PLK-J Series

Computer-controlled Cycle Machine with Input Function

Next-generation Sewing J

Everything to improve usability

Stable and neat stitches

Beautiful design stitching

Automotive

From quality control to quality assurance

Beautiful corner stitches

Neat stitches from the beginning

Consistent stitching

Bags & Shoes

Strong yet neat stitches

Safety Belt

Strong penetrating force pierces even stiff fabrics

Features

Improve finished stitches!

Optimizes thread tightness in all stitching directions

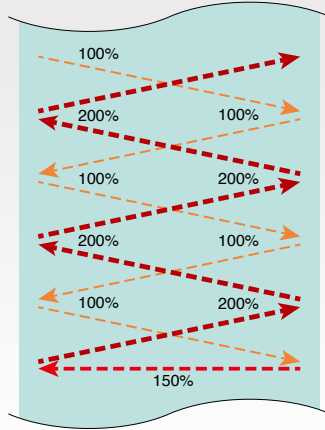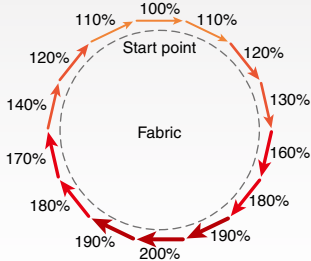### Digital tension

beautiful stitching finish

Before
Skilled operators adjust thread tension on a hunch

Now
Adjustment can be digitally reproduced many times

Tension when stitching curved lines

- Digital tension function
  The sewing machine selects the optimum tension according to the stitching pattern.
  They reduce variation in tightness according to the stitching direction and improve quality.
  This function is ideal for difficult circle stitching and stitching in the hitch direction.
- Digital reproduction of the aesthetic sense of skilled workers
  The basic adjustments are the same as conventional machine, so there is no need to learn new operation methods.
  Conventional knob settings may be kept as they are, while stitching using the digital function.
- When sewing safety belts, the fabric becomes harder as the stitching progresses. By gradually increasing the tension, stable stitches can be realized with each stitch.

Realizes stable thread interlocking from the first stitch

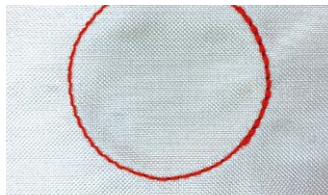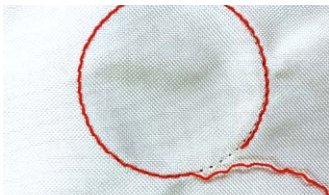### Prevention of skipped stitches at startup (e-stitch)

beautiful stitching finish

Stitches not interlocked

Stitches interlocked

- Stitches are smoothly interlocked from the start of stitching.
  "Stitch interlock faults" are resolved by minimizing the flapping of fabric at the start of stitching.
  "Stitch entanglement," which occurs on the back of the fabric at the start of stitching, is minimized.
- Inevitable stay stitching can be minimized.
  Stay stitches can be minimized by using the presser foot to firmly press down on thin fabrics that are difficult to interlock.
  This function is useful for stitching on materials that are difficult to stay stitch, while maintaining stitching quality.
  Enhance decorative stitching with a beautiful finish that does not require stay stitches.

Ensures neat corners by anyone
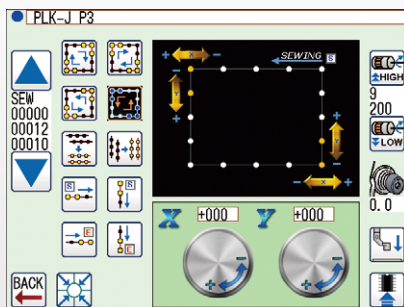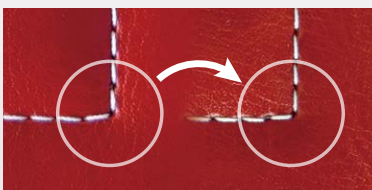
Stitch compensation (FF-stitch)

beautiful stitching finish

Before
Machine needs to slow for creating beautiful corners

Now
Easy micro-adjustment to fit corners and number of stitches per sewing item

- Shorten the adjustment time for stitching corners, start of stitching and end of stitching. Times can be finely adjusted easily in the operation panel, so anyone can perform intuitive adjustments.
  The settings can be easily and finely adjusted according to the corners and number of stitches for each sewing product.
  The needle drop position (back or forth) can be easily adjusted.
- Even if a problem occurs at the corner during high-speed stitching, it can be easily adjusted.
  Productivity is improved as there is no need to drop the speed to create a neat corner.
  * Supported by PLK-J2516-YU/J2516R-YU only

Realizes beautiful stitches using diverse adjustment functions
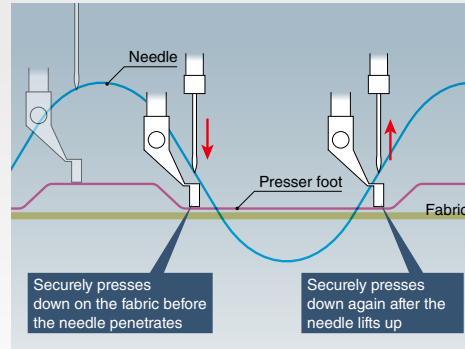
Independent presser foot

beautiful stitching finish

Before
Uneven seams by different thickness of material

Now
Even seams created by pressing various kinds of material at the best timing

Needle

Presser foot

Fabric

Securely presses down on the fabric before the needle penetrates

Securely presses down again after the needle lifts up

- A presser foot optimally presses down on all fabrics, from thin to thick.
The presser foot, which directly affects the stitching state, allows free motion, so beautiful and stable stitches can be achieved.
Stitching tension can be smoothly adjusted in the operational panel.
- The fabric pressing time and timing can be adjusted digitally.
The fabric is pressed at an optimum timing and reduces the flapping.
This contributes to stable needle location and reduced stitch skipping.

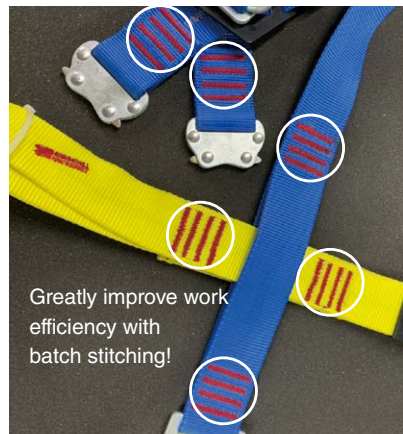## Supports larger stitching areas

Extra-thick stitching of larger areas

beautiful stitching finish

Before
Small sewing area allows to perform a single process operation

Now
Large sewing area allows to perform milti-process operation at one time

Greatly improve work efficiency with batch stitching!

- With an increased stitching area, you can perform multiple steps for full harnesses and lashing belts in one stitching session.
Speed is been increased by 1.5-times compared to conventional extra-thick stitching. The increased stitching area and increased speed will greatly shorten cycle times.
* Supported by PLK-J4040RH/J10050RH only

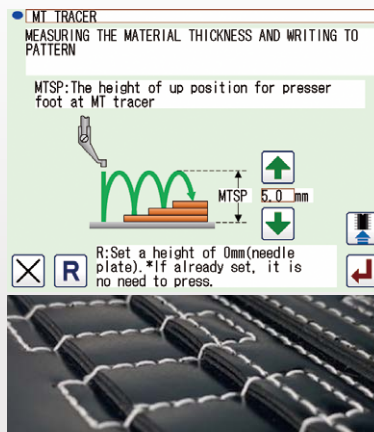## Automatically adjusts presser foot height

Featuring an MT tracer

beautiful stitching finish

Before
Operators need to set intermediate presser height manually at each multi-layered section

Now
Intermediate presser automatically detects material thickness and adjust the height accordingly

MT TRACER
MEASURING THE MATERIAL THICKNESS AND WRITING TO PATTERN

MTSP:The height of up position for presser foot at MT tracer

MTSP 5.0 mm

R:Set a height of 0mm(needle plate). *If already set, it is no need to press.

- The presser foot adjusts its height after automatically measuring the overall fabric thickness along the stitching pattern. Although it was necessary in the past for workers to manually adjust the presser foot height of each location where fabric thickness changes occurred, use of this function enables the time and effort necessary for such process to be drastically reduced.
- This function is useful for sewing materials with numerous locations of varying thickness.
  * This function does not guarantee that the optimal presser foot height for the fabric being sewn will be achieved. After measurements are performed, fine adjustments may be necessary in some cases.

4

Features

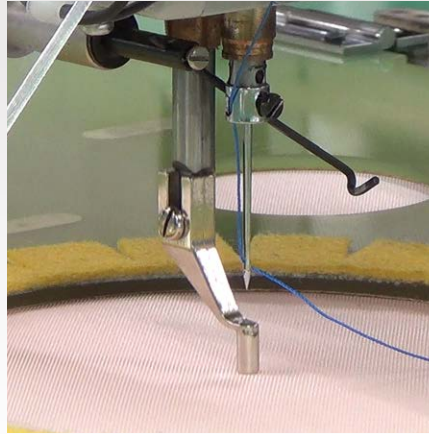# Helps to discover defective items!

Automatically discovers setting errors

Before
Not aware of setting eror and ship defective products

Now
Machine detects setting error

Thickness detection

- The sewing machine checks the thickness of the fabric and detects setting errors before beginning sewing.
  The presser foot moves along the stitching pattern and confirms the thickness, so valuable fabric is not wasted.
- Even materials 0.01mm thin can be detected. The sewing machine double-checks all conventional settings that are made manually.

Detects stitching errors*

Comes standard with thread break detection and skip stitch detection

Stitch error detection
In addition to visual detection by the operator, stitch errors (skipped stitches, thread breaks) are detected by the machine to help discover defective items.
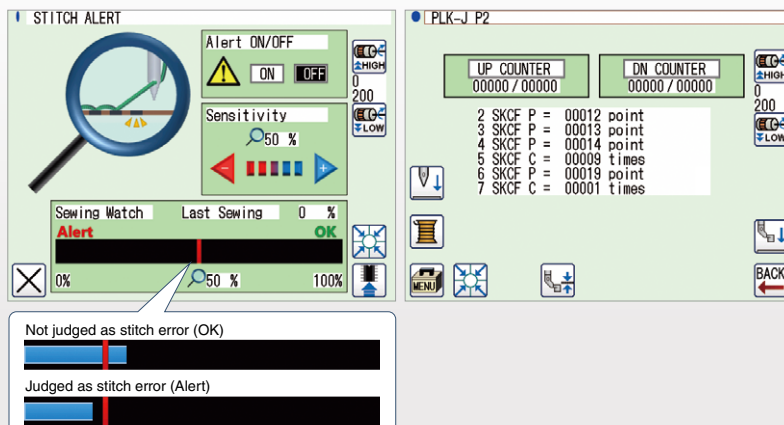The machine can also detect at which stitch the stitch error occurred. This information can be used to analyze the sections of fabric or pattern where stitch skipping tends to occur.
* Supported by PLK-J2516-YU/J2516R-YU with options
* Excludes PLK-J4040RH/J10050RH

Stitch alerts

- Stitch errors are discovered beforehand.
  The stitch errors (skipped stitches, thread breaks) that occur during stitching are detected by sensing the tension applied on the hook.
  This function stops the sewing machine so rejects can be found at an early stage.
  * Supported by PLK-J4040RH/J10050RH only
  * This function does not warranty all abnormal stitch detections. Depending on the sewing conditions, there may be undetected or false detection.

Simplify maintenance!

Enables digital adjustment

Digital adjustment of hook, presser foot, and thread trimmer (up/down separate drive)
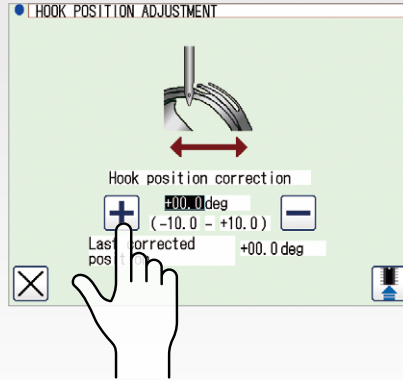
Simplify maintenance!

Before
Tooling is required to make micro-adjustment of hook, intermediate presser, etc.

Now
Reproducing adjustment of mechanical part is made possible now

HOOK POSITION ADJUSTMENT

Hook position correction
+00.0 deg
(−10.0 − +10.0)
Last corrected pos +00.0 deg

- Shorter adjustment time.
  Operation panel settings greatly reduce the "time spent on making fine adjustments with a tool".
- The machine adjustment section is quantified to simplify adjustments.
  The quantified settings make it possible to reproduce machine adjustment sections that were previously not possible.
- The finely honed sense of skilled workers can be digitally reproduced as necessary.
  Sections that required the finely honed sense of a skilled worker can now be adjusted simply by setting values in the operation panel.
- * With the PLK-J2516-YU/J2516R-YU, only the presser foot can be digitally adjusted.

Open/close window for bobbin exchange
Unlike conventional large models which required the operator to get under the sliding plate to replace the bobbin, the J Series models all have an open/close window on the sliding plate so that the bobbin can be easily exchanged. This greatly reduces the operator's work.

* Excludes PLK-J2516-YU/J2516R-YU

Glass epoxy sliding plate
The glass epoxy sliding plate is not contaminated as easily as the conventional stainless steel plate, and helps to prevent rust.
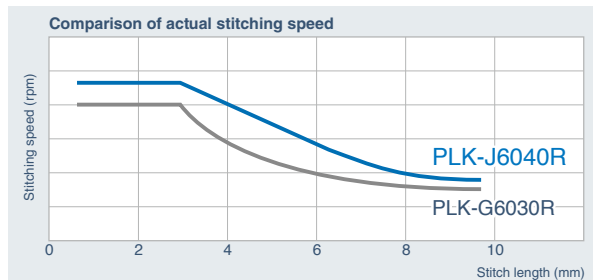
Spray-type digital oiling
This function reduces the fatigue for adjusting oiling amount.

Ensures quality and energy savings

Faster and more attractive
Comparison of actual stitching speed

Stitching speed (rpm) / Stitch length (mm)

PLK-J6040R
PLK-G6030R

Stitching speed is maximized under various conditions even when the fabric thickness changes.
It is increased by up to 30% compared to the stitching speed of conventional sewing machines.

Outstanding energy-saving effect
<Both increased productivity and energy savings are realized>

PLK-G6030R

25%cut
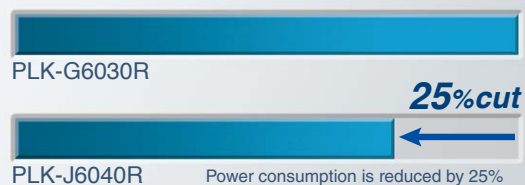
PLK-J6040R
Power consumption is reduced by 25% compared to the conventional model even with the faster speed and larger stitching area.

* Enforce with conditions designated by the company

The new arm bed structure and new XY feed control realize low vibration and low sound, and thereby realize energy savings. Power consumption is greatly reduced compared to the conventional machine even with the faster stitching speed and larger stitching area.

Traceability model which supports quality

PLK-*J* 3020R-SE

In addition to acquiring sewing information, pressure on take-up lever and changes of material thickness during sewing operation can be collected and accumulated. This machine come standard with traceability functions. With the help of independently driven take-up lever, we will offer better sewing quality compared to our previous models (PLK-G series).
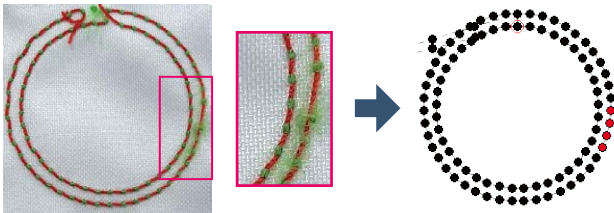

Traceability

Monitoring the pressure on take-up lever during the sewing operation

By detecting the pressure on take-up lever during the operation, every stitching condition can be monitored. It will help discover defective items such as skip stitches and fiber stitches.
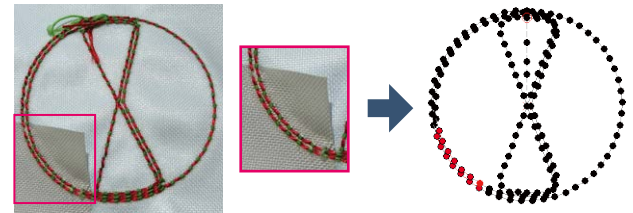
(Example) When fiber stitches occurred

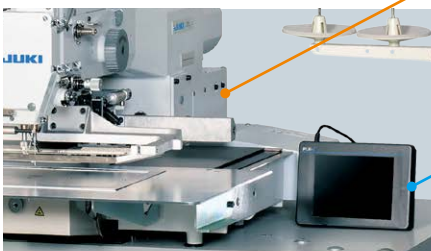### Monitoring the changes of material thickness during the sewing operation

In addition to detecting material placement mistake, the machine can monitor the changes of material thickness during operation. When the changes occur, it helps discover additional or misplaced fabric.

(Example) When fabric was folded by mistake

Save the sewing results

The data of take-up lever pressure and materials thickness can be accumulated into the sewing machine. It allows to utilize the data for quality control as well as for reliable data source to your clients. It is compatible with the company FA products which makes it possible to display data in a real time.

Data can be collected through USB or CC-Link

CC-Link **IE** **F**ield **Basic**

Programmable controller   GOT

Visualization of collected data Displays the sewing data on GOT by LAN connection

USB

Data accumulation Transmits the data in CSV format. Possible to manage the data on your PC.
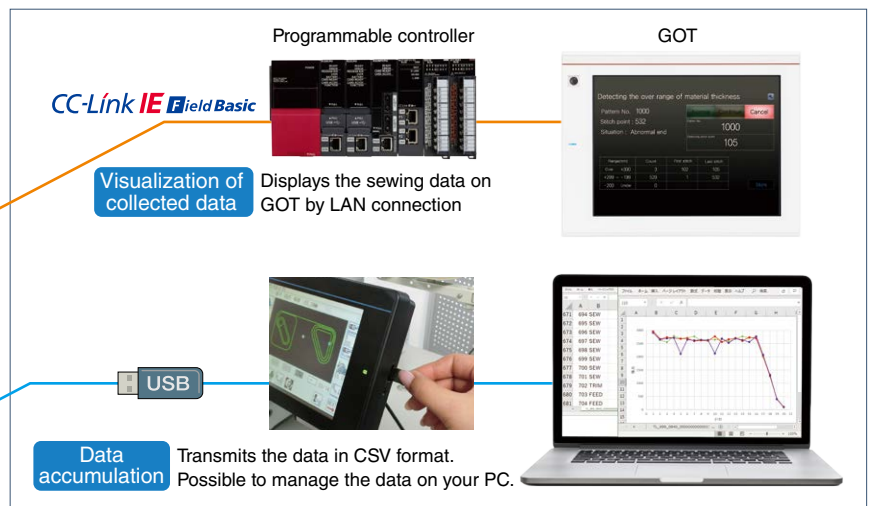
assurance

Improvement of sewing quality

Reduces skip stitches at start of sewing

<SE-Stitch>
Even the remaining thread is short, it reduces skip stitches which may occur at the start of sewing cycle.

Improves appearance (bird's nest) at start of sewing

<SE-Trim>
The remaining thread tail when trimming is adjustable to a certain length. It greatly reduces the case of bird's nest by adjusting the amount of thread tail on the back of the fabric.

Before

Time consuming for adjustment of skipped stitches at the start of sewing, preventing birds nest and thread trimming, etc.

Skip stitches
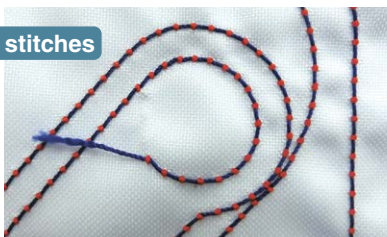
Bird's nest

Now

Improving skipped stitches and birds nest just by turning on this function

<SE-Stitch>
<SE-Trim> **Function ON**

Improvement of skip stitches and bird's nest

Software

Software that enhances J Series usability

PTN-JX
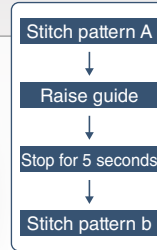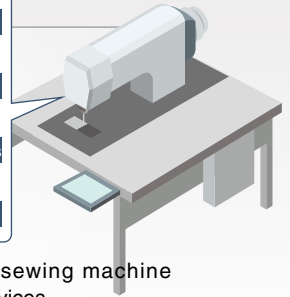**Creation and correction of stitching patterns**

Allows stitching patterns to be created on a personal computer screen.

PLKJ-STEP
Creation and editing of simple sequences

Stitch pattern A
↓
Raise guide
↓
Stop for 5 seconds
↓
Stitch pattern b

Programs the sewing machine and external devices.

PLKJ-SET
Editing of settings

Settings made in the sewing machine's operation panel can be easily edited from a personal computer.

PLKJ-VIEW
Data management
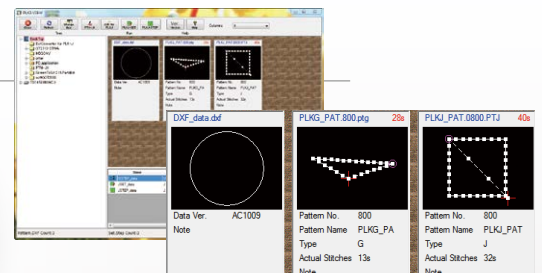
Displays sewing machine data as a tree or thumbnail for easy management.

DXF Converter
Conversion and editing of CAD data

Allows easy correction of stitching patterns.

Paid version PTN-JX
PTN-JX　DXF Converter
Set CD

Free version
PLKJ-STEP　PLKJ-SET　PLKJ-VIEW

Free versions can be downloaded from the following URL.
https://www.juki.co.jp/technosolutions/english/sewing_machine/download/software.html

PTN-JX

Create and edit stitching patterns on a personal computer screen

Paid version

➡ Test the stitching immediately

- Control stitching quality.
  The feed motion, presser foot motion, and digital tension can be set in the stitching data.
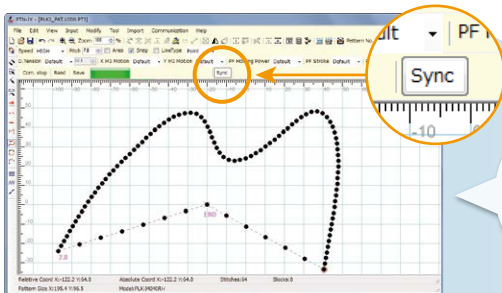- Data can be read, edited, and written to a PLK Series sewing machine.
  (Supported models: PLK-J, G, E, B Series)
- Synchronization mode

(1) Correct on the personal computer's large screen.

Repeated test stitching

(2) Click the Synchronize button.
The corrected data will be sent to the sewing machine.

PC

(3) Stitching can be tested immediately with the USB connection.

DXF Converter

Convert CAD data into stitching data

Paid version

➡ Make quick corrections with intuitive operations
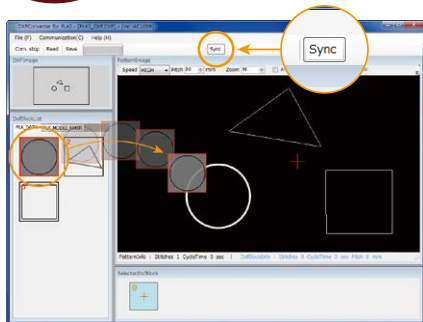
Drag & drop the stitching pattern from the block list.
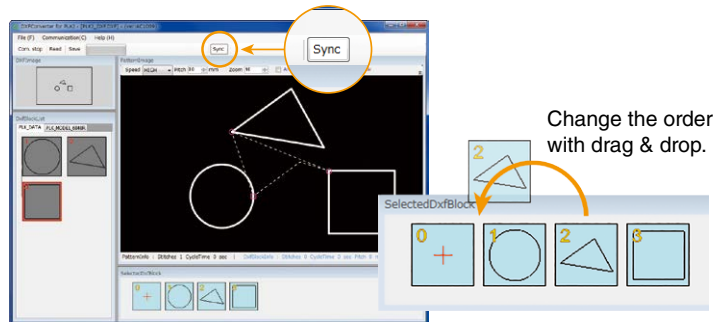
Easily change the stitching order in parts (block) units.

Change the order with drag & drop.

Select part of the stitching pattern to make the stitch length uniform.

Easily change the stitching pattern size.

Lineup

Responding to various stitching scenes with the best specifications

PLK-J2516-YU
PLK-J2516R-YU

PLK-J3020R-SE — Traceability model

**Sewing area
300 x 200mm: PLK-J2516-YU/2516R-YU**

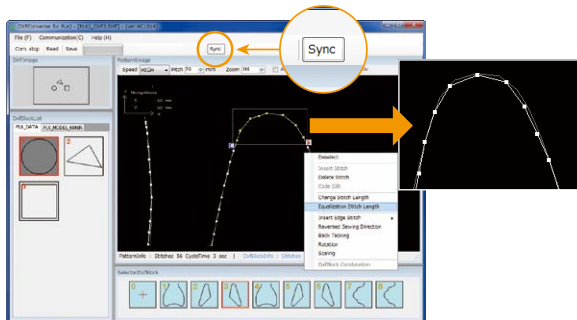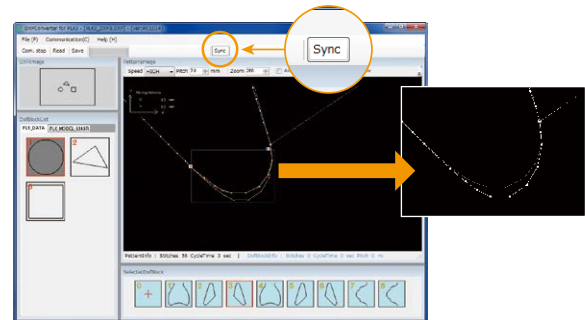| Item / Model	PLK-J2516-YU	PLK-J2516R-YU
Stitching style	Single-needle lockstitch	
Hook	Double-size shuttle hook	Double-size rotary hook
Needle	DP×17 #18	
Max. speed (Note 1)	Intermittent feed: 2,300rpm Continuous feed: 2,300rpm	
Feeding system	Intermittent or continuous (switchover method)	
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)	
Max. stitches	20,000 stitches/pattern	
Max. patterns (Note 2)	9,000	
Memory medium	USB flash memory	
Upper shaft motor	750W direct servo motor	
Lower shaft motor	-	
Work holder	Air cylinder drive	
Presser foot drive	Direct drive by stepping motor	
Presser foot lift stroke	18.0mm (max. 22.0mm) variable in 0.1mm step	18.0mm (max. 24.0mm) variable in 0.1mm step
Presser foot stroke (Note 5)	Digital adjustment stroke: 0.0 to 10.0mm	
Upper thread tensioner	Manual/digital switchover method	
	Input data save function provided	
	Stitching direction-compatible automatic adjustment function provided	
Oil lubrication	Inside of sewing machine head only Spray type: Adjustable spray time method	
Operation panel	6.5-inch color LCD touch panel with USB port	
External device	Terminal I/O 16-point input, 16-point output	
Interface (Note 3)	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication	
Barcode reader	USB barcode reader (HID) supported	
Thread break detection, skipped stitch detection (Note 4)	Option available (MP-J25-AD)	
Stitch alert (Note 4)	-	
Programmable controller	Dual original step sequence function	
Outline dimensions	1,200 x 1,144 x 1,230 mm (WxDxH)	
Mass	187kg	
Power supply	200 to 240V single-phase/three-phase	

**Sewing area
300 x 200mm: PLK-J3020R-SE**

Item / Model	PLK-J3020R-SE
Stitching style	Single-needle lockstitch
Hook	Double-size rotary hook
Needle	DP× 17 #18
Max. speed (Note 1)	Intermittent feed 2,300rpm Continuous feed 2,300rpm
Feeding system	Intermittent or continuous (switchover method)
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)
Max. stitches	20,000 stitches/pattern
Max. patterns (Note 2)	9,000
Memory medium	USB flash memory
Type of motor (Main)	750W direct servo motor
Type of motor (Sub)	400W direct servo motor (For the thread take up lever direct drive)
Work holder	Air cylinder drive
Presser foot drive	Direct drive by stepping motor
Presser foot lift stroke	18.0mm (max. 24.0mm) variable in 0.1mm step
Presser foot stroke	Digital adjustment stroke: 0.0 to 10.0mm
Upper thread tensioner	Manual/digital switchover method
	Input data save function provided
	Stitching direction-compatible automatic adjustment function provided
Oil lubrication	Inside of sewing machine head only Spray type: Adjustable spray time method
Operation panel	6.5-inch color LCD touch panel with USB port
External device	Terminal I/O 16-point input, 16-point output
Interface (Note 3)	Ethernet (CC-Link IE Field Basic compatible), USB communication
Barcode reader	USB barcode reader (HID) supported
Thread break detection, skipped stitch detection (Note 4)	Option available (MP-J25-AD)
Stitch alert (Note 4)	-
Programmable controller	Dual original step sequence function
Outline dimensions	1,200 x 1,144 x 1,320 mm (WxDxH)
Mass	190kg
Power supply	200 to 240V single-phase/three-phase

Note 1: Sewing speed may be limited by the type of sewing material, presser weight, stitch length, etc.
Note 2: Max. patterns may be limited depending on the number of stitches per pattern in the memory.
Note 3: Ethernet is a trademark of Fuji Xerox Co., Ltd.
Note 4: Detection of all stitch errors is not guaranteed. Always complete adjustments according to the stitching conditions before use.
Note 5: Standard value is 8.0 mm.

PLK-♪4040/6040 📷2
PLK-♪4040R/6040R 📷2
PLK-♪4040R3/6040R3 📷3

PLK-♪4040RH 📷6

Sewing area
400 x 400mm: PLK-J4040/4040R/4040R3
600 x 400mm: PLK-J6040/6040R/6040R3

Item \ Model	PLK-J4040/ PLK-J6040	PLK-J4040R/ PLK-J6040R	PLK-J4040R3/ PLK-J6040R3
Stitching style	Single-needle lockstitch		
Hook	Double-size shuttle hook	Double-size rotary hook	Triple-size rotary hook
Needle	DP×17 #18		
Max. speed (Note 1)	Intermittent feed: 2,000rpm Continuous feed: 2,000rpm	Intermittent feed: 2,300rpm Continuous feed: 2,500rpm	
Feeding system	Intermittent or continuous (switchover method)		
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)		
Max. stitches	20,000 stitches/pattern		
Max. patterns (Note 2)	9,000		
Memory medium	USB flash memory		
Upper shaft motor	750W direct servo motor		
Lower shaft motor	400W direct servo motor		
Work holder	Chucking system		
Presser foot drive	Direct drive by stepping motor		
Presser foot lift stroke	18.0mm (max. 24.0mm) variable in 0.1mm step		
Presser foot stroke (Note 5)	Digital adjustment stroke: 0.0 to 10.0mm		
Upper thread tensioner	Manual/digital switchover method		
	Input data save function provided		
	Stitching direction-compatible automatic adjustment function provided		
Oil lubrication	Spray method: Spray time adjustment		
Operation panel	6.5-inch color LCD touch panel with USB port		
External device	Terminal I/O 16-point input, 16-point output		
Interface	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication		
Barcode reader	USB barcode reader (HID) supported		
Thread break detection, skipped stitch detection (Note 4)	Standard equipment		
Stitch alert (Note 4)	-		
Programmable controller	Dual original step sequence function		
Outline dimensions	1,350 x 1,570 x 1,205 mm (WxDxH)		
Mass	440kg		
Power supply	200 to 240V single-phase/three-phase		

Sewing area
400 x 400mm: PLK-J4040RH

Item \ Model	PLK-J4040RH
Stitching style	Single-needle lockstitch
Hook	6-fold rotary hook
Needle	DD×1 #26
Max. speed (Note 1)	Intermittent feed 1,000rpm Continuous feed 1,000rpm
Feeding system	Intermittent or continuous (switchover method)
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)
Max. stitches	20,000 stitches/pattern
Max. patterns (Note 2)	9,000
Memory medium	USB flash memory
Upper shaft motor	750W direct servo motor
Lower shaft motor	400W direct servo motor
Work holder	Chucking system
Presser foot drive	Direct drive by stepping motor
Presser foot lift stroke	15.0mm (max. 30.0mm) variable in 0.1mm step
Presser foot stroke	Digital adjustment stroke: max. 10mm
Upper thread tensioner	Manual/digital switchover method
	Input data save function provided
	Stitching direction-compatible automatic adjustment function provided
Oil lubrication	Spray method: Spray time adjustment
Operation panel	6.5-inch color LCD touch panel with USB port
External device	Terminal I/O 16-point input, 16-point output
Interface	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication
Barcode reader	USB barcode reader (HID) supported
Thread break detection, skipped stitch detection (Note 4)	-
Stitch alert (Note 4)	Standard equipment
Programmable controller	Dual original step sequence function
Outline dimensions	1,350 x 1,570 x 1,250 mm (WxDxH)
Mass	460kg
Power supply	200 to 240V single-phase/three-phase

Lineup

PLK-J10050 [2]
PLK-J10050R [2]
PLK-J10050R3 [3]

PLK-J10050RH [6]

Sewing area
1,000 x 500mm: PLK-J10050/10050R/10050R3

Item \ Model	PLK-J10050	PLK-J10050R	PLK-J10050R3
Stitching style	Single-needle lockstitch		
Hook	Double-size shuttle hook	Double-size rotary hook	Triple-size rotary hook
Needle	DP×17 #21		
Max. speed (Note 1)	Intermittent feed: 2,000rpm Continuous feed: 2,000rpm	Intermittent feed: 2,500rpm Continuous feed: 2,500rpm	
Feeding system	Intermittent or continuous (switchover method)		
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)		
Max. stitches	20,000 stitches/pattern		
Max. patterns (Note 2)	9,000		
Memory medium	USB flash memory		
Upper shaft motor	750W direct servo motor		
Lower shaft motor	400W direct servo motor		
Work holder	Chucking system		
Presser foot drive	Direct drive by stepping motor		
Presser foot lift stroke	18.0mm (max. 24.0mm) variable in 0.1mm step		
Presser foot stroke (Note 5)	Digital adjustment stroke: 0.0 to 10.0mm		
Upper thread tensioner	Manual/digital switchover method		
	Input data save function provided		
	Stitching direction-compatible automatic adjustment function provided		
Oil lubrication	Spray method: Spray time adjustment		
Operation panel	6.5-inch color LCD touch panel with USB port		
External device	Terminal I/O 16-point input, 16-point output		
Interface	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication		
Barcode reader	USB barcode reader (HID) supported		
Thread break detection, skipped stitch detection (Note 4)	Standard equipment		
Stitch alert (Note 4)	-		
Programmable controller	Dual original step sequence function		
Outline dimensions	2,122 x 1,941 x 1,205 mm (WxDxH)		
Mass	620kg		
Power supply	200 to 240V single-phase/three-phase		

Sewing area
1,000 x 500mm: PLK-J10050RH

Item \ Model	PLK-J10050RH
Stitching style	Single-needle lockstitch
Hook	6-fold rotary hook
Needle	DD×1 #26
Max. speed (Note 1)	Intermittent feed 1,000rpm Continuous feed 1,000rpm
Feeding system	Intermittent or continuous (switchover method)
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)
Max. stitches	20,000 stitches/pattern
Max. patterns (Note 2)	9,000
Memory medium	USB flash memory
Upper shaft motor	750W direct servo motor
Lower shaft motor	400W direct servo motor
Work holder	Chucking system
Presser foot drive	Direct drive by stepping motor
Presser foot lift stroke	15.0mm (max. 30.0mm) variable in 0.1mm step
Presser foot stroke	Digital adjustment stroke: max. 10mm
Upper thread tensioner	Manual/digital switchover method
	Input data save function provided
	Stitching direction-compatible automatic adjustment function provided
Oil lubrication	Spray method: Spray time adjustment
Operation panel	6.5-inch color LCD touch panel with USB port
External device	Terminal I/O 16-point input, 16-point output
Interface	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication
Barcode reader	USB barcode reader (HID) supported
Thread break detection, skipped stitch detection (Note 4)	-
Stitch alert (Note 4)	Standard equipment
Programmable controller	Dual original step sequence function
Outline dimensions	2,122 x 1,941 x 1,250 mm (WxDxH)
Mass	640kg
Power supply	200 to 240V single-phase/three-phase

Note 1: Sewing speed may be limited by the type of sewing material, presser weight, stitch length, etc.
Note 2: Max. patterns may be limited depending on the number of stitches per pattern in the memory.
Note 3: Ethernet is a trademark of Fuji Xerox Co., Ltd.
Note 4: Detection of all stitch errors is not guaranteed. Always complete adjustments according to the stitching conditions before use.
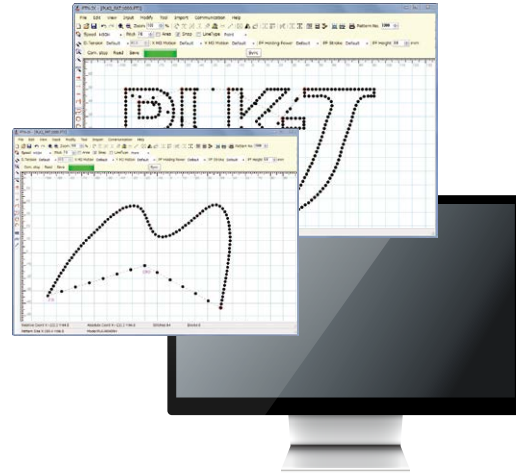Note 5: Standard value is 8.0 mm.

PLK-*J*12060 ⊚2
PLK-*J*12060R ⊚2
PLK-*J*12060R3 ⊚3

PTN-JX

Sewing area
1,200 x 600mm: PLK-J12060/12060R/12060R3

Item / Model	PLK-J12060	PLK-J12060R	PLK-J12060R3
Stitching style	Single-needle lockstitch		
Hook	Double-size shuttle hook	Double-size rotary hook	Triple-size rotary hook
Needle	DP×17 #21		
Max. speed (Note 1)	Intermittent feed: 2,000rpm Continuous feed: 2,000rpm	Intermittent feed: 2,300rpm Continuous feed: 2,300rpm	
Feeding system	Intermittent or continuous (switchover method)		
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)		
Max. stitches	20,000 stitches/pattern		
Max. patterns (Note 2)	9,000		
Memory medium	USB flash memory		
Upper shaft motor	750W direct servo motor		
Lower shaft motor	400W direct servo motor		
Work holder	Chucking system		
Presser foot drive	Direct drive by stepping motor		
Presser foot lift stroke	18.0mm (max. 24.0mm) variable in 0.1mm step		
Presser foot stroke (Note 5)	Digital adjustment stroke: 0.0 to 10.0mm		
Upper thread tensioner	Manual/digital switchover method		
	Input data save function provided		
	Stitching direction-compatible automatic adjustment function provided		
Oil lubrication	Spray method: Spray time adjustment		
Operation panel	6.5-inch color LCD touch panel with USB port		
External device	Terminal I/O 16-point input, 16-point output		
Interface	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication		
Barcode reader	USB barcode reader (HID) supported		
Thread break detection, skipped stitch detection (Note 4)	Standard equipment		
Stitch alert (Note 4)	-		
Programmable controller	Dual original step sequence function		
Outline dimensions	2,522 x 2,112 x 1,205 mm (WxDxH)		
Mass	650kg		
Power supply	200 to 240V single-phase/three-phase		

Item / Model	PTN-JX
Recommended operation environment	
CPU	1.5GHz or higher 32bit (x86) or 64bit (x64) processor
OS	Windows®8/8.1 (32bit/64bit)/Windows®10 (32bit/64bit)
RAM	32bit: 1GB or more, 64bit: 2GB or more
HDD	Windows®8/8.1, Windows®10 : 32bit (16GB or more open space), Windows®8/8.1, Windows®10 : 64bit (20GB or more open space)
Monitor resolution	Capable of displaying 1024x768 or higher
Monitor color setting	Full color (32bit) or higher
Peripheral devices	CD-ROM drive (used for installation), USB memory (medium for electronic sewing machine and pattern data), USB port x 2 (for USB memory or USB communication, for protection key), RS-232C port (when exchanging stitching data between PTN-GX and sewing machine)

*1. The CPU, memory, and hard disk specifications may vary depending on the amount of data being processed.
*2. A relatively high PC performance is required for the best use.

Windows is a trademark or registered trademark of Microsoft Corporation in the United States and other countries.

Main specifications	
Protector type	USB
Input type	Linear, arc, circle, curve, polygonal line, point, multiple/offset, zigzag, tacking (same input functions as PLK-J Series electronic sewing machines)
Modification type	Delete, insert, change, move, convert, code (in addition to PLK-J Series electronic sewing machine modification function, data can be deleted, inserted and moved in block units)
Display scale	20 to 5000%
Grid line pitch	0.1 to 100mm, or hidden
Input method	Personal computer mouse, coordinate value input (absolute coordinate, relative coordinate)
Supported data types	Data compatible with PLK electronic sewing machines (J, G data)*1 DXF data*2 (R12, R13, R14), embroidery data (only specified versions are supported)

*1. G data is read only.
*2. Some restrictions apply to the data conversion function. Please refer to the instruction manual before use.