Please check our website for product information, application examples, maintenance information and to request materials.

www.janomeie.com

Janome Sewing Machine Co., Ltd. Industrial Equipment Sales Division

1463 Hazama-machi, Hachioji-shi, Tokyo 193-0941 TEL: +81-42-661-6301 FAX +81-42-661-6302 E-mail: j-industry@gm.janome.co.jp

- •Actual products may differ in color from their depictions in this catalog due to differences in the printing process.
- Before using our products, please be sure to check their respective operation manuals so that you can use them safely and correctly.
- •Specifications may be modified without prior notice to improve product quality.
- •For inquiries, please contact us at the telephone number above or through our website.



C00-00(02.1)EN 2018.06-1,000

JANOME

Industrial Equipment Catalog





Meeting customer needs with new functionality.

Our responsiveness and flexibility pave the way toward your manufacturing future.

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JANOME: The Answer to Your Manufacturing Needs

Building on technology refined through years of precision sewing machine development, we forge ahead in the high function industrial equipment field. Always on the cutting edge in manufacturing, we devote ourselves to offering the finest quality in everything we do from product development to after sales service.

Our main products, namely servo presses and desktop, Cartesian and SCARA robots are valued by customers worldwide for precision work in a variety of manufacting fields, including the automotive parts, IT and electronics industries.

Headquarters



Head Office and R&D Division

Manufacturing Facilities

Japan



Janome Taiwan Co., Ltd

Janome (Thailand) Co., Ltd.

2008

Training Center



Our products are on display at our Training Center located in our Tokyo Headquarters. available to assist customers who want to test our machines. We also have product showrooms at all of our sales offices.

Company Overview

Address Established Incorporated

Capital

Main Businesses

1463 Hazama-machi, Hachioji-shi, Tokyo 193-0941 Japan

October 1921

June 1950

11.37 Billion Yen (as of 31 March 2018)

- ·Manufacture and sale of sewing machines and related products
- ·Manufacture and sale of industrial equipment
- ·Manufacture and sale of 24-hour self-cleaning bath units
- ·Sale of sewing machine products and educational materials for schools, etc.
- ·Real estate leasing, etc.

HISTORY

Tokyo Factory

1984	4	Sold our first servo press, the JP-20 Electro Press
1986	12	JP1 Series Electro Press released

International

1993 4 JR500 Desktop Robot released JP2 Series Electro Press released

1994 11 JR750 Desktop Robot released 1996 5 JP3 Series Electro Press released

1998 JSR4400 Series SCARA Robot released 5 2000 8 JR2000 Series Desktop Robot released

2003 10 JS Series SCARA Robot released 2 JPE Series Electro Press released

JR2000N Series Desktop Robot released 10 JSTH Series SCARA Robot released

2005 7 JP Series 4 Electro Press released 6 Nagoya Sales Office opened 2006

JSR4400N Series SCARA Robot released

Janome Industrial Equipment USA, Inc. established in Chicago 2007 CAST Series Desktop Robot released

- JR2000NE Series Desktop Robot released 3 Janome Industrial Equipment Europe GmbH established in Frankfurt
- Fukuoka Sales Office opened
- 2009 2 JR2000NERT Series Depaneling Desktop Robot released
 - 10 Osaka Sales Office opened
- 2010 8 JP-S Series Electro Press released
- Janome Industrial Equipment (Shanghai) Co. Ltd established
- 11 JR-V2000 Series Desktop Robot released
- 5 JC-2 Series Cartesian Robot released
- 11 Janome Industrial Equipment (Taiwan) Co. Ltd established
- 2014 10 JR3000 Series Desktop Robot released 2015 4 JC-3 Series Cartesian Robot released
- Janome Industrial Equipment (Shanghai) Co. Ltd Shenzhen Office opened
- 2016 JP Series 5 Flectro Press released 9
- 4 JR3000ERT Series Desktop Robot released
- 12 JR3000F Heavy Duty Robot released 4 JS3 Series SCARA Robot released

Main Products



Desktop Robots

Dispensing, screw-tightening, soldering, PC board cutting, and more, our versatile desktop robots handle a variety of jobs. Highly rigid construction ensures stable movement. Our simple teaching method makes using the robots easy



Cartesian Robots

A 3 or 4-axis robot with smooth, precise tracking and high repeatability. The standard model features multiple interface ports; ideal for inline installation. Combine stroke sizes to fit your needs; we offer a wide selection of size configurations.



SCARA Robots

Equipped with a powerful servomotor, our user-friendly, vertical multi-jointed robot is useful for a wide range of jobs, from high-speed small parts pick-and-place to high-precision component assembly



Servo Presses (Electro Press)

Our high-precision servo presses offer exact control of speed, position and pressure with result data traceability and many sensor functions for effective quality control. We offer a broad lineup from 0.5kN to 200kN, in both unit types for line installation and stand alone column types. Clean room compatible models also available.

Robot Lineup

High precision, user-friendly, with a wealth of applications, styles and operating ranges, our robots dramatically improve productivity.

Icon Key

Field Network
Compatible (Option:
"See p.25 for product of



Includes a built-in sin



LAN port included as standard equipment





CE Declared Model

						LAN	I/O-MT *See p.25 for product	
				Cartesian Robot Series	SCARA Robot Series			
		JR3000	JR3000AP-D	JR3000ERT	JR3000F	JR-V2000	JC-3	JS3
	Product Image	JANOME JR3203			A COLUMN TO SERVICE STATE OF THE SERVICE STATE OF T	JANOME 1	JANOONE JOS	IMOME
	Pages	7-8	9-10	11-12	13-14	15-16	17-18	19-20
	Pages Features	7-8 Flagship desktop robot features state-of-the-art precision, speed and rigidity for a variety of manufacturing applications.	9-10 The JR3000 Series Desktop Robot configured with a powerful sensor and camera combination for fine dispensing.	The JR3000 Series Desktop Robot configured with a spindle motor-driven router and dust collecting vacuum system for high quality printed circuit board cutting.	High payload specialist JR3000 Series robot carries a tool mass up to 15kg.	Vareatila introductory	17-18 Multifunctional, user-friendly Cartesian robot.	SCARA robot featuring a highly rigid arm for high
are		Flagship desktop robot features state-of-the-art precision, speed and rigidity for a variety of	The JR3000 Series Desktop Robot configured with a powerful sensor and camera combination for	The JR3000 Series Desktop Robot configured with a spindle motor-driven router and dust collecting vacuum system for high quality	High payload specialist JR3000 Series robot carries a tool mass up to 15kg.	Versatile introductory	Multifunctional,	SCARA robot featuring a highly rigid arm for high speed, precision and
oftware	Features	Flagship desktop robot features state-of-the-art precision, speed and rigidity for a variety of manufacturing applications.	The JR3000 Series Desktop Robot configured with a powerful sensor and camera combination for	The JR3000 Series Desktop Robot configured with a spindle motor-driven router and dust collecting vacuum system for high quality	High payload specialist JR3000 Series robot carries a tool mass up to 15kg.	Versatile introductory	Multifunctional,	SCARA robot featuring a highly rigid arm for high speed, precision and payload capacity.
ion Software	Features Standard*	Flagship desktop robot features state-of-the-art precision, speed and rigidity for a variety of manufacturing applications.	The JR3000 Series Desktop Robot configured with a powerful sensor and camera combination for fine dispensing.	The JR3000 Series Desktop Robot configured with a spindle motor-driven router and dust collecting vacuum system for high quality	High payload specialist JR3000 Series robot carries a tool mass up to 15kg.	Versatile introductory	Multifunctional,	SCARA robot featuring a highly rigid arm for high speed, precision and payload capacity.
Application Software	Features Standard* Dispensing	Flagship desktop robot features state-of-the-art precision, speed and rigidity for a variety of manufacturing applications.	The JR3000 Series Desktop Robot configured with a powerful sensor and camera combination for fine dispensing.	The JR3000 Series Desktop Robot configured with a spindle motor-driven router and dust collecting vacuum system for high quality	High payload specialist JR3000 Series robot carries a tool mass up to 15kg.	Versatile introductory	Multifunctional,	SCARA robot featuring a highly rigid arm for high speed, precision and payload capacity.

Compatible Applications

Standard

Dispensing

JR3000 Series

Loaded with useful functions, this high performance desktop robot excels at many different manufacturing roles.















Features

Superior Structural Rigidity

Enhanced rigidity makes the JR3000 faster and more accurate with stable traceability even at high speeds (max. speed 900mm/s).

When a camera is mounted on the Z-mechanism and the robot stops, the oscillation time until the Z-mechanism comes to rest is 50% shorter than for our previous model.

Built-in LAN Port & Optional Fieldbus Port

Choose from among 6 different Field Network modules, including CC-Link, DeviceNet and PROFIBUS. A LAN port is included with the robot; control multiple robots from your PC.



Control up to 6 Axes in Total

Add up to 2 additional stepping or servo motors; teach them together with the 4 robot axes via the teaching pendant.

Use the I/O-MT Auxiliary Axes to change the workpiece direction by mounting it on a turntable, or to control a conveyor from the robot.

JOG Keys



Model Name

JK3	20	3		- A	C
JR3000 Series	X, Y Axes Strokes	No. of Axes	Encoder*1	Operation Panel	Power Supply*2
	20:200×200mm 30:300×320mm 40:400×400mm 50:510×500mm	2:2 3:3 4:4	E : Included N : Not Included	A : Installed Switch B : Switchbox C : Basic Switchbox	C: 100-120/200-240V 50/60Hz(No Outlet) 200-240V 50/60Hz(200V Outlet) J: 100-120V 50/60Hz(100V Outlet)
	60:510×620mm				*1 Motor Step-out Detection Function

Screw Tightening

*1 Motor Step-out Detection Function *2 JR3200 Type is No Outlet only

Specifications

3 Axes Specifications

Item	Model*1	3 Axes (Synchronous Control)					
item	Nodel*1	JR3203	JR3303	JR3403	JR3503	JR3603	
O	X & Y Axes (mm)	200×200	300×320	400×400	510×510	510×620	
Operating Range	Z Axis (mm)	50	100	150	150	150	
Maximum Portable Load	X Axis (Workpiece) (kg)	7	15	15	15	15	
Maximum Portable Load	Y Axis (Tool) (kg)	3.5	7	7	7	7	
Maximum Speed (PTP Drive)*2	X & Y Axes (mm/sec)	700(7~700)	900(9~900)	900 (9~900)	900(9~900)	900(9~900)	
()=Settable Speed Range	Z Axis (mm/sec)	250(2.5~250)	400 (4~400)	400(4~400)	400(4~400)	400 (4~400)	
Maximum Speed (CP Drive)*2 ()=Settable Speed Range	X, Y, Z Combined (mm/sec)	600(0.1~600)	850 (0.1~850)	850(0.1~850)	850(0.1~850)	850(0.1~850)	
Departability#3	X & Y Axes (mm)	±0.006	±0.007	±0.007	±0.008	X:±0.008 Y:±0.01	
Repeatability*3	Z Axis (mm)	±0.006	±0.007	±0.007	±0.008	±0.008	
External Dimensions WxDxH (Excluding Protrusions) (mm) ()=Double Column Type		323×387×554	560×535×659	584×631×807 (615×631×807)	678×731×807	790×731×807	
Robot Weight(kg) ()=Double Column Type		20	35	42 (45)	44	45	

4 Axes Specifications

li e	M - 1 - 1 × 1	4 Axes (Synchronous Control)					
Item	Model*1	JR3204	JR3304	JR3404	JR3504	JR3604	
	X & Y Axes (mm)	200×200	300×320	400×400	510×510	510×620	
Operating Range	Z Axis (mm)	50	100	150	150	150	
	R Axis (°)	±360	±360	±360	±360	±360	
Maximum Portable Load	X Axis (Workpiece) (kg)	7	15	15	15	15	
Maximum Fortable Load	Y Axis (Tool) (kg)	3.5	7	7	7	7	
	X & Y Axes (mm/sec)	700(7~700)	900(9~900)	900 (9~900)	900 (9~900)	900(9~900)	
Maximum Speed (PTP Drive)*2	Z Axis (mm/sec)	250(2.5~250)	400 (4~400)	400(4~400)	400(4~400)	400 (4~400)	
()=Settable Speed Range	R Axis (°/sec)	600(6~600)	900 (9~900)	900(9~900)	900(9~900)	900 (9~900)	
Maximum Speed (CP Drive)*2 ()=Settable Speed Range	X, Y, Z Combined (mm/sec)	600(0.1~600)	850(0.1~850)	850(0.1~850)	850(0.1~850)	850(0.1~850)	
	X & Y Axes (mm)	±0.01	±0.01	±0.01	±0.01	±0.01	
Repeatability*3	Z Axis (mm)	±0.01	±0.01	±0.01	±0.01	±0.01	
	R Axis (°)	±0.008	±0.008	±0.008	±0.008	±0.008	
External Dimensions WxDxH (Excluding Protrusions) (mm) ()=Double Column Type		323×387×676	560×535×844	584×631×894 (615×631×894)	678×731×894	790×731×894	
Robot Weight(kg) ()=Double Column Type		22	38	46 (49)	47	48	

<Notes> 11 2 Axes Specifications also available. Please contact us for details. 12 Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the maximum portable load. 13 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.

JR3000 Series Common Specifications

Item		Content
Program Capacity		999 Programs
Database Capacity*1		Up to 32,000 points
	I/O-SYS*2	16 Inputs / 16 Outputs
	1/0-1*2*3	8 Inputs/ 8 Outputs (including 4 relay outputs) (optional)
	I/O-MT*2 *3	Controls up to 2 external motors (optional)
	I/O-S	Safety device connector (optional)
External Input/Output	Field Network	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	COM1	RS232C (for external devices, COM commands)
	COM2·COM3	RS232C (for external devices) (optional)
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)
Power Source (V)		AC100~120/AC200~240 (single phase)
Power Consumption (W)		200

NULES

1** Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.

1**2 Please choose the I/O polarity: NPN or PNP.

1**3 For the JR3200 type, choose only one optional add-on: I/O-1 or I/O-MT.

+Power Cable -Switchbox (included as standard equipment for robots with B type operation panels) -Basic Switchbox (included as standard equipment for robots with C type operation panels)



JR3000 Adjustment Package for Dispensing

Make all your settings on the same software!

Dynamic adjustment package dispensing robot.













Features

Adjustment Functions for High Precision Dispensing

Camera Adjustment Robot dispenses while adjusting for displaced workpieces.





Laser displacement sensor measures workpiece height gradations as the robot moves.

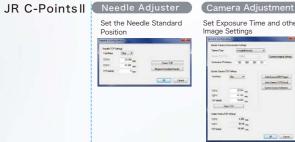


3 Needle Adjustment

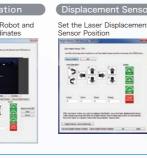
Robot automatically finds the current needle position, adjusting for any tip displacement that comes after changing needles, etc.

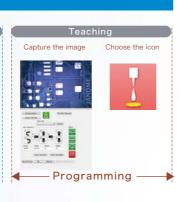


Making settings is easy from start to finish with our specialized software.









JR3	30	3	AP-D
JR3000 Series	X, Y Axes Strokes	No. of Axes	Adjustment Package for Dispensing
	30:300×320mm	3:3	

Dispensing

Specifications

ltem	Model*1	JR3303	JR3403	JR3304	JR3404		
Number of Axes		3 Axes (Synchronous Control)	3 Axes (Synchronous Control)	4 Axes (Synchronous Control)	4 Axes (Synchronous Contro		
	X & Y Axes (mm)	300×320	400×400	300×320	400×400		
Operating Range	Z Axis (mm)	100	150	100	150		
	R Axis (°)	-	-	±360°	±360°		
Maniana Dantakla I and	X Axis (Workpiece) (kg)	14	14	14	14		
Maximum Portable Load	Y Axis (Tool) (kg)	5	5	5	5		
	X Axis(mm/sec)	900	900	900	900		
Maximum Speed (PTP Drive)*2	Y Axis (mm/sec)	800	800	800	800		
Maximum Speed (FTF Drive)	Z Axis (mm/sec)	400	400	400	400		
	R Axis(°/sec)	-	-	900	900		
Maximum Speed (CP Drive)*2	X, Y, Z Combined (mm/sec)	850	850	850	850		
	X & Y Axes (mm)	±0.007	±0.007	±0.01	±0.01		
Repeatability*3	Z Axis (mm)	±0.007	±0.007	±0.01	±0.01		
	R Axis(°/sec)	-	-	±0.008°	±0.008°		
External Dimensions W×D×H (Excluding Protrusions)(mm)		628×608×657	651×668×715	628×608×769	651×668×844		
Robot Weight (kg)		42	51	44	55		
Program Capacity		999 Programs					
Database Capacity*4		Up to 32,000 points					
· ·	I/O-SYS*5*6	16 Inputs / 16 Outputs					
	I/O-1*5 *6	8 Inputs / 8 Outputs (including 4 relay outputs)					
	I/O-MT*6		Controls up to 2 exter	rnal motors (optional)			
External Input/Output	I/O-S		Safety device cor	nnector (optional)			
External input, output	Field Network	EtherNet/IP	/ PROFINET / CC-Link / Dev	iceNet / PROFIBUS / CANop	en (optional)		
	COM*5		RS232C 3ch (for external	devices, COM commands)			
	MEMORY	USB memory connector	(for saving/reading out teac	hing & customizing data, sys	tem software upgrades)		
	LAN	For PoE industrial hub connection					
Power Source (V)		AC100~120/AC200~240 (single phase)					
Power Consumption (W)			28	30			

Maximum speed can vary depending upon conditions.

Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.

Repeatability was memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.

Some I/O are preassigned for system configuration purposes.

Please choose the I/O polarity: NRN or PNP.

Power Cable - Switchbox (also available with optional switch or mode changing switch)

Operation Manual (CD-ROM) - PC Software JR C-Points II (Windows* 7, Windows* 8.1, Windows* 10 compatible)

JR3303AP-D



JR3304AP-D



JR3403AP-D



Compatible Applications

JR3000ERT Depaneling Robot

We added original specialized depaneling software and a router-based cutting system to the JR3000 Series Desktop Robot to create a dedicated depaneling machine.



Setup Example (with optional camera)













Features

Router Cutting Method

High precision spindle motor makes stress free cuts for smooth and easy depaneling. Cuts straight lines, curves and angles.

Router Bit Wear Signal

An indicator displays router bit sharpness. When the robot's cumulative work hours exceed the limit you set, the switchbox LED shows it is time to replace the bit.



Tool Offset Function

This editing function let you program an offset against the router bit diameter. Also incorporate CAD data for easy and precise cutting.



Model Name



50:510×510mm 60:510×620mm

Specifications

Item	Model	JR3203ERT	JR3303ERT	JR3403ERT (Double Column Type only)	JR3503ERT*8	JR3603ERT* ⁸		
Number of Axes				3 Axes				
D	X & Y Axes (mm)	195×190	295×315	395×395	505×505	505×615		
Depaneling Range Limit	Z Axis (mm)	35	90	82	95	95		
	X Axis (mm/sec)	700	900	900	900	900		
Maximum Speed (PTP Drive)*1	Y Axis (mm/sec)	700	900	900	900	900		
Maximum Speed (PTP Drive)*1	Z Axis (mm/sec)	250	400	400	400	400		
Maximum Speed (CP Drive)*1	X, Y, Z Combined (mm/sec)	600	850	850	850	850		
	X Axis(mm)	±0.006	±0.007	±0.007	±0.008	±0.008		
Repeatability*2	Y Axis(mm)	±0.006	±0.007	±0.007	±0.008	±0.01		
	Z Axis (mm)	±0.006	±0.007	±0.007	±0.008	±0.008		
Cutting Trajectory Precision(mi	m)			0.2(nominal standard)				
External Dimensions W×D×H								
(Excluding Protrusions)(mm)		350×439×632	618×586×657	647×640×665	678×731×665	790×731×66!		
Robot Weight (kg)		26	42	51	48	49		
Program Capacity		999 Programs						
Database Capacity*3		Up to 32,000 points						
	I/O-SYS*4	16 Inputs / 16 Outputs (using a dedicated I/O for depaneling)						
	1/0-1*4*5	8 Inputs / 8 Outputs (including 4 relay outputs) (optional)						
	I/O-MT*4 *5	Controls up to 2 external motors (optional)						
External Input/Output	I/O-S	Safety device connector						
External input, output	Field Network	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)						
	COM1	RS232C 1ch (for external devices, COM1)						
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)						
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software						
Power Source (V)		AC100~120/AC200~240 (single phase)						
Power Consumption (W)		250						
Supplied Air Pressure*6(Mpa)		0.5 (5kgf/αi່) *Dry Air						
Air Consumption Volume*7(Nℓ)	/min)	200						
	Drive Method			DC Brushless Motor				
Spindle Motor	Rated Output (W)			21				
Opinial Wiotor	Rated Rotating Speed(r/min)			40,000				
	Chuck		Colle	t Chuck Method (φ3.175	mm)			
Router Bit Gauge (mm)				φ0.8				
Vacuum				Ejector Method				
Filter Box Size (mm)		W215xD305xH305						
Applicable Board Materials			Glass Epoxy, Paper Ph	nenol, etc. (maximum boa	rd thickness 1.6mm)			

JR3203ERT



JR3303ERT





JR3503ERT



JR3603ERT

JR3000F Heavy Duty Robot

This robot is equipped with a feedback motor to carry heavy tool and workpiece payloads.













Features

Built Stronger for Heavier Tools and Workpieces

Ideal for heavy tool operations such as large tank dispensing or hot melt dispensing with a heater.





Z-Axis Brake

Keeps the Z-Axis from falling during emergency stops or if the main power supply is cut, preventing damage to the tool & workpiece.

JR3	30	3	F
JR3000 Series	X, Y Axes Strokes	No. of Axes	Heavy Duty Robot
	30:300×320mm 40:400×400mm	3:3	

Compatible Applications

Standard

Dispensing

Specifications

Item		Model	JR3303F	JR3403F		
Number of Axes			3 Axes (Synchronous Control)	3 Axes (Synchronous Control)		
X & Y Axes (mm)		(mm)	300×320	400×400		
Operating Range	Z Axis (mm)	150	150		
Marian Dantalala Land	X Axis (Wo	rkpiece) (kg)	20	20		
Maximum Portable Load	Y Axis (Too	ol) (kg)	15	15		
	V A :	up to 5kg	1000	1000		
	X Axis	up to 10kg	800	800		
	(mm/sec)	up to 20kg	600	600		
		up to 1kg	900	900		
Maximum Speed	Y Axis	up to 5kg	800	800		
(PTP Drive)	(mm/sec)	up to 10kg	600	600		
		up to 15kg	500	500		
	Z Axis (mm/sec)	up to 5kg	400	400		
		up to 10kg	300	300		
		up to 15kg	200	200		
Maximum Speed (CP Drive)*1	X, Y, Z Combined	(mm/sec)	850	850		
Repeatability*2	X, Y, and Z	Axes (mm)	±0.01	±0.01		
External Dimensions Wx (Excluding Protrusions)			560×535×807	615×631×807		
Robot Weight(kg)	,		36	45		
Program Capacity			999 Pr	ograms		
Database Capacity*3			Up to 32,0	000 points		
	I/O-SYS*4		16 Inputs/	16 Outputs		
	I/O-1*4		8 Inputs/ 8 Outputs (including 4 relay outputs) (optional)			
	I/O-MT*4		Controls up to 2 external motors (optional)			
External Input/Output	I/O-S		Safety device cor	nnector (optional)		
External input/Output	COM1		RS232C (for external de	evices, COM commands)		
	COM2·COM	M3	RS232C (for external device	s) (optional at time of order)		
	MEMORY		USB memory connector (for saving/reading out to	eaching & customizing data, system software upgrades)		
	LAN		Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software			
Power Source(V)			AC100~120/AC20	0~240(single phase)		
Power Consumption(W)	1			00		

These figures are the maximum settable values. Maximum speed can vary depending upon conditions. Maximum speed cannot be reached when the robot is bearing its maximum load. Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.

Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.

Please choose the I/O polarity: NPN or PNP.







JR-V2000 Series

Introductory Model Desktop Robot Offers High Functionality at an Economic Price





Features

Easy to Master

User-friendly teaching: quickly teach complicated functions including dispensing liquid purging, or tightening positions for miniature screws. Multi-lingual teaching pendant: program and run the robot in the operator's preferred language. Switch among English, Spanish, Korean, Vietnamese and more!

Flexible General Purpose Desktop Robot

Ideal for a variety of roles in your assembly process; use the Standard Model as a pick-and-place robot, or attach a camera and use it as an inspection device.

Model Name



Compatible Applications

Standard

Dispensing

Screw Tightening

Specifications

Item	Model	JR-V2203	JR-V2303		JR-V2403			
Number of Axes		3 Axes (Synchronous Control)	3 Axes (Synchronous Control)		3 Axes (Synchronous Control			
O	X & Y Axes (mm)	200×200	300	×320	400×400			
Operating Range	Z Axis (mm)	50	50	100	100			
Maria Baratta at	X Axis (Workpiece) (kg)	5	!	 5	5			
Maximum Portable Load	Y Axis (Tool) (kg)	2*1	2	*1	2			
Maximum Speed (PTP Drive)*2	X & Y Axes (mm/sec)	500(5~500)	500(5	~500)	500(5~500)			
()=Settable Speed Range	Z Axis (mm/sec)	200(2~200)	200(2	~200)	200(2~200)			
Maximum Speed (CP Drive)*2 ()=Settable Speed Range	X, Y, Z Combined (mm/sec)	500(0.1~500)	500(0.	1~500)	500(0.1~500)			
Repeatability*3	X, Y & Z Axes (mm)	±0.01	±0	.01	±0.01			
5. 15 W.5.II	Dispensing	320×364×549	560×507×609	560×507×655	584×607×755			
External Dimensions W×D×H	Screw Tightening	320×443×549	560×590×609	560×590×655	584×650×755			
(Excluding Protrusions) (mm)	Standard	320×364×549	560×507×609	560×507×655	-			
	Dispensing	17	30	31	37			
Robot Weight (kg)	Screw Tightening	18	31	32	38			
	Standard	17	30	31	-			
Program Capacity		255 Programs						
Database Capacity*4			Up to 30,	000 points				
External Interface		Teaching Pendant Port (RS422) PC Port (RS232C) RS232C 2ch (for external devices COM2, COM3) (Optional)						
	Dispensing	I/O-SYS 8 Inputs/ 8 Outputs I/O-DSP 1 Input/2 Outputs(including 1 relay output)						
		Needle Adjuster Connector Port (optional) I/O-SYS (for screwdriver connection) 8 Inputs/ 8 Outputs * 2 outputs dedicated for the ejector						
External Input/Output*5	Screw Tightening	I/O-SYS (for screwdr		8 Outputs * 2 outputs de ts/ 6 Outputs	edicated for the ejector			
	01. 1. 1		I/O-SYS 8 Inp	uts/ 8 Outputs				
	Standard	I/O-1 8 Inputs/ 6 Outputs(Optional)						
Power Source (V)		AC100~120/AC200~240(single phase)						
Power Consumption (W)			1	150				

Specification Based Features

Dispensing	Purge Switch (dedicated switch on the front panel)		
Disperising	Start Box Specifications (for purge switch inclusion)		
	Maximum Tightening Torque 0.2Nm (2kg-cm)		
	Recommended Screw Size M1.0-M2.0 (provided the maximum tightening torque is not exceeded)		
Screw Tightening*6	Ejector/Regulator included as standard equipment (for screw pickup)		
	Screw Tightening set includes: Screw Tightening Model Robot, electric screwdriver and automatic screw feeder		
	Start Box Specifications		
Standard I/O-1 Add-on (optional)			

lotess We also offer a "High Payload" type for the 50mm Z-Axis operating range which bears a tool load up to 3kg. Please contact us about compatible applications. Maximum speed can vary depending upon conditions. Maximum speed cannot be reached when the robot is bearing its maximum load. Repeatability was measured at a constant temperature and does not represent a guarantee of about precision. Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area. I/O COLONIA IN ADMINIANY IN

JR-V2203







JC-3 Series

The User-friendliness and Functionality of Our Desktop Robots Loaded into Versatile 3 & 4 Axes Cartesian Robots



*Cablevevor is optional.

The controller comes with our user-friendly

teaching software installed. Use our teaching

pendant for simple, interactive teaching

without making a lot of troublesome settings.

All-in-One















Features

Excellent Path Traceability

Configured with dispensing in mind, the JC-3 Cartesian Robot is finely tuned for smooth movement and path traceability.

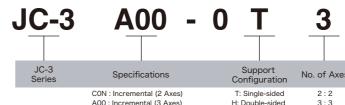
Two types are available, single and double sided, with a wide range of X, Y, Z axes stroke lengths. Add a 4th axis and jobs such as dispensing or soldering on the wall of a cylindrical workpiece are much easier.

An optional Absolute Specification Type is available for the 3 Axes model.





Model Name



3:3 4:4 A00 : Incremental (3 Axes) B01 : Incremental (4 Axes) H: Double-sided D00 : Absolute (3 Axes)

Compatible Applications

Specifications

	,,,,,	3 A	xes	4 Axes			
Item	Model	JC-3A00-0T3(Single-sided)	JC-3A00-0H3(Double-sided)	JC-3B01-0H4(Double-sided)			
Number of Axes		3 Axes (Synchr	4 Axes (Synchronous Control)				
	X Axis (mm)	200/300/400/500/600	300/400/500/600	300/400/500/600			
O	Y Axis (mm)	200/300	300/400/500	300/400/500			
Operating Range	Z Axis (mm)	50/100/150/200	50/100/150/200	100/150			
	R Axis (°)	-	-	±360			
Maximum Portable Load(kg)		4	8	3			
	X(mm/s)	8	00	800			
Maximum Speed (PTP Drive)*1	Y(mm/s)	8	00	800			
waximum Speed (PTP Drive)	Z(mm/s)	4	00	400			
	R(°/s)		-	900			
	X & Y Axes (mm)	±O	.02	±0.02			
Repeatability*2	Z Axis (mm)	±0	±0.01				
	R Axis (°)		±0.008				
		W: Y Axis Stroke +319	W: Y Axis Stroke +426	W: Y Axis Stroke +426			
External Dimensions(mm)	Robot Unit	D: X Axis Stroke +309	D: X Axis Stroke +309	D: X Axis Stroke +309			
External Differsions(IIIII)		H: Z Axis Stroke +357	H: Z Axis Stroke +357	H: Z Axis Stroke +334			
	Controller	W170×D3	310×H300	W170×D310×H300			
Program Capacity			999 Programs				
Database Capacity*3			Up to 32,000 points				
	I/O-SYS*4		16 Inputs/ 16 Outputs				
	I/O-1*4		8 Inputs/ 8 Outputs				
	I/O-MT*4	Co	ontrols up to 2 external motors (option	nal)			
External Input/Output	Field Network	EtherNet/IP / PROFIN	IET / CC-Link / DeviceNet / PROFIBUS	S / CANopen (optional)			
External input/ output	COM Port(RS232C)	CC	DM1, COM2, COM3 (for external device	ces)			
	EMG OUT	Emergency stop signal i	nput for external safety circuit conne	ction (set up by end user)			
	MEMORY	USB memory connector (fo	or saving/reading out teaching & customizing	data, system software upgrades)			
	LAN	Ethernet connector for PC (for open	et connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)				
Power Source*5(V)		AC90~240 (single pha	se) + external DC48 (depending upor	n facility power supply)			
Power Consumption (W)		150 (AC pow	ver supply), 300 (DC48V, motor drive	power supply)			

JC-3A00-0T3

JC-3A00-0H3

JC-3B01-0H4

Controller



JS3 Series

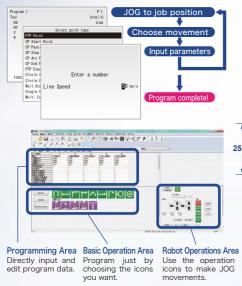
Cut costs with our user-friendly, fast and highly functional SCARA Robot!



Features

User-Friendly Teaching

Teach using our interactive teaching pendant or get a hands-on feel for the robot's operation teaching via our PC software.



Works Fast!

Our standard cycle time is top class: 0.29sec, with a maximum speed of wiring and piping for compact, 8,300mm/sec, helpful for shorter tact streamlined hand installation. times and greater efficiency.

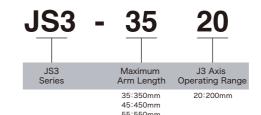


Cable Interference Prevention

Axis tip available with interior hand



Model Name



Compatible Applications

Standard

Pick & Place

Specifications

ltem	Model	JS3-3520	JS3-4520	JS3-5520						
Number of Axes			4 Axes							
	Maximum Arm Length (J1+J2)	350	450	550						
Arm Length (mm)	J1 Arm	125	225	325						
	J2 Arm		225							
	J1 Axis (°)	340(±170)								
J2 Axis (°)			290(±145)							
Operating Range	J3 Axis (mm)		200							
	J4 Axis (°)		720(±360)							
Portable Mass (kg)			Maximum 6 (Rating 3)							
Acceptable Moment of Ir	nertia (kgm²)		Maximum 0.12 (Rating 0.01)							
	J1+J2+J4 Axes Combined(mm/sec)*1	6900	7600	8300						
Maximum Speed	J3 Axis (mm/sec)		2080							
	J4 Axis(°/sec)		2500							
Standard Cycle Time (se	c)*2		0.29							
	J1+J2 Axes Combined (mm)	±0.010	±0.010	±0.012						
Repeatability*3	Axis (mm/sec)	±0.010								
	J4 Axis(°)		±0.004							
J3 Axis Resistance*4		165N								
External Dimensions*5 W×D×H	Robot	174×572×798 174×672×798 174×772								
(Excluding Protrusions) (mm)	Controller	400×350×288								
	Robot	36	36	37						
Weight (kg)	Controller		16							
Tool Wiring		·I/O-H 8 Hand Inputs/ 8 Hand Outputs ·LAN Cable <100BASE-TX>								
Air Piping			Primary: ϕ 6×2 Secondary: ϕ 4×8*	¢6						
Program Capacity			999 Programs							
Database Capacity*7			Up to 32,000 points							
	I/O-SYS*8		15 Inputs/ 14 Outputs							
	I/O-1*8	18 Inp	outs/ 22 Outputs (including 4 relay	outputs)						
	I/O-MT*8	Co	ntrols up to 2 external motors (opti	ional)						
	I/O-S		Safety device connector (optional)						
External Input/Output	I/O-H*8		8 Hand Inputs/ 8 Hand Outputs							
	Field Network	EtherNet/IP / PROFIN	ET / CC-Link / DeviceNet / PROFIBI	JS / CANopen (optional)						
	COM1, COM2	RS23	32C (for external devices, COM com	nmands)						
	MEMORY		r saving/reading out teaching & customizi							
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)								
Power Source (V)			AC200~240(single phase)							
Power Consumption (W)			1600							

- <Notes>
 11 This is the J1, J2 and J4 axes' maximum speed with a control point on a flat X-Y surface. (The control point is a position 30mm from the center of the J4 axis' rotation.)
 12 Value when bearing a 2kg load. Cycle time may increase when precision workpiece positioning is necessary or due to the robot's operating position(s).
 13 Repeatability is not a quarantee of absolute precision.
 14 The downwards pressing force at the tip of the load when the robot is bearing its maximum load and the J1, J2 and J4 axes are at rest. An excess load error may occur if a pressing force is applied for an extended period of time.
 15 These are the dimensions when the J1 and J2 Axes' position is O'.
 16 The \$4\$ secondary piping is used when the optional solenoid valve is added.
 17 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
 18 Please choose the I/O polarity: NPN or PNP.

<Standard Accessories>
Operation Manual (CD-ROM)
Short Connectors (for Teaching Pendant, I/O-S and I/O-SYS)
Robot-Controller Connector Cable





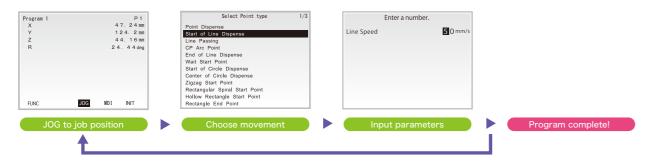
Software

From first-time users to seasoned professionals, a system software for everyone!

We offer dedicated software designed for individual applications, each with a comprehensive set of operation commands new users can use easily for program teaching.

Please refer to pp. 5 and 6 for details about compatible applications for each robot

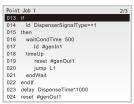
User-Friendly Teaching

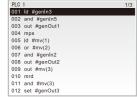


Standard Application

With our original application-based robot language, users can freely create programs with the operations they want using easy-to-understand "Point Commands".

Our software is designed with helpful functions: with our "Customizing Function" users can create their own program applications and our "Simple PLC Function" lets the robot communicate with peripheral devices without using an external PLC.





Point Job Command Setting Screen

Simple PLC Setting Screen

Screw Tightening Application

With our dedicated screw tightening software, teach a program just by setting screw tightening conditions such as screw length, pitch, driver rpm, etc., and specifying the tightening positions.



Dispensing Application

With our dedicated dispensing software, teach by pointing the dispenser needle tip to the position you want and select the type of dispensing movement (point dispense, line dispense, fill-in dispense, etc.)



Point Type Selection Screen

Depaneling Application

This dedicated depaneling software for the JR3000ERT includes a function notifying when it is time to change the spindle motor router bit.



"JR C-Points II" PC software*1(optional)

JR C-Points II is our original application software for creating, editing and saving program teaching and customizing data.

*1 JR-V2000 uses "JR C-Points".

USB Camera Teaching

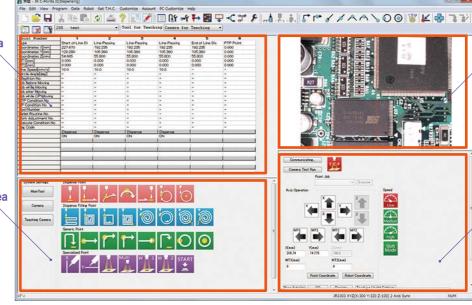
Connect a store-bought USB camera*2 and teach while referring to enlarged images of your workpiece.

Programming Area

Displays programming data point by point; edit values by selecting them directly.

Basic Operation Area

Programming is easy for everyone. Just select the icons for the operations you



Camera Imaging Area

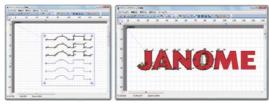
Use the enlarged image to designate precise positions. Click on a position on the camera image and the robot moves to center itself over that position. (3 Axes types only)

Robot Operations Area

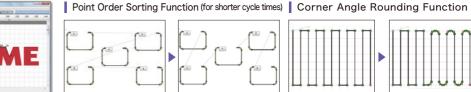
Make JOG movements while viewing the camera screen.

Point Graphic Editing Function

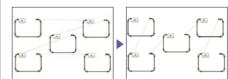
Import DXF or Gerber data and automatically generate point data. Refer to background image data (.jpeg format) when creating movement paths. Track and edit the robot's path in the teaching data; create programs while viewing an image of the entire workpiece, etc.



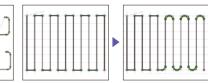
Check and edit the robot's path and see the overall picture of your workpiece when programming.



Teach while referring to



Sorting from left to right to shorten the moving distance.
Designate a radius by clicking on a connecting point.



Software Specifications

	JR3000	JR3000F	JR3000ERT	JR3000AP-D	JR-V2000	JC-3	JS3
PC Software Name		JR C-F	oints II		JR C-Points	JR C-Po	oints II
Usable Display Languages		glish, Japanese, Germ se (Simplified & Trad		English, Japanese, Chinese (Simplified & Traditional)	English, Japanese, Chinese(Simplified)	English, Japan Chinese (Simplifi	ese, German, ed & Traditional)
Compatible PC Operating Systems			Window	vs®7、Windows®8.1、Wir	ndows®10		

^{*2} Please contact us for details about compatible USB cameras.

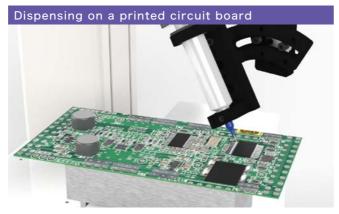
Application Examples

Please refer to pp. 5 and 6 for details about compatible applications for each robot.

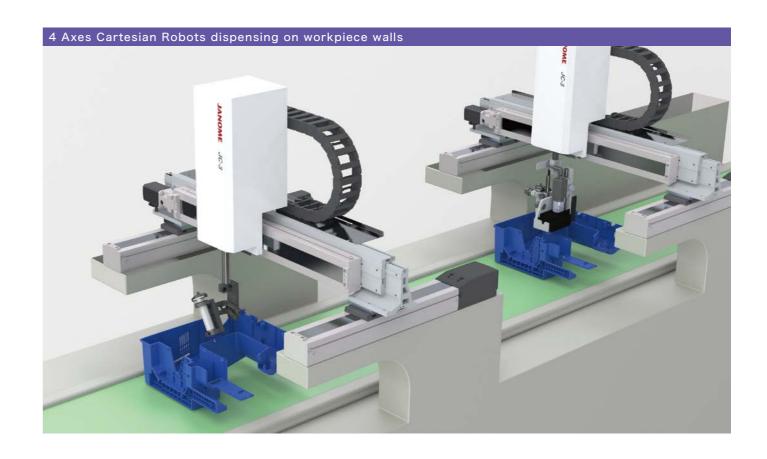












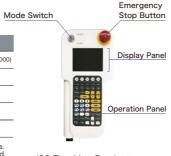


Options

Teaching Pendant

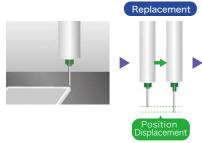
- ·Each axis has independent JOG keys for a hands-on feel when moving from point to point
- ·Switch freely among multiple screen display languages
- ·Useful for programming and running diagnostics in locations where you cannot bring a PC

	JR3000	JR3000 AP-D	JR3000 ERT	JR3000F	JR- V2000	JC-3	JS3	Notes	
Standard Type (No Emergency Stop Switch)	•	•	•	•	•			Cable Lengths: 2m/3m/5m (2m only for JR-V2000)	
With Emergency Stop Switch	•	•	•	•		•		Cable Lengths: 2m/3m/5m	
With Emergency Stop & Enable Switches	•	•	•	•		•		Cable Lengths: 2m/3m/5m	
With Emergency Stop, Enable & Mode Switches							•	Cable Lengths: 2m/3m/5m	
Interchangeable Display Units				mm, inch					
Interchangeable Display Languages		English, Spanish, German, French, Italian, Japanese, Korean, Chinese (Simplified & Traditional). Czech, Vietnamese					JR-V2000 does not have Traditional Chinese. JR3000AP-D is mainly PC software operated		



Needle Adjuster (Dispensing Models only)

This function detects and corrects any needle tip position displacement occurring after needle replacement. Just set the standard position and run the adjustment program after changing needles. The robot adjusts automatically.









The Needle Adjuster is also available for 4-Axes JR3000 and JC-3 Series Robots. Please contact us regarding the 4-Axes Needle Adjuster.

3-Axes Needle Adjuster PR1.PR2

Model	Needle Gauge	Robots	Variation
PR1	φ0.35~2.50mm	3-Axes	Cable Lengths: 1m/5m *Choose NPN or PNP
PR2	φ0.20~1.00mm	3-Axes	Cable Lengths: 1m/5m *Choose NPN or PNP

I/O-MT* *Not available with the JR-V2000

Add up to 2 pulse string input type motors (stepping, servo, etc.) and control them from the robot.

Example:

2 Motors added to a 4-Axis Robot

2 motors are added to modify the syringe angle and workpiece angle. The robot dispenses along the edge of a hole cut through a tube-shaped piece.



Example: Dispensing on a Turntable

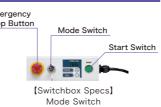
A 4-Axes robot dispenses on multiple workpieces set on a rotating worktable.



Switchbox · Operation Box* * Excluding Built-in Switches Type:

Select and start programs, change modes and more.

00	icet and start progr	amo, o	nungo	111000	o arra		Optional Add-on	Sto		
		JR3000	JR3000 AP-D	JR3000 ERT	JR3000F	JR-V 2000	JC-3	JS3	Notes	
	Standard	O*1	0		○*1				Cable Lengths: 1.5m (Standard)/1m	
	Mode Switch	•*1	•		● *1				Cable Lengths: 1.5m (Standard)/1m	
	Optional Switch	•	•	0	•	•*2			Cable Lengths: 1.5m (Standard)/1m	
xoq	Mode Switch, Optional Switch	● *3			● *3				Cable Lengths: 1.5m (Standard)/1m	
ritch	Initialization Switch						•		Cable Lengths: 2m/5m	
Sw	Initialization Switch, Mode Switch						•		Cable Lengths: 2m/5m	
	Initialization Switch, Purge Switch						•		Cable Lengths: 2m/5m	
	Initialization Switch, Mode Switch, Purge Switch						•		Cable Lengths: 2m/5m	
	Operation Box							•	Vertical/Horizontal Placement	



Optional Switch

[Basic Switchbox Specs] Mode Switch, Optional Switch

*1 Switchbox or Basic Switchbox is available according to robot operation panel specs.
*2 JR-V2000 cable is 1.5m only.
*3 Basic Switchbox only

Field Networks*

Acquire and set point and position data information from an external PLC, etc. Choose from among these 6 networks.

Attachments

O:Included with Robot

Attach	nments									○:Included with Robot ●:Optional Add-on
Category	Product	Variation	JR3000	JR3000 AP-D	JR3000 ERT	JR3000F	JR- V2000	JC-3	JS3	Notes
		EtherNet/IP	•	•	•	_	_	•	•	
		PROFINET	•	•	•			•	•	
	Field	CC-Link	•	•	•	_		•	•	
	Networks*	DeviceNet	•	•	•	_		•	•	
		PROFIBUS	•	•	•	_		•	•	
		CANopen	•	•	•			•	•	
		I/O-SYS	0	0	0	0	0	0	0	JR3000 Series: 17Inputs/16 Outputs JR-V2000:8 Inputs/8 Outputs JC-3:16 Inputs/16 Outputs JS3:15 Inputs/14 Outputs
Robot	Additional	1/0-1	•	•	•	•	•	0	0	JR3000 Series: 8 Inputs/8 Outputs(including 4 relay out JR-V2000:8 Inputs/6 Outputs(i/O-DSP for Dispensing Mo JC-3:8 Inputs/8 Outputs JS3:18 Inputs/22 Outputs(including 4 relay outputs)
Unit Options	Interfaces*	I/O-MT	•	•	•	•	_	•	•	Control up to 2 External Motors
Options		I/O-S	•	•	0	•		0	0	Marked as EMG-OUT on the JC3.
		COM1	0	0	0	0	0	0	0	
		COM2·COM3	•	0	•	•	•	0	0	JS3 has only COM2.
	Internal I/O Po	wer Supply*	•	0	_	•		•	0	
	Cableveyor Se	t (JC-3)	_	_		_		•		For X Axis/for Y Axis
	Optional Cover for	or 3 Axes Type (JC-3)	_			_		•		Motor Assembly Panel Z Axis: 50-100mm/150-200r
	Solenoid Valve	(JS3)	_			_		_	•	For Air Piping (Please choose NPN/PNP when order
	Hand Cable Cu	urled Tube (JS3)	_	_				_	•	
	Hand Wiring a	nd Tubing (JS3)	_	_				_	•	
	External Wiring	and Tubing Box (JS3)	_			_		_	•	
	I/O-SYS Cable		•			•	•	•		Cable Lengths: Connector only/2m/3m/5m
	I/O-1 Cable		•	•	•	•	•	•	•	Cable Lengths: Connector only/2m/3m/5m
	I/O-MT Cable		•	•	•	•		•	•	Cable Lengths: Connector only/0.5m/1m/3m/
Cables	Robot Unit~Co	ontroller Cable	_	_		_	_	•	0	JC-3:2/3/4 Axes Types (Cable Lengths:3/5/10/20 JS3:Cable Lengths: 5m(Standard Accessorie 10m/15m/20m(optional)
	Hand Output C	Cable (JS3)	_	_	_	_	_	_	•	
	Hand Input Ca	ble (JS3)	_	_	_	_		_	•	
	Switchbox Sho	ort Connector	•	•	•	•		0	0	
	Teaching Penda	ant Short Connector	•	•	•	•	_	0	0	
	PC Software		•	0	•	•	•	•	•	
	Service Manua	al	•	•	•	•	•	•	•	Japanese/English
	USB Camera		•	_	•	•		•	•	USB Camera Teaching
Other	Positioning Pin	Set (JC-3)	_					•		Used for positioning during setup
	Mechanical Stopper	for J1 Range Modification	_						•	
	J1/J2 Adjustm	nent Tool (JS3)	_						•	
		Screwdriver Unit	•	_		_	•	_	_	Screwdriver mounting fixture Please ask us about compatible screwdrivers
Model Options	Screw Tightening	Screw Feeder Attachment Plate	•	_			•			Screw Feeder mounting fixture Please ask us about compatible screw feeder
		Ejector Unit *	•				•	•		Screw Vacuum Microejector Unit













We offer a wide range of models, from inline types for assembly lines to stand alone

C-frame models to clean room compatible types for a variety of applications.

Icon Key









			Electro Press	
		JP Series 5	JP Series 4 Stand Alone Type	JP-S Series
Produc	t Image	JANOME Elatro Pres JP Series 5		JANOME MAN JANOME
Pag	ges	29-30	31-32	33-34
Feat	ures	Dependable "visualized" new generation servo press increases productivity.	Standard servo press model offers high precision, comprehensive control and user-friendly operation.	Slim and compact servo press ideal for inline installation.
	0.5kN	•	•	
	1kN	•	•	
	2kN	•	•	
	5kN	•	•	
	10kN			
Pressing	15kN			
Capacity	20kN 30kN	•		
	50kN			
	80kN			
	100kN			•
	200kN			•
Clean		● (Class 10*)	● (Class 10*)	● (Class 1000*)



146×502×258

34

JP Series 5

New Model Servo Press:

Excellent Speed, High Precision and Ready for IoT Era Facilities













Features

Ideal for replacing an air or oil press

Easier on the environment than conventional pneumatic or hydraulic presses; less noisy and with a lower running cost.

Higher speed for greater productivity

Maximum ram speed 414mm/sec

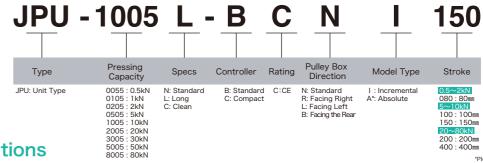
The highest speed in the lightweight servo press industry greatly shortens



Improved Production Quality

- ·Load Precision ±0.8% FS
- ·Position Repeatability ±0.005mm
- ·Comprehensive Sensor Functions

Model Name



Specifications

Power Source (V)

Weight(kg)*

External Dimensions (mm)*5

Item	Model	JPU-0055	JPU-0105	JPU-0205	JPU-0505	JPU-1005
Pressing Capacity	Maximum (kN)	0.5	1	2	5	10
Ram Stroke	Maximum (mm)	80	80	80	100(L:150)	100(L:150)
Ram Speed	Pressing Time (mm/sec) *1	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35
Ram Speed	Approach-Return Time (mm/sec)	0.01~414	0.01~414	0.01~414	0.01~280	0.01~280
Maximum Holding Time a	nt Max. Load (sec)*2	999.9	360	20	999.9	25
Load Precision*3		25N or more ±4N	50N or more ±8N	100N or more ±16N	250N or more ±40N	500N or more ±80N
Position Repeatability (mr	n)*4	±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from	m Ram Tip (kg)	1 or less	2 or less	4 or less	10 or less	20 or less
Dawer Consumption (M)	Standard Controller	400	400	400	950	950
Power Consumption(W)	Compact Controller	200	200	200	750	750

Single Phase/Three Phase 200~240 ±10%(50/60Hz)

116×425×218

146×502×258

116×425×218

Item	Model	JPU-2005	JPU-3005	JPU-5005	JPU-8005
Pressing Capacity	Maximum(kN)	20	30	50	80
Ram Stroke	Maximum(mm)	200 (L:400)	200 (L:400)	200(L:400)	200 (L:400)
Dom Croed	Pressing Time(mm/sec)*1	0.01~35	0.01~35	0.01~35	0.01~35
Ram Speed	Approach-Return Time (mm/sec)	0.01~320	0.01~320	0.01~320	0.01~250
Maximum Holding Time a	t Max. Load (sec)*2	80	30	20	8
Load Precision*3		1kN or more ±160N	1.5kN or more ±240N	2.5kN or more ±400N	4kN or more ±640N
Position Repeatability(mn	n)* ⁴	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from	n Ram Tip (kg)	40 or less	90 or less	100 or less	100 or less
D C	Standard Controller	3.7	3.7	5.2	5.2
Power Consumption (kW)	Compact Controller	3.5	3.5	5.0	5.0
Power Source (V)			Three Phase 200~2	240 ±10% (50/60Hz)	
External Dimensions (mm))*5	171×706×384	230×775×474	230×775×474	260×797×477
\Maiab+ (lca*5		•n	161	167	170

116×425×218

1 Recommended setting range.
2 Value when making a cold start. Can vary according to setting conditions.
3 Load display precision is £0.8% (FS) of the maximum load when pressing in the range of 5% or more of the maximum load.
This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerance after pressing or margin of error.
4 Position repeatability is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature. Repeatability is not a guarantee of absolute position precision.
5 Values are for standard specification models.

JP Series 5 Common Specifications

Item		Content
Program Capacity*1		512
	COM	RS-232C 1ch
	I/O-SYS*2	17 Inputs/ 16 Outputs *Choose NPN or PNP
	LAN	10BASE-T/100BASE-TX
External Input/Output	MEMORY	USB memory connector(Save results data, backup and restore data, update system software)(32GB or less)
	Field Networks	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	I/O-S	Safety device connector
	Other	Load cell output, encoder output, analog monitor output (optional)
Encoder		Incremental (standard) or absolute types*3 (optional)

<Notes>
*1 The number of programs, pressing steps and step judgments is limited in relation to the total memory size.
When multiple steps are included in one program, this in turn limits the number of new programs which can be added to the memory.
*2 An internal I/O power supply is available as an option for the standard controller.
*3 Please contact us about compatible models.

JPU-0055 \sim

JPU-0205

Operation Manual (CD-ROM) Press Unit Connector Cable (3m) SWBOX Short Connector TPU Short Connector 1/0-S Short Connector 1/0-S Short Connector

JPU-0505•

JPU-1005

JPU-2005

JPU-3005• JPU-5005



JPU-8005



Standard Controller



Compact Controller











JP Series 4 Stand Alone Type

User-friendly Standard Model Servo Press for Precision Operation and Comprehensive Control



Features

"All-in-One" configuration unifies the turn ON the power and the press is ready to work; ideal as an independent machine tool used in cell production, or for R & D work.

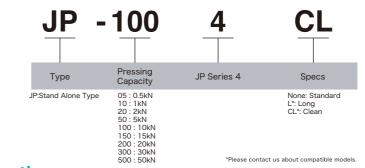
Servomotor Driven

Precision Load Cell and Encoder allow pressing force, ram speed, stopping position and stopping time.

Repeatability ± 0.005mm

The position repeatability is fine tuned controller and drive mechanism. Just for free control of parameters such as to ± 0.005mm, well able to handle minute pressing jobs.

Model Name



Specifications

Item Model		JP-054	JP-104	JP-204	JP-504	JP-1004
Pressing Capacity	Maximum(kN)	0.5	1	2	5	10
Ram Stroke	Maximum(mm)	80	80	80	100 (L:150)	100(L:150)
Ram Speed	Pressing Time(mm/sec)*1	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35
Ram Speed	Approach-Return Time(mm/sec)	166	166	166	166	166
Maximum Holding Time at Max. Load (sec)*2		999.9	999.9	999.9	999.9	50
Load Precision*3		50N or more ±5N	100N or more ±10N	200N or more ±20N	500N or more ±50N	1kN or more ±100N
Position Repeatability(mm)*4		±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging	from Ram Tip(kg)	0.5 or less	1 or less	2 or less	5 or less	10 or less
Power Consumption ((W)	300	300	300	850	850
Power Source(V)		Single Phase/Three Phase 180~250				
		180~250	180~250	180~250	180~250	180~250
External Dimensions(mm)*5		520×567×750	520×567×750	520×567×750	520×585×875	520×585×875
Weight(kg)*5		100	100	100	160	160

Item	Model	JP-1504	JP-2004	JP-3004	JP-5004
Pressing Capacity	Maximum(kN)	15	20	30	50
Ram Stroke	Maximum(mm)	100(L:150)	200	200	200
Ram Speed	Pressing Time(mm/sec)*1	0.01~20	0.01~35	0.01~35	0.01~35
Ram Speed	Approach-Return Time(mm/sec)	100	166	200	200
Maximum Holding Time at Max. Load (sec)*2		60	15	10	10
Load Precision*3		1.5kN or more ±150N	2kN or more ±200N	3kN or more ±300N	5kN or more ±500N
Position Repeatability(mm)*4		±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging	from Ram Tip(kg)	15 or less	20 or less	90 or less	100 or less
Power Consumption(\	N)	850	1600	3000	5000
Power Source(V)		Single Phase/Three Phase 180~250	Three Phase 180~250	Three Phase 180~250	Three Phase 180~250
External Dimensions(mm)*5		520×585×875	520×813×1,236	520×813×1,236 560×985×1,315	
Weight(kg)*5		160	550	1,050	1,050

Value when making a cold start. Can vary according to setting conditions.
 Load display precision is ±1% (FS) of the maximum load when pressing in the range of 10% or more of the maximum load.
 This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerance after pressing or margin of error.
 Position repeatability is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature. Repeatability is not a guarantee of absolute position precision for the pression of the pression

JP Series 4 Common Specifications

Item		Content		
Program Capacity*1		100		
COM		RS-232C 1ch		
	I/O-SYS	17 Inputs/ 16 Outputs *Choose NPN or PNP		
External Input/Output	LAN	10BASE-T/100BASE-TX (optional)		
	I/O-S	Safety device connector		
	Other	Load cell output, encoder output, analog monitor output		
Encoder		Incremental (standard) or absolute types*2 (optional)		

<Notes>
1 The number of programs, pressing steps and step judgments is limited in relation to the total memory size.
When multiple steps are included in one program, this in turn limits the number of new programs which can be added to the memory.
22 Please contact us about compatible models.

<Standard Accessories>

 I/O-S Connector I/O-SYS Connector (note: cable not included)
 Operation Manual (CD-ROM)

JP-054~JP204



JP-504~JP-1504



JP-3004·JP-5004



JP-S Series

"Inline Specialist" Servo Press Designed for Factory Installation Slim and Compact JP-S Series













Features

Space Saving Configuration

Both the press unit and controller are slim and compact; ideal for inclusion in your facility system.

Full Lineup

The JP-S is available in 8 basic models ranging from 5kN to 200kN, as well as several optional clean room compatible models and high power motor types.

Also choose either a compression (pressing) type or tensile (pulling) type load cell. (Please check with us about compatible models.)

Ideal for replacing an air or oil press

Low noise operation is environmentally friendly, and the JP-S consumes much less energy compared with an oil or air

Flexible configuration helps customers choose functions according to application need (such as with or without a load cell) keeping startup costs down.

JP-S 0501 Model 100 Name Pressing Capacity Stroke 0501:5kN 1001:10kN 1501:15kN 2001:20kN 3001:30kN 5R01:50kN 10R1:100kN 20T1:200kN 100:100mm 150:150mm 200:200mm 250:250mm 300:300mm 400:400mm 450:450mm 500:500mm S: Pressing L: Pulling 0: None 0 : Standard 1 : CE 2*1: Clean 0 : Standard 1*2: Special Configuration 1

Specifications

Item	Model	JP-S0501	JP-S1001	JP-\$1501	JP-S2001
Pressing Capacity	Maximum(kN)	5	10	15	20
Ram Stroke(mm)		100/150/200/250/350	100/150/250	100/200/300/350/400/450	100/200/300/350/400
Dom Croed	Pressing Time(mm/sec)*1	0.01~35	0.01~35	0.01~35	0.01~35
Ram Speed	Approach-Return Time(mm/sec)	0.01~216	0.01~216	0.01~200	0.01~200
Maximum Holding Time(sec) *2		999.9	999.9	999.9	999.9
Load Precision*3		0.5kN or more ±50N	1kN or more ±100N	2kN or more ±200N	2kN or more ±200N
Position Repeatability(mm	1)*4	±0.01	±0.01	±0.01	±0.01
Tool Weight Hanging from	n Ram Tip(kg)	5 or less	10 or less	15 or less	20 or less
Power Consumption(W)		200	400	750	750
Power Source(V)		Single Phase/Three Phase	Single Phase/Three Phase	Single Phase/Three Phase	Single Phase/Three Phase
Power Source(v)		180~250(50/60Hz)	180~250 (50/60Hz)	180~250(50/60Hz)	180~250 (50/60Hz)
External Dimensions (mm)		65×155×455	65×155×455	80×196×505	80×196×505
Weight(kg)		12	12	20	20

Item Model		JP-S3001	JP-S5R01	JP-S10R1	JP-S20T1
Pressing Capacity Maximum(kN)		30	50	100	200
Ram Stroke(mm)		100/200/300/350/400	100/200/300/350/400	200/400/500	200/400
Ram Speed	Pressing Time(mm/sec)*1	0.01~35	0.01~35	0.01~16	0.01~8
Ram Speed	Approach-Return Time(mm/sec)	0.01~210	0.01~200	0.01~100	0.01~50
Maximum Holding Time	Maximum Holding Time(sec) *2		999.9	999.9	999.9
Load Precision*3		3kN or more ±300N	5kN or more ±500N	10kN or more ±1000N	20kN or more ±2000N
Position Repeatability(n	nm)*4	±0.01	±0.01	±0.01	±0.01
Tool Weight Hanging fr	om Ram Tip(kg)	30 or less	50 or less	100 or less	200 or less
Power Consumption(W)		2,000	5,000	5,000	5,000
Power Source(V)		Three Phase 180~250(50/60Hz)	Three Phase 180~250(50/60Hz)	Three Phase 180~250(50/60Hz)	Three Phase 180~250(50/60Hz)
External Dimensions(mm)		100×259×570	148×365×643	200×465×889	292×442×1,499
Weight(kg)		35	98	198	387

etting range.
asse as loads increase. (In some situations, hold times cannot be attained.) Increases in motor temperatures can also shorten hold times.
asse as loads increase. (In some situations, hold times cannot be attained.) Increases in motor temperatures can also shorten hold times.
cision is ±1% (FS) of the maximum load when pressing in the range of 10% or more of the max. load for the 15kN type).
sents the level of sensor accuracy and is not an indicator of load tolerance after pressing or margin of error.
billty is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature. Repeatability is not a guarantee of absolute position precision.

JP-S Series Common Specifications

Item			Content	
Program Capacity*1			512	
	COM		RS-232C 1ch	
	Digital Input/Output (DIO)		17 Inputs/ 16 Outputs *Choose NPN or PNP	
External Input/Output	LAN		10BASE-T/100BASE-TX	
External input/Output	Field Network		EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)	
	041	Standard Equipment	Load cell output, encoder output	
	Other	Optional	Analog monitor output	
Encoder			Incremental	

-Main unit cables (motor cable, encoder connector cable, sensor/load cell cable or sensor cable)

-Main unit cables (motor cable, encoder connector cable, sensor/load cell cable or sensor cable)

-Power cables (controller power cable, press unit drive power cable)

-Operation Manual (CD-ROM)

-PC Software JP-S Designer

JP-S0501. JP-S1001

JP-S1501• JP-S2001

JP-S3001

JP-S5R01

JP-S10R1 Controller

Photo: JP-SC1001

*1 Please contact us about compatible models. *2 Special Configuration 1: High Power Motor Specifications (built with a motor one size larger). Please contact us about compatible models.













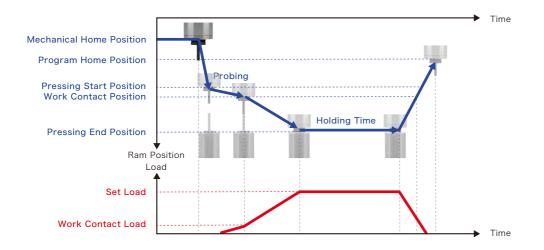
Modes / Functions

Pressing Modes · Sensor Functions

With a variety of pressing modes and sensor functions, Janome Electro Presses are well equipped to handle complicated pressing methods, including those which require multiple sensor functions.

Our quality control capabilities prevent faulty workpieces from moving through your assembly process.

Basic Servo Press Operation



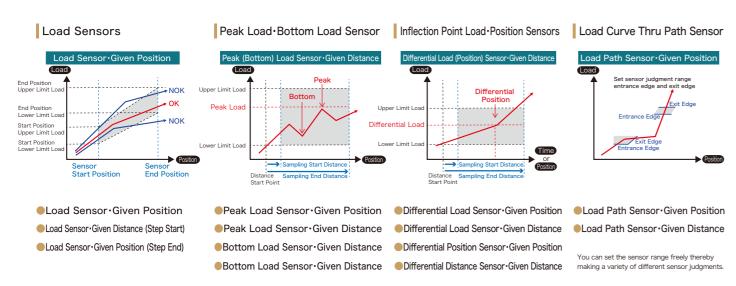
Pressing Mode

Pressing Conditions	Stopping Conditions	Content	Max *	Max			
	Position	Stops when a set position is reached	512 [*] X	512*			
Constant Speed Pressing	Distance	Stops when a set distance from a given position is reached	Programs	Steps			
Constant Speed Fressing	Load	Stops when a set load is reached					
	:	Also set stopping conditions based upon incremental load increases or load differentials. Please contact us for details.					
	Time	Stops when a set time is reached					
Constant Load Pressing	Position	Stops when a set position is reached					
	:	Also set stopping conditions based upon distance or in response to external signals. Please contact us for de					

The JP4 Series has a maximum capacity of 100 programs 100 steps. The number of programs and pressing steps is limited by the overall memory capacity.

Sensor Functions

We offer a wide variety of step sensors, load path sensors and load zone sensors.

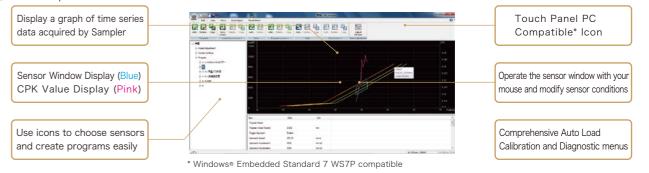


PC Software

"JP TaS II System" is an application software you can run on your PC to edit setting data and display and analyze result data.

Designer

Create teaching data, sensor conditions, etc., upload all of your setting data to your PC, modify the settings, save a backup copy of your data, as well as print it out.



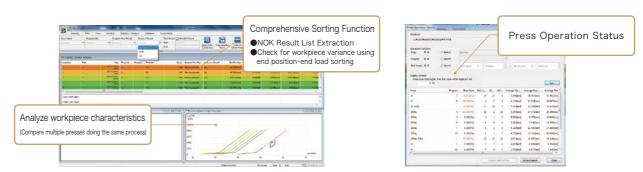
Sample

Display single shot quality control & time series data and save it as a sampling file. Display the data for multiple presses at the same time.



Reporter

Display data acquired by Sampler, create CPK breakdown analysis and result analysis reports.

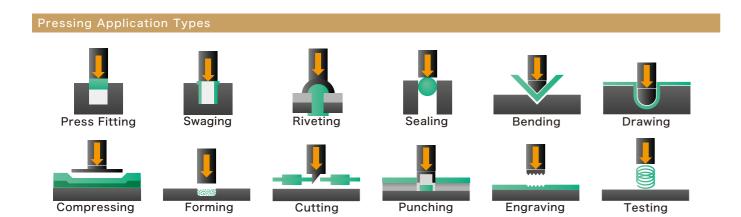


	JP5	JP4	JP-S			
PC Software Name	JP TaSII System	JP TaS System	JP SaS System			
Usable Display Languages	English, Japanese, Korean, Simplified Chinese	English*1, Japanese	English, Japanese, Korean, Simplified Chinese			
Compatible PC Operating Systems	Windows®7, Windows®8.1, Windows®10, Windows® Embedded Standard 7 WS7P(JP Series 4 excluded)					

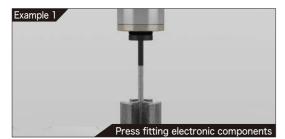
^{*} The PC software screen shown below is of the "JP TaS II System", used with the JP Series 5. There are some differences in appearance and function with the software for other press types.

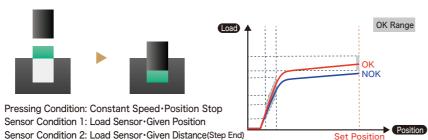
Application Examples

From press fitting to testing, Janome servo presses fulfill an important role in many different processes.



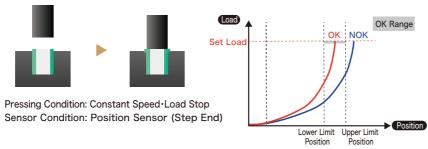
Press Fitting



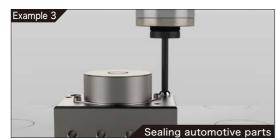


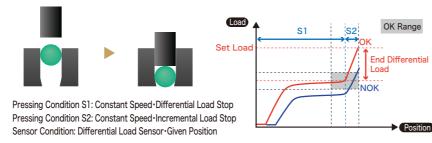
Swaging



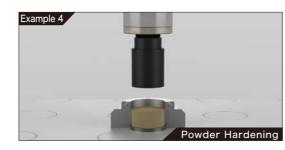


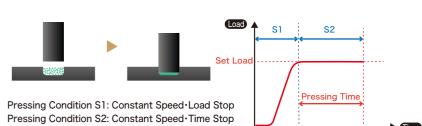
Sealing





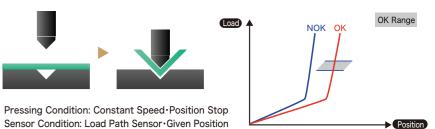
Powder Forming





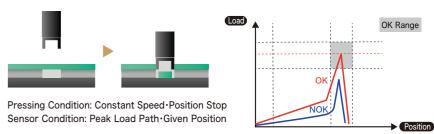
Bending



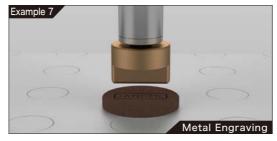


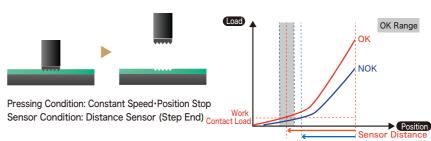
Punching





Engraving



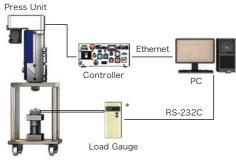


Options

A Janome servo press needs a lot less maintenance compared to a hydraulic press. Hydraulic Press Servo Press Packing Replacement Oil Leak Repair Cylinder Overhaul Lubrication Oil Replacement Load Calibration **Tubing Maintenance** Pump Overhaul

The tough job of load calibration is now a lot easier (but manual calibration is also available if needed).

Setup Example



Auto Load Calibration Using "JP 5 Designer" Software





Calibration Conditions Setting Screen

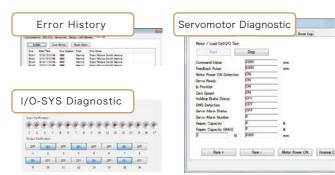
Load Check Screen

Make real-time I/O status checks while the press is running.

Subject Press Press (CVZ, 16, 155, 11				
Many Clythan				
100 05 Feet	E Peldurinut	Convertification	Distriction	y Regard
(/)VS-SHOWA	ENBAGRE	[7] Street 20 Output		
Whene C	executed		Per	e.
reinskepror nan.	Assigned munition		1964	
nystri.	Start Signal			
systr2	Instant Stop on Error			
syste3	Semponer Smo			
nystr4	Program Number Load		41	
sydr5	Proposition 1			
0,62%	regards 2			
neth?	Program Na. 4.			
systrat	Anguardo d		+11	
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BC Bya	Program No. 22			
melril.	Program No. 64			
twill 12	Return to Program Home.		+	
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e ele il	Assertance (No.			

JP5 Designer

Helpful "Diagnostic Mode" improves servo press maintainability.



JP5 Designer

ategory	Product	Variation	JP5	JP4 (Stand Alone Type)	JP-S	Notes
		EtherNet/IP	•	_	•	
		PROFINET	•	_	•	
	Field Networks*1	CC-Link	•		•	
		DeviceNet	•	_	•	
		PROFIBUS	•		•	
		CANopen	•		•	
ess Unit		I/O-SYS	0	0	_	17 Inputs/ 16 Outputs *Please choose NPN/PNP when ordering
		Digital Input/Output (DIO)	_		•	17 Inputs/ 16 Outputs *Please choose NPN/PNP/None when ordering
		СОМ	0	0	0	
		MEMORY	0		_	
	Additional Interfaces*1	I/O-S	0	0	_	
		Load cell output	•	•	0	
		Encoder output	•	•	0	
		LAN	0	•	0	
		Analog monitor output	•	•	•	
	Emergency Stop Connector Output Cable		_		•	Cable Lengths: 3m/5m
	I/O-SYS Cable		•	•	_	Cable Lengths: 2m/3m/5m
	DIO Cable		_		•	Cable Lengths: Connector only/2m/3m/5m
	Encoder Output Cable		_		•	Cable Lengths: 3m/5m
ables	Load Cell Output Cable		_		•	Cable Lengths: 3m/5m
	Analog Monitor Cable		_		•	Cable Lengths: 2m
	DC Power Input Cable (for compact controller)	•		_	Cable Lengths: 3m/5m
	Controller Power Cable	, Press Motor Power Cable	_		0	Cable Lengths: 3m/5m/10m
	Press Unit to Controller Connector Cable		•		•	Cable Lengths: 3m/5m/10m/15m/20m
		Standard Type (No Emergency Stop Switch)	_		•	
	Teaching Pendant*2	With Emergency Stop Switch	_		•	Cable Lengths: 3m/5m(JP5)Cable Lengths: 2m/3m/5m/10m(JP-S)
		Emergency Stop Switch with Stop Switch	•		_	 Interchangeable Display Languages: English, Japanese, Korean, Simplified Chinese
ther	Teaching Pendant Shor		0		•	
riiei	Maintenance Box		•		_	Cable Lengths: 3m/5m
	SWBOX Connector		0		_	_
	DIN Rail Attachment Bo	pard	_		•	
	PC Software (Designer	, Sampler, Reporter)	•	•	•	Designer is included as a standard accessory (JP Series 5, JP-S)

^{*1} Optional at time of order. *2 This is a Pendant Unit for the JP-S Series.

Using a field network, each parameter (such as end load position and sensor load position) are read out on the register and acquired. Choose from up to 6 different compatible field networks.







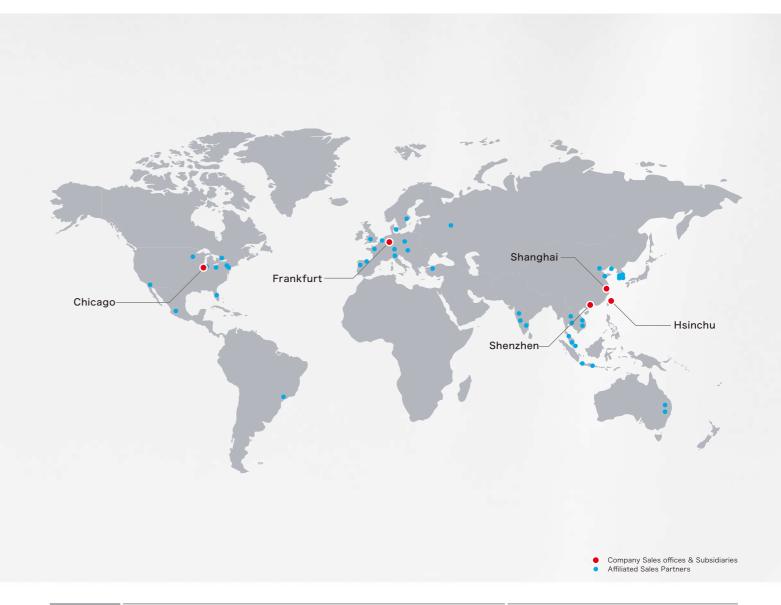
Support

Support Centers

Japan Sales Offices



International Sales Offices



Tokyo		Domestic Sales	TEL:042-661-2123	FAX:042-665-3354
Head Office	1463 Hazama-machi, Hachioji-shi, Tokyo 193-0941 Japan	International Sales	TEL:042-661-6301	FAX:042-661-6302
Nagoya Sales Office	J's Bldg. Nagoya 2F, 6-42 Maehama, Minami-ku, Nagoya-shi, Aichi 457-0058 Japan		TEL:052-819-5501	FAX:052-819-5503
Osaka Sales Office	3-2-27 Nagayoshikawanabe, Hirano-ku, Osaka-shi, Osaka 547-0014 Japan		TEL:06-6760-7410	FAX:06-6797-1998
Fukuoka Sales Office	J's Bldg. Izuka 3F, 17-44 Izuka, Izuka-shi, Fukuoka 820-0041 Japan		TEL:0948-26-4171	FAX:0948-23-2086

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Germany	Janome Industrial Equipment Europe GmbH Opelstraße 20-22, 64546 Mörfelden-Walldorf, Germany	TEL:+49-6105-27-1258 FAX:+49-6105-27-126 Web:http://www.janomeie-europe.de/			
China	Janome Industrial Equipment (Shanghai) Co., Ltd. B211, 2633 Yan'an Road (W), Changning District, Shanghai, PRC	TEL:+86-21-62788225 FAX:+86-21-62788235 Web:http://www.janomeie.com.cn/			
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Taiwan	Janome Industrial Equipment (Taiwan) Co., Ltd. 6F-6, No. 8, Zihciang South Road, Jhubei City, Hsinchu County, 30264 Taiwan (ROC)	TEL:+886-3-6683-949 FAX:+886-3-6683-249 Web:http://www.janomeie.com.tw/			