

# MF-7800D Series

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

## DRY-HEAD TECHNOLOGY

The advanced dry-head technology prevents oil stains.



MF-7823D-U10-B56

A world-  
first  
feature

Semi-dry-head, Top and Bottom Coverstitch Machine

# MF-7800D Series

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# MF-7800D Series

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

The world's first semi-dry-head top and bottom coverstitch machine has been developed. With the excellent functions inherited from the MF-7800 Series, the MF-7800D 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.

## □ MF-7800D Series

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

## □ MF-7800D/UT Series

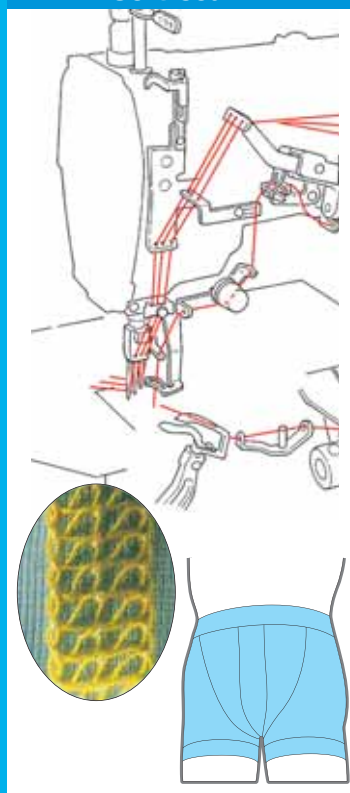
Semi-dry-head, Cylinder-bed, Top and Bottom Coverstitch Machine with Top and Bottom Thread Trimming Device



MF-7823D-U10-B56-UT25

**It is possible to select (change over) the stitch type according to sewing items.**

### Soft-seam

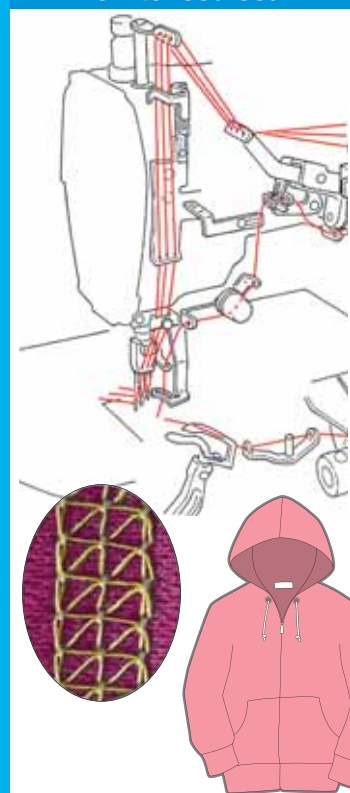


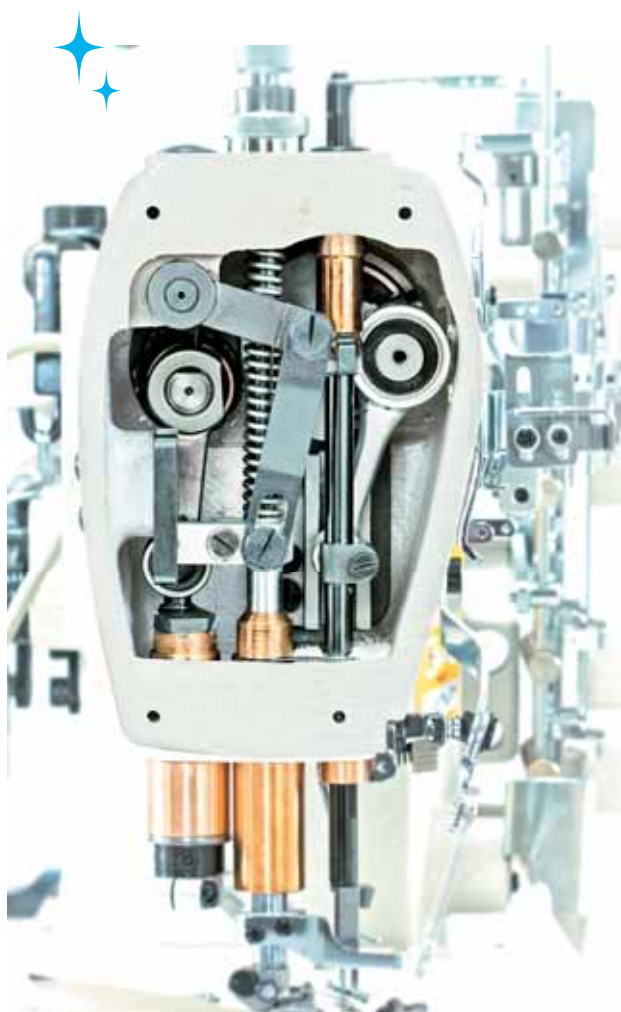
The seam conditions can be changed over according to the application or material, i.e., soft and low-tensed seams for inner wear and high-grade well-tensed seams for outer wear.

Neither the replacement of parts nor the changing of thread tension is required. The stitch type can be changed over (soft-seams/well-tensed seams) simply by changing the thread path.

By reducing the thread tension, beautifully-finished seams and satisfactorily-finished body-fitting products are produced. In addition, the machine has achieved low-vibration and low-noise operation, laying importance on comfort of sewing and ease of handling.

### Well-tensed seam





### 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 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.

## Simplified maintenance mechanism

The machine comes with diverse and trouble-free functions in consideration of the shop-floor.

### MF-7800 and 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.

### Micro-lifter mechanism

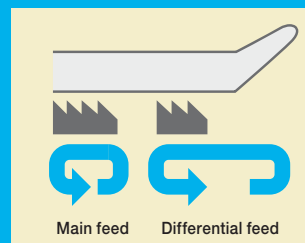
Elastic material or delicate material can be sewn with the presser foot kept slightly raised.

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. In addition, the differential feed ratio remains the same even when the stitch length is changed.



### Comfortable work space

The cylinder bed is designed to provide a comfortable work space, to secure not only a longer distance from machine arm to needle for covering process so as to help reduce the operator's mental pressure, but also an optimum cylinder length for hemming processes so as to ensure improved operability.



# U10

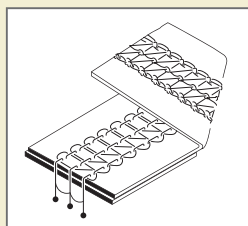
## Universal type (basic type)



T-shirts



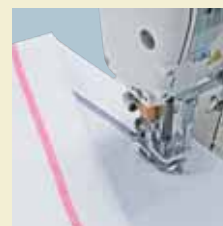
Polo shirts



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.

It is not a specific-purpose model, but a basic one which can be used for a broader range of processes independently.

\*Modification to the covering type and collarett attaching type model are easily achieved simply by changing the throat plate and feed dog.



# K10

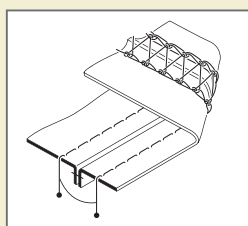
## for Covering



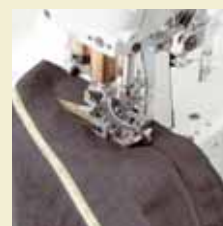
Knitwear



Sportswear



This model is best suited to covering processes for polo shirts, sportswear and knitwear.

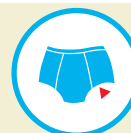


# C10

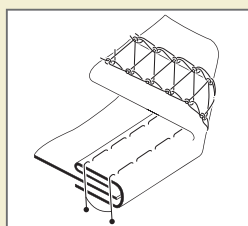
## for Collarett attaching



T-shirts



Briefs



This model is best suited for attaching collarett on underwear, T-shirts and briefs.

Multilayered joining parts of T-shirts can be fed smoothly due to the adoption of a special-purpose gauge.



# H21

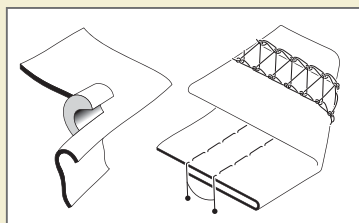
## for Hemming (with left hand fabric trimmer)



T-shirts

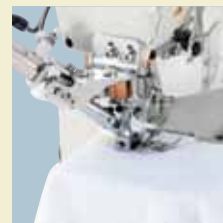


Polo shirts



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 knife drive section is a unit-structure to permit easy removal. The machine is therefore used as a hemming type model without a trimming capability.



# E10

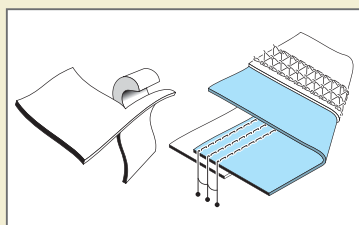
## for Elastic band attaching (with right hand fabric trimmer and tension roller)



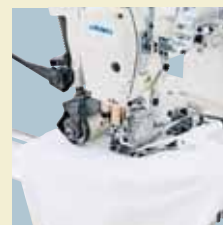
Briefs










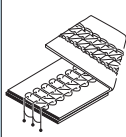
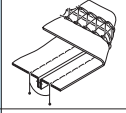
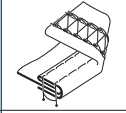
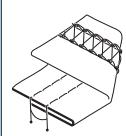
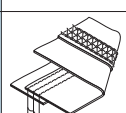
Boxer briefs



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. The right hand fabric trimmer mechanism is a unit-structure to permit easy installation/removal. This contributes to easier adjustments, such as looper aligning.



## 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)
<b>U10</b> Universal type ( basictype )		MF-7823D-U10-B**	3	5	5.6, 6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5(8)	4,000
		MF-7823D-U10-D**							
		MF-7823D-U10-B**/UT22							
		MF-7823D-U10-D**/UT22							
		MF-7823D-U10-B**/UT25							
		MF-7823D-U10-D**/UT25							
<b>K10</b> Covering		MF-7823D-K10-B56	3	5	5.6	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5(8)	4,000
		MF-7823D-K10-B56/UT25							
<b>C10</b> Collarett attaching		MF-7823D-C10-B56	3	5	5.6	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5(8)	4,000
<b>H21</b> Hemming (with left hand fabric trimmer)		MF-7823D-H21-B56	3	5	5.6	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5(8)	4,000
		MF-7823D-H21-B56/MC36							
		MF-7823D-H21-B56/UT22							
		MF-7823D-H21-B**/UT25			5.6, 6.4				
		MF-7823D-H21-D56/UT25			5.6				
		MF-7823D-H21-B**/UT25/MC35			4.8, 5.6, 6.4				
		MF-7823D-H21-D56/UT25/MC35			5.6				
<b>E10</b> Elastic band attaching (with right hand fabric trimmer)		MF-7823D-E10-B40	3	5	4.0	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5(7)	4,000
		MF-7813D-E10-B56/PL11/UT24/MC35	3	4	5.6				

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

## List of gauges

Type	C10					K10		C10		
Needle gauge	3.2mm	4.0mm	4.8mm	5.6mm	6.4mm	5.6mm	6.4mm	4.0mm	5.6mm	6.4mm
Needle clamp	13350004	13350103	13350509	13350301	13350400	13350301	13350400	13350103	13350301	13350400
Throat plate (tongue shape of throat plate*)	B	40058587	40058706	40040514	40040515	40040513	13352307	13352406	13351408	13351606
	D	-	40058956	40060923	40040516	40061463	-	-	40073948	40073950
Presser foot asm.	40058589	40058708	13376058	13375050	13375050	13375050		40056504	40056410	40056411
Main feed dog	13431200				13430103	13430707		40056684	13430301	
Differential-feed dog	13433503				13432109	13432901		40056683	40056416	

\*For the shape of the throat plate, B type is standard. The D type throat plate allows the needle thread to stretch moderately.

Type		H21				E10		
Needle gauge		4.0mm	4.8mm	5.6mm	6.4mm	4.0mm	5.6mm	6.4mm
Needle clamp		13350103	13350509	13350301	13350400	13550103	13350301	13350400
Throat plate (tongue shape of throat plate)	B	40058639	13445101	40041203	40041204	13356001	13356209	13356308
	D	40035066	-	40049944	-	-	-	-
Presser foot asm.		40048637	40039796	40039794		40022100	40022101	
Main feed dog		13431200		40032900		13430806	13430905	
Differential-feed dog		13433503		40040376		13433107	13433206	
Upper knife		40039364				40038754		
Lower knife		40042378				40038091		

## Device

### UT22 Electromagnetic type top and bottom thread trimming device/Auto-lifter

It is an electromagnetic type automatic thread trimming device/auto-lifter. The machine does not need an air compressor to achieve easy layout changing.



Electromagnetic type top and bottom thread trimming mechanism



1 Presser lifter drive mechanism  
2 Thread trimmer drive mechanism

### UT25 Pneumatic type top and bottom thread trimming device/Auto-lifter

It is a pneumatic automatic 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.



Pneumatic type top and bottom thread trimming mechanism



1 Presser lifter drive mechanism  
2 Thread trimmer drive mechanism

### MC35·36 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.

MC35 (solenoid valve type) for the servomotor or MC36 (mechanical valve type) for the clutch motor should be selected according to the use of your machine.



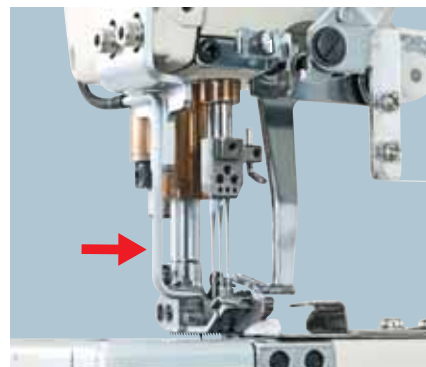
MC35



MC36

### UT24 Pneumatic type bottom thread trimming device + Air blow type wiper / Auto-lifter

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



Air blow type wiper

#### Compressed air / Air consumption (with automatic thread trimmer)

UT24			Air consumption dm <sup>3</sup> /min (ANR)	Compressed air MPa
Bottom thread trimmer / Auto-lifter	Air-blow type wiper	MC35 MC36		
○	○		182	0.5
○	○	○	637	

#### (with automatic thread trimmer)

UT25			Air consumption dm <sup>3</sup> /min (ANR)	Compressed air MPa
Top and bottom thread trimmer / Auto-lifter	Air-blow type wiper	MC35 MC36		
○			0.7	0.5
○	○		182	
○		○	456	
○	○	○	637	

### PL11 Cloth puller : Flat type

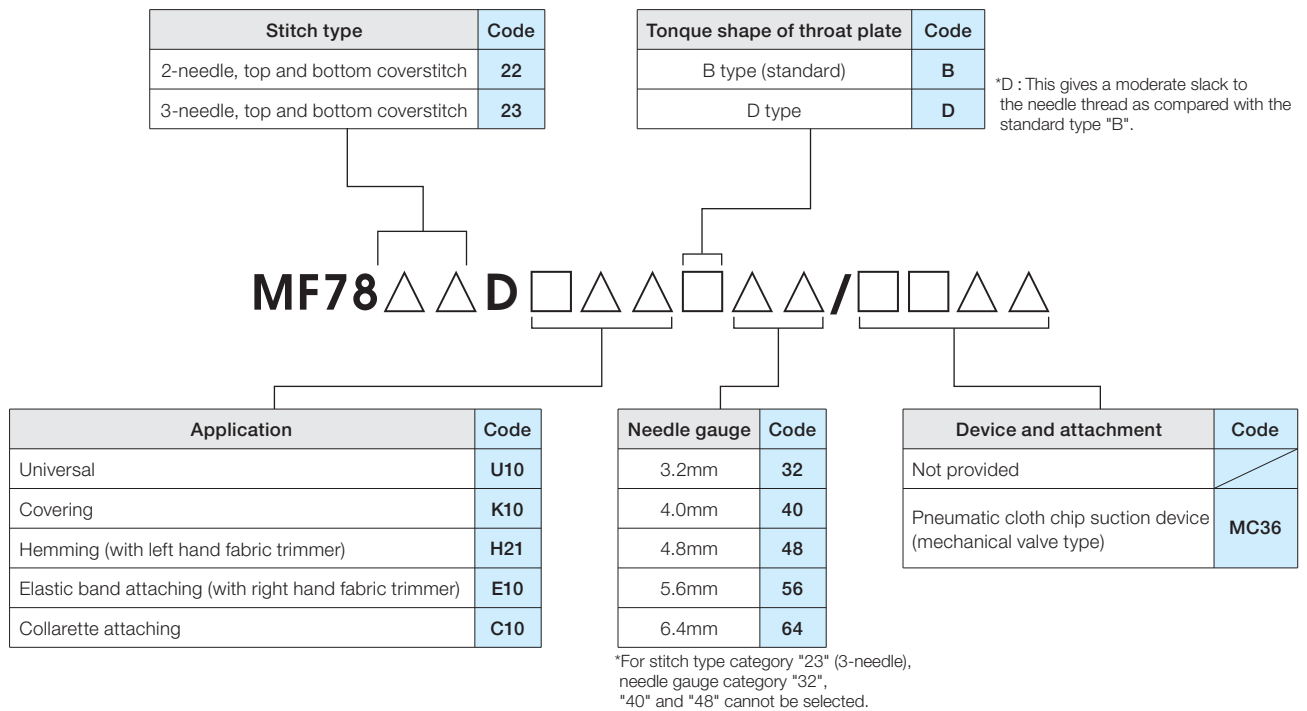
This is a flat type cloth puller. It helps feed soft material which requires a higher feeding force to assist sewing. (Example: Hemming)



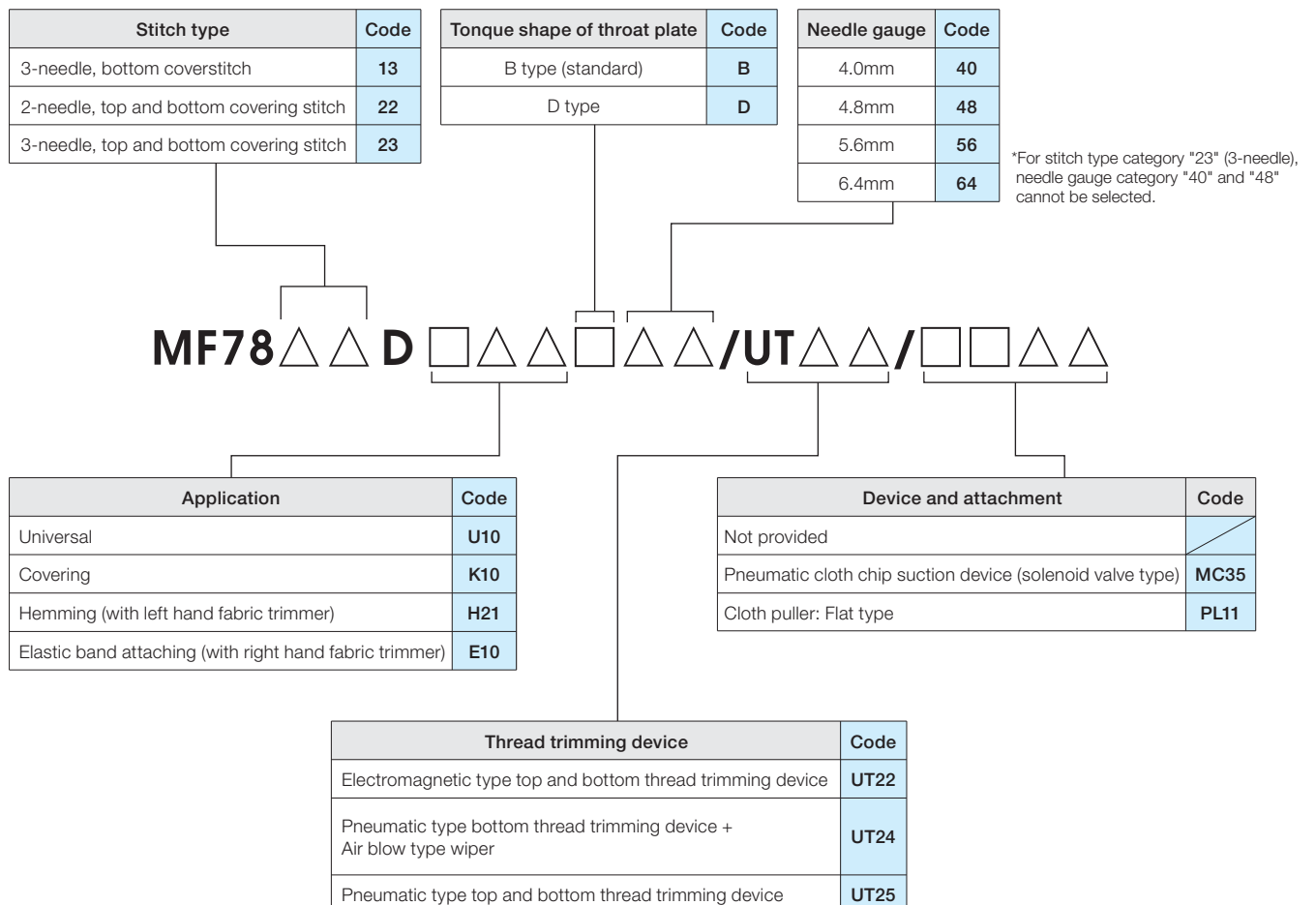
## ■ WHEN YOU PLACE ORDERS

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

### [without automatic thread trimmer]



### [with automatic thread trimmer]



● To order, please contact your nearest JUKI distributor.

## SPECIFICATIONS(U10, K10, H21, E10, C10)

Model name		MF-7800D Series	
Stitch type		2-needle / 3-needle top and bottom covering stitch	
Needle		UY128GAS #9S~#12S (standard #10S)	
Lift of the presser foot		U10, K10, H21, C10	5mm (with top and bottom covering stitch), 8mm (with bottom covering stitch)
		E10	5mm (with top and bottom covering stitch), 7mm (with bottom covering stitch)
Stitch pitch adjustment		By dial	
Differential feed adjustment		By micro-adjustment mechanism	
Lubrication		Automatic	
Lubricating oil		JUKI Machine Oil 18 (equivalent to ISO VG18)	
Feed dog inclination adjustment		Provided as standard	
Micro-lifter		Provided as standard	
Needle bar stroke converting function		31mm	
Silicon oil tank for needle tip and needle thread		Provided as standard	
Cartridge oil filter		Provided as standard	
Weight of the machine head	U10, K10, C10	42kg (without device), 44kg (with UT25), 48kg (with UT22)	
	H21	43kg (without device), 45kg (with UT25), 49kg (with UT22)	
	E10	43kg (without device), 48kg (with PL11), 50kg (with UT24/PL11)	

**JUKI**

**JUKI CORPORATION**  
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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.



**JUKI CORPORATION HEAD OFFICE**  
An environmental management system to promote and conduct the following:  
(1) Eco-friendly development of products and technologies  
(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  
in the activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.