

## Specifications

Item	Model	PLK-J10050	PLK-J10050R	PLK-J10050R3	PLK-J10050RH
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	DP×17 #21	DP×17 #21	DD×1 #26
Sewing area (X x Y)		1000mm x 500mm			
Max. speed <sup>(Note 1)</sup>		M3 motion: 2000 rpm	M3 motion: 2500 rpm	M3 motion: 2500 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 <sup>(Note 2)</sup>			
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 <sup>(Note 3)</sup> (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		2122 x 1941 x 1205 mm (WxDxH)			
Mass		600 kg			610 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.

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# INDUSTRIAL SEWING MACHINES

## PLK-J10050

Shuttle: S

Rotary: R

Rotary x3: R3

Rotary Heavy: RH





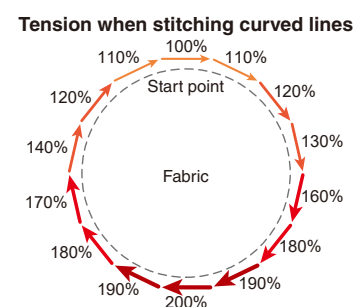


## The evolution of future sewing

### Everything to improve usability

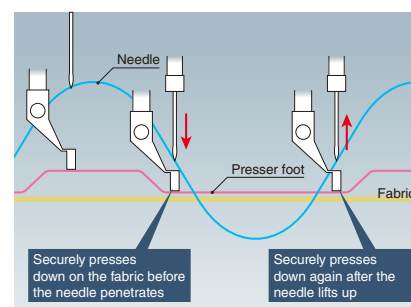
#### Optimizes thread tightness in all stitching directions Digital tension function

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



#### 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.



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

#### 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 intermittent 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-Factory**

e-Factory 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.

