

**JANOME**



*Electro Press*

***JP-S2 Series***

JP-S2  
Series

## Inline Installation Type Servo Press

# Slim & Compact



### Space Saving

Slim press unit and compact controller ideal for facility integration. Effectively lowers your production equipment space requirements whether installed as a single unit or as a multiple unit system.

### Comprehensive Lineup

9 basic model sizes ranging from 5kN~200kN, with different ram stroke lengths to choose from.

### Ideal for Air or Oil Press Replacement

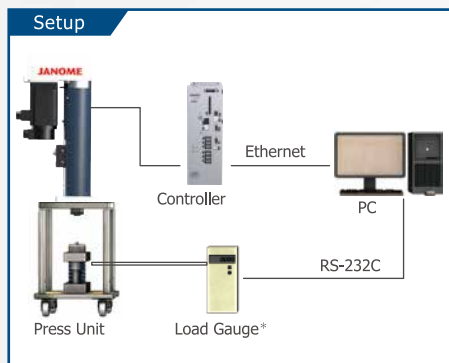
The low noise, environmentally friendly JP-S2 consumes less energy than an oil or air press, greatly lowering your running cost. Installation is easier too, as electrically-powered servo presses need no piping!

### Wide Variety of Pressing Modes and Sensors

We combined pressing parameters (speed/load) with stopping parameters (position/load/distance/time, etc.) to create our pressing modes. Set several modes in one program to make a multi-stage operation. Use our many sensor functions to judge pressing results.

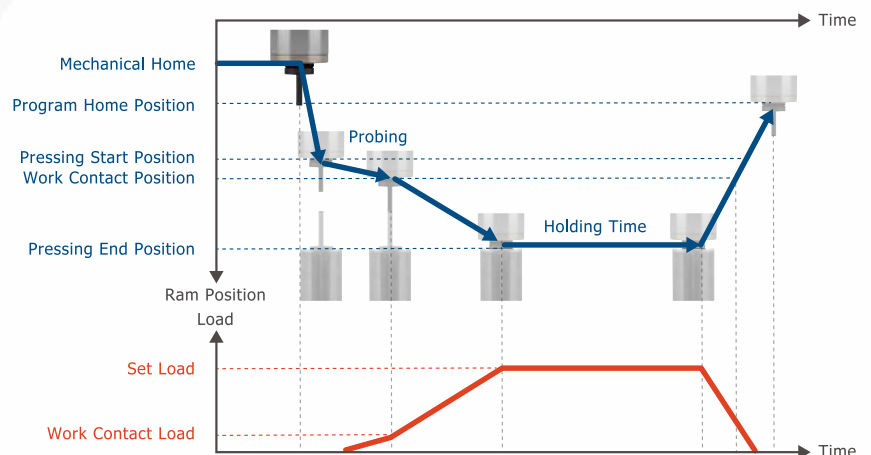
### Auto Load Calibration

Calibrate the internal load cell with just a few easy settings!



\*Please contact us about compatible load gauges.

### Basic Servo Press Operation



## PC Software

Edit setting data, display pressing results and analyze your data with our original “JP-SaS II System” software.

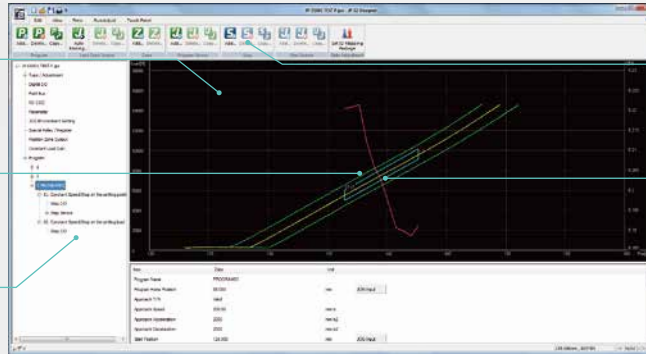
### Designer

Create teaching and sensor parameter data, send and receive all your setting data to and from your PC, save changes, backup and print your data.

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

Sensor Window (Blue)  
CPK Value Display (Pink)

Choose menu icons and easily add sensors to your pressing programs.



Touch Panel PC Compatible\* Icons.

Use your mouse to modify sensor parameters.

\*Windows® Embedded Standard 7 WS7P Compatible

### Sampler (optional)

Use this software to display quality control data and time series data for each shot, and save it as a sampling file. Displays the pressing results for multiple press units on one screen.

Most recent pressing result data displayed here.

See pressing productivity from both the control and worksite sides.

Quality Control Data Screen Shows cumulative result data.



\* Display example of pressing data from 4 units.

Pressing result waveform data displayed here.

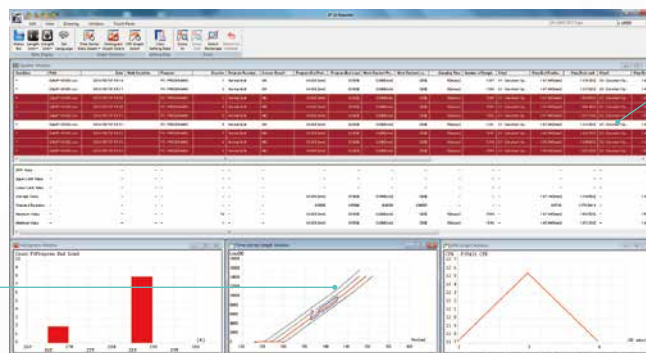
Know sensor results with just one look!  
**OK NOK**



### Reporter (optional)

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

Work Characteristic Analysis (Compare results for the same process done by multiple presses.)



Comprehensive Sorting

- Extract an NOK result list
- Sort results by end position/end load to check work variance, etc.

## Model Code

**JP-S 1002 - 0 0 100 B S - N CC B - 5 5 1**

| JP-S2 Series | Pressing Capacity | Rating       | Specification                 | Stroke <sup>2</sup> | Brake        | Load Cell    | DIO      | Fieldbus         | Regenerative Resistance | Press Unit Cable <sup>3</sup> | Power Cable | Power Source Specs |
|--------------|-------------------|--------------|-------------------------------|---------------------|--------------|--------------|----------|------------------|-------------------------|-------------------------------|-------------|--------------------|
| 0502 : 5kN   | 0502 : 5kN        | 0 : Standard | 0 : Standard                  | 100 : 100mm         | B : Included | S : Pressing | N : NPN  | EP : EtherNet/IP | B : Built-in            | 3 : 3m                        | 3 : 3m      | 1 : Single         |
| 1002 : 10kN  | 1002 : 10kN       | 1 : CE       | 1 : Long Holding <sup>1</sup> | 150 : 150mm         | 0 : None     | 0 : None     | P : PNP  | PN : PROFINET    | A : External Add-on     | 5 : 5m                        | 5 : 5m      | Phase <sup>4</sup> |
| 1502 : 15kN  | 1502 : 15kN       |              |                               | 200 : 200mm         |              |              | 0 : None | CC : CC-Link     |                         | A : 10m                       | A : 10m     | 3 : Three          |
| 2002 : 20kN  | 2002 : 20kN       |              |                               | 250 : 250mm         |              |              |          | DE : DeviceNet   |                         | B : 15m                       | 0 : None    | Phase              |
| 3002 : 30kN  | 3002 : 30kN       |              |                               | 300 : 300mm         |              |              |          | PR : PROFIBUS    |                         | C : 20m                       |             |                    |
| 5002 : 50kN  | 5002 : 50kN       |              |                               | 350 : 350mm         |              |              |          | CO : CANopen     |                         | D : 5mR                       |             |                    |
| 8002 : 80kN  | 8002 : 80kN       |              |                               | 400 : 400mm         |              |              |          | 0 : None         |                         | E : 10mR                      |             |                    |
| 10T2 : 100kN | 10T2 : 100kN      |              |                               |                     |              |              |          |                  |                         | F : 15mR                      |             |                    |
| 20T2 : 200kN | 20T2 : 200kN      |              |                               |                     |              |              |          |                  |                         | 0 : None                      |             |                    |

\*1 Equipped with a motor one size larger. Please contact us about compatible models.

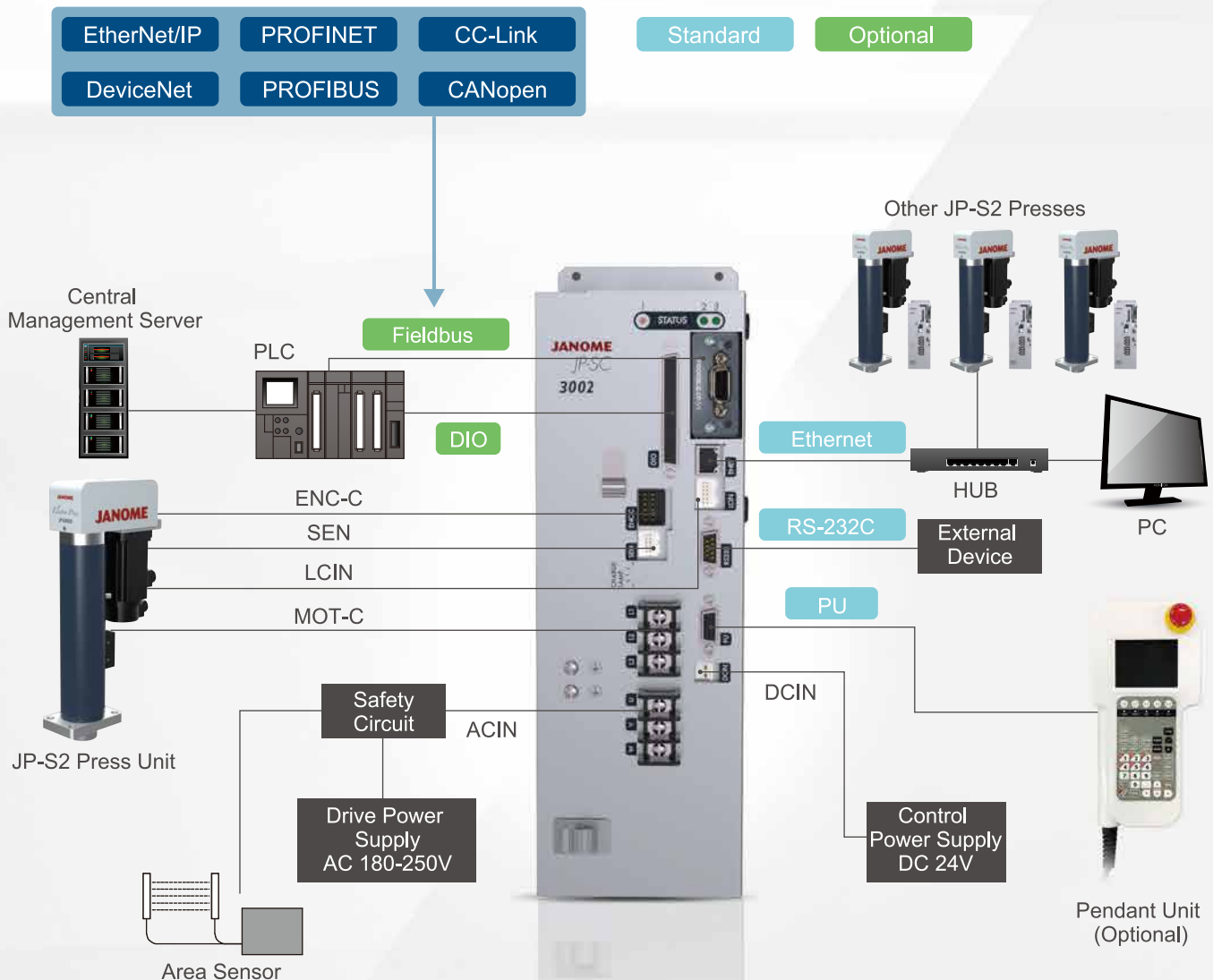
\*2 Compatible strokes vary by model. Please refer to the "Specifications" on pp. 6-7 for details.

\*3 ○mR are flexible cables.

Flexible cables and cables 10m and longer are not CE compatible.

\*4 JP-S2002 and smaller models only.

## System Configuration

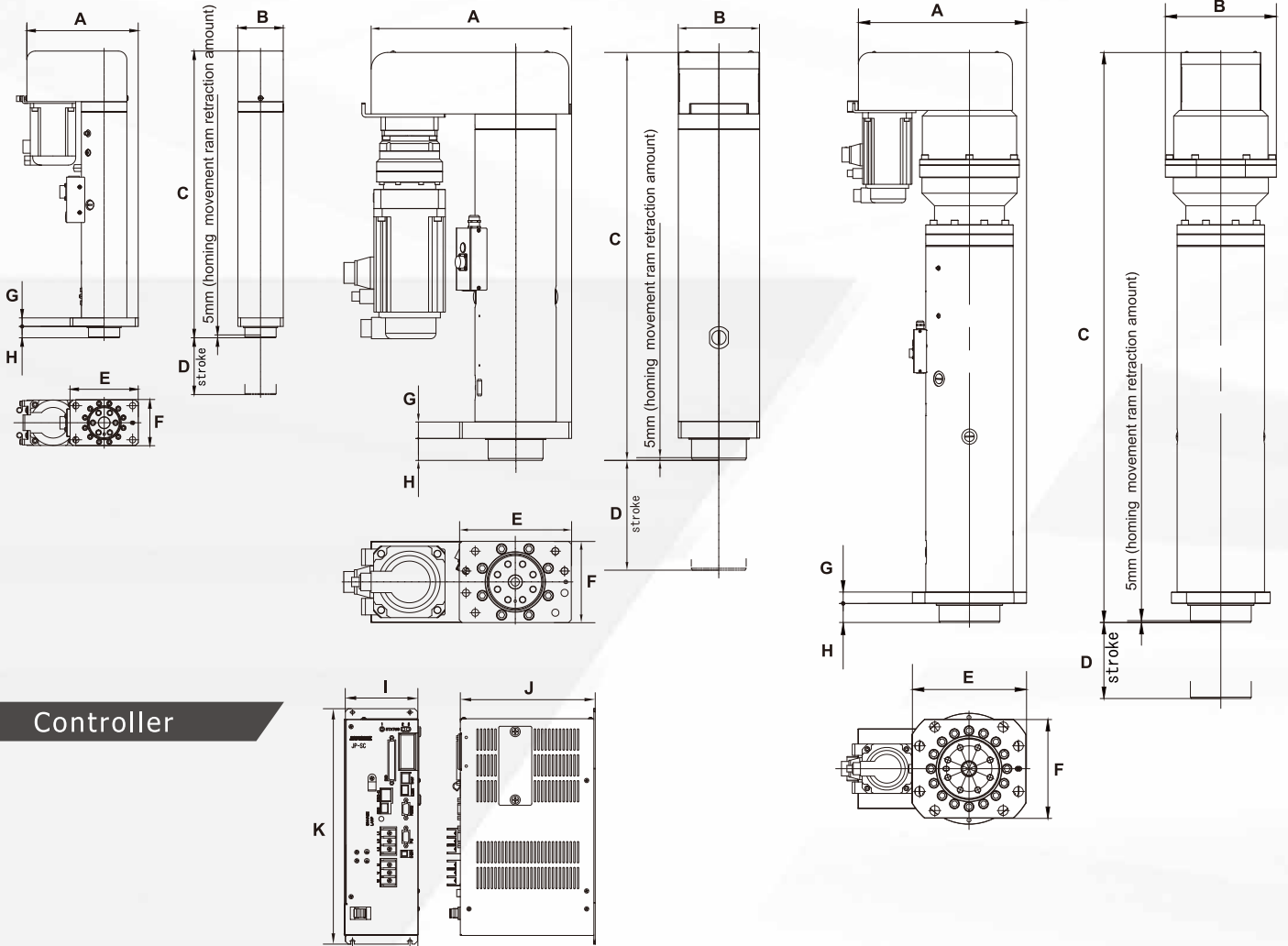


# External Dimensions

## JP-S0502~JP-S3002

## JP-S5002~JP-S10T2

## JP-S20T2



## Controller

## External Dimensions

Unit: Dimensions (mm) Weight(kg)

| Model                | Stroke | Press Unit |     |      |     |     |     |    |    |        | Controller |     |     |        |
|----------------------|--------|------------|-----|------|-----|-----|-----|----|----|--------|------------|-----|-----|--------|
|                      |        | A          | B   | C    | D   | E   | F   | G  | H  | Weight | I          | J   | K   | Weight |
| JP-S0502<br>JP-S1002 | 100    |            |     | 455  | 100 |     |     |    |    | 12     |            |     |     |        |
|                      | 150    | 155        | 65  | 505  | 150 | 95  | 65  | 15 | 20 | 13     |            |     |     |        |
|                      | 250    |            |     | 655  | 250 |     |     |    |    | 16     | 79         | 163 | 287 | 3.1    |
| JP-S1502<br>JP-S2002 | 100    |            |     | 505  | 100 |     |     |    |    | 20     |            |     |     |        |
|                      | 200    | 196        | 80  | 645  | 200 | 120 | 80  | 15 | 20 | 25     |            |     |     |        |
|                      | 350    |            |     | 845  | 350 |     |     |    |    | 30     |            |     |     |        |
| JP-S3002             | 100    |            |     | 570  | 100 |     |     |    |    | 35     |            |     |     |        |
|                      | 200    |            |     | 690  | 200 |     |     |    |    | 42     |            |     |     |        |
|                      | 300    | 259        | 100 | 810  | 300 | 156 | 100 | 23 | 30 | 48     | 104        | 188 | 328 | 4.9    |
|                      | 350    |            |     | 870  | 350 |     |     |    |    | 52     |            |     |     |        |
| JP-S5002             | 400    |            |     | 930  | 400 |     |     |    |    | 56     |            |     |     |        |
|                      | 200    |            |     | 743  | 200 |     |     |    |    | 110    |            |     |     |        |
| JP-S8002             | 200    | 365        | 148 | 893  | 350 | 204 | 148 | 30 | 40 | 129    |            |     |     |        |
|                      | 400    |            |     | 943  | 400 |     |     |    |    | 135    |            |     |     |        |
| JP-S10T2             | 200    | 380        | 135 | 820  | 200 | 196 | 135 | 30 | 40 | 99     | 147        | 188 | 365 | 8      |
|                      | 400    | 465        | 200 | 1089 | 400 | 280 | 200 | 30 | 50 | 198    |            |     |     |        |
| JP-S20T2             | 200    |            |     | 1499 | 200 |     |     |    |    | 392    |            |     |     |        |
|                      | 400    | 442        | 292 | 1699 | 400 | 300 | 260 | 30 | 50 | 442    |            |     |     |        |

\* The JP-S2002 Long Holding Type controller has the same dimensions as the JP-S3002 Standard controller.  
The JP-S3002 Long Holding Type controller has the same dimensions as the JP-S5002 Standard controller.

\* Please contact us for more detailed dimensions and /or dimensions not mentioned in this catalog.

# Specifications

| Item                                   |                             | JP-S0502  | JP-S1002             | JP-S1502             | JP-S2002             |
|--|-----------------------------|---|----------------------|----------------------|----------------------|
| Pressing Capacity                      | Maximum                     | 5kN   | 10kN                 | 15kN                 | 20kN                 |
|  | Detection Unit <sup>1</sup> | 2N  | 4N                   | 8N                   | 8N                   |
| Ram Stroke                             |                             | 100mm   | 100mm                | 100mm                | 100mm                |
|  |                             | 150mm   | 150mm                | 200mm                | 200mm                |
|  |                             | 250mm   | 250mm                | 350mm                | 350mm                |
| Ram Speed                              | Pressing                    | 0.01~35mm/sec   |                      |                      |                      |
|  | Approaching/Returning       | 0.01~216mm/sec  |                      | 0.01~200mm/sec       |                      |
| Maximum Holding Time <sup>2</sup>      |                             | 999.9sec  |                      |                      |                      |
| Load Display Precision <sup>3</sup>    |                             | ±50N at 0.5kN or more   | ±100N at 1kN or more | ±200N at 2kN or more | ±200N at 2kN or more |
| Position Repeatability <sup>4</sup>    |                             | ±0.01mm   |                      |                      |                      |
| Maximum Ram Tip Fixture Hanging Weight |                             | 5kg or less   | 10kg or less         | 15kg or less         | 20kg or less         |
| Power Consumption                      |                             | 200W  | 400W                 | 750W                 | 750W                 |
| Power Source                           | Single Phase                | 180~250V (50/60Hz) *Single phase types use a single phase drive power supply cable. |                      |                      |                      |
|  | Three Phase                 |   |                      |                      |                      |

## Common Specifications

|                                    |  |  |
|------------------------------------|--|--|
| Basic Pressing Modes               | Pressing at a constant speed: Position Stop / Distance Stop / Load Stop / Differential Load Stop / Event Stop<br>Pressing at a constant load: Time Stop / Position Stop / Distance Stop / Event Stop<br>Use these combinations to make multistep pressing settings in one program. |  |
| Sensor Functions                   | Step Sensor / Program Sensor / Load Zone Sensor  |  |
| No. of Programs <sup>5</sup>       | Up to 512  |  |
| No. of Pressing Steps <sup>5</sup> | Up to 512 (in one program)   |  |
| No. of Step Sensors <sup>5</sup>   | Up to 16 (in one step) Up to 512 (in one program)  |  |
| External Input/Output              | COM  | RS-232C 1ch  |
|                                    | Digital Input/Output (DIO) (optional)  | 17 Inputs / 16 Outputs *NPN / PNP (specify at time of order)                                 |
|                                    | LAN  | 10BASE-T / 100BASE-TX  |
|                                    | Field Network (optional)   | EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (specify at time of order) |
| Other                              | Load Cell Output, Encoder Output, Analog Monitor Output  |  |
| Encoder                            | Incremental Type   |  |
| Display Units                      | Load Unit: N, kgf, lb Length Unit: mm, inch  |  |
| Display Languages                  | PC Software  | Japanese, English, Korean, Chinese   |
|                                    | Pendant Unit   | Japanese, English, Korean  |
| Work Environment                   | Surrounding Temperature  | 0~40°C   |
|                                    | Relative Humidity  | 20~90% (without condensation)  |

\*1 The load detection unit indicates the resolution (for analog/digital conversion). This differs from load detection precision.

\*2 Holding times decrease as loads increase. (In some situations, holding times are unattainable.)

Increases in motor temperature can shorten holding times even further.

\*3 Load display precision is ±1% (FS) of the maximum load when pressing in the range of 10% or more of the maximum load with no influence from increases in temperature.

This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerances after pressing or margin of error.

\*4 Position repeatability is dependent upon the press bearing a constant load at constant press unit and surrounding environmental temperatures.

Repeatability is not a guarantee of absolute position precision.

\*5 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.



| JP-S3002             | JP-S5002             | JP-S8002             | JP-S10T2               | JP-S20T2               |
|----------------------|----------------------|----------------------|------------------------|------------------------|
| 30kN                 | 50kN                 | 80kN                 | 100kN                  | 200kN                  |
| 12N                  | 20N                  | 32N                  | 40kN                   | 80N                    |
| 100mm                |                      |                      |                        |                        |
| 200mm                | 200mm                |                      |                        | 200mm                  |
| 300mm                | 350mm                | 200mm                |                        | 400mm                  |
| 350mm                | 400mm                |                      |                        |                        |
| 400mm                |                      |                      |                        |                        |
| 0.01~35mm/sec        |                      | 0.01~22mm/sec        | 0.01~16mm/sec          | 0.01~8mm/sec           |
| 0.01~210mm/sec       | 0.01~200mm/sec       | 0.01~135mm/sec       | 0.01~100mm/sec         | 0.01~50mm/sec          |
|                      |                      | 999.9sec             |                        |                        |
| ±300N at 3kN or more | ±500N at 5kN or more | ±800N at 8kN or more | ±1000N at 10kN or more | ±2000N at 20kN or more |
|                      |                      | ±0.01mm              |                        |                        |
| 30kg or less         | 50kg or less         | 80kg or less         | 100kg or less          | 200kg or less          |
| 2,000W               |                      |                      | 5,000W                 |                        |
|                      |                      | -                    |                        |                        |
|                      |                      | 180~250V (50/60Hz)   |                        |                        |

#### <Accessories>

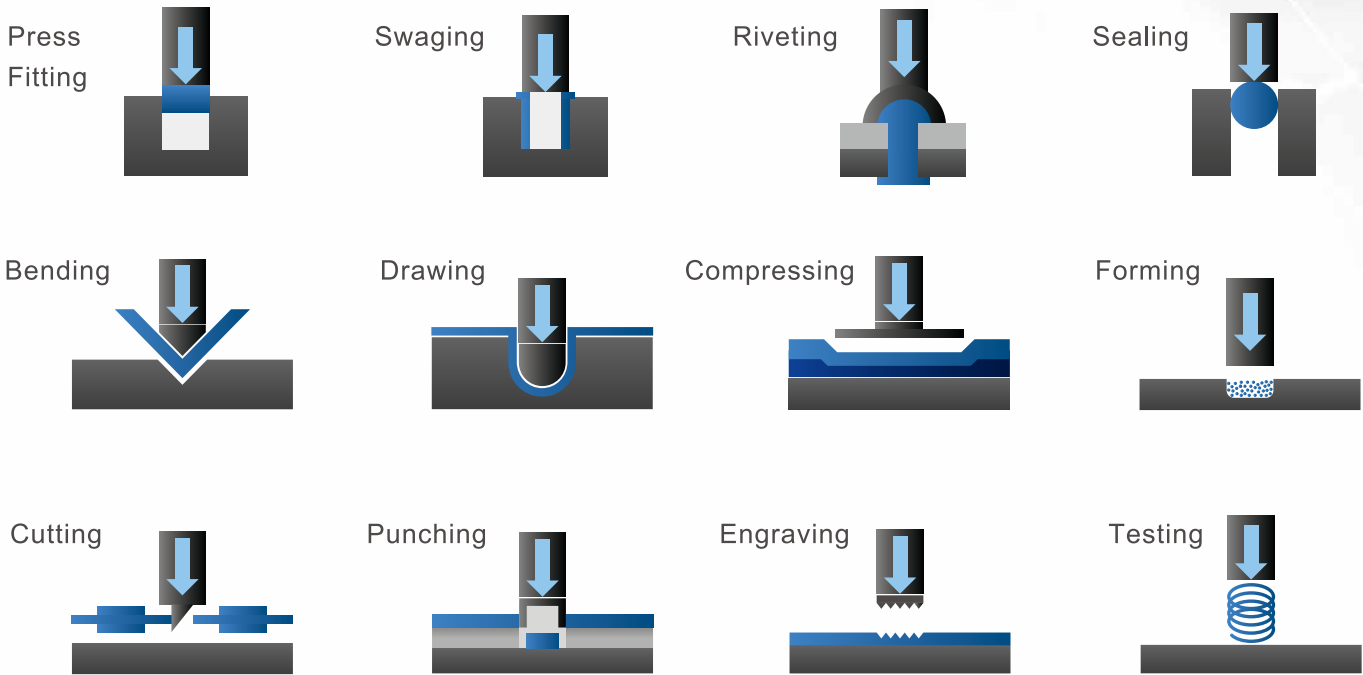
- Press Unit Cable
- Power Cable
- Operation Manual (CD-ROM)
- JP-S2 Designer PC Software (Windows® 7, Windows® 8.1, Windows® 10, Microsoft Windows® Embedded Standard 7 compatible)

#### <Options>

- JP-S SaS II System PC Software(Windows® 7, Windows® 8.1, Windows® 10, Microsoft Windows® Embedded Standard 7 compatible)
- Pendant Unit (with or without emergency stop switch\*) (Length: 2m/3m/5m/10m)
- Emergency Stop Contact Output Cable\* (Length: 3m/5m)
- Pendant Unit Short Connector\*
- DIO Connector
- DIO Cable (Length: 2m/3m/5m)
- Encoder Output Cable (Length: 3m/5m)
- Load Cell Output Cable (Length: 3m/5m)
- Analog Monitor Output Cable (Length: 2m)
- DIN Rail Attachment Plate

\*When using a Pendant Unit equipped with an emergency stop switch, please be sure to construct a cutoff circuit.  
 An "emergency stop contact point output cable" is necessary when constructing a cutoff circuit.  
 When disconnecting a Pendant Unit equipped with an emergency stop switch, a "Pendant Unit short connector" is required.

# Janome Servo Presses are ideal for many different applications.



When using our press for metalworking, obey local laws for safety, add a safety device and obtain regulatory approval(s) when required. For more information, please contact us.

Janome Servo Presses are used in a wide range of industries, including automotive, consumer electronics, aerospace, cosmetics and pharmaceuticals.



- 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 below or through the "Contact Us" page on our website.

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