

JUKI®

LZ-2290A Series

Computer-controlled, Direct-drive, High-speed, 1-needle, Lockstitch, Zigzag Stitching Machine



LZ-2290A Series

A single LZ-2290A Series machine is extremely versatile and can perform many different stitching patterns.

The next-generation standard zigzag stitching machine LZ-2290A Series

It comes in two different models, one with standard specifications and the other with an anti-material slip capability. For both models, there are two subclass models, i.e., the "minute-quantity lubrication type" and the "dry-head type", which eliminates oil stains on sewing products. You may select the best-suited model from the diversified subclasses according to your applications.

The machine is also provided with a newly-developed operation panel, the IP-110. With this operation panel, you can easily establish settings for stitch shapes and stitches, as well as conduct setup changing, thereby achieving further increased availability.



The machine is provided with many different stitching patterns.

- * The machine is provided as standard with fourteen different basic zigzag stitching patterns grouped into eight different types. You can choose the zigzag stitching pattern you want directly on the operation panel (IP-110) of the machine body. The zigzag width, needle throw position and number of blind stitches can also be easily adjusted on the operation panel.
- * A single unit is extremely versatile and can perform straight stitching, standard zigzag stitching, 2-step zigzag stitching, 3-step zigzag stitching, scallop stitching, and blind stitching. As a result, the system is available for a far wider range of applications.

■ Sewing pattern

Name of pattern	Straight stitch	Standard zigzag	2-step zigzag	3-step zigzag	Scallop (left)				Scallop (right)				Blind stitch (left)	Blind stitch (right)	Custom pattern
					Standard	Crescent	Equal-width	Equal-width	Standard	Crescent	Equal-width	Equal-width			
Stitch pattern															
Number of stitches	1	2	4	6	24		12		24		12		2 + α	Max. 500	

Advanced operation panel IP-110

- * A liquid crystal display has been adopted. It displays stitch shapes, zigzag width and standard lines with pictographs and settings all together on one screen to improve operability of the panel.
- * The machine has added capabilities that make the most out of the computer-controlled sewing machine functions, such as program stitching (constant-dimension sewing), cycle sewing and continuous sewing. With these capabilities, the machine is able to respond to sewing in various processes.
- * Custom pattern data can be stored using the same CompactFlash™ that is widely used for digital cameras. This enables the sharing of custom patterns, not only in one plant, but also among two or more sewing plants, by exchanging data via e-mail systems.



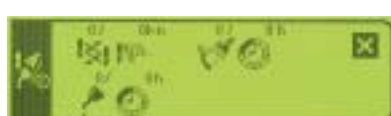
Example of screen displays



Scallop stitch shape setting



Continuous stitching



Maintenance function

Custom patterns can be created on the operation panel with ease.

* You can quickly create an original stitching pattern on the operation panel and then try to sew it on a trial basis.

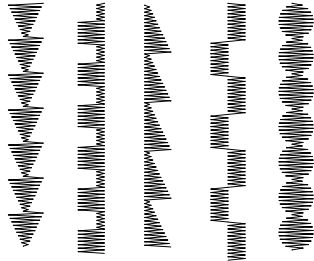
A wider variation in design enables the machine to respond to wider applications, such as foundations, ladies' wear and men's wear.

* The machine requires neither a programming device nor ROM writer.

● Custom patterns

- Original sewing patterns can be quickly created and stored in memory.
- Max. 20 patterns, Max. 500 stitches / pattern.

(Example)

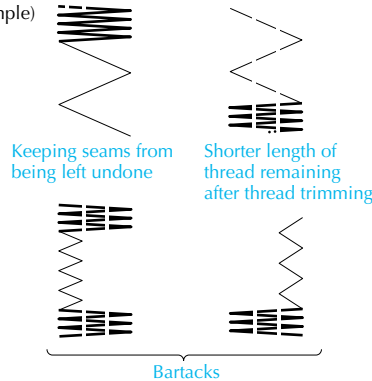


● Condense custom patterns

*Automatic reverse feed function is required.

- The user can specify original condense custom patterns. This type of pattern is very effective at producing improved bartacks and keeping seams from being left undone.

(Example)



- Start and end of sewing: A maximum of 20 different patterns, with a max. of 64 steps/pattern.
- The machine, with its automatic thread trimmer, is able to leave shorter thread after thread trimming as compared with the conventional machines.



Abundant variation in stitching.

● Mirroring of scallop stitches

- The machine produces beautifully finished scallop stitches on front part of a girdle, etc.
- For the scallop stitch, the starting position for sewing can be selected between the top and bottom of a scallop.

(Example)

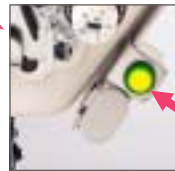
Stop the sewing machine and press mirror inversion switch.

Mirror inversion operation LED lights up.

Afterwards inversion operation

Stitching direction

Scallop: 1 pattern



Mirror inversion switch

● Setting the number of stitches for a blind stitching pattern

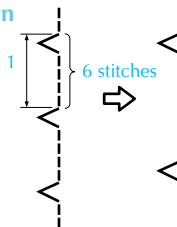
(Example)

- The user can set the number of stitches for a pattern. (3 to 250 stitches.)

Blind stitch: 1 pattern

6 stitches

10 stitches



● Setting of the left and right stopping positions

- The left and right stopping positions of the needle can be controlled.
- These settings are effective when performing corner stitching for label attachment or decorative stitching on the fronts of girdles.

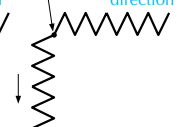
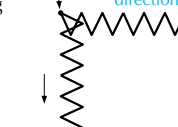
(Example)

Left stopping position of the needle

Right stopping position of the needle

Stitching direction

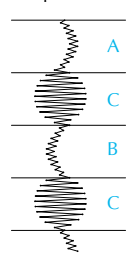
Stitching direction



● Continuous stitching

- Custom patterns can be joined.
- Max. 10 patterns, Max. 20 steps / pattern, and Max. 500 stitches / step

(Example)

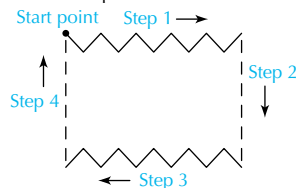


Pattern combining patterns A, C, B and C

● Cycle sewing

- The machine is able to sew different patterns while changing them in sequence.
- Max. 10 patterns, Max. 20 steps / pattern, and Max. 500 stitches / step

(Example)



● Program stitching

- As many as 20 different constant-dimension stitch patterns can be programmed. The maximum number of stitches that can be set for one step is 500.

● Multi-layer stitching

- It is used for reinforcing fastening stitches or bartacks.

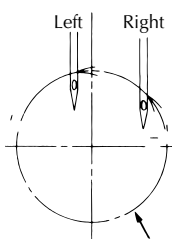


Soft-texture seam quality.

* The thread tension mechanism, bobbin case and feed timing have been improved to produce soft-textured seams.

* The machine is equipped with a hook-driving shaft-offset mechanism which places the hook-rotating shaft off-center from the center of zigzag stroke of the needle. This mechanism allows the blade point of the hook to catch the needle thread every time regardless of the needle throwing direction. As a result, the machine is immune to sewing troubles such as stitch skipping and thread breakage, annoyances likely to occur with the conventional machine, especially when the needle throws to the right.

■ Hook-driving shaft offset mechanism



The position at which the blade point of the hook tacks the thread is almost uniform.

* For the minute-quantity lubrication type hook, the inner hook is finished with titanium to keep it from becoming hot. The machine requires only a very small quantity of oil. This prevents oil stains on the material and improves durability of the hook. In addition, the hook configuration is carefully designed to avoid needle breakage.



Newly developed larger-size machine head with a long arm.

Wider space under the arm

JUKI has developed a new high-long arm machine head one size larger than the head for the conventional lockstitch machine. With its wider area under the arm, the machine permits easy handling of the sewing material for improved operability. The shape of the jaw gives the operator a clear view of the area around the needle.

Reduced noise and vibration

The machine comes with a more rigid and well-balanced machine head frame. This, coupled with the direct-drive method, dramatically reduces the noise and vibration of the machine and helps reduce operator fatigue.

Excellent basic performance.

Higher productivity

* In the standard zigzag stitching mode with the zigzag width set to 4mm, a frequently selected operating condition, the machine sews at a top speed of 5,000rpm, that is the world's highest available speed as a computer-controlled zigzag stitching machine, to increase in productivity.

(The dry-head type and the anti-material-slip type machines are excluded.)

The maximum zigzag width: 10mm

* A zigzag width of as large as 10mm is possible for all types of stitch shapes.

Sewing troubles such as stitch skipping or thread breakage will never occur even when sewing at the maximum zigzag width.

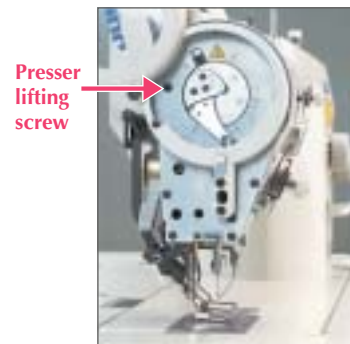
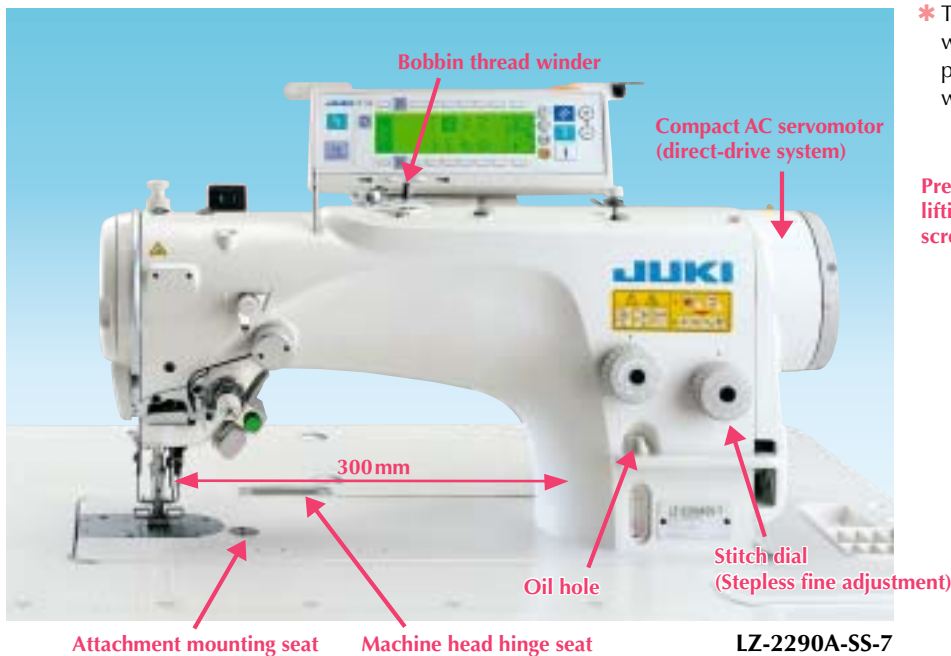
* A gauge that supports 10mm is required.

Increased feed amount

* Since the machine supports the feed amount as large as 5mm, this single machine is able to handle various feed types from standard feed to coarse feed. The coarse feed is effective when sewing stretched elastic tapes in processes such as elastic tape attachment to waistbands in shorts. (For the anti-material-slip type machine, the maximum feed amount is 2.5mm.)

* The stitch dial is a stepless adjustable type. This enables fine adjustment of the feed amount.

* The machine is provided as standard with a micro-lifter screw. This helps prevent material slippage or damages when using elastic materials.



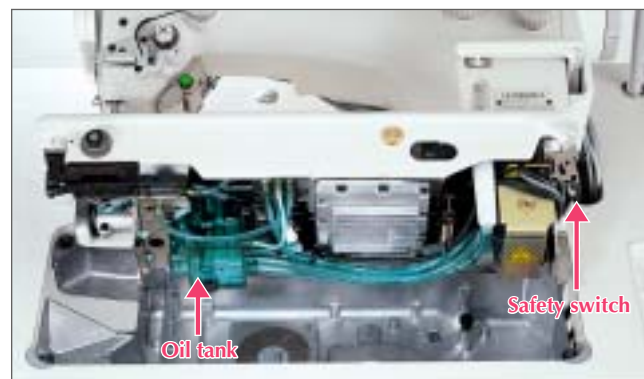
Excellent maintainability.

* The machine is structured without an oil pan. Oil is supplied from the oil tank installed on the machine to the hook and needle bar.

* In addition, the oil hole is located on the machine arm. This is quite helpful to female operators; since oiling can be carried out without tilting the machine head.

* Time and effort are conventionally required to remove the knee lifter and cover. This means the machine head can be easily tilted when cleaning the machine or performing maintenance.

* A safety switch is mounted on the machine head. If the machine is tilted with the power on, the safety switch is activated and disables the machine operation. In this disabled condition, the machine will never run even if you depress the foot pedal.



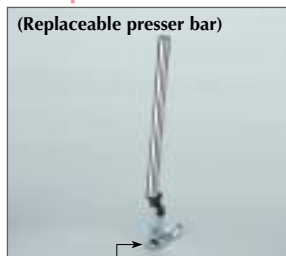
Designed with no oil pan (minute-quantity lubrication type)

Extensive product lineup for supporting many different processes

Options

Model	Part No.	Description	Features
—	400-10795	Automatic reverse feed kit	When this device is installed, the LZ-2290A-□□(without automatic thread trimmer) can perform reverse feed operation. (The mirroring switch for scallop stitching is used as the push-button-type reverse feed switch.)
—	400-03640	Optional switch kit	This handy switch is used to control various functions*. It is most effective when operating the machine in a standing position. (*Needle up/down correction, 1-stitch correction, reverse-stitch correction, auto lifter and thread trimmer, etc.)
AK121	GAK-A21000B0	Auto-lifter (pedal-driven)	—
—	D1501-583-H00	Presser bar	Presser foot connecting components (Replaceable presser bar)
	D1502-583-H00	Presser connecting rod	
	B1551-586-000	Presser foot connecting foot	
	SS-7090910-TP	Screw	
—	225-26578	Hard-point hook	The blade point of this hook prevents abrasion.
—	235-23152	Hook	Hook with non-rotational bobbin
	235-22550	Bobbin case (asm.)	
	235-23004	Bobbin	
V059	MAV-059000AA	Tension-free feeder (Tape feeder)	The amount of tape to be fed can be adjusted in accordance with the sewing speed of the machine. It is adaptable to processes for attaching reinforcement tape, attaching elastic tape or lace to foundation.
S189A	MAS-189000AA	Pneumatic type	Elastic tape tensing device
S189B	MAS-189000AB	Solenoid type	

● Presser foot connecting components



*Place a separate order for the presser foot

● Auto-lifter (pedal-driven)



AK121

When you place orders

Please note when placing orders, that the model name should be written as follows:

● Without automatic thread trimmer

Machine head type	Code	Type	Code
Standard	S	Standard	S
Dry-head	D	Anti-material-slip type	U

LZ2290A □ □ □ □

Automatic reverse feed function	Code
Provided	0B
Not provided	

For LZ-2290A-SU (anti-material-slip capability), select "Not provided."

● With automatic thread trimmer

Machine head type	Code	Type	Code
Standard	S	Standard	S
Dry-head	D	Anti-material-slip type	U

LZ2290A □ □ 7 □ □ □ □ □ □ □ □

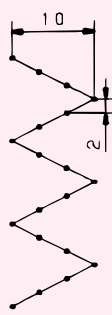
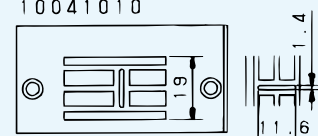
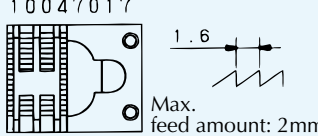
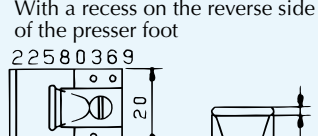
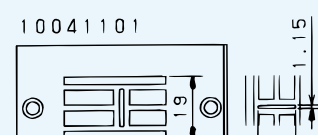
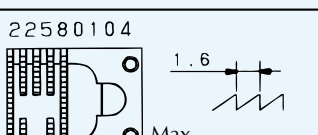
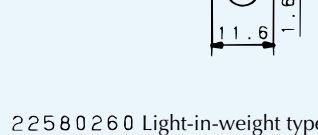
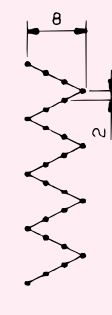

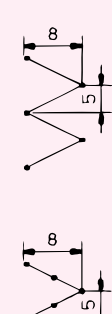
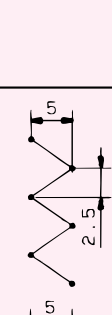
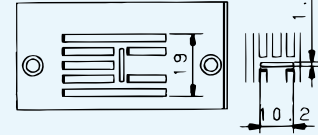
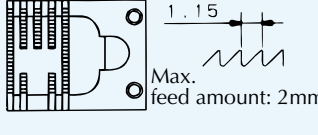
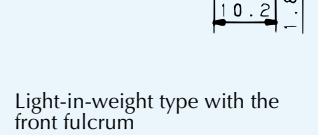
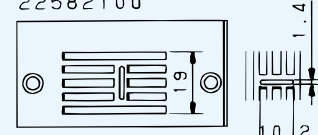
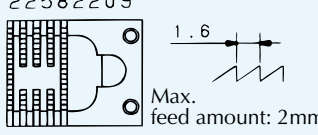
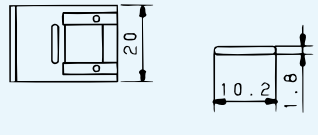
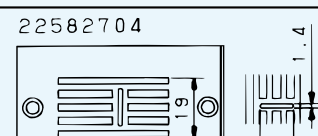
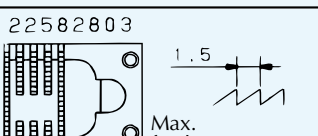
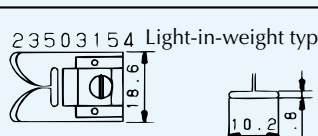
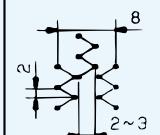
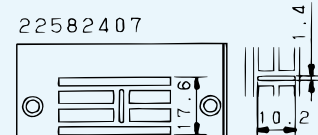
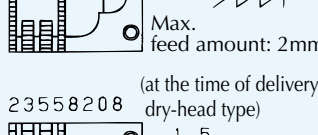
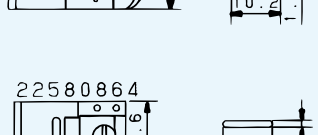
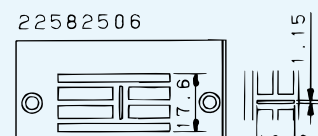
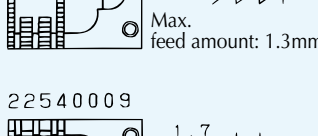
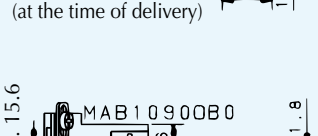
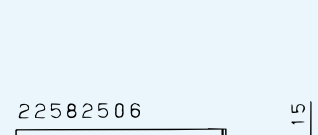
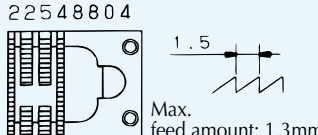
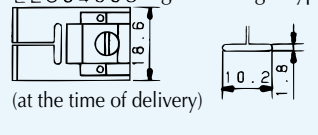
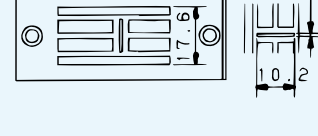
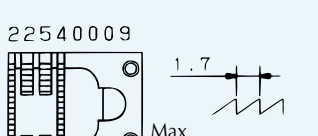
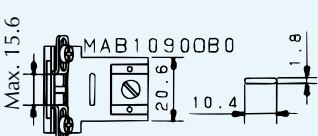
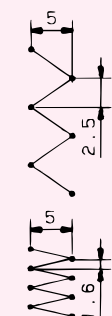
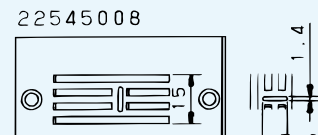
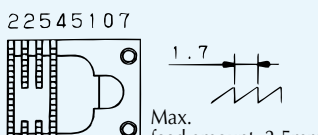
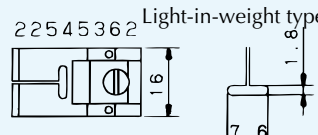
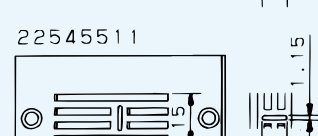
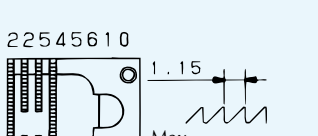
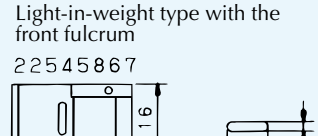
Wiper/Automatic reverse feed function		
Wiper	Automatic reverse feed function	Code
Provided	Provided	WB
Not provided	Provided	0B

Auto-lifter	Code
Auto-lifter (pedal-driven)	AK121
Not provided	

● To order, please contact your nearest JUKI distributor.

Type	Dry-head type		Minute-quantity lubrication type	
	Without automatic thread trimmer	With automatic thread trimmer	Without automatic thread trimmer	With automatic thread trimmer
Standard	LZ-2290A-DS	LZ-2290A-DS-7-WB	LZ-2290A-SS	LZ-2290A-SS-7-WB
	LZ-2290A-DS-0B		LZ-2290A-SS-0B	
Anti-material-slip capability	LZ-2290A-DU	LZ-2290A-DU-7-WB	LZ-2290A-SU	LZ-2290A-SU-7-WB
	LZ-2290A-DU-0B			

List of the major gauges

Max. zigzag width / Max. feed pitch	Throat plate	Feed dog	Presser foot (with finger guard)	Remarks	
	10041010 	10047017  <p>1.6 Max. feed amount: 2mm</p>	With a recess on the reverse side of the presser foot 22580369 		
	10041101 	22580104  <p>1.6 Max. feed amount: 2mm</p>	22580260 Light-in-weight type 		
   	22580005 	22580500  <p>1.15 Max. feed amount: 2mm</p>	Light-in-weight type with the front fulcrum 22580765 		
	22582100 	22582209  <p>1.6 Max. feed amount: 2mm</p>			
	22582704 	22582803  <p>1.5 Max. feed amount: 2mm</p>	23503154 Light-in-weight type 	<ul style="list-style-type: none"> • Suited to sewing tasks that require frequent changes in the needle throw position. 	
	(at the time of delivery) 22582407 	22581508 (at the time of delivery)  <p>1.5 Max. feed amount: 2mm</p>	23503253 Front fulcrum type 		
	22582506 	23558208 (at the time of delivery: dry-head type)  <p>1.5 Max. feed amount: 2mm</p>	22580864 		<ul style="list-style-type: none"> • Light-in-weight presser foot prevents jumping at the time of high-speed sewing.
	22548804 	22548804  <p>1.5 Max. feed amount: 1.3mm</p>	22584965 Light-in-weight type (at the time of delivery) 		
22540009 	22540009  <p>1.7 Max. feed amount: 5mm</p>	MAB10900B0  <p>Max. 15.6 20.6 10.4 1.8</p> <p>Presser foot with tape guide</p>			
	22545008 	22545107  <p>1.7 Max. feed amount: 2.5mm</p>	22545362 Light-in-weight type 		
	22545511 	22545610  <p>1.15 Max. feed amount: 1.6mm</p>	Light-in-weight type with the front fulcrum 22545867 		

Max. zigzag width / Max. feed pitch	Throat plate	Feed dog	Presser foot (with finger guard)	Remarks
	22548705 	22548804 Max. feed amount: 1.3mm	22548960 Light-in-weight type 	
	22548507 	22548408 Max. feed amount: 2.5mm	22547962 Light-in-weight type 	• For standard zigzag stitching
	22548010 	22548119 22541601 Max. feed amount: 2.5mm Max. feed amount: 5mm		
	22549000 	22549109 22541809 Max. feed amount: 2.5mm Max. feed amount: 5mm		
	22549208 	22549307 22541700 Max. feed amount: 2.5mm Max. feed amount: 5mm		
	22546519 	22546717 22546618 	22546964 Light-in-weight type 	
	22546212 	22546410 22546311 	Light-in-weight type with the front fulcrum 22547269 	
	MAD04060000 	MAD04070000 1.5	MAD040500A0 	• For attaching tape to brassieres, etc.
	22549604 	22549703 1.15	22549869 Light-in-weight type 	

- Max. feed is 5 mm for the LZ-2290A-SS(-7). Since the max. feed is 2.5 mm for the LZ-2290A-SU(-7), gauges have to be selected with care.
- In addition to the above-listed ones, many different gauges and attachments for zigzag stitching are available. Please contact us for details.

■ Specifications

Machine head type		Dry-head type		Minute-quantity lubrication type	
Model name	Without automatic thread trimmer	LZ-2290A-DS	LZ-2290A-DU	LZ-2290A-SS	LZ-2290A-SU
	With automatic thread trimmer	LZ-2290A-DS-7	LZ-2290A-DU-7	LZ-2290A-SS-7	LZ-2290A-SU-7
Type		Standard	Anti-material-slip capability type	Standard	Anti-material-slip capability type
Max. sewing speed	4,000rpm			5,000rpm	4,500rpm
	(for standard zigzag stitching, the zigzag width has to be set to 5mm or less.)			(for standard zigzag stitching, the zigzag width has to be set to 4mm or less.)	
Max. zigzag width	10mm (in increments of 0.1mm)				
Needle throw mechanism	Computer-controlled				
Max. Stitch length	5.0mm	2.5mm		5.0mm	2.5mm
	Stepless fine adjustment				
Lift of the presser foot	By hand: 5.5mm/By knee: 10mm				
Hook	Exclusive no-lubricating hook (plastic hook with special-purpose race surface)			DP hook (with titanium-treated inner hook)	
Thread take-up	Rotary type				
Needle (at the time of delivery)	438(#75), DP×5(#10)				
Number of patterns for standard stitching	8 types/14 patterns				
Custom pattern memory capacity	Internal memory	Max. 20 patterns			
	Extended memory	Max. 999 patterns			
Max. number of stitches	500 stitches/pattern				
Continuous stitching pattern	Max. 10 patterns, 20 step, 500 stitches/step				
Input function of the main unit	Provided as standard (operation panel)				
Bobbin thread winder	Built-in machine head				
Machine head drive	Compact AC servomotor (direct-drive system)				
Lubrication	No lubrication			Minute-quantity lubrication to needlebar and hook (no oil pan system)	
Lubricating oil	—			JUKI New Defrix Oil No.1 (equivalent to ISO VG7)	
Distance from needle to machine arm	300mm				
Bed size	517mm×178mm				
Power requirement/ Power consumption	Single-phase 100~120V, 200~240V, 3-phase 200~240V/Power rating 600VA				
Total weight	98kg (without automatic thread trimmer)				
	100kg (with automatic thread trimmer)				

* CompactFlash™ or CFA specification compatible media.

* "CompactFlash™" is a registered trademark of SanDisk Corporation, U.S.A.



JUKI CORPORATION HEAD OFFICE

Juki Corporation operates an environmental management system to promote and conduct the following as the company engages in the research, development, design, sales, distribution, and maintenance of industrial sewing machines, household sewing machines, industrial robots, etc., and in the provision of sales and maintenance services for data entry systems:

- ①The development of products and engineering processes that are safe to the environment
- ②Green procurement and green purchasing
- ③Energy conservation (reduction in carbon-dioxide emissions)
- ④Resource saving (reduction of papers purchased, etc.)
- ⑤Reduction and recycling of waste
- ⑥Improvement of logistics efficiency (modal shift and improvement of packaging, packing, etc.)

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* Specifications and appearance are subject to change without prior notice for improvement.

* Read the instruction manual before putting the machine into service to ensure safety.

* This catalogue prints with environment-friendly soy ink on recycle paper.