#### **■** JP Series 4 Specifications

Mo	del	JP-104 Series	JP-204 Series	JP-504 Series	JP-1004 Series						
	Maximum	1,000N (100Kg)	2,000N(200Kg)	5,000N (500Kg)	10,000N(1,000Kg)						
D :	Allowable Range	100~1,000N	200~2,000N	500~5,000N	1,000~10,000N						
Pressing Capacity	Increments	1N	1 N	1 N	1N						
	Mimimum Sensing Capacity*1		0.2 % of maximum	n pressure capacity							
	Maximum	80mm	80mm	100mm	100mm						
Ram Stroke	Allowable Range	0~80mm	0~80mm	0~100mm	0~100mm						
	Increments	0.001mm	0.001mm	0.001mm	0.001mm						
	Approaching	166mm/s	166mm/s	166mm/s	166mm/s						
Ram Speed	Pressing	0.01~35mm/s	0.01~35mm/s	0.01~35mm/s	0.01~35mm/s						
	Increments	0.01mm/s	0.01mm/s	0.01mm/s	0.01mm/s						
	Maximum*2	999sec	999sec	999sec	999sec						
Holding Time	Allowable Range	0~999sec	0~999sec	0~999sec	0~999sec						
	Increments	0.1sec	0.1sec	0.1sec	0.1sec						
Repeatability	]	±0.005mm	±0.005mm	±0.005mm	±0.005mm						
Load Sensing Rang	70	100~1.000N	200~2.000N	500~5.000N	1.000~10.000N						
Load Ochonig Hang	Const-Speed/Set Stop Position			000 0,00014	1,000 10,00014						
	Const-Speed/Set Stop Load	(2) Load control in sensing position									
	Const Speed/Set Dist, Mode			eanear position or distance range							
Sensor Functions	Multiple-Section Pressing	(3) Load control (peak, top, bottom, valley, peak to peak, differential) in sensor position or distance range  The multiple-section pressing mode in combination with the above three modes									
	Const·Load/Set Timed Stop										
	Const-Load/Set Position Stop	These items will be equipped with f	rom Vor E E								
	Const-Load/Set Distance Stop	These realis will be equipped with from ver 5.5.									
	Unit of Measure/Pressure	N ⇔ Kgf ⇔ Lbf mm ⇔	in								
Screen Display											
Main Dragram Dra	Display Language	English, Japanese, Spanish, Italian,		from DC to the internal flush DOM.	raing the COM1						
Main Program Prov External Interface*				e from PC to the internal flush ROM u	ISING THE CONT.						
	*		or. PC can be connected to control to	rie press using optional software.)							
External I/O Termin		Inputs 17, Outputs 16 (Optional in									
Driving and Contro		AC servomotor driven by 32-bit CP	J								
Power Supply	Tree-Phase Single-Phase	180~250 V									
Daniel Orașii	Single-Phase	180~250 V	0001/4	050)/4	05074						
Power Capacity	Handan on the Deer Tie	300VA	AV008	850VA	850VA						
	Hanging on the Ram Tip		20N	50N	100N						
Ambient Temperat	ure	0~40°C									
Relative Humidity		20~90% Non-condensing									
Flotage Dust		Nil									
Corrosive Gas	1	Nil									
	Stand-Alone Type	W520×D567×H750mm	W520×D567×H750mm	W520×D580×H875mm	W520×D580×H875mm						
	JP Series 4	100Kg	100Kg	160Kg	160Kg						
"Dimensionsand	Head Type	W282×D472×H470mm	W282×D472×H470mm	W280×D505×H495mm	W280×D505×H495mm						
and	JPH Series 4	80Kg	80Kg	100Kg	100Kg						
Weight*	Unit Type*5	W118×D415×H213mm	W118×D415×H213mm	W146×D250×H495mm	W146×D250×H495mm						
	JPU Series 4	18Kg	18Kg	35Kg	35Kg						
	Control Box	W398×D280×H198mm	W398×V280×H198mm	W398×D280×H198mm	W398×D280×V198mm						
	JPB Series 4	13Kg	13Kg	13Kg	13Kg						

<sup>\*1</sup> Load display accuracy is  $\pm 1$  % and guaranteed within the above ranges, over 10 % of the maximum pressure capacity

Stand-Alone Type: Body (with the area sensor short connector and I/O connector \*6), Operation manuals (supplied in CD-ROM)

Head Type: Body (with the area sensor short connector and I/O connector \*6), Switch Box (with a 2m-cable), I/O Cable (3m), Operation manuals (supplied in CD-ROM)

Body, Control Box (with the short connectors for the area sensor and switch box and I/O connector\*6), Teaching Pendant (with a 2m-cable)

2 Connection Cables between the body and control box (3m), Operation Manuals (supplied in CD-ROM), Teaching Penadant Short Connector Optional Devices: Switch Box for the unit type (with a 2m-cable)

PC Software for result data collecting system and teaching data control system complied with Windows2000/XP (Windows is a registered trademard of Microsoft Corporation.)

• All patents granted in Japan and the U.S.A. • Specifications may be changed due to product upgrades without prior notice.

 $\bigstar$  All the products are displayed in our showrooms. Please contct us if you are interested in our products.

2005.06(S)5,000

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Business Line: Electro Press, Desktop Robot, SCARA Robot, Vacuum Casting, etc



# **JANOME**

# Electro Press

# JP Series 4 Electro Press

**High Precision CNC Machine** for the assembling 1KN • 2KN • 5KN • 10KN

<sup>(</sup>Check the load value and calibration amount periodically.)

<sup>\*2</sup> The holding time becomes shorter as the maximum pressure increases due to motor capacity.

\*3 The encoder output interface is available optionally. It is useful when position information is required to send to an external device in real time.

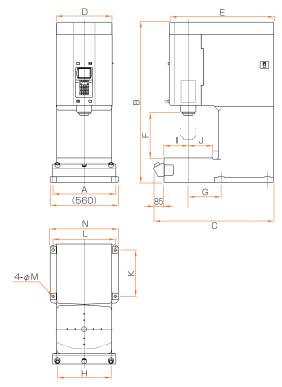
\*4 The load cell output interface is available optionally. It is useful when load information is required to send to an external device in real time.

<sup>\*5</sup> You can choose an installation method of the unit type from side surface fixing (standard) or flange vertical fixing (optional.)

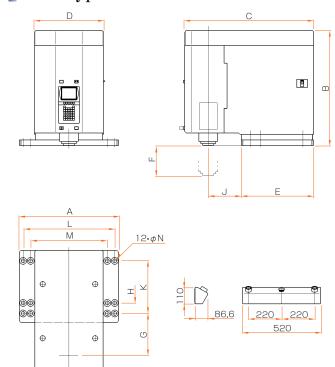
# JP Series 4 Electro Press—1.5KN·30KN·50KN·80KN—

# **External Dimensions**

# Stand-Alone type

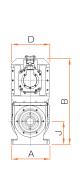


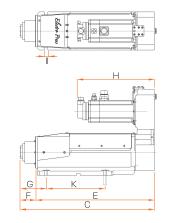
### Head type



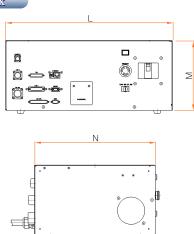
# Unit type

#### Doda





#### Control Box



Stand-Alone	А	В	С	D	E	F	G		-	J	K		M	N
JP-1504	520	875	585	200	555	275	160	325	115	130	185	230	12	_
JP-3004	560	1,315	985	458	858	350	270	450	200	200	380	510	22	560
JP-5004	000	1,010	000	700	000	000	2,0	400	200	200	000	010		000
JP-8004	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Head type	A	В	С	D	—E—	F	G				K		M	N
JPH-1504	280	495	505	200	280	30	120	41	_	100	180	240	_	18
JPH-3004	000	765	050	450	400	000	000	70		000	050	010	F10	00
JPH-5004	660	/65	858	458	480	200	280	/0	_	220	350	610	510	26
JPH-8004	_	_	-	_	_	_	_	_	_	_	-	_	_	_
Unit type	A	В	С	D	—E—	F	G				K		M	N
JPU-1504	146	260	495	125	445	50	80	(269)	13	75	200	398	198	280
JPU-3004		250	.50		. 10	- 50	- 50	(403)	, 0	, 0		230	.50	
JPU-5004	220	510	775	220	685	90	150		18	132	340	550	230	398
JPU-8004	270							(444)						

#### JP Series 4 Specifications

Mo	odel	JP-1504 Series	JP-3004 Series	JP-5004 Series	JP-8004 Series								
	Maximum	15KN (1.5t)	30KN (3t)	50KN (5t)	80KN (8t)								
Pressing Capacity	Allowable Range	1.5~15KN	3~30KN	5~50KN	8~80KN								
Fressing Capacity	Increments	1N	10N	10N	10N								
	Minimum Sensing Capacity *1		0.2 % of maximum	pressure capacity									
	Maximum	100mm	200mm	200mm	200mm								
Ram Stroke	Allowable Range	0~100mm	0~200mm	0~200mm	0~200mm								
Tiam Stoke	Increments	0.001mm	0.002mm	0.002mm	0.002mm								
	Approaching	100mm/sec	300mm/sec	300mm/sec	200mm/sec								
Ram Speed	Pressing	0.01~20mm/sec	0.01~35mm/sec	0.01~35mm/sec	0.01~35mm/sec								
Tiam Opeca	Increments	0.01mm/sec	0.01mm/sec	0.01mm/sec	0.01mm/sec								
	Maximum *2	999sec	999sec	999sec	999sec								
Holding Time	Allowable Range	0~999sec	0~999sec	0~999sec	0~999sec								
Tiolding Time	Increments	0.1sec	0.1sec	0.1sec	O.1sec								
Repeatability *3	•	±0.005mm	±0.005mm	±0.005mm	±0,005mm								
Load Sensing Rang	ge	1.5~15KN	3~30KN	5~50KN	8~80KN								
	Const-Speed / Set Stop Position												
	Const-Speed / Set Stop Load												
	Const-Speed / Set Dist, Mode		(1)Load, position, distance control at end pressing										
Sensor Functions	Const·Load / Time Presser	(2) Load control for sensor position  (3) Sampling load control for sensor position and distance range (Sampling types; peak, top, bottom, valley, peak to peak, differential)											
	Const·Load / Set Stop Position	(3) Sampling load control for senso	r position and distance range (Samp	ling types: peak, top, bottom, valley,	peak to peak, differential)								
	Const-Load / Set Dist. Mode												
	Multiple-Section Pressing	A combination of the above 3 press	sing modes.										
Screen Display	Unit of Measure/Pressure	N ⇔ Kgf ⇔ Lbf mm ⇔ in											
Screen Display	Display Language	English, Japanese, Spanish, Italian, French, German											
Main Program Sup	plied	Installed before shipment. To upgrade the program, download from PC to the internal flash ROM using COM1.											
External Interface *	*4, *5	RS-232C 1ch (9-pin male connector to control the press via PC using optional software)											
External I/O Termir	nal Number	17 inputs, 16 outputs (Optional increase to 25 inputs, 24 outputs)											
Driving and Contro	l Method	AC servomotor driven by 32-bit CPU	AC servomotor driven by 32-bit CPU										
Power Supply	Tree-Phase	180~250V (Domestic standard)	180~250V	180~250V	180~250V								
Fower Supply	Single-Phase	180~250V	_	_	_								
Power Capacity	•	850VA	3.1KVA	5.1KVA	5.1KVA								
Maximum Jig Weig	ht on the Ram	150N	900N	1,500N	1,500N								
Ambient Temperat	ure *6	0~40°C											
Relative Humidity *	•6	20~90% Non-condensing											
Flotage Dust *6		Nil											
Corrosive Gas *6		Nil											
	Stand-Alone Type	W520 X D580 X H875mm	W560 X D985 X H1,315mm	W560 X D985 X H1,315mm									
	JP	160Kg	1,050Kg	1,050Kg	_								
Dimensions	Head Type	W280 X D505 X H495mm	W660 X D858 X H765mm	W660 X D858 X H765mm									
and	JPH	100Kg	650Kg	650Kg									
Weight	Unit Type*7	W146 X D495 X H260mm	W220 X D775 X H510mm	W220 X D775 X H510mm	W270 X D775 X H510mm								
	JPU	35Kg	35Kg	160Kg	160Kg								
	Control Box	W398 X D280 X H198mm	W550 X D398 X H230mm	W550 X D398 X H230mm	W550 X D398 X H230mm								
	JPB												

#### What is included in the package;

Stand-Alone Type: Machine (with I/O-S connector and I/O connector\*\*), Operation manual (on CD-ROM),

Head Type: Machine (with I/O-S connector and I/O connector\*\*), Switch box (with a 2m-cable), I/O cable (3m), Operation manuals (on CD-ROM).

Unit Type: Machine, Control box (with I/O-S connector, I/O connector\*\* and Switch box short connector), Teaching pendant (with a 2m-cable) 2 Connection cables for connecting the body and control box (3m), Operation manuals (on CD-ROM), Teaching pendant short connector.

Optional Devices: Switch box for the unit type (with a 2m-cable) PC software for results data collecting and teaching data control runs on Windows® 2000/XP (Windows® is a registered trademark of Microsoft Corporation.)

\*\* The I/O connector does not include cables.

•All patents granted in Japan and the U.S.A. •Specifications may be changed due to product upgrades without prior notice.

2005.08(S)3.000



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E-mail: j-industry@gm.janome.co.jp

Business Line: Electro Press, Desktop Robot, SCARA Robot, Vacuum Casting, etc.

Distributor:

<sup>\*1</sup> Load display accuracy is ±1 % and guaranteed within the above ranges, over 10 % of the maximum pressure capacity.
(Load value should be regularly checked and calibrated.)

\*2 The holding time becomes shorter as the maximum pressure increases due to motor capacity.

\*3 Repeatability was measured at a constant temperature.

\*4 Encoder output interface is available as an option. Useful when it is necessary to send position information to an external device in real time.

\*5 Choose between side surface fixing (standard) and flange vertical fixing (optional) installation of the unit type.

\*6 IP Protection Rating is IP40.

\*7 Choose between side surface fixing (standard) or flange vertical fixing (optional) for installation of the unit type.

# **JANOME** Electro Press JP Series 4

# High Precision CNC Machine for the assembling can trust.

## JP Series 4 -

Since 1986 JANOME has gained trust and recognition right throughout the manufacturing world and in particular in the automotive and precision equipment fields.

We now proudly present to you the new, clean, High Precision CNC Machine, Series 4

#### that gives you even better quality while at the same time being gentle on the environment.

#### Features

#### • Safe, Clean and Energy saving (ISO14000)

- \*Powered by AC servomotor, the Electro Press provides a quiet and clean work environment
- •The Electro Press uses an estimated 80%-90% less energy than other company's hydraulic and pneumatic presses,
- making running costs much lower.
- •To ensure safe use, all Electro Presses come with an area sensor terminal. A fail safe circuit is provided to enable it to be stopped safely. •We are also preparing a clean room model [Class 10  $(0.3\mu m)$ ]

#### Complete Quality Control (ISO9000)

- ·Various sensing functions makes quality control easier.
- •The Electro Press also comes with an RS-232C as standard equipment to obtain and save operation results on PC. (The software for this is not included in the package.)

#### • High Precision and High Functionality

•The AC servomotor, high precision ball screw and high precision load cell help create precision and control. (Repeatability: ±0.005 mm)

#### • Wide Variety of Pressing Modes and Functions

- ·Various pressing modes including Constant Speed Set Stop Position, Stop Load, Stop Distance and more.
- ·Multiple-section pressing makes difficult specialized processes easy.
- · You don't need to make and adjust high precision die and jig-fixtures so setting up new production lines is faster with our Electro Press.

#### Self Diagnosis Function

•The self diagnosis function allows you to quickly locate and react to any problems that arise.

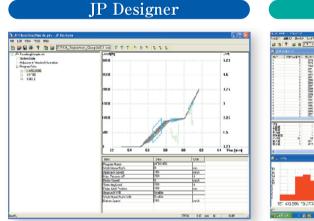
#### Simple and Easy to Use

·Interactive software, wide LCD screen and panel switches.

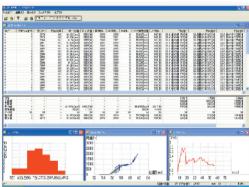
#### Variety of Types to Suit All Needs

·Stand-alone, head and unit types to meet all our customer needs.

#### Enhanced PC Software



#### JP Reporter



#### **■** JP Designer

Enables data teaching and OK/NG judgment setting on your PC

#### ■ IP Reporter

Enables quality control and time series data/CPK analysis on your PC

#### Model Name





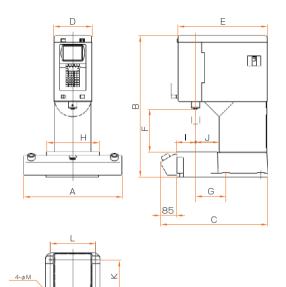




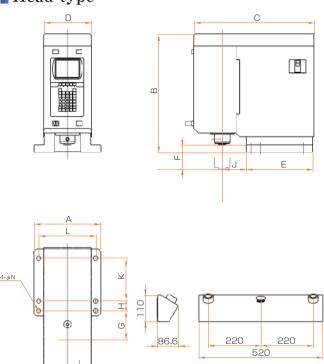
	①Type	2Pr	essure Ca	pacity
None	Stand-alone type	10	Capability	1,000N
Н	Head type	20	Capability	2,000N
U	Unity type	50	Capability	5,000N
		100	Canability	

# **External Dimension**

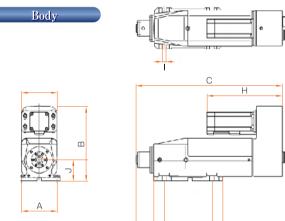
#### Stand-Alon type

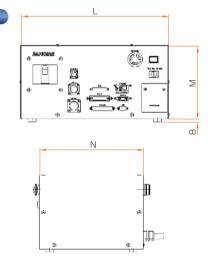


#### Head type



#### Unit type





Stand-Alone	А	В	С	D	E	F	G	—н—			K	1	M	N
JP-104	520	750	567	200	472	225	160	280	100	115	185	240	12	_
JP-204	520	700	507	200	4/2		100	200	100	113	100	240	12	
JP-504	E20	075	585	200	505	275	160	325	115	130	185	230	10	_
JP-1004	520 875	505	200	303	2/0	160	320	110	130	100	230	12	_	

Head type	A	В	С	D	Ш	—F—	G		-	J	K	— L	M	N
JPH-104	282	470	472	200	255	80	152	0	_	124	180	240	_	18
JPH-204	LOL	470	7/2	200	200	- 00	102	U		127	100	240		10
JPH-504	280	495	505	200	280	30	120	41		100	180	240	_	18
JPH-1004	200	430	505	200	200	30	120	41	_	100	100	240	_	10

Unit type	Α	В	С	D	—E—	F	G	—н—	Ī	J	K	Ī	M	N
JPU-104	118	212.5	415	100	195	50	80	(214)	12	60	135	398	198	280
JPU-204	110	212.0	410	100	100 100		00	(214)	12		100		100	200
JPU-504	146	250	495	125	300	50	80	(269)	10	75	200	398	198	280
JPU-1004	140	250	490	120	300	50	80	(203)	13	/5	200	330	136	200