

The JS Series SCARA Robot from Janome

JS Series (Arm Length: 250mm – 550mm)

Model		JS250 (CL)	JS350 (CL)	JS450 (CL)	JS550 (CL)
Arm Length (mm)	J1 Arm	100	125	225	35
	J2 Arm	150		225	
	J1 + J2	250	350	450	550
Operation Range (mm)	J1 Arm	±145°			
	J2 Arm	±145° (±135°)		±150°	
	Z-Axis	150			
	R-Axis	±360°			
Maximum Speed *1	J1 and J2 (combined)	4,200	6,300	5,600	6,200
	Z-Axis	1,400	1,850		
	R-Axis	1,750°/sec	1,900°/sec		
Repeat-ability *2 (mm)	X-and Y-Axis	±0.01		±0.015	
	Z-Axis	±0.01			
	R-Axis	±0.01			
Acceptable Moment of Inertia (kg · m ²)	0.1				
Maximum Portable Weight (kg)	4	6			
Standard Cycle Time *3 (sec) (When carrying 2kg of work piece)	0.39	0.38	0.39	0.41	
Tool Wiring and Piping	14 wires for signals, 4 air pipes Φ4				
Machine Weight (kg)	27		28	29	

Clean Room Type Models (JS250CL/JS350CL/JS450CL/JS550CL)

Cleanliness	Class 10 (Federal Standard 209D)
Ventilator Diameter	Internal Diameter of Vent Pipe:Φ19
Outlet Flow	180NL/min (11Nm ³ /h)

*Common to the robot body and control box.

*Clean Class 10 is defined by Federal Standard 209D as a particulate count that shall not exceed a total of 10 particles of a size of 0.5µm or greater per cubic foot of air.

JS Series Specifications

Programming Capacity	255 Program
Data Memory Capacity *4	Maximum 30,000 points
Position Detection	Absolute Encoder
Control Method	PTP (Point to Point) control, CP (Continuous Path) control
Interpolating Function	3-Dimensional Line and Arc Interpolation
External Interface	RS422 1ch (for teaching pendant)
	RS232C 1ch (for PC:COM1)
	RS232C 2ch (for external device: COM2,COM3)
External Input/Output *5	I/O-SYS Input: 15/Output:14
	I/O-1 Input: 18/Output: 22 (4-relay contact)
	I/O-H Input: 4/Output: 4(2-relay contact)
Power Supply	AC180-250V (single phase)

- *1 Measured on a machine with regenerative resistors. Maximum speed cannot be achieved under the maximum portable weight setting.
- *2 Repeatability was measured at a constant temperature, so absolute precision is not guaranteed.
- *3 Measured on a machine with regenerative resistors. Continuous operation cannot be achieved at the maximum cycle time.
- *4 The point data capacity will be reduced if the additional function data setting/point job data/sequencer data increases, due to the shared data storage area.
- *5 NPN/PNP can be chosen before shipment.

Specifications are subject to change without prior notice due to continuing product improvements.