



Almega Friendly series 100kg Payload Class

FD-V80/V100/V130

NEW

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



Coming Soon!

FD-V80

80 kg payload
Reach 2500 mm



FD-V100

100 kg payload
Reach 2236 mm



Coming Soon!

FD-V130

130 kg payload
Reach 2139 mm

FD-V80/V100/V130

100kg Payload Class Handling Robots

Well-equipped for all your material-handling applications

- Optimized for the speed, lifting capacity

Small arm profile and mounting footprint

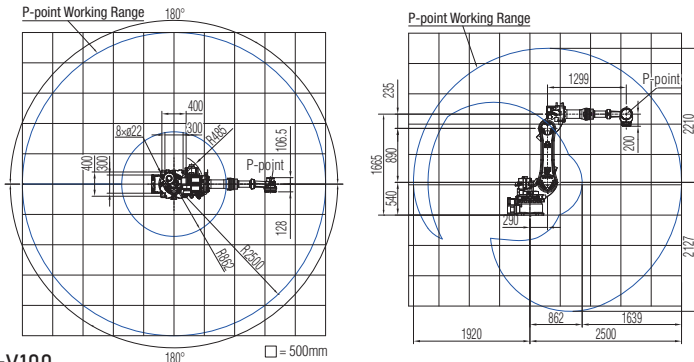
- Slim wrist and upper arm
- Small mounting footprint

Built-in end-of-arm tooling support

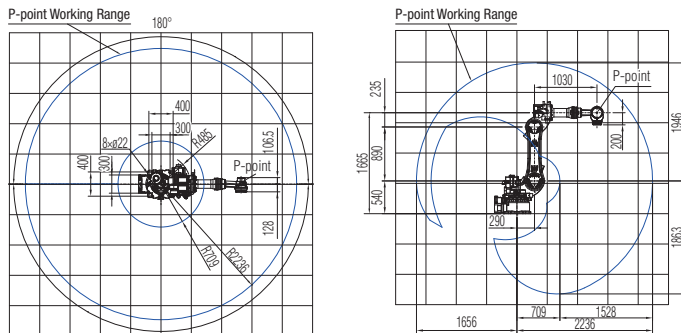
- DeviceNet
- Discrete I/O
- Pneumatic lines
- User application cable conduit (Robot base-to-shoulder routing included)

MANIPULATOR WORKING RANGE

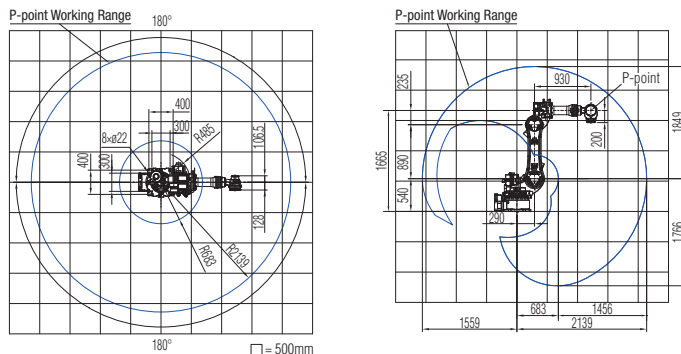
FD-V80



FD-V100



FD-V130



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.

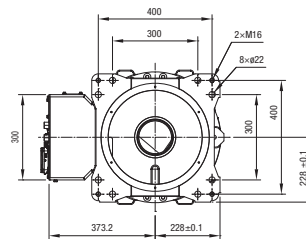
MANIPULATOR SPECIFICATIONS

		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	J1 (Rotation)	±180°	
		J2 (Lower arm)	-15°~+90°	
		J3 (Upper arm)	-185°~+205°	
	Wrist	J4 (Swing)	+360°	
		J5 (Bending)	-35°~+215°	
		J6 (Twist)	+360°	
Maximum Speed	Arm	J1 (Rotation)	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	Allowable Moment	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		IP67 (Only for J5, J6 Axis)		
Installation Type		Floor		

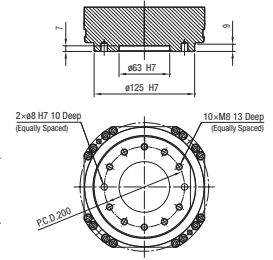
Notes

- Positional repeatability of the tool center point (TCP) value complies with the JIS-B-8432 Standard.
- The capacity of the upper arm varies with the wrist capacity.

Installation dimension (mm)



Flange dimensions (mm)



OTC DAIHEN Website
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