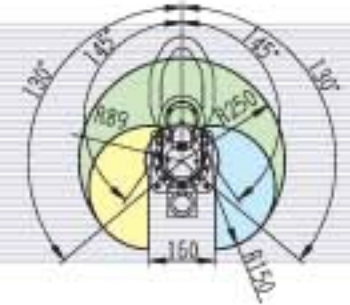
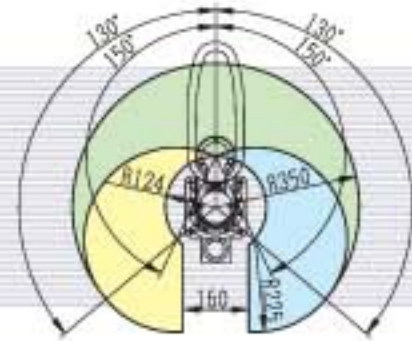


Operation Range for Standard Models

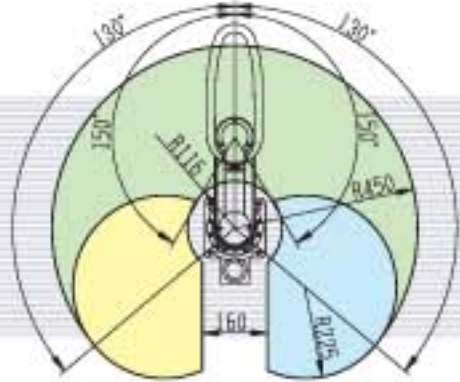
JS 250



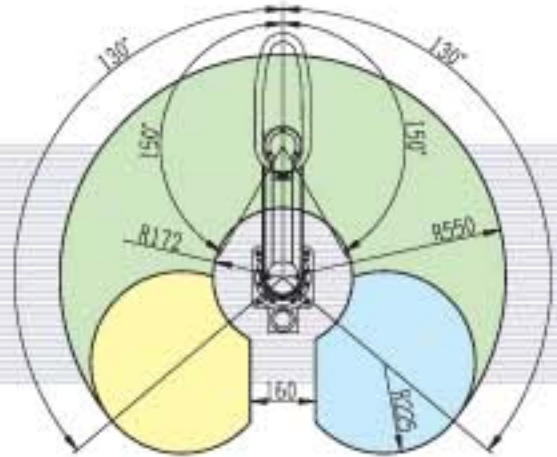
JS 350



JS 450



JS 550



Main Specifications for JS Series

Model Number	JS250-GP	JS350-GP	JS450-GP	JS550-GP
Axis-type	4 (synchronous control)			
Arm Length	J1 Arm	100mm	125mm	225mm
	J2 Arm	150mm	225mm	225mm
	J1 + J2	250mm	350mm	450mm
Operation Range	J1 Arm	±130°	±130°	±130°
	J2 Arm	±145°	±150°	±150°
	Z-Axis	150mm	150mm	150mm
	R-Axis	±360°	±360°	±360°
Maximum Portable Weight	4kg	6kg	8kg	8kg
Acceptable Moment of Inertia	0.1kg·m ²			
Maximum Speed	J1 Arm	4200 (3000)*1 mm/sec	6300 (3900)*1 mm/sec	5800 (4000)*1 mm/sec
	Z-Axis	1400mm/sec	1850mm/sec	1850mm/sec
	R-Axis	1750°/sec	1900°/sec	1900°/sec
Repeatability	X- and Y-Axis	±0.01mm	±0.01mm	±0.015mm
	Z-Axis	±0.01mm	±0.01mm	±0.01mm
	R-Axis	±0.01°	±0.01°	±0.01°
Standard Cycle Time (when the portable weight is 1 kg)	0.39 (0.42)*1 sec	0.38 (0.38)*1 sec	0.39 (0.40)*1 sec	0.41 (0.41)*1 sec
Position Detection	Absolute Encoder			
Control Method	PTP (Point to Point) Drive, CP (Continuous Path) Drive			
Interpolating Function	3-Dimensional Line and Arc Interpolation			
Teaching Method	Direct/JOG/MDI			
Programming Language	JR-C Points (Enhanced Version of JR Points Software)			
Programming Capacity	255 Programs, 30,000 Points in Total			
External Interface	(Input/Output)	Input 37/40 (8-Relay Contact)		
	RS232C	3 Ports		
	Interlock	For Interlock Signal Input		
Tool Piping & Wiring	Wiring : 14, Piping : φ4×4			
Sequencer Function	100 Programs			
Load Error Detection	Depending on Servomotor Driver			
Power Supply	AC 180 - 250 (Single Phase)			
Power Capacity	1050 VA			
Ambient Temperature	0 - 40 °C			
Flotage dust	Nil			
Corrosive gas environment	Nil			
Total Humidity	20 - 90 % (Non Condensing)			
Weight (Robot)	27kg	27kg	28kg	28kg
Weight (Control Box)	20kg			

*1: For standard specifications
 ● Specifications of the JS series may be modified without prior notice to improve its quality.



2004.01 (B) 10000

JANOME
 Janome Sewing Machine Co., Ltd.
 Industrial Automation Systems Division
 1934 Hazama-cho, Hachioji-shi, Tokyo 183-0941 JAPAN
 Tel: +81 426 61 6301, Fax: +81 426 61 6302
 Business Line : Desktop SCARA robot, Servo Press, etc.
 U R L : <http://www.janome.co.jp/industrial>
 E-mail : jindustry@gm.janome.co.jp

www.etneo.com
[email: info@etneo.com](mailto:info@etneo.com)



JS

Series

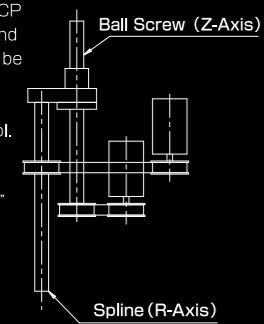
High Reliability Acquired by Years and Years of Experience

The JS series servo SCARA robot is a multipurpose robot for various applications, developed with sophisticated technology gained through years of experience and accumulated knowledge. Janome proudly introduces the JS series to all those wanting compact, low-cost production lines, automatic and labor-saving production sites, but still needing to maintain high productivity and quality.

1 Stable CP* Movement by Double Shaft Mechanism

The high precision CP drive and easy Z- and R-Axes control can be achieved by the separated Z and R-Axes motors control.

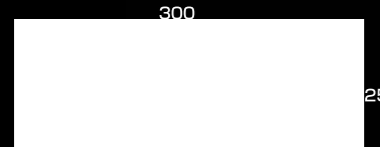
*"CP" stands for "continuous path."



2 High Speed Operation

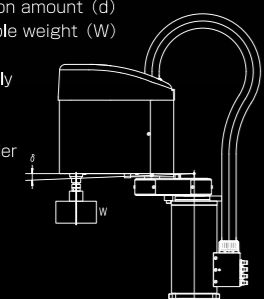
The top-level standard cycle time can be achieved by the high-powered AC servomotor and JANOME original high rigid mechanism. It ensures a higher level of productivity.

The following illustration shows the standard cycle time.



3 High Rigid Arm

A 0.04mm deflection amount (d) under a 4 kg portable weight (W) is achieved even when the Arm is fully extended. You can select heavier workpieces and wider applications.



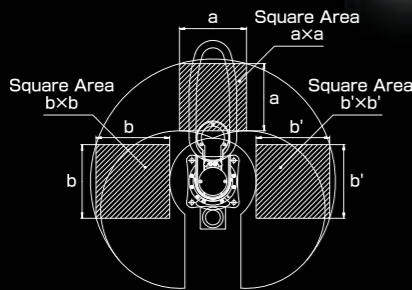
New Multipurpose SCARA Robot: as Powerful, Speedy, and Smart as JR Series Desktop Robot

JANOME



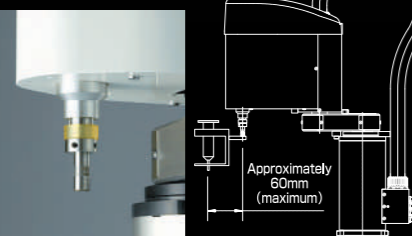
4 Wide Square Area Suitable for CP Movement

210mm x 210mm square areas b x b (Righty) and b' x b' (Lefty) are guaranteed for Model JS350.



5 R-Axis Acceptable Moment of Inertia

The large R-Axis acceptable moment of inertia allows you a wider tool selection.



6 User Friendly Tool Piping

Fourteen signal wires and four air tubes (φ4) come equipped with the robot as service wiring and piping. It allows you to create a compact layout.



7 Position Memory Function

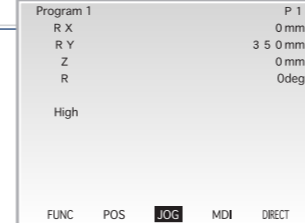
The JS series can memorize the current Arm position while the power is off. You do not need to return to the work home position after rebooting the robot. Accordingly, you can reduce the work time.

Easy Teaching Fulfills Various Requirements, such as Cell or Inline*

Work Position Input

Before inputting a work position, select JOG, MDI, or DIRECT mode simply by pressing the button on the teaching pendant. Clearly-displayed coordinate values allow you to correct positions easily.

Work Position Setting Screen

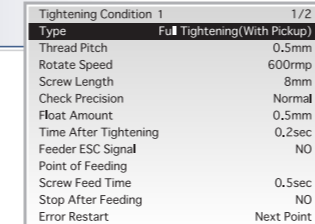


Application Software Examples

●Screw Tightening Software

Register screw tightening conditions, such as Thread Pitch, Screw Length, and Rotate Speed, then enter the "screw tightening" position and the screw tightening condition number for the point. A screw tightening program is now complete. You can set different tightening condition numbers to each point so as to create different screw tightening conditions in a program.

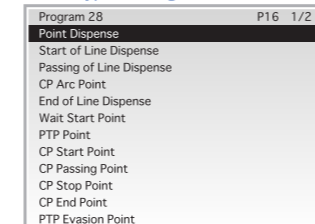
Tightening Condition Setting Screen



●Dispensing Software

Complete a dispensing program simply by inputting work positions, such as "Point Dispense", "Start of Line Dispense", "Line Passing", and "End of Line Dispense". You can set "Dispense Time" to each "Point Dispense" point. You can change Dispense Conditions, such as "Device Mode", "Signal Operation" type (for dispenser), "Wait Time" (from Dispense ON to start shifting), "Up Amount" and "Up Speed" (at end dispensing), simply by setting and registering.

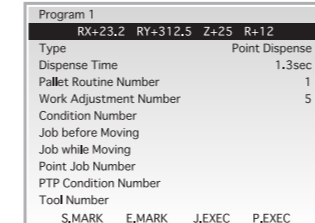
Point Type Setting Screen



●Palletizing or Work Position Adjustment by Camera

By setting a "Pallet Number", you can repeat the same operation at different points. By setting a "Work Adjustment Number", you can easily adjust a position error between the standard position captured by the camera.

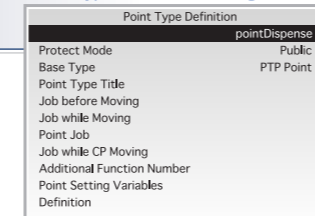
Point Setting Screen



How to Create Application Software

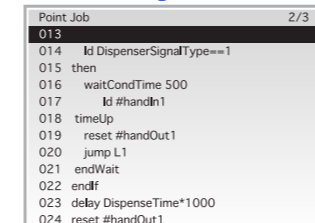
You can create original application software for a variety of needs. For example, define a point type "Point Dispense" when creating the "Dispensing Application" software.

Point Type Definition Setting Screen



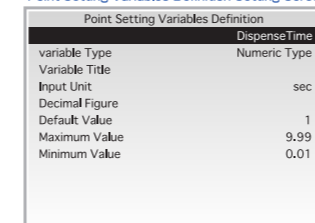
Register the contents of the "point dispense" operation in the point type definition. (e.g. Start the dispenser (set #handOut1), wait for a dispense time (delay DispenseTime*100), and then stop the dispenser (reset #handOut1).)

Point Job Setting Screen



Register "Common Setting Variables Definition" in the point type definition so as to set the "Dispense Time" to each point. The process is complete simply by entering necessary items, such as "Variable Type", "Variable Title", and "Input Unit".

Point Setting Variables Definition Setting Screen

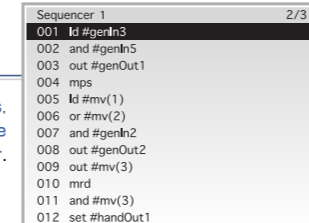


Set "Enumeration Type" or "Numeric Type" as the "Variable Type." If you select the "Enumeration Type", you can select a value from the "Selection Item Title" list and set it. Furthermore, you can set "Variable Title", as well as variable names (identifiers), as a title display.

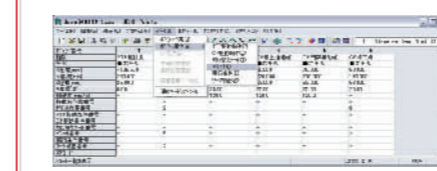
Sequencer Function

You can create simple sequencer circuits, such as a self-holding circuit, non-cumulative timer, pulse output circuit, and counter. Additional sequencer is not necessary.

Sequencer Command Setting Screen

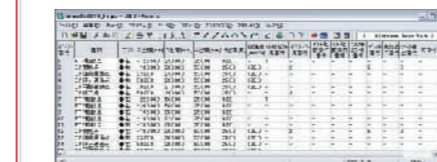


PC Software "JR C-Points" (Option)



enhanced compile function (robot language) and available.

The main screen is the plural point data setting screen. You can create a program simply by entering necessary items, such as the point type, work position, line speed, pallet number, and work adjustment numbers.



using the Copy & Paste function. You can also convert drawings into coordinate values and download them onto a PC using CAD data (DXF file).



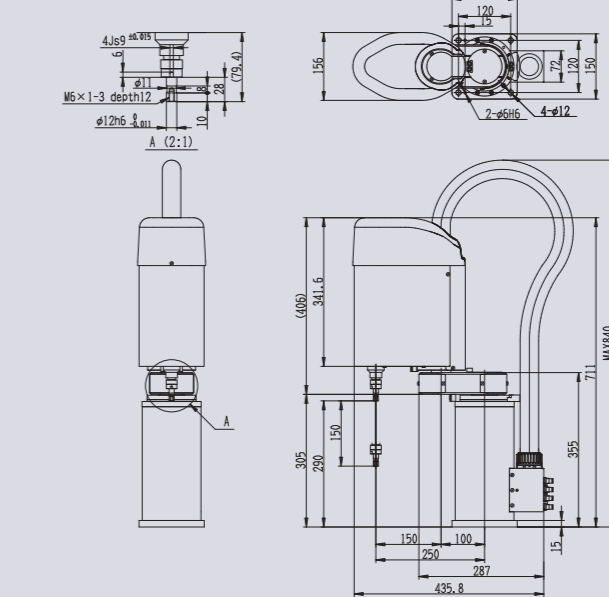
special commands, such as "waitCondTime" command to wait for an input signal (timeouts are available until receiving the input signal), are available.

Model Number JS - [] [] [] - [] [] []

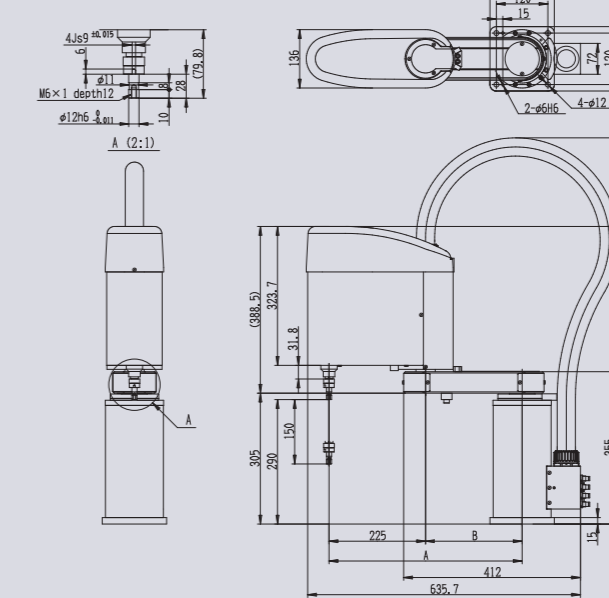
Arm Length
250mm:250
350mm:350
450mm:450
550mm:550

Control Box
GP : full CE specifications (with both safety circuit and regenerative resistor)
P : safety circuit specifications (with only safety circuit)
Nil : standard specifications (without either safety circuit or regenerative resistor)

JS 250 External Dimensions



JS 350/450/550 External Dimensions



Model Name	A	B	C
JS350	350	125	840
JS450	450	225	900
JS550	550	325	900

Option

Operation Box

With the start switch, program change switch, and emergency stop switch



Controller Specifications



External Dimensions

