

MF-7900 Series

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



## MF-7900D Series

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









2-11-1, TSURUMAKI, TAMA-SHI, TOKYO 206-8551, JAPAN PHONE: (81) 42-357-2370

\* 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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## 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

## MF-7900/UT<sub>Series</sub>

MF-7900D<sub>Series</sub> Semi-dry-head, Cylinder-bed,

MF-7900D/UT<sub>Series</sub>

Semi-dry-head, Direct-drive, Cylinder-bed, Top & Bottom Coverstitch Machine with Needle- and Looper- Thread Trimmer





## 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-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 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



eases its sewind speed to 5,000

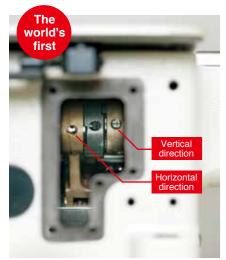
Needle bar stroke conversion mechanism

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)

## 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.



## 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

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













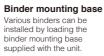


The machine can be used for the hemming process of the sleeves and bottoms of T-shirts and for the covering process for sportswear and knitwear.

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.









### 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)*4
		MF-7922-U11-B**	2	4	3.2,4.0,4.8				6.500
		MF-7923-U11-B**	3	5	5.6,6.4			5 (8)	0,500
MF-7900/U11		MF-7923-U11-B**/PL12, PL13		, ,	3.0,0.4				5,000
Universal type		MF-7922-U11-B48/UT51	2	4	4.8	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)		6,000
(basic type)		MF-7923-U11-B**/UT51, UT53, UT57 MF-7923-U11-B**/UT59	3	5	5.6.6.4	0.0 0.0		3 (0)	6,000
		MF-7923-U11-B**/UT52/PL12 MF-7923-U11-B**/UT57/PL13			5.0,0.4				5,000
		MF-7922D-U11-B40	2	4	4.0				
MF-7900D/U11 Universal type (basic type)		MF-7923D-U11-B** MF-7923D-U11-B**/UT51, UT57 MF-7923D-U11-B**/UT59	3	5	5.6,6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	5,000
		MF-7923D-U11-B**/UT57/PL12	1						

minimit,

MF-7923-U11-B56/UT51







This model is best suited to elastic-band welting for swimwear, briefs, etc. It welts the elastic band which has been overlocked on the garment body.







### List of subclass machines

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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)*4
MF-7900/H11 Elastic band welting		MF-7923-H11-B**/PL12 MF-7923-H11-B**/PL13 MF-7923-H11-B**/UT52, UT57/PL12 MF-7923-H11-B**/UT57/PL13	3	5	5.6,6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	5,000
MF-7900D/H11 Elastic band welting		MF-7923D-H11-B**/UT57/PL13							

1 Stitch length can be adjusted to 4.5mm at the maximum. \*2 Differential ratio can be switched by adjustment.
3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch. \*4 stiffmin' stands for \*Stitches per Minute.\*

# 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.





★:The world's fastest ewing machine with left hand

## 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)*4
		MF-7922-H22, H23-B** MF-7922-H22, H23-B48/MC40	2	4	4.0,4.8 4.8		1:0.9~1:1.8	5 (8)	_
MF-7900/		MF-7923-H22, H23-B** MF-7923-H22, H23-B**/MC40	3	5	5.6,6.4	0.9~3.6	(1:0.6~1:1.1)		6,000*
H22,23 For hemming		MF-7922-H22, H23-B48/UT51, UT57 MF-7922-H22, H23-B48/UT57/MC37	2	4	4.8	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	
(with left hand fabric trimmer)		MF-7922-H23-D40/UT59/MC37			4.0				6.000★
		MF-7923-H22, H23-B**/UT51, UT57, UT59 MF-7923-H22, H23-B**/UT57/MC37 MF-7923-H22, H23-B**/UT59/MC37	3	5	5.6,6.4	0.3-3.0			0,000
		MF-7923D-H22, H23-B56 MF-7923D-H22, H23-B56/MC40	3	5	5.6,6.4				
MF-7900D/ H22,23		MF-7922D-H22, H23-B48/UT57/MC37			4.8	0.9~3.6			
For hemming (with left hand fabric		MF-7922D-H22, H23-D40/UT57/MC37 MF-7922D-H23-D40/UT57, UT59/MC37	2	4	4.0		0.9~3.6 1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	5,000
trimmer)		MF-7923D-H22, H23-B**-UT51, UT57 MF-7923D-H22, H23-B**-UT57/MC37 MF-7923D-H22, H23-B**-UT59/MC37	3	5	5.6,6.4				

and sliding presser foot,





The machine is best-suited for the hemming of stretchy new material such as T-shirts, underwear and sportswear, etc. The machine produces seams with no semi-cylindrical swells by performing sewing while making the feeding lengths of the right and left needle threads equal. The sliding presser foot prevents the material hem from twisting during sewing and further eliminates oblique-feeding of the material in terms of its texture.





### 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)*5
MF-7900D/ H24,25*		MF-7922D-H24, H25-E**/UT57,UT59/MC37	2	5	3.2,4.0	0.9~3.6	1:0.9~1:1.8	5 (8)	5,000
For hemming (with left hand fabric trimmer, for extra light-weight materials)		MF-7923D-H24, H25-E**/UT57,UT59/MC37	3	5	5.6,6.4	0.5~3.0	(1:0.6~1:1.1)	3 (6)	3,000

- 11 Stitch length can be adjusted to 4.5mm at the maximum. "2 Differential ratio can be switched by adjustment.
  13 The lift of the presser foot its 5mm for the top and bottom coversitich machine, and 8mm for the bottom coversitich machine,
  14 Sliding presser foot with LISS "5 "stifm" stands for "Stitches per Minute."

<sup>\*1</sup> 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 \*sti/min\* stands for \*Stitches per Minute.\*

## For elastic band attaching (with right hand fabric trimmer and tension roller)







MF-7913-E11-B56/PL12/MC37

This model is best suited to endless flat elastic band sewing processes for briefs, boxer briefs, etc. The right hand fabric trimmer trims the fabric, even at a multi-layered joined part, to produce a beautiful finish with the seam and fabric edge aligned with consistency. Cloth cutting knife can be detached with one touch operation in case of sewing without using the knife.





### 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)*4
		MF-7922-E11-B40/PL12/MC40	2	4	4.0				
MF-7900/E11		MF-7923-E11-B**/PL12/MC40 MF-7923-E11-B**/PL13/MC40		5	5 5.6,6.4	0.9~3.6	1:0.9~1:1.8	5 (7)	5.000
Elastic band attaching (with right hand fabric trimmer)		MF-7913-E11-B56/UT55,UT56/PL12/MC37 MF-7913-E11-B56/UT55/PL13/MC37	3	4	5.6	0.9~3.0	(1:0.6~1:1.1)	5(7)	5,000
		MF-7913-E11-B**/UT56/PL13/MC37			5.6,6.4				
MF-7900D/E11 Elastic band attaching (with right hand fabric trimmer)		MF-7913D-E11-B56/UT56/PL13/MC37	3	4	5.6	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (7)	5,000

- 1 Stitch length can be adjusted to 4.5mm at the maximum. "2 Differential ratio can be switched by adjustment."

  Stitch length can be adjusted to 4.5mm at the maximum. "2 Differential ratio can be switched by adjustment."

  The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch.

**E22** 

band attaching

(with manual binder and tension roller)



band attaching (with air binder and tension roller)







This model is best suited for sewing elastic bands on briefs. E22 is opened / closed with the knee lever and E23 is opened / closed with the knee switch. The machine comes provided as standard with a tension roller to smoothly sew elastic bands on different-sized garment bodies. The machine flexibly adapts to varving elasticities due to its soft seams.



### List of subclass machines

LIST OF SUBCIASS		100							
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)*4
MF-7900/ E22,23 For endless spandex elastic band attaching		MF-7923-E22-B**/PL13 MF-7923-E23-B**/PL13 MF-7923-E22-B**/UT52/PL13 MF-7923-E23-B**/UT57/PL13	3	5	5.6,6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	6 (7)	5,000

1 Stitch length can be adjusted to 4.5mm at the maximum. \*2 Differential ratio can be switched by adjustment.
3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch.

\*3 The numeric value indicates the lifting an \*4 "sti/min" stands for "Stitches per Minute."

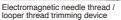
## **Device**

## **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.







## **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



Presser lifter drive mechanism magne 2 Thread trimmer drive mechanism magnet

## **UT53**

## Electromagnetic type bottom thread trimming device + Electromagnetic type wiper / Auto-lifter

This is an electromagnetic type bottom thread trimming device / auto-lifter. It is used for processes which do not need top covering.



## **UT55**

## Pneumatic type bottom thread trimming device + **Electromagnetic type wiper / Auto-lifter**

This is a pneumatic type bottom thread trimming device / auto-lifter. It is used for processes which do not need top covering.

## **UT56**

### Pneumatic type bottom thread trimming device + Air blow type wiper / Auto-lifter

This is a pneumatic type bottom thread trimming device / auto-lifter. It pneumatically handles the needle thread (i.e, places the needle thread above the presser foot) instead of the mechanical wiper.

## 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



2 Thread trimmer drive mechanism air cylinder

UT59 cannot be attached to the machine as a device. Please order with the machine head.

## Pneumatic type top and bottom thread trimming device with thread-fray-prevention function

It is the state-of-the-art function to make the thread-fray-prevention at the end of sewing more reliable.







New cloth guide / The new cloth guide helps the machine perform hemming while keeping the hem

\*The short stitch device (SS11) is included.



## **Device**

#### Short stitch device: Part No.70004376

This is a device for preventing the thread from coming undone at the end of sewing. The device is able to sew condensation stitches by the number specified as desired. It prevents the needle thread from being poorly tensed, which is likely to occur in cases where the amount of condensation is



The needle thread tightening mechanism helps produce well-tensed seams even when the machine performs short stitching.



The short stitch pitch can be adjusted with ease.

This is a gear type cloth puller. It helps feed difficult-to-feed materials to assist smooth sewing.

(Example: Attaching flat elastic bands)



## 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)



## Pneumatic cloth chip suction device

MC37 (solenoid valve type): Part No.70004432, MC40 (mechanical valve type): Part No.70004434

## Compressedair / Air consumption (with automatic thread trimmer)

Device	Top and bottom thread trimmer Auto-lifter	Bottom thread trimmer Auto-lifter	Air blow type wiper	MC37 MC40	Air consumption dm³/min (ANR)	Compressed air MPa
UT55	_	•	_	•	456	0.5
LITEC	_	•	•	_	182	0.5
UT56	_	•	•	•	637	0.5
	•	_	_	_	0.7	
LITEZ LITEO	•	_	•	_	182	0.5
UT57, UT59	•	_	_	•	456	0.5
	•	_	•	•	637	

**JUKI ECO PRODUCTS** 

The MF-7923U11B56/UT57 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.



• This sewing machine reduces power consumption by 27% as compared with the conventional models.

• 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.

For details of JUKI ECO PRODUCTS, refer to: http://www.juki.co.jp/eco\_e/index.html

\*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.

**SPECIFICATIONS** (U11, H11, H22, H23, H24, H25, E11, E22, E23)

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~#12S						
Lift of the presse	er foot	5mm (with top and bottom covering stitch), 8mm (with bottom covering stitch)						
Stitch pitch adjustment		By dial						
Differential feed	adjustment	By micro-adjustr	ment mechanism					
Lubrication		Automatiac	Automatic (frame: no lubrication)					
Lubricating oil		JUKI Machine Oil 18 (e	equivalent to ISO VG18)					
Feed dog inclina	ation adjustment	Provided a	s standard					
Micro-lifter		Provided a	s standard					
Needle gauge (mm)		3.2, 4.0, 4.8, 5.6, 6.4						
Needle bar stroke		U11, H11, H22, H23, E11: Provided as standard: 31mm: at the time of delivery / When sewing a heavy-weight material: 33mm  U11, H22, H23, H24, H25, E Provided as standard: 31n at the time of delivery / When sewing a heavy-weight r 33mm						
converting func	tion	E22, E23: Provided as standard: 33mm: at the time of delivery / When sewing a heavy-weight material: 35mm	_					
Silicon oil tank for and needle three		Provided as	standard					
Cartridge oil filte	er	Provided as	standard					
Power requirem Power consump		Single-phase 100~12 3-phase 200~240V / 500VA (with						
	U11	41kg (without device), 49kg (with UT51)	, 51kg (with PL/UT52), 44kg (with UT57)					
H11 (with PL) Weight of the		43kg (without device), 51kg (with UT52)	, 46kg (with UT57)					
		42kg (without device), 50kg (with UT51)	, 45kg (with UT57)					
machine head	H24, H25	_	46kg (with UT57), 46kg (with UT59)					
	E11 (with PL)	44kg (without device), 48kg (with UT55), 47kg (with UT56)						
	E22, E23 (with PL)	43kg (without device), 51kg (with UT52)	, 46kg (with UT57)					

## WHEN YOU PLACE ORDERS

## Please note when placing orders, that the model name should be written as follows: MF-7900 ■ Machine head Without automatic thread trimmer Tongue shape of throat plate | Code Needle gauge | Code models list for the needle gauge of the respective models. 2-needle, top and bottom coverstitch 3.2mm 3-needle, top and bottom coverstitch 4.0mm 4.8mm 5.6mm **MF79**

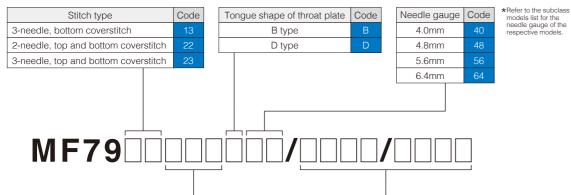
Elastic band welting Hemming (with left hand fabric trimmer, for light-weight materials) Hemming (with left hand fabric trimmer, for medium-weight materials) For elastic band attaching For endless spandex elastic band attaching (with manual binder and tension roller) For endless spandex elastic band attaching (with air binder and tension roller)

Application

Device	and attachment	Code
Not provided		
Pneumatic clo (mechanical v	th chip suction device alve type)	MC40
Cloth puller: G	ear type	PL12
Cloth puller: F	lat type	PL13

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

Universal type



Application	Code
Universal type	U11
Elastic band welting	H11
Hemming (with left hand fabric trimmer, for light-weight materials)	H22
Hemming (with left hand fabric trimmer, for medium-weight materials)	H23
For elastic band attaching	E11
For endless spandex elastic band attaching (with manual binder and tension roller)	E22
For endless spandex elastic band attaching (with air binder and tension roller)	E23

SC-921B

■ Operation panel

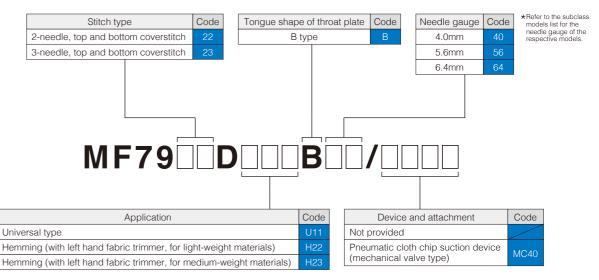
**CP-18B** 

Thread trimming device	Code
Electromagnetic type top and bottom thread trimming device	UT51
Electromagnetic type top and bottom thread trimming device	UT52
Electromagnetic type bottom thread trimming device + Electromagnetic type wiper	UT53
Pneumatic type bottom thread trimming device + Electromagnetic type wiper	UT55
Pneumatic type bottom thread trimming device + Air blow type wiper	UT56
Pneumatic type top and bottom thread trimming device	UT57
Pneumatic type top and bottom thread trimming device with thread-fray-prevention function	UT59
Pneumatic cloth chip suction device (electromagnetic valve type)	MC37
Cloth puller: Gear type	PL12
Cloth puller: Flat type	PL13

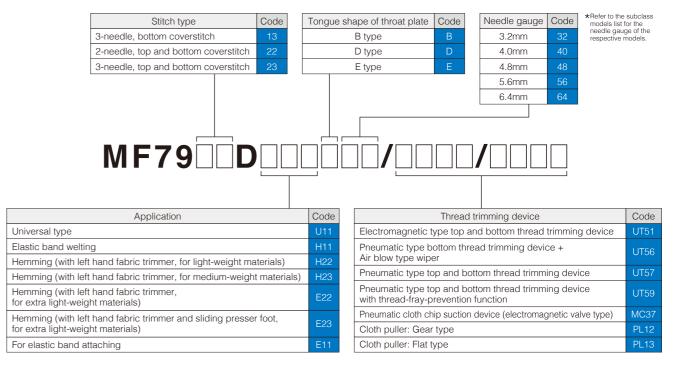
MF-7900D (Semi-dry-head)

■ Machine head

Without automatic thread trimmer



With automatic thread trimmer (Direct-drive motor)



SC-921B

■ Operation panel

**CP-18B**