

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

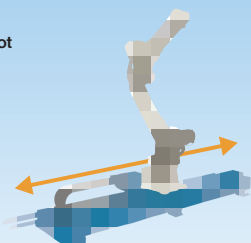
Various applications

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

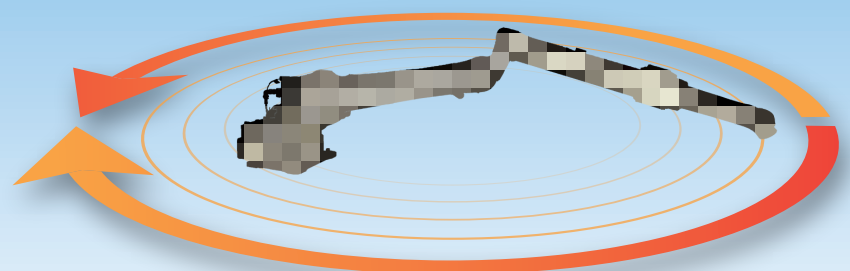
The range of robot selection will expand!

Reduced systematization costs!

Conventional pattern



New proposal



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

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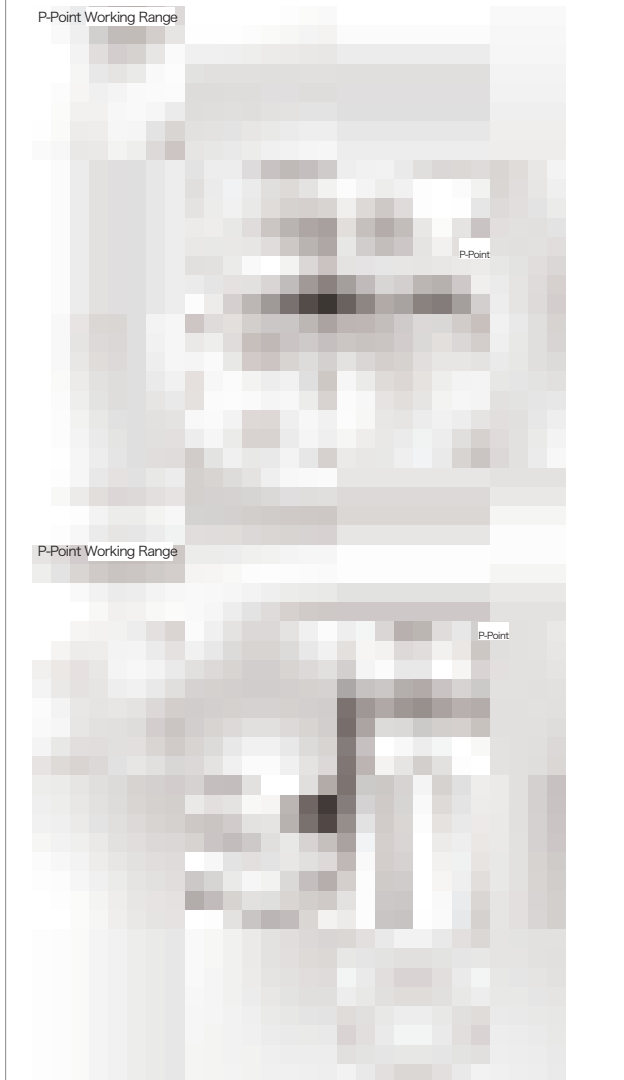
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< Manipulator Working range >



< 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		11500W	
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 x 360°	
Ambient temperature and humidity		0 ~ 45°C, 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

- 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' s 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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Note | This product and the technologies (including software) used in the product are subject to Catch-All Controls. When exporting any of them, verify the users, applications, etc. according to the applicable laws and regulations and take appropriate procedures such as applications for export permission to the Minister of Economy, Trade and Industry if required.

●The information contained in this catalog is current as of July 2023 and is subject to revision without notice.