Specifications

Item \ Model	PLK-J12060	PLK-J12060R	PLK-J12060R3	PLK-J12060RH
Stitching style	Single-needle lockstitch			
Hook	Double-size shuttle hook	Double-size rotary hook	3-fold size rotary hook	6-fold rotary hook heavy
Needle	DP×17 #18	DPx17 #21	DPx17 #21	DD×1 #26
Sewing area (X x Y)	1200mm x 600mm			
Max. speed [Note 1]	M3 motion: 2000 rpm	M3 motion: 2300 rpm	M3 motion: 2300 rpm	M3 motion: 1000 rpm
Feeding system	M3 motion : Intermittent and/or continuous			
Stitch length	0.1 to 20.0mm (min. resolution 0.1mm)			
Max. stitches	20,000 stitches/pattern			
Max. patterns	9,000 [Note 2]			
Memory medium	USB flash memory			
Axis control	7 axis : Head & Hook & presser foot & thread tension & trimmer & X & Y			
Upper shaft motor	Mitsubishi Electric 750W direct servo motor			
Lower shaft motor	Mitsubishi Electric 400W direct servo motor			
Work holder	Chucking system			
Needle bar stroke	41 mm	40 mm	42 mm	51 mm
Thread take up lever stroke	78 mm	73 mm	2 positions : 77mm / 74mm	100 mm
Presser foot drive	Direct drive by stepping motor			
Presser foot lift stroke	Max. 24.0mm variable in 0.1mm step			Max. 30.0mm variable in 0.1mm
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	Horizontal engagement LU type by stepping motor			
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			
Thread break detection, skipped stitch detection	Standard equipment			Option
Stitch alert	Option			Standard equipment
Programmable controller	Dual original step sequence function			
Outline dimensions	2522 x 2112 x 1205 mm (WxDxH)			
Mass	630 kg			640 kg
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.

⚠ 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.

eco Changes — for a greener tomorrow

MITSUBISHI ELECTRIC
Changes for the Better

INDUSTRIAL SEWING MACHINES
PLK-J12060

Shuttle: S
Rotary: R
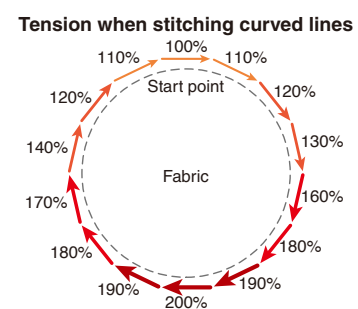## Rotary x3: R3
Rotary Heavy: RH

The evolution of future sewing
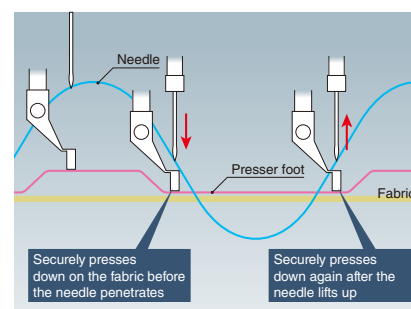
Everything to improve usability

Optimizes thread tightness in all stitching directions
Digital tension function

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

Tension when stitching curved lines

100%
110%   110%
Start point
120%   120%
140%   130%
Fabric   160%
170%
180%   180%
190%   200%   190%

Easy maintenance!
New arm-shaped, glass epoxy slide plate

The bobbin can be replaced from the top

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.

Needle
Presser foot
Fabric
Securely presses down on the fabric before the needle penetrates
Securely presses down again after the needle lifts up

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.

M3 Motion : Mix between intermitent and continuous needle motion

This unique feature reduces vibration and noise to optimize the sewing.

E-stitch : Prevention of skipped stitches at start-up

Perfect thread maintain at start-up.

Modular concept

4 different hooks available for the highest flexibility and to meet all your specific needs:
Shuttle / Rotary / Rotary x3 / Rotary Heavy.

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 operashing status and work information,
reviews the production plan and uses it to make improvements.

Data information from slaves
Server
Commmercially available switch
Wi-fi Router
master ←→ slave stations
Typical office Ethernet communication (HTTP, FTP, etc....)
CC-Link IE Field Basic
Robot   HMI   Barcode reader   Vision sensor
PLK-J12060