

# DAIHEN

New  
Product  
News

## *Friendly series II*

### *Optimum Collaborative Robot for Arc Welding*

NEW

# FD-VC4L

Long reach specification



Collaborative robots are born to cover a wide range of operation.

### Wide working range

- 1.4 times\*<sup>1</sup> the work range of conventional collaborative robots
- Expansion of applications such as multi-station

\*1: Comparison with FD-VC4

### Compatible with various welding methods and dedicated functions

- Various types of welding, including CO<sub>2</sub>/MAG and TIG welding.
  - Compatible with a wide range of welding-specific periods (option).
- ◎ Weaving function ◎ Arc sensor function ◎ Touch sensor functions, etc.

### Easy robot introduction

- Space-saving installation without safety fence\*<sup>2</sup> and easy relocation
- Various teaching support functions to simplify robot operation

\*2: If a safety fence is not installed, a risk assessment by the customer is required.



Welding package



Compatible with tall workpieces



Achieves a wide operating range.

## Various teaching support functions to simplify robot operation

### Direct teach



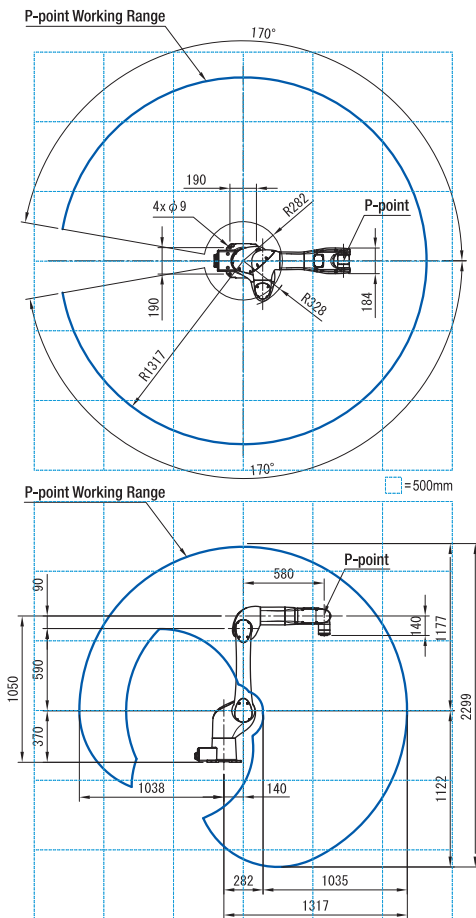
Teaching the welding start position and aim posture by moving the robot arm directly by hand

### Photo touch teach (option)



Automatically Generate Teaching Program by Tablet Only

#### [Manipulator Working Range]



#### [Manipulator Specifications]

Item			Specification
Model			NVC4L
Structure			Vertically articulated type
Number of Axes			6
Wrist Capacity			4 kg
Positional Repeatability			±0.04 mm (Note 1)
Drive Method			AC servo motor
Drive Capacity			1300 W
Position Feedback			Absolute encoder
Working range	Arm	J1 (Rotation)	±170°
		J2 (Front/Back)	-155°~+90°
		J3 (Up/Down)	-165°~+240°
	Wrist	J4 (Swing)	±170°
		J5 (Bending)	-30°~+210°
		J6(Twist)	±360°
Maximum Speed			1000mm/s (Note 2)
Wrist Allowableload	Allowable moment	J4 (Rotation)	13.0 N · m
		J5 (Bending)	13.0 N · m
		J6 (Twist)	4.4 N · m
	Allowable Moment of Inertia	J4 (Rotation)	0.462 kg · m²
		J5 (Bending)	0.462 kg · m²
		J6 (Twist)	0.048 kg · m²
Arm Cross-section Area			3.04 m² × 340°
Environmental Conditions			RHTemp.: 0 to 45°C, Humidity: 20~80%RH (No-condensation)
Weight			47 kg
IP code			IP65
Installation method			Floor-mounted
Paint color			Alice Blue

Note 1) Position repeatability of the tool center point (TCP) value complies with the JIS B 8432 Standard.

Note 2) Regarding the specification of the operation speed, a risk assessment in the use environment is required.

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