



Almega Friendly series
Handling Robot
FD-V8



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

Improved in every aspect of
performance!



The maximum payload is increased to 8kg.
Ideal for the high-speed handling.

Improved in every aspect of performance!

Faster cycle time

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

Slim design

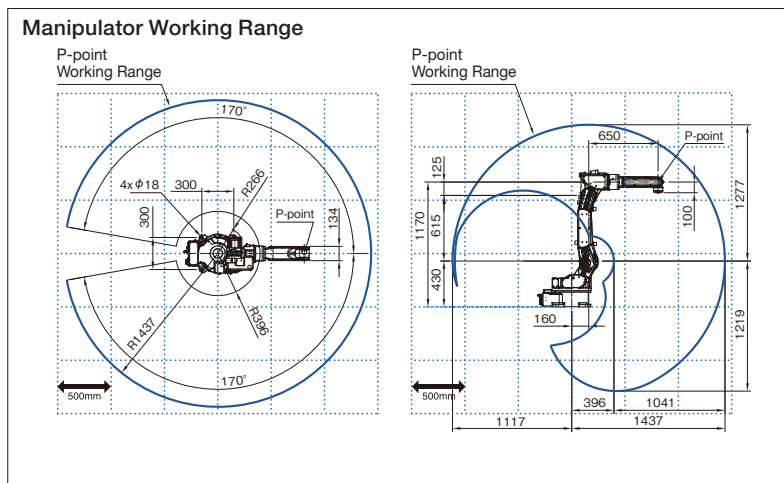
Slimmed lower arm and reduced rotating radius. Avoiding the interference with jigs or workpieces.

User-friendly operation

Integrated signal cables and air hoses accommodate a variety of end effectors.

Stronger structure

The maximum payload has been increased by 30%, up to 8kg.



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)
	J2 (Lower arm)	-155°~+90°
	J3 (Upper arm)	-170°~+190°
Wrist	J4 (Swing)	±180°
	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)
	J2 (Lower arm)	4.19rad/s(240°/s)
	J3 (Upper arm)	4.01rad/s(230°/s)
	J4 (Swing)	7.50rad/s(430°/s)
	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 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 J6 axis may be restricted by the specific posture of the J5 axis.
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.

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Note

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