Specifications

Model / Item	PLK-J2516-YU	PLK-J2516R-YU
Stitching style	Single-needle lockstitch	
Hook	Double-size shuttle	Double-size rotary
Needle	DP×17 #18	
Sewing area (X x Y) (mm)	300 x 200	
Max. speed (Note 1) (rpm)	M3 motion: 2300	
Feeding system	M3 motion : Intermittent and/or continuous	
Stitch length (mm)	0.1 to 20.0 (min. resolution 0.1)	
Max. stitches	20 000 stitches/pattern	
Max. patterns (Note 2)	9 000	
Memory medium	USB flash memory	
Axis control	5 axis : Head & presser foot & thread tension & X & Y	
Upper shaft motor	Mitsubishi Electric 750W direct servo motor	
Lower shaft motor	-	
Work holder	Jig-eject system in option	
Needle bar stroke (mm)	41	40
Thread take up lever stroke (mm)	68	73
Presser foot drive	Direct drive by stepping motor	
Presser foot lift stroke	Max. 24.0 (step: 0.1)	
Presser foot stroke	Digital adjustment stroke: 0.0 to 10.0mm	
Upper thread tensioner	Manual or digital switchover method	
	Input data save function provided	
	Stitching direction-compatible automatic adjustment function provided	
Trim knife type	Arc engagement type by main motor of from cam	
Oil lubrication	Spray method: Spray time adjustment	
Operation panel	6.5-inch color LCD touch panel with USB port	
External device Input / Output	Total: 27 NPN + 2 Analogic (Free : 21 NPN / 2 Analogic)	
Interface	Ethernet (Note 3) (CC-Link IE Field Basic compatible), USB communication	
Barcode reader	USB barcode reader (HID) supported	
Detection: Thread break, skipped stitch	Option	
Stitch alert	Option	
Programmable controller	Dual original step sequence function	
Outline dimensions (mm) (WxDxH)	1200 x 1144 x 1230	
Mass (kg)	187	
Power supply	200 to 240V single-phase/three-phase	

*1:Sewing speed may be limited by the type of sewing material, presser weight and stitch length, etc.

*2:The max. patterns may be limited depending on the number of stitches of each pattern in the memory.

*3:Ethernet is a trademark of Fuji Xerox Co., Ltd.

INDUSTRIAL SEWING MACHINES

PLK-J2516-YU

Shuttle: S
Rotary : R

⚠ Safety Precaution — To ensure safe and proper use of the products in this document, please make sure to read the relevant instruction manuals and technical notes before use.

Note: Be sure to confirm the details of the warranty when making a purchase.

MITSUBISHI ELECTRIC CORPORATION
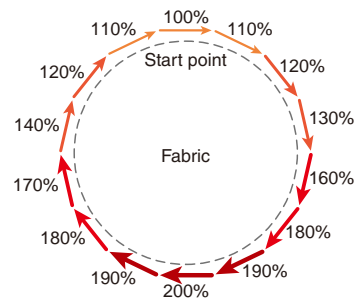
MITSUBISHI ELECTRIC

The evolution of future sewing
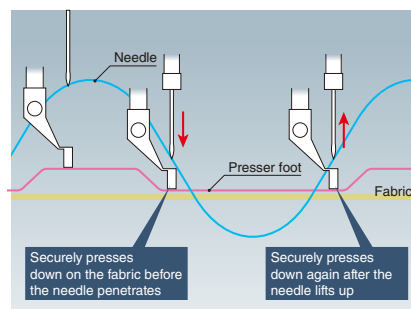
Everything to improve usability

Optimizes thread tightness in all stitching directions
Digital tension function

The sewing machine selects the optimum tension according to the stitching pattern.

Stitch error detection option
(skipped stitches, thread breaks)

Oiling of the upper shaft is digitally controlled so only a minimal amount of oil is needed.

Easy to see operations and simple 6.5-inch color operation panel

Independent presser foot motion

The fabric pressing time and timing can be adjusted digitally to prevent the fabric from lifting up.
This contributes to stable needle location and reduced stitch skipping.

Securely presses down on the fabric before the needle penetrates

Securely presses down again after the needle lifts up

M3 Motion : Mix between intermitent and continuous needle motion
This unique feature reduces vibration and noise to optimize the sewing.

Sewing machines equipped with "Pokayoke" to prevent human error
Materials thickness confirmation function ensures proper material layers before sewing starts.

Quality assurance from quality control
Equipped with the seam error detection function
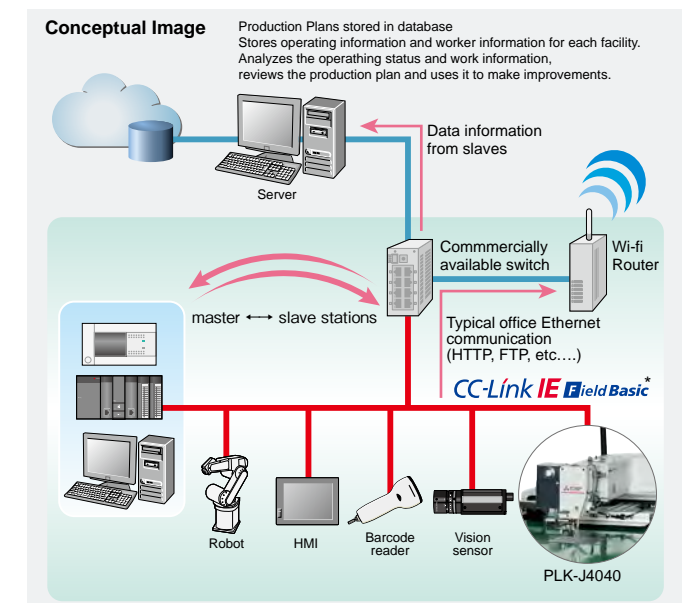The history and condition of every stitch can be transferred to storage device for future traceability.

E-stitch : Prevention of skipped stitches at start-up
Perfect thread maintain at start-up.

Next-generation IT factory management

Integrated FA-IT solutions driven by Mitsubishi Electric

e-F@ctory

e-F@ctory enables visualization of operating status through enhanced communication functions, contributing to flexible factory management. The best partner for sewing machines and other Mitsubishi Electric FA products.

Conceptual Image

Production Plans stored in database
Stores operating information and worker information for each facility. Analyzes the operathing status and work information, reviews the production plan and uses it to make improvements.

Server
Data information from slaves
Wi-fi Router
Commmercially available switch
master ↔ slave stations
Typical office Ethernet communication (HTTP, FTP, etc....)
CC-Link IE Field Basic
Robot
HMI
Barcode reader
Vision sensor
PLK-J4040