



***Almega Friendly series II***  
**Handling Robot**  
**NEW FD-B6H**  
**HANDLING specification**

**Fast, Slim,  
User-Friendly**

**Improved all performances!  
New hollow arm handling robot**



**Max. Payload 6kg  
Reducing cycle times and  
minimized system size.**

# Improved all performances! New hollow arm handling robot

**FD-B6H**  
HANDLING specification

**Fast**

Industry leading level speed.  
Reduce cycle time

**User friendly**

Built-in application cable for  
various hand tools.

**Slim**

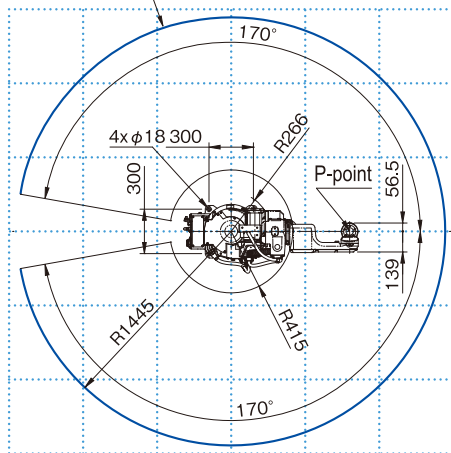
High-density layout

**Tough**

IP65 Dust-proof and  
splash-proof design.

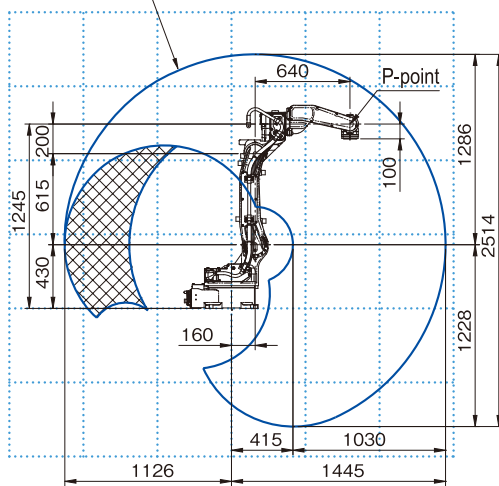
## Manipulator Working Range

P-point Working Range



□ = 500mm

P-point Working Range



□ : For welding applications when floor-mounted  
⊗ : For other than the above

## Manipulator Specifications

		Specification	
Name		FD-B6H	
Structure		Vertically articulated type	
Number of Axes		6	
Wrist Capacity		6kg	
Positional Repeatability (Note 1)		±0.08mm (Note 1)	
Driving Method		AC servo motor	
Driving Capacity		3132W	
Positional Feedback		Absolute encoder	
Working Range	Arm	J1 (Rotation)	±170°(±50°) (Note 2)
		J2 (Front/back)	−155°~+90° (Note 3)
		J3 (Up/down)	−170°~+245°
	Wrist	J4 (Swing)	±155°(±170°) (Note 4)
		J5 (Bending)	−45° ~+225°
		J6 (Twist)	±205° (±360°)
Maximum Speed	Arm	J1 (Rotation)	4.19 rad/s {240°/s} (3.32 rad/s {190°/s}) (Note 2)
		J2 (Front/back)	4.19 rad/s {240°/s}
		J3 (Up/down)	4.01 rad/s {230°/s}
	Wrist	J4 (Swing)	7.50rad/s {430°/s}
		J5 (Bending)	7.50rad/s {430°/s}
		J6 (Twist)	11.00rad/s {630°/s}
Wrist Allowable Load	Allowable Moment	J4 (Swing)	10.5N・m
		J5 (Bending)	10.5N・m
		J6 (Twist)	5.9N・m
	Allowable Moment of inertia	J4 (Swing)	0.28kg・m <sup>2</sup>
		J5 (Bending)	0.28kg・m <sup>2</sup>
		J6 (Twist)	0.06kg・m <sup>2</sup>
Arm Cross-sectional Area		3.57m <sup>2</sup> ×340°	
Environmental Conditions		Temp: 0~45℃, Hmd: 20~80%RH (No Condensation)	
Mass (weight)		145 kg	
Capacity of Upper Arm		10kg (Note 3)	
Installation Method		Floor-/Ceiling-/Wall-mounted	
Paint Color		White (Munsell notation 10GY 9/1)	

(Note 1) Positional repeatability of the tool center point (TCP) value complies with the JIS -B-8432 Standard.  
 (Note 2) Specifications for wall mounting appear in parentheses.  
 (Note 3) The working range of the J2 axis may be restricted when wall-mounted.  
 (Note 4) This specification applies when a single-wire power cable is fed through the hollow part of J4 and J6.  
 The value in parentheses represents all other specifications.  
 (Note 5) Working range of J6 axis may be restricted by the position of J5 axis.  
 (Note 6) The capacity of the upper arm varies with the wrist capacity.

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**Daihen Robot Site**

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●The information contained in this catalog is current as of April 2021 and is subject to revision without notice.

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