

# Robot Module FD19-V100

## High-Payload Robot High-density layout

Avoiding the interference with jigs or workpieces by slim design.

Compatible wide operating range and narrow interference radius

## Perfect communication with external devices

Compatible with application cable of various communication standards

Built-in cable from robot base to shoulder.

## Reduced cycle times

Due to the industry's fastest speeds.



## Product information

Order No.	116000031
Model No.	0

## Specification

Type	FD-V100
Number of axes	6
Working range	R 2236 mm
Max. payload capacity	100 Kg
Additional payload capacity Axis 3	25 kg (Note 7)
Installation type	F,W
Weight	770 Kg
Ambient temperature and humidity	"0 ~ 45°C, 20 ~ 80 % RH (No condensation)"

## Performance

Position repeatability (ISO 9283) +/- 0,08 mm (Note 1)

	Working Range	Max Speed	Wrist load
<b>Axis 1</b>	+/- 180°	2.44 rad/s {140°/s}	
<b>Axis 2</b>	-155° ~ + 90°	1.92 rad/s {110°/s}	
<b>Axis 3</b>	-185° ~ + 220° (Note 2)	2.44 rad/s {140°/s}	
<b>Axis 4</b>	+/- 360°	3.05 rad/s {175°/s}	60.0 kg m <sup>2</sup>
<b>Axis 5</b>	-35° ~ +215°	3.05 rad/s {175°/s}	60.0 kg m <sup>2</sup>
<b>Axis 6</b>	+/- 360°	4.45 rad/s {255°/s}	33.7 kg m <sup>2</sup>

Note 1: The value of the positional repeatability is at the tool center point (TCP) compliant to ISO 9283.

Note 2: The value in the parentheses indicates the wall-hung condition. J2 axis may occur the limitation of the working range.

Note 3: There are occasions where restrictions can be made to the operation range of the J2 axis when the wall-hung condition.

Note 4: The operation range of the J3 axis is restricted to -170 degrees to + 180 degrees when floor based welding is applied (In overhead mounting it's a combination of J2 + J3 axis).

Note 5: This is the specification for the case that the coaxial power cable are let into the centrum of J4 and J6 axis. The value given in parentheses presents for other specifications.

Note 6: There are occasions where restrictions can be made to the operation range of the J6 axis, depending on the J5 axis's posture.

Note 7: Max. Load to the upper shoulder, when loading the max. payload capacity at the end effector.

F= Floor W=Wall C=Ceiling