DAIHEN

Almega Friendly series Ⅱ

The Extra-Long Reach Medium Class Robot

NEW **FD-V25L**

3m reach robot with 25kg payload

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 highest operating speed in the same class

Various applications

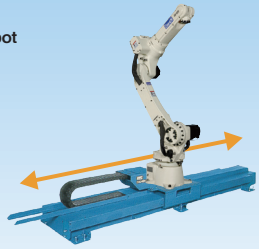
A payload capacity of 25 kg is sufficient to attach various tools such as welding and handling!

The range of robot selection will expand!

Reduced systematization costs!

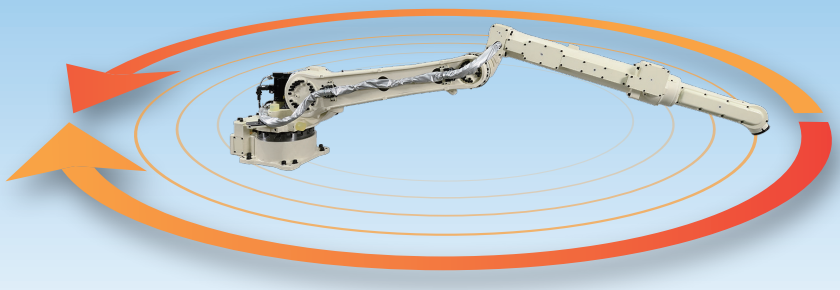
Conventional pattern

Uses heavy payload robot for wide motion range



Robot system with slider used

New proposal



Ideal for automation scenes for a wide range of operations due to the large range of operation!

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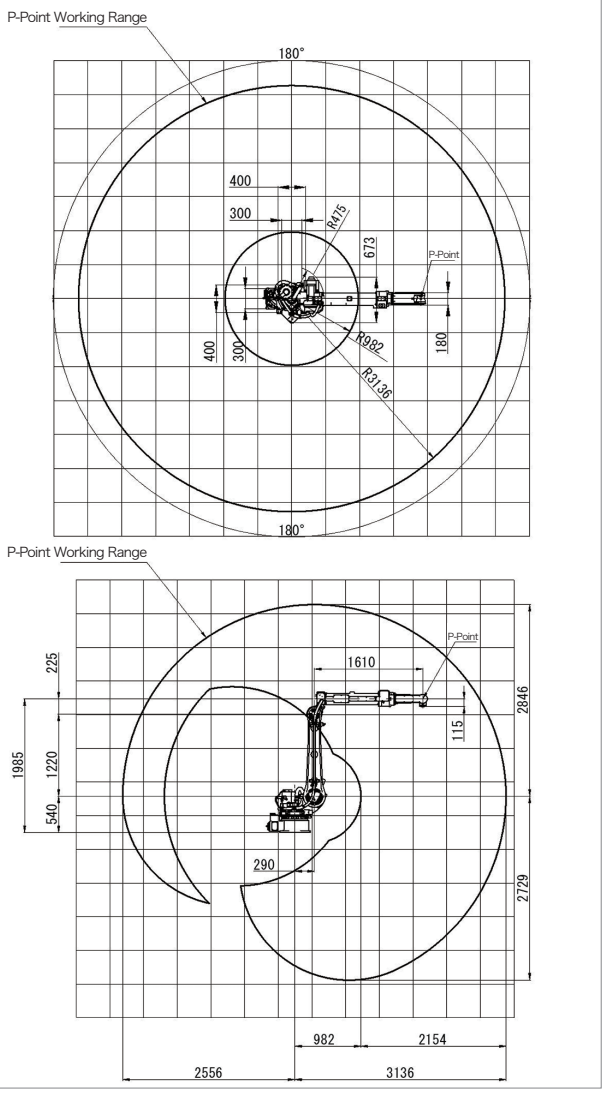
<Manipulator Working range>



<Manipulator Specifications>

Item			Specifications
Name			NV25L
Structure			Vertical articulated type
Number of axis			6
Max. payload capacity			25kg
Positional repeatability			+/- 0.07 mm (Note 1)
Drive system			AC Servo motor
Drive capacity			11,700W
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)	1.24 kg*m^2
		J5 (Bending)	1.24 kg*m^2
		J6 (Twist)	0.33 kg*m^2
Arm operation cross-sectional area			17.2 m^2 × 360°
Ambient temperature and humidity			0 ~ 45℃, 20 ~ 80 %RH (No condensation)
Mass (weight)			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
1. The value of the positional repeatability is at the tool center point (TCP) compliant to ISO 9283.
2. There are occasions where restrictions can be made to the operation range of the J6 axis, depending on the J5 axis' s posture.
3. The upper arm movable mass changes depending on the wrist movable mass.
4. he 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.
5. The battery backup period may be shorter depending on the environmental conditions, the use conditions and so on.
6. A holding brake is provided in all axes.

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