



***Almega Friendly series II***  
**Handling Robot**

**NEW** ***FD-V8H***

**HANDLING specification**



**Fast, Slim,  
User-Friendly**

**Improved with all  
performances!**



**Max. payload 8kg.  
Ideal for the  
high-speed handling.**

## Improved with all performances!

### Fast

Industry leading level speed.  
Reduce cycle time

### Slim

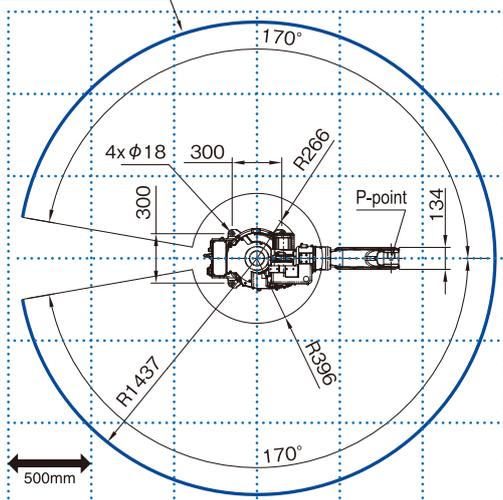
High-density layout

### User friendly

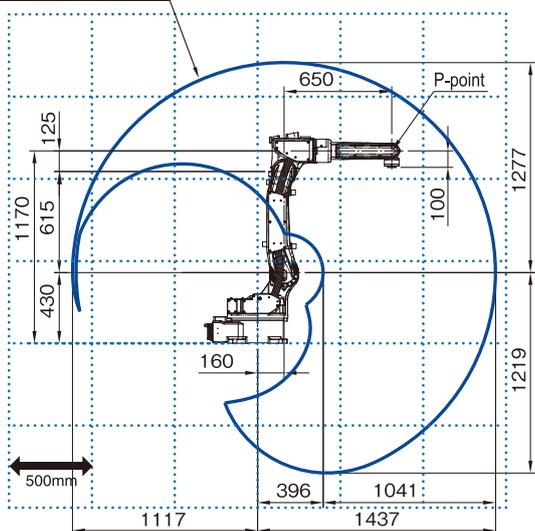
Built-in application cable for  
various hand tools.

#### [ Manipulator Working Range ]

P-point Working Range



P-point Working Range



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

#### [ Manipulator Specifications ]

		Specification	
Name		FD-V8H	
Structure		Vertically articulated type	
Number of Axes		6	
Wrist Capacity		8 kg	
Positional Repeatability (Note 1)		±0.08mm (Note 1)	
Driving Method		AC servo motor	
Driving Capacity		3016W	
Positional Feedback		Absolute encoder	
Working Range	Arm	J1 (Rotation)	±170°(±50°) (Note 2)
		J2 (Front/back)	-155°~+90° (Note 3)
		J3 (Up/down)	-170°~+190°
	Wrist	J4 (Swing)	±180°
		J5 (Bending)	-50°~+230°
		J6 (Twist)	±360°
Maximum Speed	Arm	J1 (Rotation)	4.19 rad/s{240°/s} (3.32rad/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)	7.50 rad/s{430°/s}
		J5 (Bending)	7.50rad/s{430°/s}
		J6 (Twist)	11.00rad/s{630°/s}
Wrist Allowable Load	Allowable Moment	J4 (Swing)	17.6 N·m
		J5 (Bending)	17.6 N·m
		J6 (Twist)	7.8 N·m
	Allowable Moment of Inertia	J4 (Swing)	0.43 kg·m <sup>2</sup>
		J5 (Bending)	0.43 kg·m <sup>2</sup>
		J6 (Twist)	0.09 kg·m <sup>2</sup>
Arm Cross-sectional Area		3.11m <sup>2</sup> × 340°	
Environmental Conditions		Temp: 0~45°C, Hmd: 20~80%RH (No Condensation)	
Mass (weight)		140 kg	
Capacity of Upper Arm		10kg (Note 4)	
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) The capacity of the upper arm varies with the wrist capacity.

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