



*Almega Friendly series*  
**ARC WELDING ROBOT**  
**FD-V8**



***Faster***  
***Stronger***  
***Slimmer***  
***Efficient***

***Load capacity of 17.6 lb***

## New and improved in every way

**Faster**

15% improvement on all axes

**Stronger**

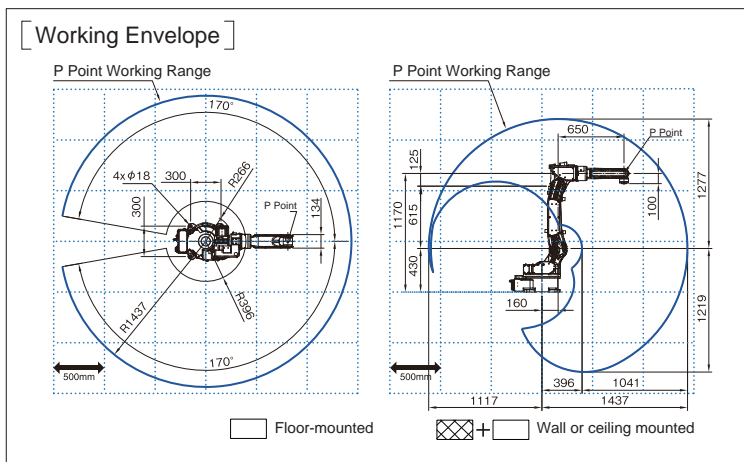
Payload increased 30%

**Efficient**

Incorporating cables improve operation

**Slimmer**

Best access to confined welds



### Specifications

		FD-V8	
Item		Specifications	
Structure		Vertical articulated type	
Number of axes		6	
Max. payload capacity		8 kg	
Positional repeatability		±0.08mm <small>Note 1</small>	
Drive system		AC Servo motor	
Drive capacity		3016 W	
Position feedback		Absolute encoder	
Working range	Arm	Axis J1 (Rotation)	±170° (±50°) <small>Note 2</small>
		Axis J2 (Lower arm)	-155° ~ +90°
		Axis J3 (Upper arm)	-170° ~ +190°
Wrist	Axis J4 (Swing)	±180°	
	Axis J5 (Bending)	-50° ~ +230°	
	Axis J6 (Twist)	±360°	
Max. velocity	Arm	Axis J1 (Rotation)	4.19 rad/s (240°/s) (3.32rad/s (190°/s)) <small>Note 2</small>
		Axis J2 (Lower arm)	4.19 rad/s (240°/s)
		Axis J3 (Upper arm)	4.01 rad/s (230°/s)
	Wrist	Axis J4 (Swing)	7.50 rad/s (430°/s)
		Axis J5 (Bending)	7.50 rad/s (430°/s)
		Axis J6 (Twist)	11.00 rad/s (630°/s)
Wrist load	Allowable Moment	Axis J4 (Swing)	17.6 N·m
		Axis J5 (Bending)	17.6 N·m
		Axis J6 (Twist)	7.8 N·m
Allowable moment of inertia	Axis J4 (Swing)	0.43kg·m <sup>2</sup>	
	Axis J5 (Bending)	0.43kg·m <sup>2</sup>	
	Axis J6 (Twist)	0.09kg·m <sup>2</sup>	
Arm operation cross-sectional area		3.11m <sup>2</sup> x 340°	
Ambient conditions		0~45°C, 20 ~ 80%RH (No condensation)	
Mass (weight)		140kg	
Upper arm payload capacity		10kg <small>Note 4</small>	
Installation type		Floor, ceiling or wall hanging type	
Paint color		White (Munsell value 10gy9/1)	

Note 1:

The positional repeatability is pursuant to JIS B 8432 standards.

Note 2:

The values given in ( ) apply when wall-mounted.

Note 3:

When wall mounted the working range of the J2 axis may be limited.

Note 4:

The upper arm payload capacity varies by max. payload capacity.

OTC DAIHEN Website

[www.daihen-usa.com](http://www.daihen-usa.com)

DAIHEN ROBOT Website

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