



**MITSUBISHI
ELECTRIC**

INDUSTRIAL SEWING MACHINES

PLK-G series 10 Pages

PLK-G1010/K2/KX/KX9

PLK-G2516

PLK-G2010R

PLK-G2516R

Changes for the Better

Showing sewing potential in various fields



Advanced G series equipped with industry-leading machine specifications.

1

High-speed sewing leads the industry in tact time
2800 stitches/minute

Industry-leading class sewing speed

2

Powerful penetration force even at start of stitching and thread trimming
750W direct servomotor
Increases sewing applications

Industry's top class penetration force

3

Prevention of skipped stitches and thread breakage even when stitching material thickness changes is accomplished by utilization the programmable presser foot height adjustment function.
Digital Feedback Control

Sewing quality improved with new control method
(Digital Sewing Technology)

4

Quicker processing of pattern data with high stitch count
Pattern creation time minimized by **one-tenth**
Work efficiency increased by **3 to 10-fold** (Mitsubishi comparison)

USB memory & High-speed processing

5

Power consumption **reduced by approx.40%** with DD* method * Direct drive (Mitsubishi Comparison)

Power consumption is reduced Environment is considered

6

Easy expansion for customization and automation
Superior **affinity** with **host control units** (Mitsubishi PLC) enables

Automation support functions

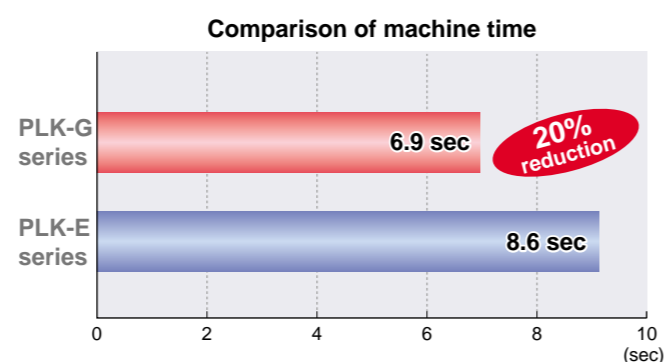
G series



Industry-leading Class Sewing Speed 2800 stitches/min

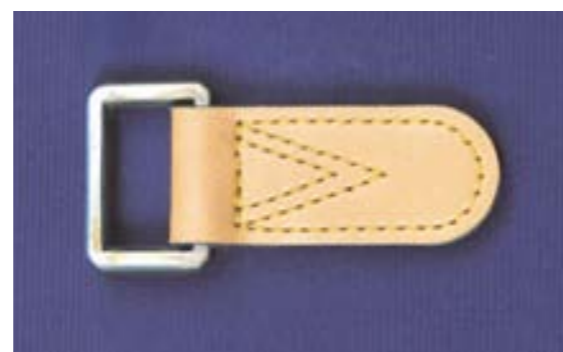
By incorporating feedback for the XY table mechanism, high-speed sewing of a intermittent feed has been realized, and the machine time has been reduced by 20% over conventional models.

[Measurement conditions]
 Sewing data : Square (100mm x 100mm) + diagonal line
 Number of stitches : 232 stitches
 Stitch length : 3mm
 Sewing speed : 2,800 stitches/min (PLK-G series)
 (2,440 stitches/min (PLK-E series))



Beautiful Stitches

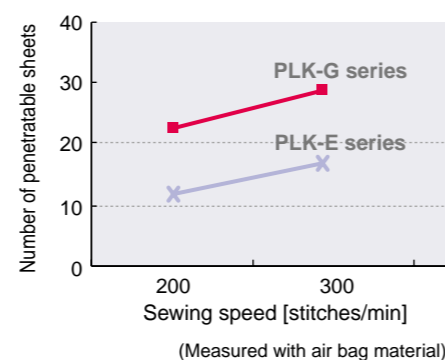
The improved presser foot mechanism and feed mechanism rigidity together with the latest feed control (feedback control) realize beautiful stitches from low to high speeds in all areas including corners which follow the sewing data and stitch linearity.



Industry's Top Class Penetration Force

The powered-up 750W direct drive servomotor is the industry's top class penetration force. Low-speed sewing (200rpm) at the start of sewing and thread cutting which was conventionally difficult to perform can now be performed with ease.

Increased applications!! Improved stability!!

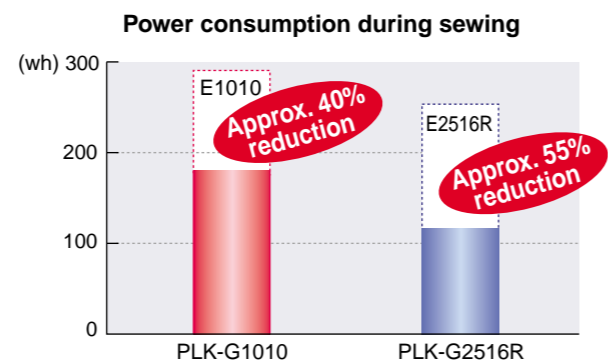


Reduced Power Consumption

The direct drive method, with low power consumption, helps to reduce the power consumed during sewing by approx 40%.

Power consumed while waiting is also reduced by approx 50% by incorporating an XY drive feedback control method.

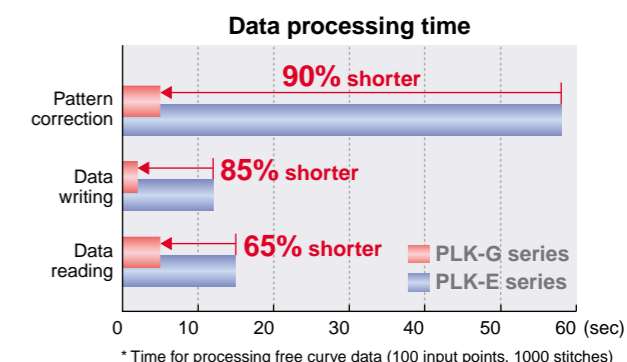
This electronic sewing machine boasts the market's lowest power consumption in this sewing area class.



Improved Work Efficiency

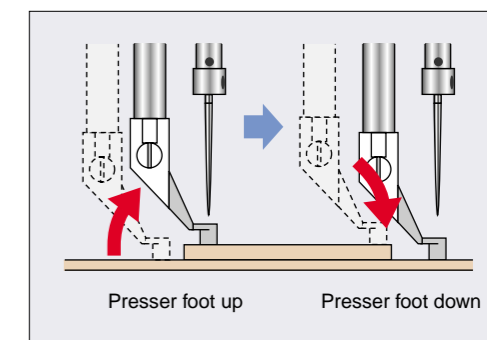
Adoption of a USB memory and high-speed processing system has greatly shortened the time required to input and correct data for patterns having many stitches.

The inching key greatly improves the speed during clamp movement, and improves the work efficiency.



Programmable Presser Foot Height Control

A presser foot height program function is incorporated. Skipped stitches and thread breakage can be prevented by changing the presser foot height according to the material thickness. The programmed presser foot data is saved in the sewing data, so the presser foot height does not need to be adjusted even if the material thickness changes.



Easy-to-use and see with large LCD touch-type operation panel

In addition to the basic sewing machine operations*1, this panel can be used to process patterns*2, confirm the status of the various sensor input and solenoid output signals, and to individually set the sewing machine functions and input/output ports.

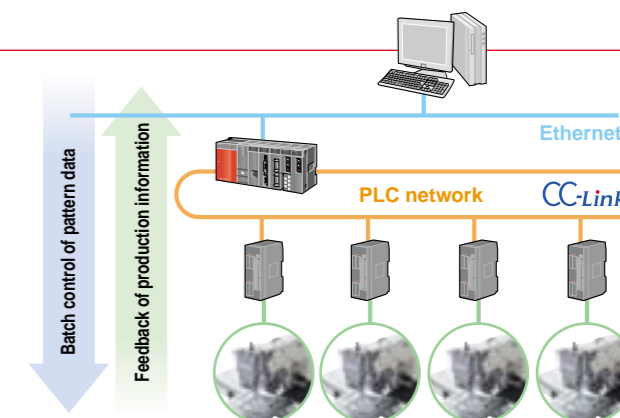
- Switching patterns used often can be selected quickly with the shortcut button.
- Simple explanation function is incorporated to display the application of each screen button when the button is touched.
- When inputting patterns, the clamp frame movement speed can be selected from three steps.
- An easy-to-carry and use shape has been adopted.



*1: Home return, jog, speed change, pattern call, up/down counter, bobbin winding, etc.
 *2: Pattern call, write, input, correction, conversion, etc.

Factory Automation

Various functions to connect to a production factory's network and support production control, including the popular pattern selection using barcode reader, are incorporated. Affinity with the Mitsubishi PLC is outstanding.



PLK-G1010



SPECIFICATIONS

Stitch Type	Single Needle Lockstitch	Hook	Shuttle/Large/Size R Bobbin
Max. Number of Sewing Patterns Possible	Internal Memory (512) USB (depends on memory size)	X/Y Drive	Timing Belt
Sewing Area	(X) 4" x (Y) 4" (100mm x 100mm)	Needle	135x17 Size 18 (Standard)
Max. Sewing Speed	2800 RPM	Work Holder Lift	Max. 25mm
Sewing Speed Selection	200~2800 RPM (10 Steps Variable)	Presser Foot Lift	Max. 15mm
Feeding System	Intermittent or Continuous	Pattern Input	Touch Screen (PLK-G-PAL)
Stitch Length	0.1~20.0mm	Drive Motor	Direct Drive (750 Watts) (1HP)
Pattern Storage	Internal Memory or External USB	Power	220 Volt 3 Phase or Single Phase
Max. Number of Stitches	20,000 Per Pattern	Power	110 Volt (Optional)
Scale Up/Scale Down	10~200% for X and Y Axis	Clamp (Electric)	Single Stage
Presser Foot	Stepping Motor Controlled	Total Weight (Net)	133kg

NOTE: Sewing speed may be limited by the type of operation, material, or clamp weight.

PLK-G1010K2



SPECIFICATIONS

Stitch Type	Single Needle Lockstitch	Hook	Shuttle/Large/Size R Bobbin
Max. Number of Sewing Patterns Possible	Internal Memory (512) USB (depends on memory size)	X/Y Drive	Timing Belt
Sewing Area	(X) 4" x (Y) 4" (100mm x 100mm)	Needle	135x17 Size 18 (Standard)
Max. Sewing Speed	2800 RPM	Work Holder Lift	Max. 30mm
Sewing Speed Selection	200~2800 RPM (10 Steps Variable)	Presser Foot Lift	Max. 15mm
Feeding System	Intermittent or Continuous	Pattern Input	Touch Screen (PLK-G-PAL)
Stitch Length	0.1~20.0mm	Drive Motor	Direct Drive (750 Watts) (1HP)
Pattern Storage	Internal Memory or External USB	Power	220 Volt 3 Phase or Single Phase
Max. Number of Stitches	20,000 Per Pattern	Power	110 Volt (Optional)
Scale Up/Scale Down	10~200% for X and Y Axis	Clamp (Air)	2-Stage Split Clamp
Presser Foot	Stepping Motor Controlled	Total Weight (Net)	133kg

NOTE: Sewing speed may be limited by the type of operation, material, or clamp weight.

PLK-G1010KX / KX9 (Expanded Sew Area)



SPECIFICATIONS

Stitch Type	Single Needle Lockstitch	Hook	Shuttle/Large/Size R Bobbin
Max. Number of Sewing Patterns Possible	Internal Memory (512) USB (depends on memory size)	X/Y Drive	Timing Belt
Sewing Area	KX (X) 8 $\frac{1}{4}$ " x (Y) 4" (210mm x100mm) KX9 (X) 9" x (Y) 4" (230mm x 100mm)	Needle	135x17 Size 18 (Standard)
Max. Sewing Speed	2000 RPM	Work Holder Lift	Max. 30mm
Sewing Speed Selection	200~2000 RPM (10 Steps Variable)	Presser Foot Lift	Max. 15mm
Feeding System	Intermittent or Continuous	Pattern Input	Touch Screen (PLK-G-PAL)
Stitch Length	0.1~20.0mm	Drive Motor	Direct Drive (750 Watts) (1HP)
Pattern Storage	Internal Memory or External USB	Power	220 Volt 3 Phase or Single Phase
Max. Number of Stitches	20,000 Per Pattern	Power	110 Volt (Optional)
Scale Up/Scale Down	10~200% for X and Y Axis	Clamp (Air)	2-Stage Split Clamp
Presser Foot	Stepping Motor Controlled	Total Weight (Net)	133kg

NOTE: Sewing speed may be limited by the type of operation, material, or clamp weight.

PLK-G1010 Area Expansions

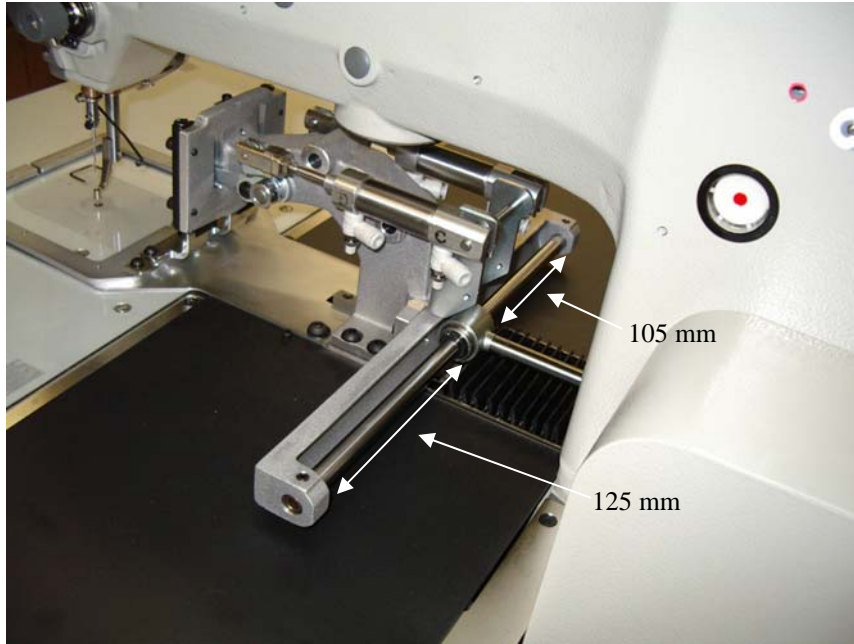
Note 1 (center)

The PLK-G1010KX is 210mm or 8 1/4" in the x-axis and is equal in clamp movement from center to right (105mm) and center to left (105mm)

Note 2 (off-set by 20mm)

The PLK-G1010KX9 is 230mm or 9" in the x-axis and the clamp movement from center to right is (105mm) and center to left (125mm). Please take this into consideration when making clamping.

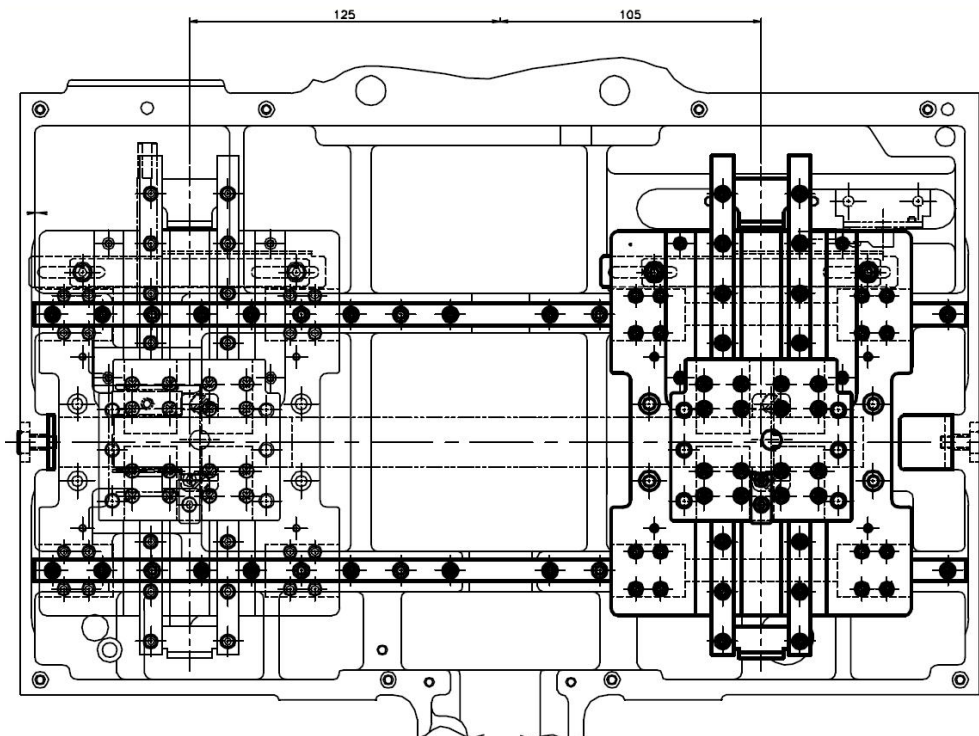
PLK-G1010KX9



KX



KX9



PLK-G2516



SPECIFICATIONS

Stitch Type	Single Needle Lockstitch	Hook	Shuttle/Large/Size R Bobbin
Max. Number of Sewing Patterns Possible	Internal Memory (512) USB (depends on memory size)	X/Y Drive	Timing Belt
Sewing Area	(X) $9 \frac{13}{16}$ " x (Y) $6 \frac{9}{32}$ " (250mm x 160mm)	Needle	135x17 Size 18 (Standard)
Max. Sewing Speed	2800 RPM (depending on operation)	Work Holder Lift	Max. 30mm
Sewing Speed Selection	200~2800 RPM (10 Steps Variable)	Presser Foot Lift	Max. 15mm
Feeding System	Intermittent or Continuous	Pattern Input	Touch Screen (PLK-G-PAL)
Stitch Length	0.1~20.0mm	Drive Motor	Direct Drive (750 Watts) (1HP)
Pattern Storage	Internal Memory or External USB	Power	220 Volt 3 Phase or Single Phase
Max. Number of Stitches	20,000 Per Pattern	Power	110 Volt (Optional)
Scale Up/Scale Down	10~200% for X and Y Axis	Clamp (Air)	Single Valve Dual Air Cylinders
Presser Foot	Stepping Motor Controlled	Total Weight (Net)	161.5kg

NOTE: Sewing speed may be limited by the type of operation, material, or clamp weight.

PLK-G2010R

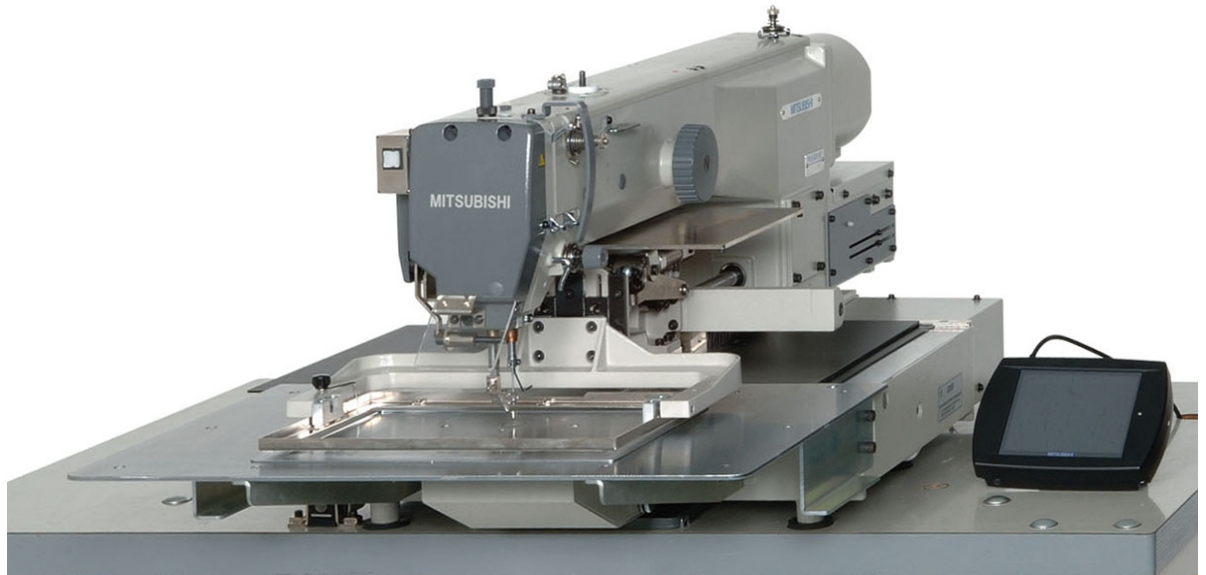


SPECIFICATIONS

Stitch Type	Single Needle Lockstitch	Hook	Rotary/Large/Size M Bobbin
Max. Number of Sewing Patterns Possible	Internal Memory (512) USB (depends on memory size)	X/Y Drive	Timing Belt
Sewing Area	(X) 7 $\frac{7}{8}$ " x (Y) 4" (200mm x 100mm)	Needle	135x17 Size 18 (Standard)
Max. Sewing Speed	2800 RPM (depending on operation)	Work Holder Lift	Max. 30mm
Sewing Speed Selection	200~2800 RPM (10 Steps Variable)	Presser Foot Lift	Max. 15mm
Feeding System	Intermittent or Continuous	Pattern Input	Touch Screen (PLK-G-PAL)
Stitch Length	0.1~20.0mm	Drive Motor	Direct Drive (750 Watts) (1HP)
Pattern Storage	Internal Memory or External USB	Power	220 Volt 3 Phase or Single Phase
Max. Number of Stitches	20,000 Per Pattern	Power	110 Volt (Optional)
Scale Up/Scale Down	10~200% for X and Y Axis	Clamp (Air)	Single Valve Dual Air Cylinders
Presser Foot	Stepping Motor Controlled	Total Weight (Net)	147kg

NOTE: Sewing speed may be limited by the type of operation, material, or clamp weight.

PLK-G2516R



SPECIFICATIONS

Stitch Type	Single Needle Lockstitch	Hook	Rotary/Large/Size M Bobbin
Max. Number of Sewing Patterns Possible	Internal Memory (512) USB (depends on memory size)	X/Y Drive	Timing Belt
Sewing Area	(X) $9 \frac{13}{16}$ " x (Y) $6 \frac{9}{32}$ " (250mm x 160mm)	Needle	135x17 Size 18 (Standard)
Max. Sewing Speed	2800 RPM (depending on operation)	Work Holder Lift	Max. 30mm
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Presser Foot	Stepping Motor Controlled	Total Weight (Net)	147kg

NOTE: Sewing speed may be limited by the type of operation, material, or clamp weight.