



# *Almega Friendly series*

# ARC WELDING ROBOT

# *FD-B6*



*New and improved in every way*

***Faster***

15% improvement on all axes

***Stronger***

Payload increased 1.5X

***Lighter***

Easiest mounting & transporting

***Slimmer***

Best access to confined welds

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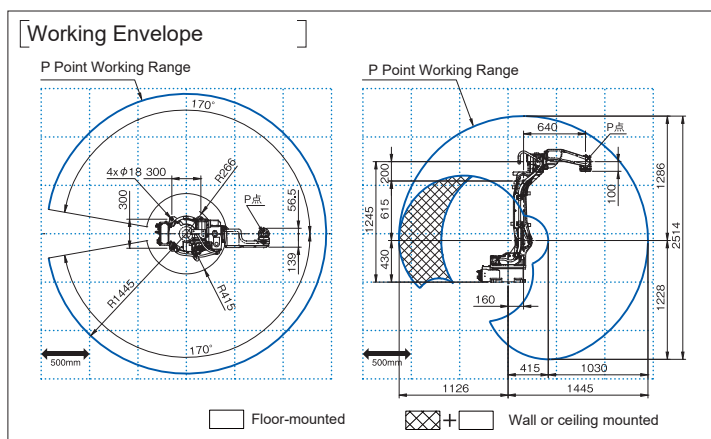
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## Specifications

		FD-B6	
Item		Specifications	
Name		NB6	
Structure		Vertical articulated type	
Number of axes		6	
Max. payload capacity		6 kg	
Positional repeatability		+/- 0.08 mm	
Drive system		AC Servo motor	
Drive capacity		3132 W	
Position feedback		Absolute encoder	
Working range	Arm	Axis J1 (Rotation)	+/- 170° (±/±50°) <small>Note 1</small>
		Axis J2 (Lower arm)	-155°~+90°
		Axis J3 (Upper arm)	-170°~+245° <small>Note 3</small>
Wrist		Axis J4 (Swing)	+/- 155° << +/- 170° >> <small>Note 2</small>
		Axis J5 (Bending)	-45°~+225°
		Axis J6 (Twist)	+/- 205° << +/- 360° >> <small>Note 2, Note 4</small>
Max. velocity	Arm	Axis J1 (Rotation)	4.19 rad/s (240°/s) (3.32 rad/s (190°/s))
		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)	10.5 N*m
		Axis J5 (Bending)	10.5 N*m
		Axis J6 (Twist)	5.9 N*m
Allowable moment of inertia		Axis J4 (Swing)	0.28 kg*m <sup>2</sup>
		Axis J5 (Bending)	0.28 kg*m <sup>2</sup>
		Axis J6 (Twist)	0.06 kg*m <sup>2</sup>
Arm operation cross-sectional area		3.59 m <sup>2</sup> x 340°	
Ambient conditions		0 ~ 45°C, 20 ~ 80 %RH (No condensation)	
Mass (weight)		145 kg	
Upper arm payload capacity		10 kg	
Installation type		Floor, ceiling or wall hanging type	
Paint color		White (Munsell 10GY9/1)	

### Note 1:

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

### Note 2:

The values given in << >> apply when coaxial power cables are not passing through the hollow wrist.

### Note 3:

Working range of the J3 axis is restricted to -170 degrees to +180 degrees when floor-based welding is applied.

### Note 4:

Working range of the J6 axis may be restricted by the J5 axis position.

OTC DAIHEN Website

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

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