# LZ-2290A-SR-7

Computer-controlled, Direct-drive, High-speed, 1-needle, Lockstitch,
Zigzag Stitching Machine with Automatic Thread Trimmer (quick reverse type)

**Quick reverse type**

LZ-2290A-SR-7-WB

# LZ-2290A-SR-7

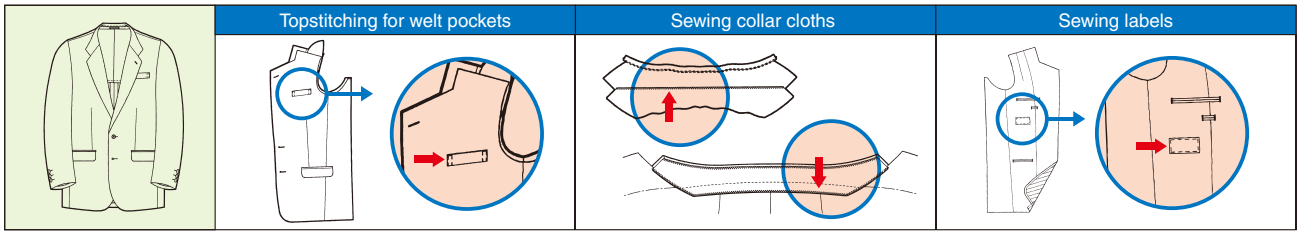
## Newly developed feed mechanism

**The machine is built around the newly developed LZ-2290A-7 machine head.
In addition to the conventional types of stitching, the machine is able to perform T-shape stitching and zigzag pattern stitching to broaden its range of applications.**

## The machine is able to perform a variety of pattern stitching types.

- In addition to the conventional eight types and 14 patterns of zigzag stitching, the machine is able to perform T-shape stitching and covering stitching. As a result, the machine is equipped as standard with a 14-type and 20-pattern sewing capability. Furthermore, the machine is able to perform condensation stitching (for reverse feed stitching) at a high speed during sewing to dramatically increase the operating rate of the facility.
- For men's garments, the machine is used in processes such as topstitching for welt pockets, sewing collar cloths and sewing labels. For ladies' garments, it can perform pattern stitching for the collars and front bodies of jackets and blouses. In addition, original patterns can be created using the custom pattern feature, enabling the machine to be utilized for a broader range of uses.

## Example of use




## Sewing pattern

| Name of pattern | Straight stitch | Standard zigzag | 2-step zigzag | 3-step zigzag | Scallop (left) | | | | Scallop (right) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 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 |

| Name of pattern | Blind stitch (left) | Blind stitch (right) | Custom pattern | T-shape stitching (left) | T-shape stitching (right) | Pattern stitching 1 | Pattern stitching 2 (fagoting) | Pattern stitching 3 | Pattern stitching 4 |
|---|---|---|---|---|---|---|---|---|---|
| Stitch pattern | | | | | | | | | |
| Number of stitches | 2+a | | Max.500 | 3 | 3 | 6 | 6 | 6 | 6 |

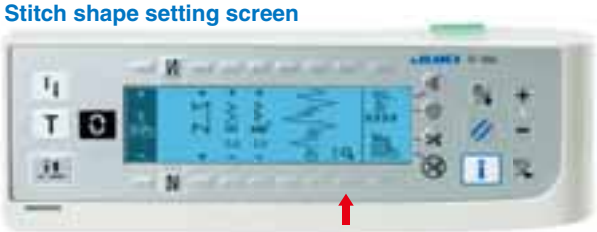
## Sewing patterns can be programmed with ease with the IT-100E operation panel.

- A liquid crystal display has been adopted for the display unit. It displays settings for the stitch shape, zigzag width and stitch base line position together on one screen with pictographs, facilitating operation. At the time of creating/modifying a custom pattern, data can be entered with the shape of the pattern visible on the display, leading to increased efficiency.
- Custom pattern data can be stored using the same Compact Flash that is widely used for digital cameras.
- With the IT-100E, program stitching and cycle sewing can be set. By using this function, it is possible to sew labels with constant-dimension sewing or to topstitch welt pockets while automatically changing over the stitching type from straight stitching to zigzag stitching according to the number of stitches desired. This contributes to improved working efficiency. In addition, multi-layer sewing, continuous sewing, one-shot sewing and the beginning point of a scallop pattern can be programmed easily through the operation panel.

- Forward/reverse feed amounts are established on the panel. This enables the machine to perform sewing with consistency, preventing unevenness in the feed amount. Since the sewing conditions are established on the panel, they can be easily restored to a previous setting.
- Reverse feed stitch length can be increased and decreased directly on Reverse Feed Stitching Setting Screen of the peration panel, when the reverse feed lever is press down. At the corners of labels, the stitch number per inch can be adjusted to sew the corners with consistency.

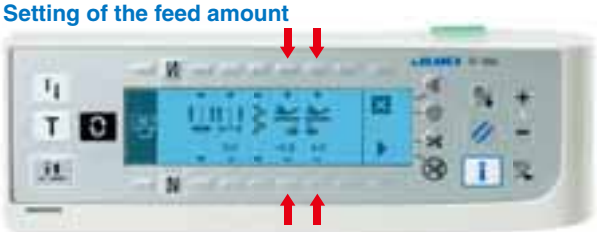
## Example of the pattern display

### Stitch shape setting screen



- Display style of the custom pattern can be changed over between the entire pattern display and partial pattern display.

### Setting of the feed amount



- Stitch pitch in the normal (to +5) and reverse (to -5) directions can be set on the panel.

## Newly developed feed mechanism is employed.

- The feed mechanism is controlled with a stepping motor to enable continuous sewing at a high speed. The machine achieves the world's highest sewing speed of 4,000rpm even when performing pattern sewing, including T-shape stitching and condensation stitching, dramatically increasing productivity. In addition, the machine retains stitching shapes with consistency (the maximum sewing speed differs depending on the sewing condition).

## Shape-tacking patterns can be changed with ease.

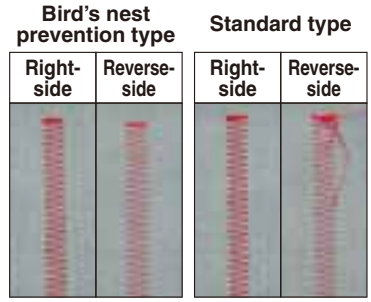
- The zigzag width and feed amount are stored on a stitch-shape basis. It is therefore not necessary, after changing the stitch shape, to re-adjust it. For a custom pattern, data can be programmed on a stitch-by-stitch basis.

## The machine helps to achieve a comfortable working environment.

- The magnet operating noise is virtually silent, even at the time of changing over the sewing direction between normal and reverse feed directions. This contributes to the achievement of a comfortable working environment with little noise.

## Bird's nest prevention type (LZ-2290A-SR-7-CB)

- The machine prevents the formation of so-called "bird's nests", where thread tangles on the reverse side of the material at the start of sewing, thereby producing upgraded quality seams. The machine does not require thread nipping after thread trimming, thereby increasing productivity and upgrading the seam quality.



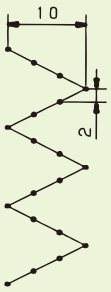
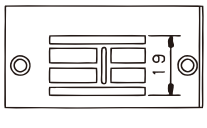
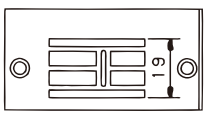
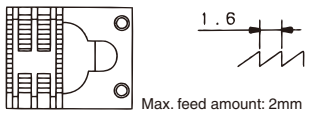
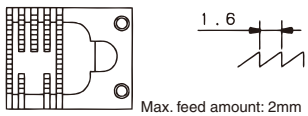
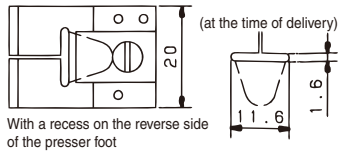
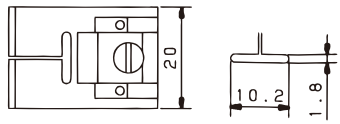
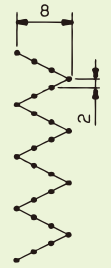
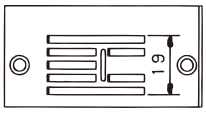
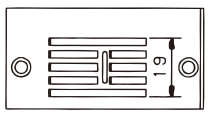
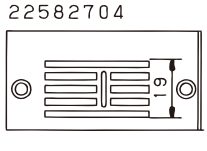
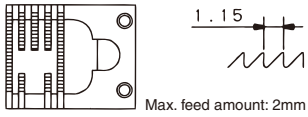
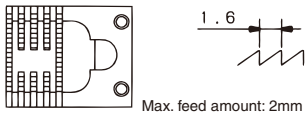
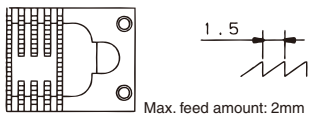
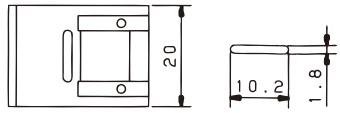
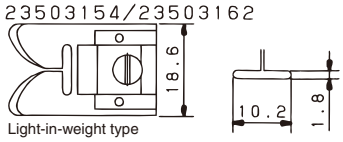
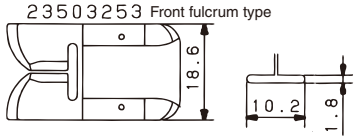
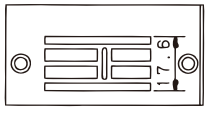
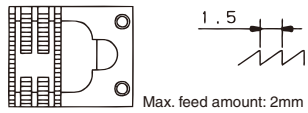
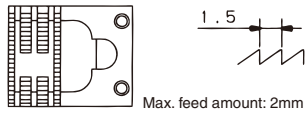
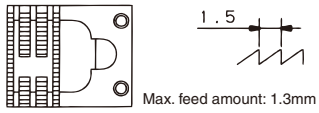
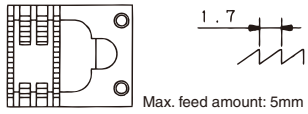
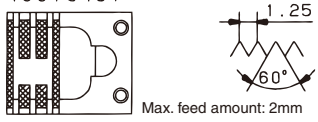
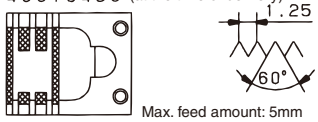
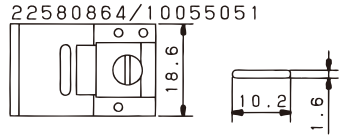
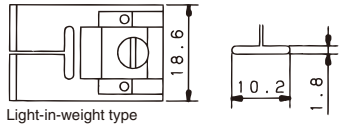
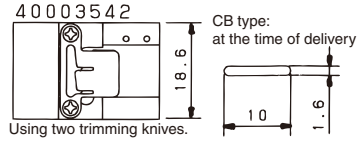
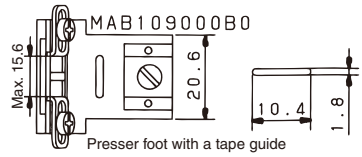
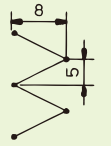
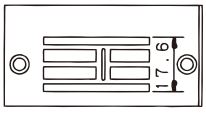
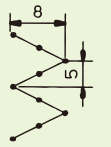
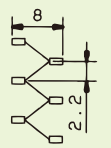
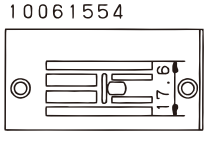
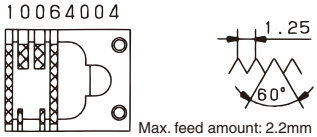
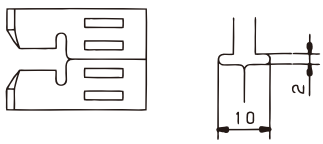

## Basic functions of the predecessor model have been incorporated into this machine.

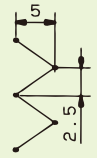
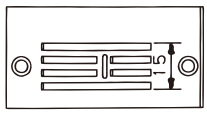
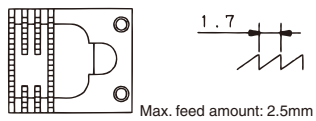
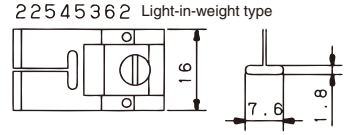
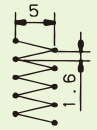
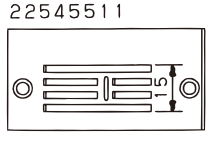
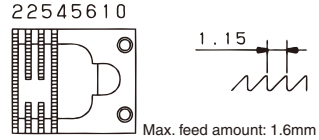
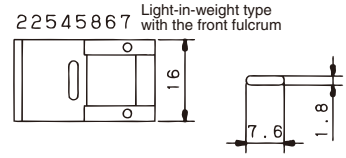
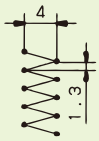
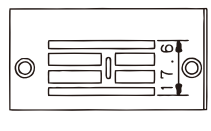
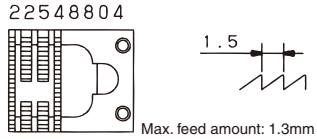
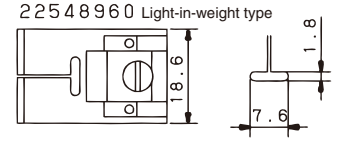
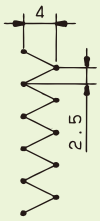
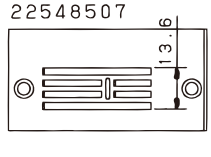
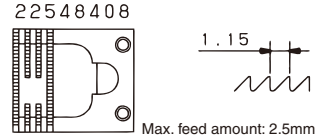
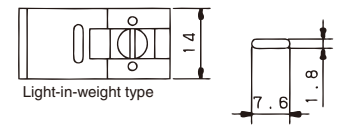
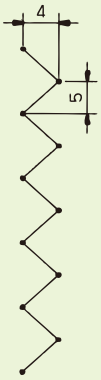
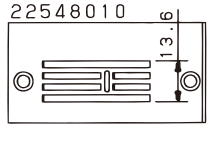
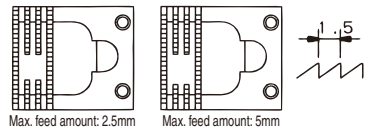
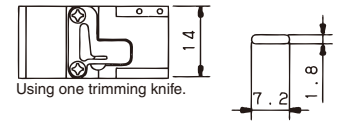
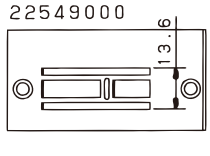
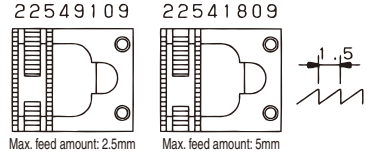
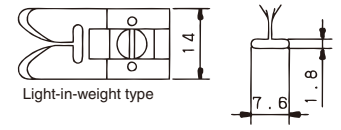
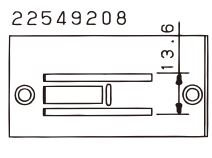
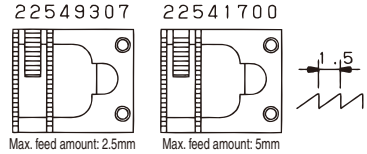
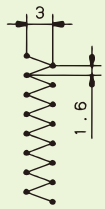
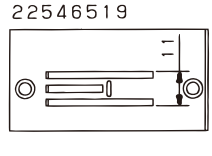
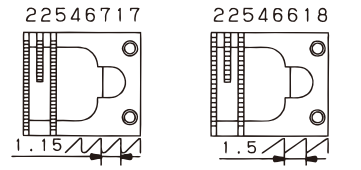
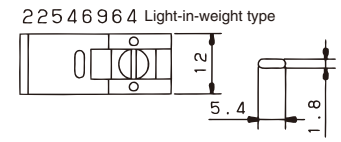
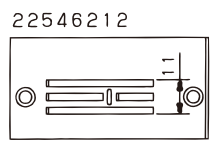
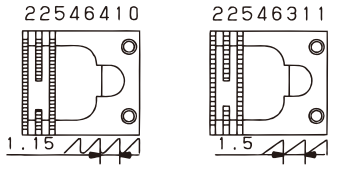
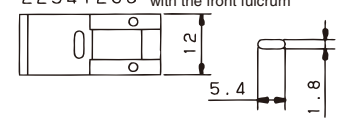
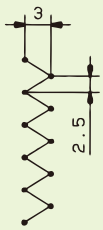
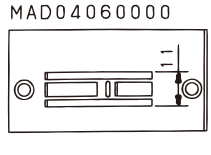
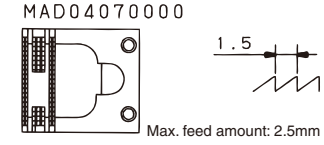
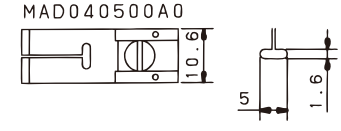
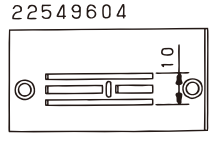
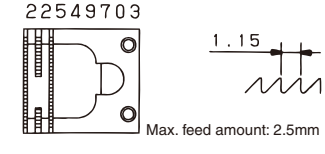
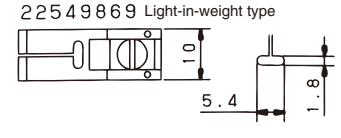
- The arm of the machine head is longer than a normal arm by one size, offering a longer distance from machine arm to needle to facilitate handling of the sewing material on the machine, leading to improved workability. ①
- The machine comes with a direct-drive type motor. As a result, the machine quickly starts and promises an upgraded stopping accuracy and excellent responsiveness. ②
- Thread trimming mechanism notable for its simple structure and extremely reliable performance. The knife-sliding method employed by the thread trimmer guarantees that the thread is cut regardless of the needle throw position.
- The machine is provided as standard with a micro-lifter screw. This helps prevent material slippage or damages when using elastic materials.
- Since the hook and needle bar is lubricated with a minute-quantity of lubricating oil, sewing products are rarely stained with oil.

## Options

| Model | Part No. | Description | | Features |
|---|---|---|---|---|
| – | 40003640 | 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 | GAKA21000B0 | Auto-lifter (pedal-driven) | | – |
| – | D1501583H00 | Presser bar | Presser foot connecting components (Replaceable presser bar) | The aforementioned parts are used when a lockstitching type presser foot is installed on the machine. |
| | D1502583H00 | Presser connecting rod | | |
| – | B1551586000 | Presser foot connecting foot | Presser foot connecting components | |
| | SS7090910TP | Screw | | |
| – | 22526578 | Hard-point hook | | The blade point of this hook prevents abrasion. |
| – | 40017095 | Thread tension disk asm. | Dual disks | – |
| – | 22591564 | Presser foot asm. | Gauge set for fagoting | |
| | 10064004 | Feed dog | | |
| | 10061554 | Throat plate asm. | | |
| | MAM09700BA0 | Fagoting folder asm. | | |
| | SS5110710SP | Screw | | |
| – | 40000100 | CompactFlash 128MB | | |

# List of the major gauges

| Max zigzag width / Max feed pitch | Throat plate | Feed dog | Presser foot (with finger guard) |
|---|---|---|---|
|  | 10041010<br>  <br>10041101<br>  | 10047017<br>  <br>Max. feed amount: 2mm<br>22580104<br>  <br>Max. feed amount: 2mm | 22580369/10045052<br>  <br>With a recess on the reverse side of the presser foot<br>22580260 Light-in-weight type<br>  |
|  | 22580005<br>  <br>22582100<br>  <br>22582704<br>  | 22580500<br>  <br>Max. feed amount: 2mm<br>22582209<br>  <br>Max. feed amount: 2mm<br>22582803<br>  <br>Max. feed amount: 2mm | 22580765 Light-in-weight type with the front fulcrum<br>  <br>23503154/23503162<br>  <br>Light-in-weight type<br>23503253 Front fulcrum type<br>  |
| | 22582407 (at the time of delivery)<br>  | 22581508<br>  <br>Max. feed amount: 2mm<br>23558208<br>  <br>Max. feed amount: 2mm<br>22548804<br>  <br>Max. feed amount: 1.3mm<br>22540009<br>  <br>Max. feed amount: 5mm<br>40018431<br>  <br>Max. feed amount: 2mm<br>40018430 (at the time of delivery)<br>  <br>Max. feed amount: 5mm | 22580864/10055051<br>  <br>22584965 Light-in-weight type<br>  <br>Light-in-weight type<br>40003542<br>  <br>Using two trimming knives.<br>Threed cutter knife 11434206<br>  <br>Presser foot with a tape guide |
|  | 22582506<br>  | | |
|  | | | |
|  | 10061554<br>  | 10064004<br>  <br>Max. feed amount: 2.2mm | 22591564<br>  |

| Max zigzag width / Max feed pitch | Throat plate | Feed dog | Presser foot (with finger guard) |
|---|---|---|---|
|  | 22545008<br>  | 22545107<br>  | 22545362 Light-in-weight type<br>  |
|  | 22545511<br>  | 22545610<br>  | 22545867 Light-in-weight type with the front fulcrum<br>  |
|  | 22548705<br>  | 22548804<br>  | 22548960 Light-in-weight type<br>  |
|  | 22548507<br>  | 22548408<br>  | 22547962/22547970<br>  <br>Light-in-weight type |
|  | 22548010<br>  | 22548119 22541601<br>  | 40003549 Presser foot with a knife<br>  <br>Using one trimming knife.<br>Threed cutter knife 11434206 |
| | 22549000<br>  | 22549109 22541809<br>  | 22548663/22548671<br>  <br>Light-in-weight type |
| | 22549208<br>  | 22549307 22541700<br>  | |
|  | 22546519<br>  | 22546717 22546618<br>  | 22546964 Light-in-weight type<br>  |
| | 22546212<br>  | 22546410 22546311<br>  | 22547269 Light-in-weight type with the front fulcrum<br>  |
|  | MAD04060000<br>  | MAD04070000<br>  | MAD040500A0<br>  |
| | 22549604<br>  | 22549703<br>  | 22549869 Light-in-weight type<br>  |

Two different part numbers are assigned to one presser foot ( ex. 22547962 and 22547970), if you place a order for 22547962 ( left number ), factory supplies you presser foot installed with a big figure guide, 22547970 ( right number ) with small finger guide respectively.

## Specifications

| Model name | LZ-2290A-SR-7-WB | LZ-2290A-SR-7-CB |
|---|---|---|
| Max. sewing speed | 5,000 sti/min*1, T-shape stitching: 4,000 sti/min*2 | |
| Max. zigzag width*3 | 10mm | |
| Max. feed amount | 5.0mm (normal / reverse feed) | |
| Needle throw mechanism | Computer-controlled | |
| Lift of the presser foot | By hand: 5.5mm / By knee: 10mm | |
| Needle (at the time of delivery) | SCHMETZ438(#75) | |
| Hook | DP hook (with titanium-treated inner hook) Hook-driving shaft offset mechanism | |
| Compressed air and air consumption | — | 0.6MPa (6kgf/cm²), 2Nℓ/1 cycle (thread trimmer: 1 times) |
| Thread take-up | Rotary type | |
| Number of patterns for standard stitching | 14 types/20 patterns | |
| Custom pattern memory capacity | Internal memory: Max. 20 patterns / Extended memory: Max. 999 patterns | |
| Max. number of stitches | Max. 500 stitches / patterns | |
| Input function of the main unit | The main unit has been provided as standard with a data input device (IT-100E operation panel) Programming software for computer-controlled sewing machines (PM-1:option) | |
| Memory medium | EEP-ROM (internal) / CompactFlash (external) | |
| Machine head drive | Compact AC servomotor (direct-drive system) | |
| Lubrication | Minute-quantity lubrication to needle bar and hook (no oil pan system) | |
| Distance from needle to machine arm / Bed size | 300mm / 517mm×178mm | |
| Power requirement / Power consumption | Single-phase 200～240V, 3-phase 200～240V / Power rating 600VA | |
| Total weight | 104kg | |

*1 The maximum sewing speed is factory-set to 4,000 sti/min at the time of shipping (depending on the region to which the machine is to be shipped).
*2 The maximum sewing speed of the machine varies depending on the zigzag width and feed amount settings.
・Since the speed is controlled with the zigzag width and feed amount per stitch, it is thus limited by the zigzag width and feed amount settings for a sewing pattern.
・The sewing speed should be appropriately set according to the sewing product and process.
*3 The maximum zigzag width has been factory-limited to 8 mm, at the time of standard shipping.

* "sti/min" stands for "Stitches per Minute."
For CompactFlash™, please use genuine JUKI products.
"CompactFlash™"is a registered trademark of SanDisk Corporation, U.S.A.

## When you place orders

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

### ●Machine head

**LZ2290ASR7□□□□□□□**

| Machine head type | Code |
|---|---|
| Standard | S |

| Type | Code |
|---|---|
| Quick reverse type | R |

| Wiper | Push-button-type reverse feed switch | Bird's nest prevention type | Code |
|---|---|---|---|
| Provided | Provided | — | WB |
| Provided | Provided | Provided | CB |

| Device / Attachment | Code |
|---|---|
| Auto-lifter (pedal-driven) | AK121 |
| Not provided | |

### ●PSC box / Operation panel for SC

**SC916□SIT100E**

| PSC box | | | Code |
|---|---|---|---|
| For General Export | 3-phase | 200～240V | D |
| For General Export | Single-phase | 200～240V | K |
| For CE | Single-phase | 200～240V | N |

| Control box | Code |
|---|---|
| Standard | S |

| Operation panel | Code |
|---|---|
| IT100E | IT100E |

**LZ-2290A-SR-7-CB**

●To order, please contact your nearest JUKI distributor.

JAB CM001 / ISO14001 JSAE389 / UKAS MANAGEMENT SYSTEMS 089

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

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TOKYO 206-8551, JAPAN
PHONE : (81) 42-357-2254
FAX : (81) 42-357-2274
http://www.juki.com

* 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 soyink on recycle paper.

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