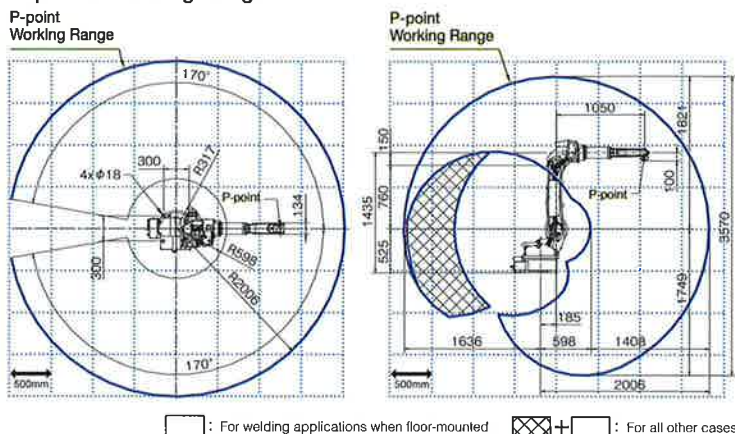
Stronger structure

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-V8L	
Structure	Vertical articulated type	
Number of Axes	6	
Max. Payload Capacity	8kg	
Positional Repeatability	±0.08mm (Note 1)	
Drive System	AC servomotor	
Drive Capacity	5000W	
Position Feedback	Absolute encoder	
Working Range	J1 (Rotation)	±170° (±50°) (Note 2)
	Arm J2 (Lower Arm)	-155°~+100° (Note 3)
	J3 (Upper Arm)	-170°~+260°
	J4 (Swing)	±180°
	Wrist J5 (Bending)	-50°~+230°
	J6 (Twist)	±360°
Maximum Speed	J1 (Rotation)	3.40rad/s (3.05 {195°/s (175°/s)}) (Note 2)
	Arm 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)	10.99rad/s(630°/s)
Wrist Allowable Load	J4 (Swing)	17.6N·m
	J5 (Bending)	17.6N·m
	J6 (Twist)	7.8N·m
	Allowable Moment of J4 (Swing)	0.43kg·m ²
	J5 (Bending)	0.43kg·m ²
	J6 (Twist)	0.09kg·m ²
Arm Cross-sectional Area	7.48m ² × 340°	
Ambient Conditions	Temp: 0 to 45°C, Hmd: 20 to 80%RH (No Condensation)	
Mass (weight)	273kg	
Upper Arm Payload Capacity	20kg (Note 4)	
Installation Type	Floor, wall, or ceiling	
Paint Color	White (Munsell notation 10GY 9/1)	

Manipulator Working Range



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.

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

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Note

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- 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.