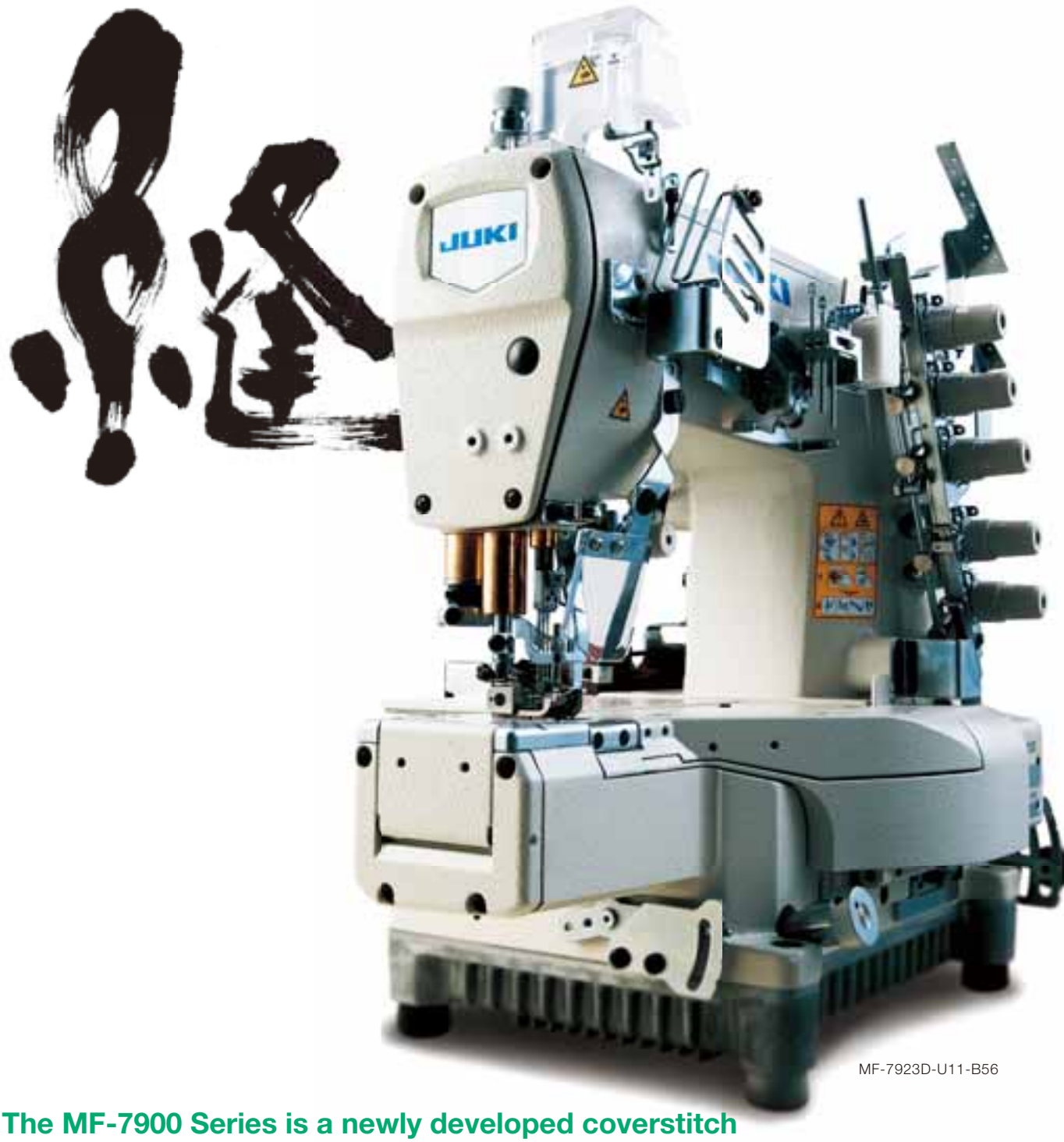
# MF-7900 Series

High-speed, Cylinder-bed, Top & Bottom Coverstitch Machine

# MF-7900D Series

Semi-dry-head, Cylinder-bed, Top & Bottom Coverstitch Machine

JUKI ECO PRODUCTS




MF-7923D-U11-B56

## The MF-7900 Series is a newly developed coverstitch machine provided with lots of mechanisms for improving the seam quality.

It is provided with many different sewing-related mechanisms which contribute to improved seam quality, such as the new feed mechanism, and differential-feed micro-adjustment mechanism. In addition, the machine is provided as standard with a looper thread twining prevention mechanism for improved maintenance.

☐ **MF-7900 Series**
High-speed, Cylinder-bed,
Top & Bottom Coverstitch Machine

☐ **MF-7900/UT Series**
Direct-drive, High-speed, Cylinder-bed,
Top & Bottom Coverstitch Machine with Needle- and Looper- Thread Trimmer

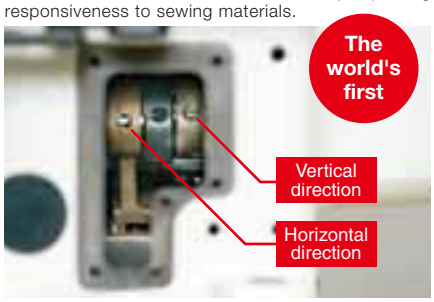
☐ **MF-7900D Series**
Semi-dry-head, Cylinder-bed,
Top & Bottom Coverstitch Machine

☐ **MF-7900D/UT Series**
Semi-dry-head, Direct-drive, Cylinder-bed,
Top & Bottom Coverstitch Machine with Needle- and Looper- Thread Trimmer

# Seam quality is improved!!

### Thanks to the new feed mechanism, many different types of sewing are achieved.

The feed locus can be adjusted externally. The feed locus is now adjustable in terms of the vertical direction and horizontal direction, thereby improving responsiveness to sewing materials.

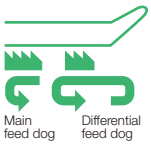


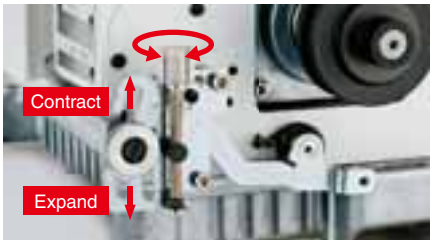

### Micro-lifter mechanism

Elastic material or delicate material can be sewn with the presser foot kept slightly raised. This effectively helps reduce the degree of slippage, warpage and damage of the material.


### Differential-feed micro-adjustment mechanism

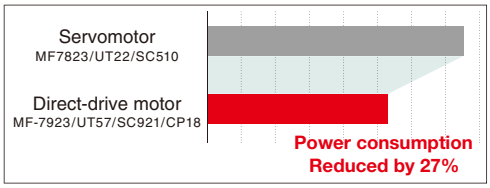
It is possible to finely adjust the differential feed amount to a best-suited value for the material to be used.
The differential feed ratio is constant even if the stitch length is changed.




# All of the sewing machines with a thread trimmer are provided with a direct-drive motor.

The direct-drive motor system has been adopted by all of the sewing machines with a thread trimmer. As a result, the sewing machine starts up swiftly and promises increased stop accuracy, thereby demonstrating improved responsiveness. In addition, the machine is no longer provided with a V-belt. This means that the adoption of the direct-drive motor is also effective in the elimination of belt shavings. Power is directly transmitted from the motor to the sewing machine, thereby contributing to reduced power consumption. (This sewing machine reduces power consumption by 27% as compared with the conventional models.)




# Simplified maintenance mechanism

### The looper thread twining prevention mechanism has been improved and is provided as standard for the sewing machine.

In the case of looper thread breakage, the looper thread twining prevention mechanism is activated to trim the looper thread before the thread twines on the looper thread cam. In this way, the looper thread twining prevention mechanism prevents the looper thread from twining on the looper thread cam. In addition, the looper thread cam, which has been incorporated in the sewing machine, has been changed so that it is mounted outside of the sewing machine. The externally-mounted looper thread cam promises improved maintainability.

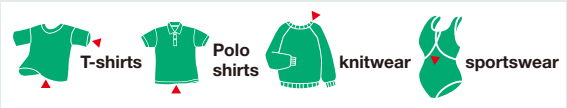

### Commercially-available gauge components are applicable with no additional work.

As a result of the commonality of components, commercially-available components (presser foot, throat plate and needle clamp) are now applicable and easily obtainable.

# U11

## Universal type (basic type)

The machine can be used for the hemming process of the sleeves and bottoms of T-shirts and for the covering process for sportswear and knitwear.
The front cover is trimmed to allow operators to bring their hands closer near the needle entry area, thereby increasing work efficiency in the covering process, etc.




MF-7923-U11-B56/UT51

### List of subclass machines

| Application | Seam | Model No. | Number of needles | Number of threads | Needle gauge (mm) | Stitch length *1 (mm) | Differentialfeed ratio *2 | Presser foot lifting amount *3 (mm) | Max. sewing speed (sti/min) |
|---|---|---|---|---|---|---|---|---|---|
| MF-7900/ U11 |  | MF-7922-U11-B** | 2 | 4 | 3.2,4.0,4.8 | 0.9~3.6 | 1:0.9~1:1.8 (1:0.6~1:1.1) | 5 (8) | 6,500 |
| | | MF-7923-U11-B** | 3 | 5 | 5.6,6.4 | | | | |
| | | MF-7922-U11-B48/UT51 | 2 | 4 | 4.8 | | | | 6,000 |
| | | MF-7923-U11-B**/UT51, UT57 | 3 | 5 | 5.6,6.4 | | | | |
| | | MF-7923-U11-B**/UT52/PL12<br>MF-7923-U11-B**/UT57/PL13 | | | | | | | 5,000 |
| MF-7900D/ U11 |  | MF-7922D-U11-B40 | 2 | 4 | 4.0 | 0.9~3.6 | 1:0.9~1:1.8 (1:0.6~1:1.1) | 5 (8) | 5,000 |
| | | MF-7923D-U11-B**<br>MF-7923D-U11-B**-UT51, UT57 | 3 | 5 | 5.6,6.4 | | | | |

*1 Stitch length can be adjusted to 4.5mm at the maximum.
*2 Differential ratio can be switched by adjustment.
*3 The lift of the presser foot is 5mm for the top and bottom coverstitch machine, and 8mm for the bottom coverstitch machine.
*4 Max. sewing speed of MF-7923-U11-B**/PL12, 13 is 5,000sti/min.

### Binder mounting base

Various binders can be installed by loading the binder mounting base supplied with the unit.

# JUKI's dry-head technology protects sewing products from being stained with oil.

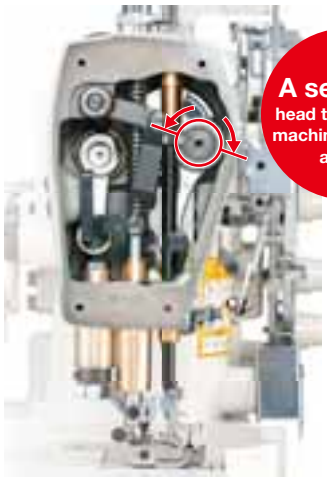
**With the excellent functions inherited from the MF-7900 Series, the MF-7900D is provided with a dry frame mechanism to eliminate the cause of oil stains. Stain removing work or re-sewing work is substantially reduced by protecting sewing products from being stained with oil, thereby improving the quality of finished products.**

**The frame no longer requires oiling.**
Unlike the conventional models, the oiling mechanism inside the frame has been eliminated. As a result, oil does not leak from the needle bar, presser bar or spreader shaft.

DRY

**Dry-head technology has materialized a frame which does not need oiling.**
The needle bar mechanism and spreader mechanism have been applied with a special surface treatment. JUKI's unique special grease is used for lubrication. Grease-filled bearings have been adopted for the crank rod. These allow the machine's frame mechanism to demonstrate outstanding durability without being oiled.

**Environmental consciousness**
Since oil stains on sewing products are reduced, the quantity of the use of stain remover generally used in sewing plants can be reduced.
*Dichlorofluoroethane (HCFC-141), which is generally used in oil stain cleaning fluid, is included in those chemicals which need to be reduced, as it is a substances that can harm the ozone layer.



**A semi-dry head type sewing machine has been added.**

## Needle bar stroke conversion mechanism

By changing over the needle bar stroke, penetrating force of the needle as well as thread tension to fit heavy-weight materials (fleece, blankets) can be obtained. The needle bar stroke can be changed by adjusting the eccentric pin. (Changing of parts is not required. Factory-set at the time of delivery: 31mm; for sewing heavy-weight materials: 33mm)


**The semi-dry head sewing machine increases its sewing speed to 5,000 sti/min**

| JUKI ECO PRODUCTS | **The MF-7923U11B56/UT57 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.** |
|---|---|
| JUKI ECO PRODUCTS | ● This sewing machine reduces power consumption by 27% as compared with the conventional models.<br>● The sewing machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.<br>**For details of JUKI ECO PRODUCTS, refer to : http://www.juki.co.jp/eco_e/index.html**<br>*The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the environment. |

# H22, H23

## For hemming (with left hand fabric trimmer)

This model is best suited to hemming processes for sleeves and the bottoms of T-shirts, Polo shirts, etc. It comes with a left hand fabric trimmer for trimming fabric in parallel, at all times, to the seam with consistency. The upper knife stroke can be adjusted with ease.


T-shirts


Polo shirts

MF-7923D-H23-B56/UT57

### List of subclass machines

| Application | Seam | Model No. | Number of needles | Number of threads | Needle gauge (mm) | Stitch length *1 (mm) | Differentialfeed ratio *2 | Presser foot lifting amount *3 (mm) | Max. sewing speed (sti/min) |
|---|---|---|---|---|---|---|---|---|---|
| MF-7900/ H22,23 |  | MF-7922-H22, H23-B**<br>MF-7922-H22, H23-B48/MC40 | 2 | 4 | 4.0,4.8<br>4.8 | 0.9~3.6 | 1:0.9~1:1.8<br>(1:0.6~1:1.1) | 5 (8) | 6,000 |
| | | MF-7923-H22, H23-B**<br>MF-7923-H22, H23-B**/MC40 | 3 | 5 | 5.6,6.4 | | | | |
| MF-7900/ H22,23/UT | | MF-7922-H22, H23-B48/UT51, UT57<br>MF-7922-H22, H23-B48/UT57/MC37 | 2 | 4 | 4.8 | 0.9~3.6 | 1:0.9~1:1.8<br>(1:0.6~1:1.1) | 5 (8) | 6,000 |
| | | MF-7923-H22, H23-B**/UT51, UT57<br>MF-7923-H22, H23-B**/UT57/MC37 | 3 | 5 | 5.6,6.4 | | | | |
| MF-7900D/ H22,23 |  | MF-7923D-H22, H23-B56<br>MF-7923D-H22, H23-B56/MC40 | 3 | 5 | 5.6,6.4 | 0.9~3.6 | 1:0.9~1:1.8<br>(1:0.6~1:1.1) | 5 (8) | 5,000 |
| MF-7900D/ H22,23/UT | | MF-7922D-H22, H23-B48/UT57/MC37 | 2 | 4 | 4.8 | | | | |
| | | MF-7923D-H22, H23-B**-UT51, UT57<br>MF-7923D-H22, H23-B**-UT57/MC37 | 3 | 5 | 5.6,6.4 | | | | |

**The world's fastest sewing machine with left hand fabric trimmer**

*1 Stitch length can be adjusted to 4.5mm at the maximum.
*2 Differential ratio can be switched by adjustment.
*3 The lift of the presser foot is 5mm for the top and bottom coverstitch machine, and 8mm for the bottom coverstitch machine.

# DEVICE

## UT51

**Electromagnetic needle thread / looper thread trimming device/Auto-lifter**

It is an electromagnetic needle thread / looper thread trimming device / Auto-lifter.
The machine does not need an air compressor to achieve easy layout changing.

Electromagnetic needle thread / looper thread trimming device

## UT52

**Electromagnetic needle thread / looper thread trimming device/Auto-lifter**

It is an electromagnetic needle thread / looper thread trimming device / Auto-lifter with cloth puller.

Electromagnetic needle thread / looper thread trimming device

## UT57

**Pneumatic type needle thread / looper thread trimming device/Auto-lifter**

It is a pneumatic type needle thread / looper thread trimming device / Auto-lifter. Since the automatic lift of the presser foot and automatic thread trimming can be activated by lightly depressing the pedal, work efficiency is dramatically increased. The air blow type wiper is supplied with the sewing machine as an accessory.

Pneumatic type needle thread / looper thread trimming device

## MC37 MC40

**Pneumatic cloth chip suction device**

Cloth chips trimmed by the hook knife are sucked away using air.
So, there is no risk of sewing cloth chips in seams. MC37 (solenoid valve type) for the servomotor or MC40 (mechanical valve type) for the clutch motor should be selected according to the use of your machine.

## PL12

**Cloth puller: Gear type**

This is a gear type cloth puller. It helps feed difficult-to-feed materials to assist smooth sewing. (Example: Attaching flat elastic bands)

## PL13

**Cloth puller: Flat type**

This is a flat type cloth puller. It helps feed soft material which requires a higher feeding force to assist sewing. (Example: Hemming)

# WHEN YOU PLACE ORDERS

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

## MF-7900

### ● Without automatic thread trimmer

| Stitch type | Code |
|---|---|
| 2-needle, top and bottom coverstitch | 22 |
| 3-needle, top and bottom coverstitch | 23 |

| Tongue shape of throat plate | Code |
|---|---|
| B type (Standard) | B |

MF79□□□□□B□□/□□□□

| Application | Code |
|---|---|
| Universal type | U11 |
| Hemming (with left hand fabric trimmer, for light-weight materials) | H22 |
| Hemming (with left hand fabric trimmer, for medium-weight materials) | H23 |

| Needle gauge | Code |
|---|---|
| 3.2mm | 32 |
| 4.0mm | 40 |
| 4.8mm | 48 |
| 5.6mm | 56 |
| 6.4mm | 64 |

| Device and attachment | Code |
|---|---|
| Not provided | |
| Pneumatic cloth chip suction device (mechanical valve type) | MC40 |
| Cloth puller: Gear type | PL12 |
| Cloth puller: Flat type | PL13 |

*Refer to the subclass models list for the needle gauge of the respective models.

### ● With automatic thread trimmer (Direct-drive motor type)

| Stitch type | Code |
|---|---|
| 2-needle, top and bottom coverstitch | 22 |
| 3-needle, top and bottom coverstitch | 23 |

| Tongue shape of throat plate | Code |
|---|---|
| B type (Standard) | B |

MF79□□□□□B□□□□□□

| Application | Code |
|---|---|
| Universal type | U11 |
| Hemming (with left hand fabric trimmer, for light-weight materials) | H22 |
| Hemming (with left hand fabric trimmer, for medium-weight materials) | H23 |

| Needle gauge | Code |
|---|---|
| 4.8mm | 48 |
| 5.6mm | 56 |
| 6.4mm | 64 |

| Thread trimming device | Code |
|---|---|
| Electromagnetic type top and bottom thread trimming device | UT51 |
| Electromagnetic type top and bottom thread trimming device | UT52 |
| Pneumatic type top and bottom thread trimming device | UT57 |
| Pneumatic cloth chip suction device (electromagnetic valve type) | MC37 |
| Cloth puller: Gear type | PL12 |
| Cloth puller: Flat type | PL13 |

## MF-7900D (Semi-dry-head)

### ● Without automatic thread trimmer

| Stitch type | Code |
|---|---|
| 2-needle top and bottom covering stitch | 22 |
| 3-needle top and bottom covering stitch | 23 |

| Tongue shape of throat plate | Code |
|---|---|
| B type (Standard) | B |

MF79□□D□□□B□□/□□□□

| Application | Code |
|---|---|
| Universal type | U11 |
| Hemming (with left hand fabric trimmer, for light-weight materials) | H22 |
| Hemming (with left hand fabric trimmer, for medium-weight materials) | H23 |

| Needle gauge | Code |
|---|---|
| 4.0mm | 40 |
| 5.6mm | 56 |
| 6.4mm | 64 |

| Device and attachment | Code |
|---|---|
| Not provided | |
| Pneumatic cloth chip suction device (mechanical valve type) | MC40 |

*Refer to the subclass models list for the needle gauge of the respective models.

### ● With automatic thread trimmer (Direct-drive motor type)

| Stitch type | Code |
|---|---|
| 2-needle top and bottom covering stitch | 22 |
| 3-needle top and bottom covering stitch | 23 |

| Tongue shape of throat plate | Code |
|---|---|
| B type (Standard) | B |

MF79□□D□□□B□□□□□□

| Application | Code |
|---|---|
| Universal type | U11 |
| Hemming (with left hand fabric trimmer, for light-weight materials) | H22 |
| Hemming (with left hand fabric trimmer, for medium-weight materials) | H23 |

| Needle gauge | Code |
|---|---|
| 5.6mm | 56 |
| 6.4mm | 64 |

| Thread trimming device | Code |
|---|---|
| Electromagnetic type top and bottom thread trimming device | UT51 |
| Pneumatic type top and bottom thread trimming device | UT57 |
| Pneumatic cloth chip suction device (electromagnetic valve type) | MC37 |

# SPECIFICATIONS (U11, H22, H23)

| Model name | MF-7900 series | MF-7900D series |
|---|---|---|
| Stitch type | 2-needle/3-needle top and bottom covering stitch | 2-needle/3-needle top and bottom covering stitch |
| Needle | UY128GAS (#10S) #9~#14S | |
| Lift of the presser foot | 5mm (with top and bottom covering stitch), 8mm (with bottom covering stitch) | |
| Stitch pitch adjustment | By dial | |
| Differential feed adjustment | By micro-adjustment mechanism | |
| Lubrication | Automatiac | Automatic (frame: no lubrication) |
| Lubricating oil | JUKI Machine Oil 18 (equivalent to ISO VG18) | |
| Feed dog inclination adjustment | Provided as standard | |
| Micro-lifter | Provided as standard | |
| Needle gauge (mm) | 3.2, 4.0, 4.8, 5.6, 6.4 | |
| Needle bar stroke converting function | Provided as standard: 31mm: at the time of delivery / When sewing a heavy-weight material: 33mm | |
| Silicon oil tank for needle tip and needle thread | Provided as standard | |
| Cartridge oil filter | Provided as standard | |
| Power requirement | Single-phase 100~120V / 200~240V, 3-phase 200~240V (with automatic thread trimmer) | |
| Power consumption | 500VA (with automatic thread trimmer) | |

| Weight of the machine head | | |
|---|---|---|
| | U11 | 41kg (without device), 49kg (with UT51), 51kg (with UT52), 44kg (with UT57) |
| | H22, H23 | 42kg (without device), 50kg (with UT51), 45kg (with UT57) |

*"sti/min" stands for "Stitches per Minute."

# Compressedair / Air consumption

**(with automatic thread trimmer)**

| UT57 | | | Air consumption dm³/min (ANR) | Compressed air MPa |
|---|---|---|---|---|
| Top and bottom thread trimmer Auto-lifter | Air blow type wiper | MC37 MC40 | | |
| ● | — | — | 0.7 | 0.5 |
| ● | ● | — | 182 | |
| ● | — | ● | 456 | |
| ● | ● | ● | 637 | |

CM001 ISO14001 JSAE389 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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✻ 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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