Lock-stitch chenille Taping & Coiling embroidery machine

TLMX series

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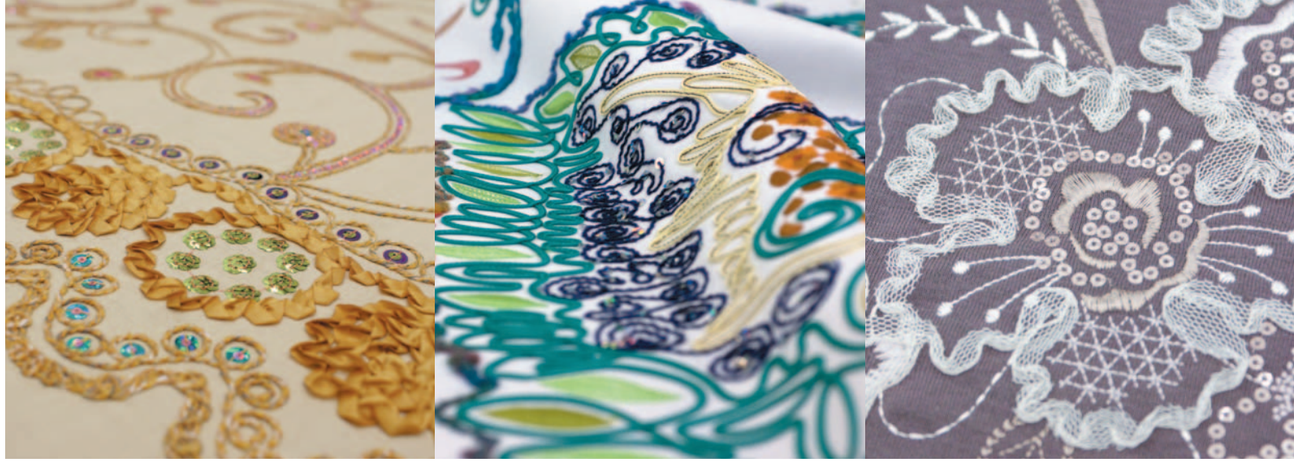
TAJIMA

Multi-head Automatic Embroidery Machine

TLMX series

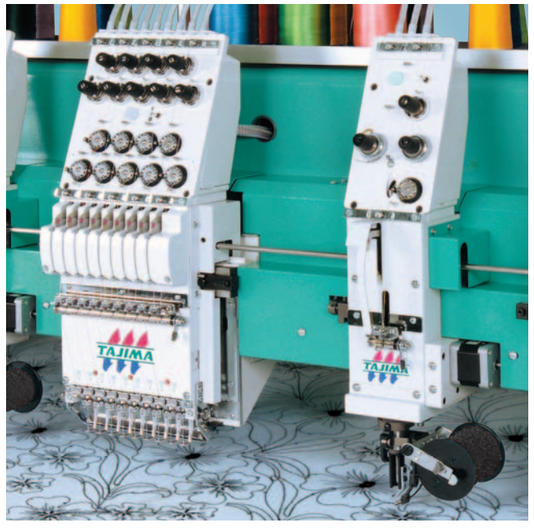
Lock-stitch chenille
Taping & Coiling embroidery machine

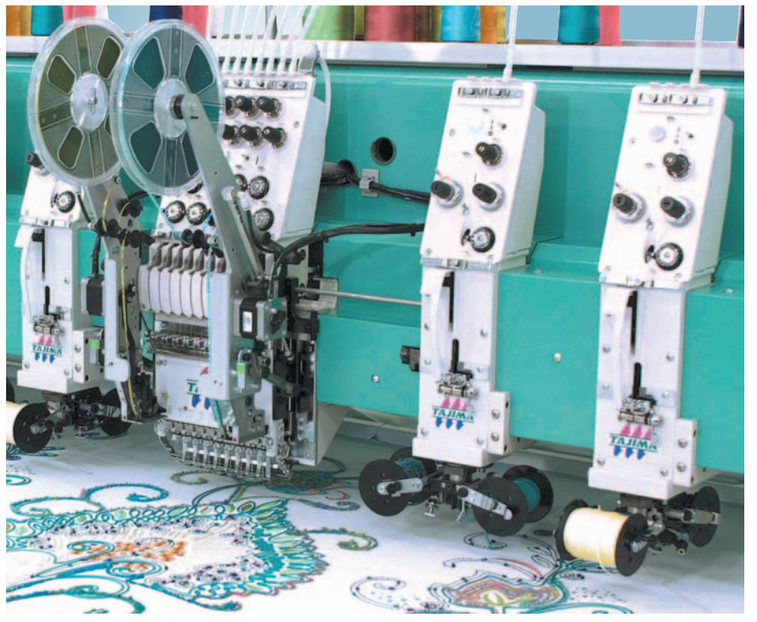
Innovative combination embroidery machines to create a greater diversity of variations



TLMX Mixed Type

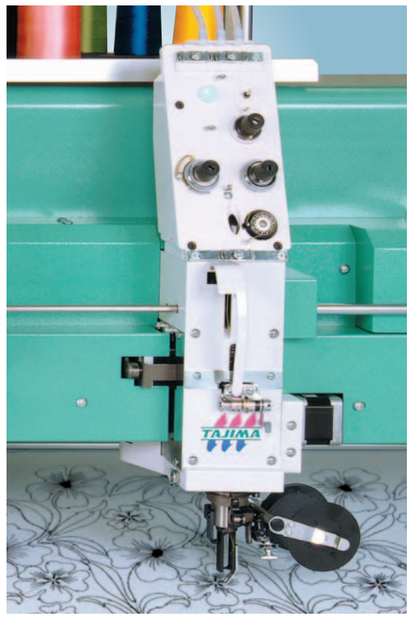
The mixed type series, integrating lock-stitch chenille embroidery heads and standard embroidery heads in pairs!
High-performance models in drastic pursuit of functionality and operability





TLMX Triple Mixed Type

The triple mixed type joins two lock-stitch chenille embroidery heads and a standard embroidery head!
Your embroidery variations will be expanded, using a maximum of 4 kinds of materials.



TLMX 100/T00 Series

100 Series is specialized for embroidery with lock stitch chenille embroidery heads.
T00 series is also available with 2 lock stitch chenille heads positioned in pairs.

FEATURES

- Brilliant embroidery arrangements are available, using cord or tape materials!
- Wide variations of stitch types are easily selectable through the operation panel.
- High quality lock-stitch chenille embroidery, stitched at a max. of 1,000 rpm

TLMX series

Lock-stitch chenille
Taping & Coiling embroidery machine

Numerous state of the art technologies are built-in to stitch a wealth of materials securely. Stable stitching has been brought to reality at high speeds.

Lock-stitch chenille head

Lock-stitch chenille heads with a precision M-axis drive for Bobbins and highly sophisticated Nipple operation to stitch materials securely have integrated the most advanced technologies to create higher value added products.

Attachment in compact units

Attachments for Taping, Coiling, Zigzag swing stitch embroidery are supplied in units. It is easy to replace the units with a screw. Once adjustment is done, readjustment is not necessary. Working efficiency has been drastically increased.

High-speed operation at a Max. of 1,000 rpm

Max.1,000 rpm is available for taping or zigzag swing stitch embroidery, max. 500 rpm for coiling embroidery. High speed operation contributes to improvement of productivity.

M-axis free control system to allow adjustment head by head

Bobbins can be moved as necessary by using the Tension base switch.
This facilitates embroidery operations like bobbin exchange or machine adjustment in units of heads.

M-axis start direction control to secure stitching

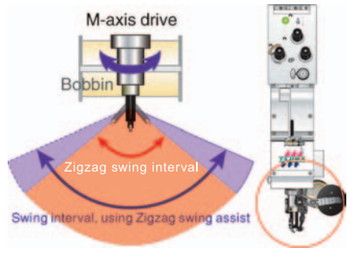
To prevent stitch start errors, this function stops the bobbin and guide temporarily in the stitching direction after stitching the materials.

Zigzag swing assist <PAT.P>

Zigzag swing interval is adjustable in the range of 6-16mm on the operation panel for zigzag swing stitches.This function also gives swing interval to the bobbins to stitch even thick materials securely, avoiding contact with the needle.

Zigzag swing stitch data automatic generator <PAT> to generate frame movement

This function automatically generates 6 kinds of zigzag swing stitch patterns based on the running stitch data. They can be selected according to the type of material or embroidery design. (See "Stitch Variations".)



Thread breakage detector and Middle thread guide with thread take-up spring in the pursuit of stable stitching

Thread breakage detector and Middle thread guide with take-up spring have been introduced, both of which are well reputed with multicolor heads.


Thread breakage detector


Middle thread guide with thread take-up spring

W-Bobbin attachment to develop your design arrangements

2 bobbins are mountable to a lock-stitch chenille head. This enables 2 kinds of embroidery stitches of taping and zigzag swing stitch embroidery without replacing bobbins, reducing the time for replacement of materials and developing the potentials of your designs.


W-Bobbin attachment

Automatic Nipple lifting function to improve working efficiency

Both the Needles and Nipples are lifted up to their retracting positions and bobbins return to the fixed position right after completion of embroidery.
This facilitates embroidery works like frame exchange.

Nipple stroke adjustment in response to materials <PAT>

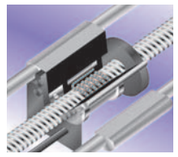
Nipple stroke can be adjusted on the operational panel according to the material being used. Adjustment range is a max. of 8mm from the lower dead point.
The height of the lower dead point is also adjustable up to 3mm.
Nipple stroke adjustment adds variations to the stitch finishing conditions on the materials.

Standard head

High-performance multicolor head full of state-of-the-art technologies

A ball screw drive system has been adopted to reduce the time for color change operation remarkably

A ball screw drive system, widely used for precision positioning control of industrial machinery, has been introduced to the color change drive system. The time required for color change from the first to the ninth needles has been reduced from about 3 to 1.1 seconds, drastically improving productivity of multicolor embroidery.

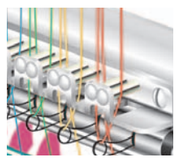


Thread breakage detecting system to prevent production error

A sensor monitors thread movement at all times.
If the upper or under thread is broken, this system detects it in an instant and stops stitching to prevent embroidery production from continuing with broken thread. The sensitivity of the sensor is adjustable on the operation panel, depending on the embroidery conditions.

Middle thread guide with thread take-up spring, keeping the balance of upper and under threads

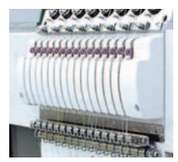
The thread take-up spring picks up excess thread and stabilizes the balance of upper and lower threads at high speed operation, improving thread tension. Thread breakage has been reduced by 30 - 50% (compared with our previous specification) due to extra fine satin stitches (2mm or less), needle tip or thread untwisting etc.



Spiral tube, Take-up lever guard <PAT>, paying attention to safety

Spiral tubes between the upper thread course stand and the individual tension base protect upper threads against environmental wind, generated by air conditioners etc. which causes thread to be entangled with each other. Furthermore, uniquely developed covers are mounted onto the take-up levers to prevent threads from getting entangled during high-speed operation and to improve safety in working environments.


Spiral tube


Take-up Lever Guard

Technologies and functions

Supporting every customer in comfort

A user-friendly color LCD operation panel

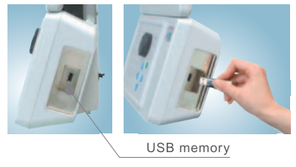
An easy-to view 17 inch color LCD operation panel and special use keys are designed in a compact interface to enable operation by instinct. The job currently being embroidered on the machine is displayed on the screen inreal time <PAT>.

Sleep mode function to save energy

The energy saving function of a personal computer has been introduced to the operation panel. Holding down a single button sets the machine in the standby status and pressing it once more cancels this function. Unnecessary power consumption can be kept down without turning off the main power.

Data input / output

Design data input or output is available, using USB memory.
* Commercialy available USB memory card reader/writer is applicable


USB memory

"Condition memory" function, supported by Tajima binary format

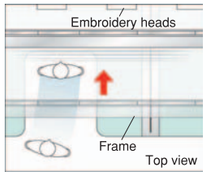
Design start position and stitching conditions, registered by an embroidery machine, can be output to USB memory or other media together with the design data. They can be easily recalled and reusable for reproduction.
Tajima binary data format (TBF) is supported to create more complicated designs.

LAN port is prepared for easier access to networking function.

LAN port is prepared for easy access to networking function, using DG/ML by PULSE (option).

Table offset switch <PAT.P>

This special switch is mounted under the table of a jumbo embroidery machine to retract the frame temporarily to any position out of the way for jobs such as threading.



TLMX series Lock-stitch chenille
Taping & Coiling embroidery machine

OPTION

Automatic frame changer (AFC)

An automatic frame changer for continuous embroidery of fabric in roll.
Powerful and high performance AFC system has incorporated a fabric clamping device <PAT.P> to hold the fabric, a fabric snaking feed prevention mechanism and a fabric stretching mechanism, allows you to create delicate and sophisticated continuous embroidery.

Sequin Device Ⅳ

Sequins in diameter of 2 - 22mm are applicable!
Wide range of sequins from small to large sizes or in various shapes like noncircular or eccentric type are applicable for creation of you designs as needed, depending on your applications.

Sequin device Ⅲ twin tipe <PAT.P>

It is now possible toembroider a max.of 4 different sizes,shapes and colors on each head! 2 kinds of sequins on one side can be interchanged and embroidered at high speed as desired. This next-generation Sequin device permits more design options and improves production efficiency.

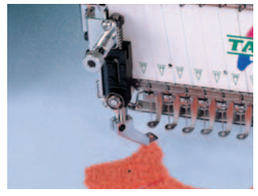
Zigzag cording device

This device is an exclusive-use option for zigzag swing stitch embroidery to rank up your designs with new materials. Just install to a normal embroidery head and arrange your regular designs with delicate cording embroidery.

Automatic lubrication system

Automatic lubrication is performed for improved production efficiency and maintenance free operation.

High-speed cording device(KB-2M)

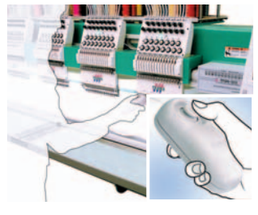


Various kinds of cording materials can be stitched at high speeds. Exchange of the attachment enables looping embroidery.
Simple adjustment of the height varies stitch volume and expands the range of embroidery expressions.

Boring device

A special knife bores fabric and the device overlocks the hole.Hole size is adjustable as needed and the shape can be created in the course of design data making.

Jog remote-controller <PAT>



The jog remote-controller has consolidated the function of frame travel operations. It is independent of the operation panel and allows to move the frame while the operator is close to the needles.

Special Attachments/Guides

Replacement of Attachments or Guides expands your embroidery variations and allows you to create unique expressions with ease.

*Standard type Guide base is used in common.

STITCH VARIATIONS

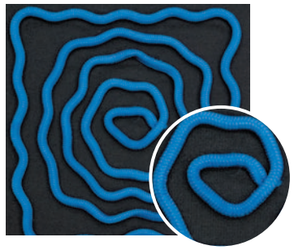
Taping embroidery

Taping embroidery stitches the center of tape or cord materials.
The standard type Guide allows basic taping embroidery.
Application of optional Guides expands the range of embroidery variations.

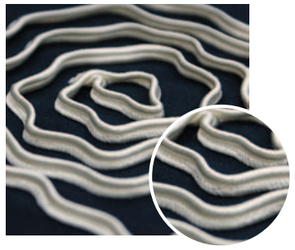
●Taping embroidery

●Thin cord embroidery (Optional)

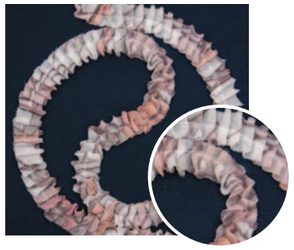
●Blind embroidery (Optional)



●Standing embroidery (Optional)

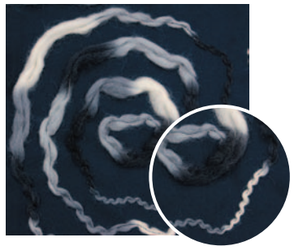


●Frill embroidery (Optional)



●Tuck embroidery (Optional)

●Slub cord embroidery (Optional)



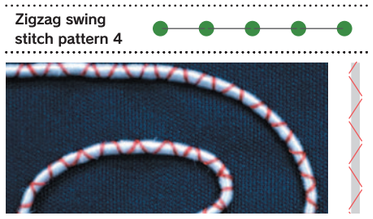
Zigzag swing stitch embroidery

Zigzag swing stitches fabric by swinging the zigzag swing lever to right or left, using Zigzag swing attachment.
6 swing stitch patterns are selectable. Thin materials, ultra thick materials, sequin spangle cords, which have decorative parts and cannot be stitched by cording embroidery, can be embroidered in zigzag swing stitches.

Original stitches
Automatically generated stitches

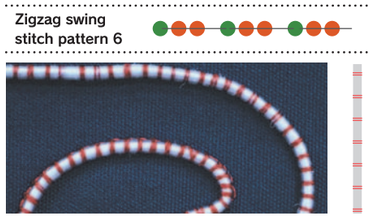
●Zigzag swing stitch pattern 4

Zigzag swing lever will swing right or left for every original stitch.



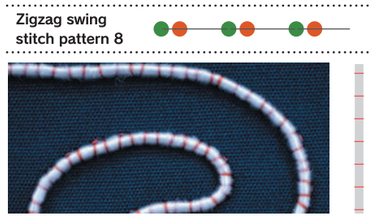
●Zigzag swing stitch pattern 6

2 stitches are added to the needle locating position of the original stitch data.



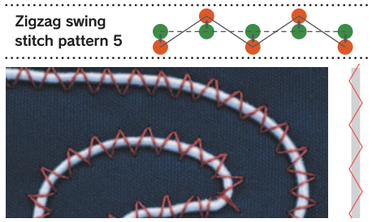
●Zigzag swing stitch pattern 8

1 stitch is added to the needle locating position of the original stitch data.



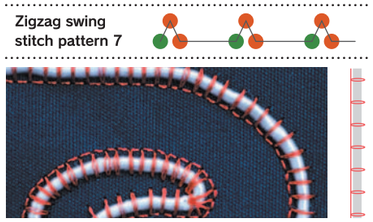
●Zigzag swing stitch pattern 5

A stitch is added in the opposite direction of the zigzag swing lever swinging direction for the original stitch. This allows you to stitch thicker materials.



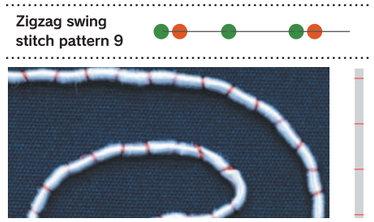
●Zigzag swing stitch pattern 7

A stitch is added to the needle locating point of the original data and in the opposite direction of the zigzag swing lever swinging direction.This allows you to stitch thicker materials.



●Zigzag swing stitch pattern 9

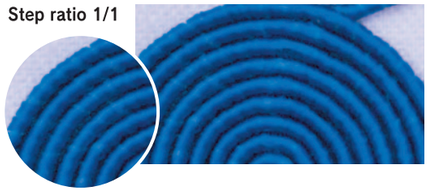
A stitch is added to the needle locating position of odd-numbered stitches in the original stitch data. Material is stitched with every odd-numbered stitch.



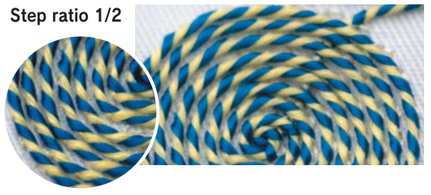
Coiling embroidery

3 kinds of materials - embroidery thread, core thread and coiling thread are used:
Core thread is stitched while it is wound by coiling thread. The winding times of material can be set from 4 steps (1/1, 1/2, 1/3, 1/4).

Step ratio 1/1



Step ratio 1/2



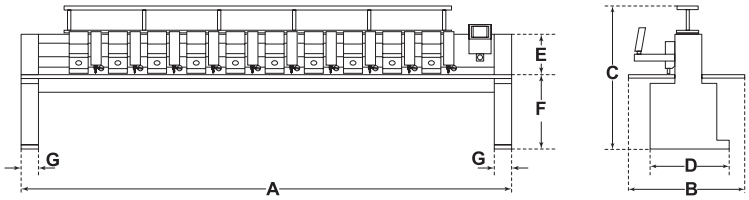
TLMX Mixed Type/Triple Mixed Type

Model	Needles	Pairs	Lock-stitch chenille heads	Multicolor heads	Head interval	Embroidery space (mm)		A	B	C	D	E	F	G
						D x W (offset)	Continuous(w)							
TLMX-912	9	12	12	12	550	1,200 x 550 (230)	6,600	8,645	2,840	1,630		430		
TLMX-915	9	15	15	15	550	850 x 550 (230)	8,250	10,295	2,140	1,730		530		
TLMX-1202	12	2	2	2	645	1,000 x 645 (290)	1,290	3,545	2,440	1,630		430		
TLMX-1208	12	8	8	8	645	1,000 x 645 (290)	5,160	7,415	2,440	1,630		430		
TLMX-1209	12	9	9	9	645	1,000 x 645 (290)	5,805	8,060	2,440	1,630	1,300	430	833	200
TLMX-1210	12	10	10	10	645	1,000 x 645 (290)	6,450	8,705	2,440	1,630		430		
TLMX-T0610	6	10	10×2	10	655	1,200 x 655 (380)	6,550	9,115	2,840	1,730		530		
TLMX-T0908	9	8	8×2	8	745	1,200 x 745 (425)	5,960	8,570	2,840	1,630		430		
TLMX-T1204	12	4	4×2	4	840	1,200 x 840(485)	3,360	6,210	2,840	1,630		430		

[Example of a model code]

TLMX-12 10 a=model name, b=number of needles, c=number of pairs
a b c

Consultation for orders of special embroidery with embroidery space, number of heads, number of needles etc. is also available.



Factory options		Automatic lubrication system, Jumbo rotary hook, Automatic frame changer, Sequin device Ⅳ, Sequin device Ⅲ twin type, Zigzag cording device			
Options		Jog remote-controller			
	Standard heads	High-speed cording device, Boring device, Emb. lamé attachment			
	Lock-stitch chenille heads	Special guide (for frill/tuck embroidery, slub cord embroidery)			
		Special attachment (for tuck embroidery, thin cord embroidery, blind embroidery, standing embroidery)			
Revolution		Standard embroidery heads	Lock-stitch chenille heads		
		Standard embroidery	Taping embroidery	Zigzag swing stitch embroidery	Coiling embroidery
		Max.1,000rpm			Max.500rpm
Stitch length		0.1mm～12.7mm			
Power consumption		2.1kw			
Power supply		3-phase 200-240V 50/60Hz, 380-440V 50/60Hz is also available with an optional transformer.			
Motors		AC Servo motorx1 (Main shaft), Pulse motorx2 (Frame), Pulse motorx2 (Standard heads), Pulse motorx4 (Lock-stitch chenille heads), Pulse motorx1 (Color change)			

* Consultation for your orders on other Y-axis embroidery space 680, 1,000, 1,200 or 1,500mm is also available.
* We reserve the right to change the specification for improvements without previous notice. Running speed may vary, depending on machine models, frame types and/or applicable conditions.
* Effective embroidery space may vary, depending on type of product to be embroidered and/or applicable conditions. * No design nor registered trademark of the products contained in this catalog may be used without the prior permission.

TLMX 100/T00 series

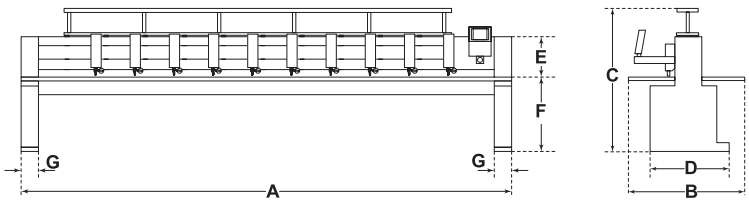
Model	Needles	Lock-stitch chenille heads	Head interva	Embroidery space (mm)		A	B	C	D	E	F	G
				D x W	Continuous(w)							
TLMX-110	1	10	400	680 x 400	4,000	5,205	1,800	1,630	1,300	430	833	200
TLMX-112	1	12	345	680 x 345	4,140	5,295	1,800	1,630				

[Example of a model code]

TLMX-110 a=model name, b=number of needles, c=number of pairs
a b c

TLMX-T09 a=model name, b=number of pairs
a b

Consultation for orders of special embroidery with embroidery space, number of heads, number of needles etc. is also available.



Factory options	Automatic lubrication system, Jumbo rotary hook, Automatic frame changer			
Options	Jog remote-controller			
	Special guide (for frill/tuck embroidery, slub cord embroidery)			
	Special attachment (for tuck embroidery, thin cord embroidery, blind embroidery, standing embroidery)			
Revolution	Taping embroidery	Zigzag swing stitch embroidery	Coiling embroidery	
	Max.1,000rpm		Max.500rpm	
Stitch length	0.1mm～12.7mm			
Power consumption	1.9kw			
Power supply	3-phase 200-240V 50/60Hz, 380-440V 50/60Hz is also available with an optional transformer.			
Motors	AC Servo motorx1 (Main shaft), Pulse motorx2 (Frame), Pulse motorx4 (Lock-stitch chenille heads)			

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