



DAIHEN INC.

Almega Friendly series

100kg Payload Class FD-V80/V100/V130

- + General-Purpose Applications:
Material Handling, Finishing, Dispensing
- + Built-In End-Of-Arm Tooling Interface At Shoulder
- + Slim Design With Small Mounting Footprint



FD-V80

80 kg payload
Reach 2500 mm



FD-V100

100 kg payload
Reach 2236 mm



FD-V130

130 kg payload
Reach 2139 mm

Well-equipped for all your material-handling applications

Small arm profile and mounting footprint

Built-in end-of-arm tooling support

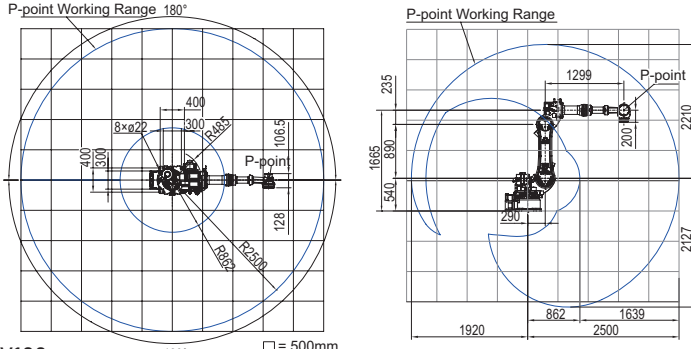
- Optimized for the speed, lifting capacity and wrist torque required speed

- Slim wrist and upper arm
- Small mounting footprint

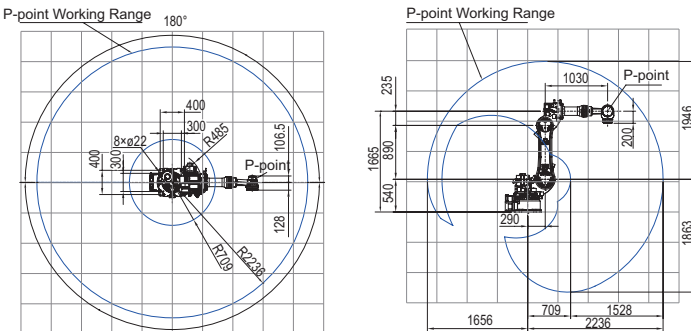
- DeviceNet
- Discrete I/O
- Pneumatic lines
- User application cable conduit (Robot base-to-shoulder routing included)

MANIPULATOR WORKING RANGE

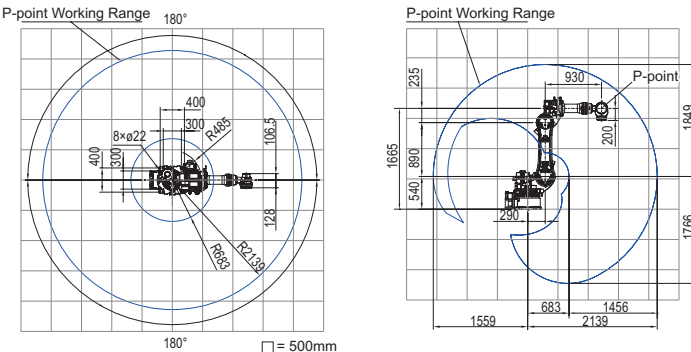
FD-V80



FD-V100



FD-V130



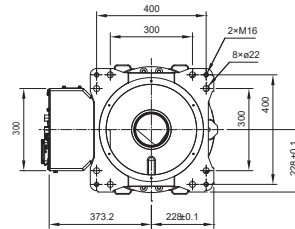
MANIPULATOR SPECIFICATIONS

	FD-V80	FD-V100	FD-V130	
Structure	Vertical articulated type			
Number of Axes	6			
Max. Payload Capacity	80 kg	100 kg	130 kg	
Horizontal Reach	2500 mm	2236 mm	2139 mm	
Vertical Reach	4337 mm	3809 mm	3615 mm	
Positional Repeatability	±0.08 mm (Note 1)			
Drive System	AC servomotor			
Drive Capacity	15100W			
Position Feedback	Absolute encoder			
Working Range	Arm	±180°		
	J2 (Lower arm)	-155°~+90°		
	J3 (Upper arm)	-185°~+205°		
	J4 (Swing)	±360°		
	Wrist	J5 (Bending)	-35°~+215°	
		J6 (Twist)	±360°	
Maximum Speed	Arm	2.44 rad/s[140°/s]		
	J2 (Lower arm)	1.92 rad/s[110°/s]		
	J3 (Upper arm)	2.44 rad/s[140°/s]		
	Wrist	J4 (Swing)	3.05 rad/s[175°/s]	
		J5 (Bending)	3.06 rad/s[175°/s]	
	J6 (Twist)	4.45 rad/s[255°/s]		
Wrist Allowable Load	J4 (Swing)	721.0 N·m		
	J5 (Bending)	721.0 N·m		
	J6 (Twist)	294.0 N·m		
	Allowable Moment of Inertia	J4 (Swing)	60.0 kg·m ²	
		J5 (Bending)	60.0 kg·m ²	
	J6 (Twist)	33.7 kg·m ²		
Arm Cross-sectional Area	6.83 m ² × 360°	7.56 m ² × 360°	9.53 m ² × 360°	
Ambient Conditions	Temp: 0 to 45°C, Hmd: 20 to 80%RH (No Condensation)			
Mass (weight)	763 kg	747 kg	743 kg	
Upper Arm Payload Capacity	25 kg (Note 2)			
IP Code	Base axes (J1, J2, J3 Axis) IP54 Wrist axes (J4, J5, J6 Axis) IP67/69 (Note 2)			
Installation Type	Floor or wall			
Paint Color	White (Munsell notation 10GY 9/1)			

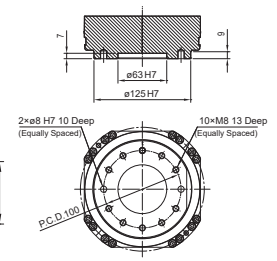
Notes

1. Positional repeatability of the tool center point (TCP) value complies with the JIS-B-8432 Standard.
2. IP code is based on IEC60529.

Installation dimension (mm)



Flange dimensions (mm)



In accordance with DAIHEN's policy of make continuing improvements, design and/or specifications are subject to change without notice and without any obligation on the part of manufacturer.

OTC DAIHEN Website
www.daihen-usa.com

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