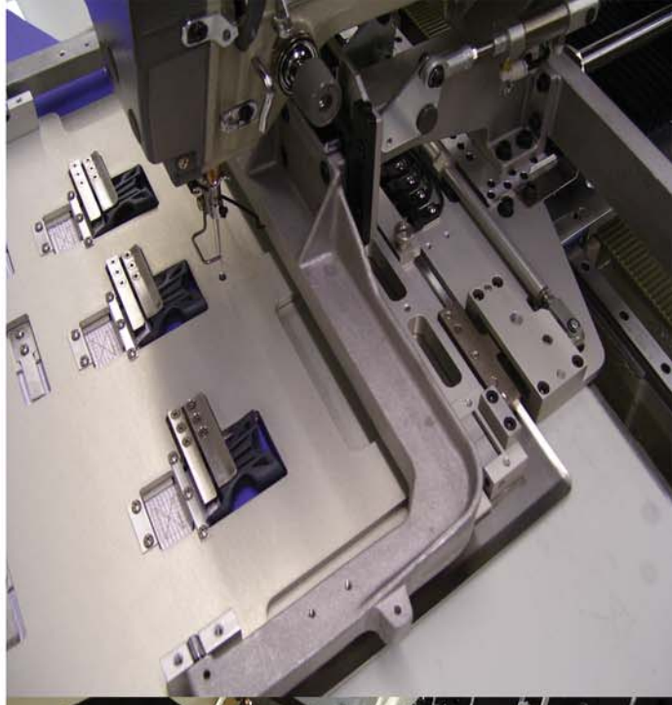
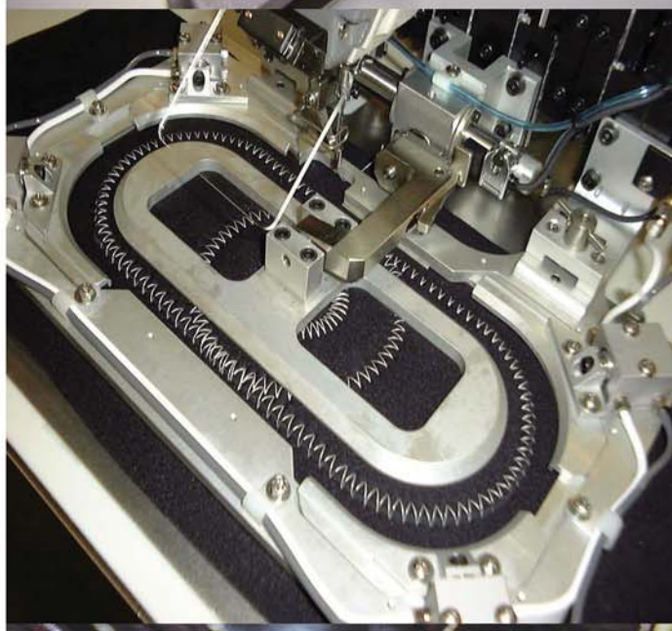
MITSUBISHI ELECTRIC

Changes for the Better

PLK-G2516-2516YU

Electronically controlled middle area sewing machine. Large shuttle hook, direct drive motor and programmable presser foot height adjustment.
Sewing area (2516) 250x160mm
Sewing area (2516YU) 300x200mm





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

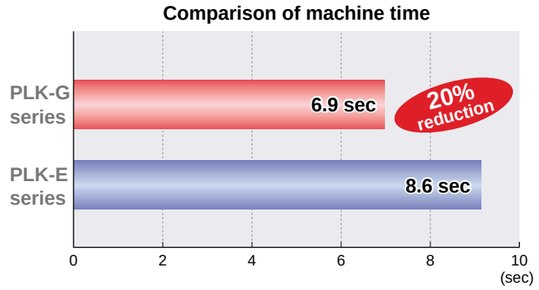
Automation support functions

G series

Industry-leading Class Sewing Speed 2800 stitches/min

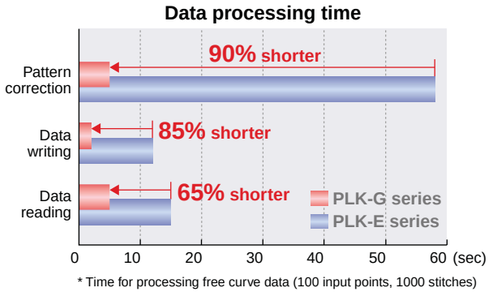
By Incorporating feedback for the XY table mechanism, high-speed sewing of a intermittent feed has been realized, and the machine time has been reduced by 20% over conventional models.

[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))



Improved Work Efficiency

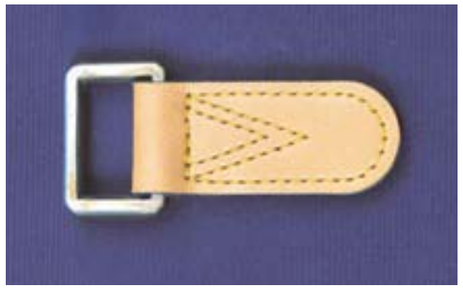
Adoption of a USB memory and high-speed processing system has greatly shortened the time required to input and correct data for patters having many stitches.
The inching key greatly improves the speed during clamp movement, and improves the work efficiency.



* Time for processing free curve data (100 input points, 1000 stitches)

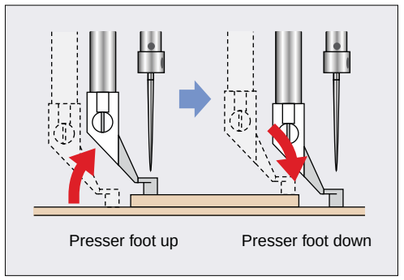
Beautiful Stitches

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.



Programmable Presser Foot Height Control

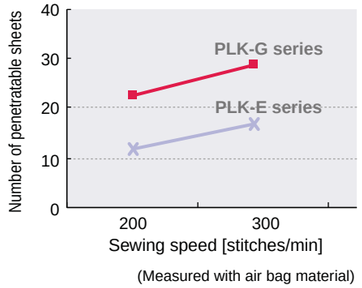
A presser foot height program function is incorporated. Skipped stitches and thread breakage can be prevented by changing the presser foot height according to the material thickness. The programmed presser foot data is saved in the sewing data, so the presser foot height does not need to be adjusted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



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.

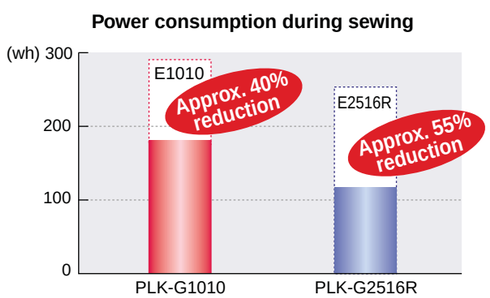
Increased applications!!
Improved stability!!



(Measured with air bag material)

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.



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.

PLK-G2516-2516YU

PLK-G2516-2516YU

This machine uses an external USB memory for sewing pattern storage as well as an internal memory with high-speed processing. It is equipped with an on-board touch screen for easily creating sewing patterns, customizing parameters and adjusting the presser foot sewing height to name a few. Digital feedback control is also added on the PLK-G models for improved stitch quality and low viberation and noise. For that hard to penetrate material even at a low speed, a 750 watt direct drive servo is provided.

Specifications

MODEL	PLK-G2516-2516YU
Stitch Type	Single Needle Lockstitch
Sewing area (2616)	(X) 250mm x (Y) 160mm (9 13/16" x 6 9/32")
Sewing area (2516YU)	(X) 300mm x (Y) 200mm (11 13/16" x 7 7/8")
Max. Speed	2800 rpm (Depending on Application)
Feeding System	Intermittent or Continuous
Stitch Length	0.1~20.0mm (Min. Resolution 0.1mm)
Pattern Storage	Internal Memory or External USB
Max. Number of Stitches	20,000 Stitches per Pattern
Max. Number of Patterns	900 Patterns (Internal Memory)
Scale up / Scale down	10~200% for X and Y axis
Presser Foot	Adjustment by Stepping Motor
Hook	Shuttle/Large/Size R Bobbin
Needle	135 x 17 size #18
Work Holder Lift	Max. 30mm
Presser foot lift	Max. 15mm
Operation Panel	Touch Screen (PLK-G-PAL)
Main Driving Motor	750 Watt Direct Drive
Power	220 Volt / Single or 3 Phase
Clamp (Air)	Single Valve Dual Air Cylinders
Mass	161.5 kg

Applications

Airbags, leather bags, large labels, attaching webbing, etc...