

Almega Friendly series II

Extra-Long Reach Robot

NEW *FD-V25L*



3m reach robot

3m reach covering a wide working area without a slider,
Compared to our model : 1.5 times of V8L and 1.8times of V25.

High-speed operation

Contributes to improved productivity with the best in class
operating speed.

25kg payload

Best in class 25 kg payload capacity is sufficient to attach
various tools for welding and material handling.

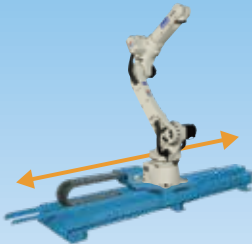
Expand
the range of robot
selection

Reduce
Systematization
Costs

Conventional pattern

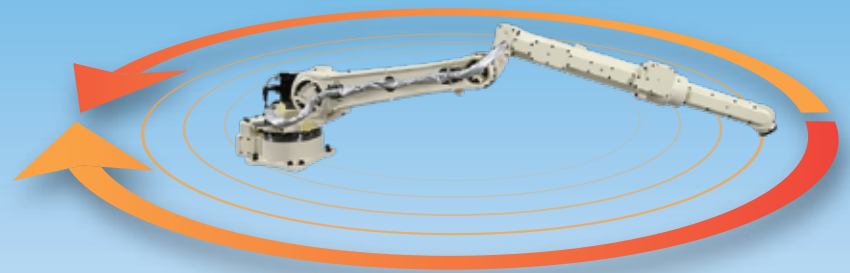


Uses heavy payload robot
for wide motion range



Uses robot system with slider

New proposal



Ideal for large automation applications for a wide range of
operations due to the extended range of motion.

Extra Long Reach Robot

3m reach

3m reach covering a wide working area without a slider
Compared to our model : 1.5 times V8L and 1.8 times V25!

High-speed operation

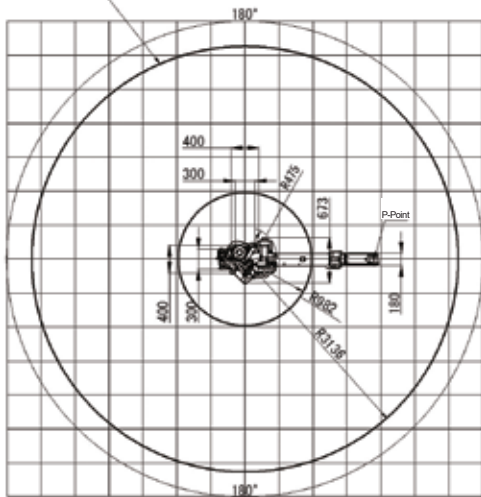
Contributes to improved productivity
with the best in class operating speed.

Various applications

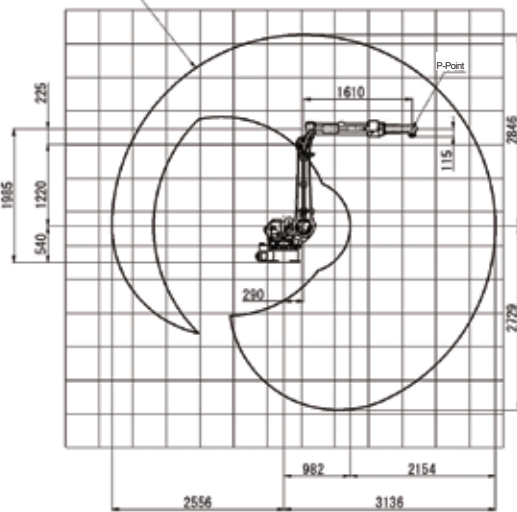
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<Manipulator Working range >

P-Point Working Range



P-Point Working Range



<Manipulator Specifications>

Item		Specifications	
Name		NV25L	
Structure		Vertical articulated type	
Number of axis		6	
Max. payload capacity		55.1lb (25kg)	
Positional repeatability		+/- 0.07 mm (Note 1)	
Drive system		AC Servo motor	
Drive capacity		11500 W	
Position feedback		Absolute encoder	
Working range	Arm	J1 (Revolving)	+/- 180°
		J2 (Fore/Back)	-155°~+90°
		J3 (Up/Down)	-180°~+250°
	Wrist	J4 (Swing)	+/- 180°
		J5 (Bending)	-50°~+230°
		J6 (Twist)	+/- 360°(Note 2)
Max. velocity	Arm	J1 (Revolving)	3.39 rad/s {194°/s}
		J2 (Fore/Back)	3.14 rad/s {180°/s}
		J3 (Up/Down)	4.58 rad/s {205°/s}
	Wrist	J4 (Swing)	7.85 rad/s {450°/s}
		J5 (Bending)	7.68 rad/s {440°/s}
		J6 (Twist)	10.56 rad/s {605°/s}
Wrist load	Allowable Moment	J4 (Swing)	52.6 N*m
		J5 (Bending)	52.6 N*m
		J6 (Twist)	24.5 N*m
	Allowable moment of inertia	J4 (Swing)	2.7lb (1.24 kg)*m ²
		J5 (Bending)	2.7lb (1.24 kg)*m ²
		J6 (Twist)	0.7lb (0.33 kg)*m ²
Arm operation cross-sectional area		185ft ² (17.2 m ²) x 360°	
Ambient temperature and humidity		32~113°F(0~45°C), 20~80% RH (No condensation)	
Mass (weight)		1366.87lb (620kg)	
Upper arm payload capacity		10 kg (Note 3)	
IP Code		IP54 equivalent (J1~4 Axis)	
Installation type		Floor, ceiling hanging type	
Paint color		White (Munsell 10GY9/1)	

Notes

- The value of the positional repeatability is at the tool center point (TCP) compliant to ISO 9283.
- There are occasions where restrictions can be made to the operation range of the J6 axis, depending on the J5 axis' posture.
- The upper arm movable mass changes depending on the wrist movable mass.
- The positional data of absolute encoder is backed up by the battery.
The battery backup period with the primary power OFF is approx. 3 years. Exceeding this period will require the battery replacement and the absolute offset adjustments.
- The battery backup period may be shorter depending on the environmental conditions, the use conditions and so on.
- A holding brake is provided in all axes.



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