Specifications/

KE-430FX-0▊

	Application
3	Medium materials
5	Heavy materials
K	Knitted materials
F	Foundation garments

BE-438FX

brother				
at your side				

KE-430FX
Electronic direct drive lockstitch bar tacker

BE-438FX
Electronic direct drive lockstitch button sewer

Stable thread tightening and thread trimmer when sewing from foundation to denim applications. High quality sewing will be realized for various materials.
- Extremely low noise and vibration for operator-friendly sewing
- Overwhelmingly superior productivity with the world's top-class cycle time
- Stable sewing quality with Digital Tension
- Clean sewing with semi-dry type
- Environment-conscious

KE-430FX	03	05	0K	0F	BE-438FX
Application	Medium materials	Heavy materials	Knitted materials	Foundation garments	Button attaching
Stitch formation	Single needle lock stitch				
Max. sewing speed	3,200 sti/min				2,700sti/min
Sewing area	Max.40×30mm				Max.6.4×6.4mm
Dimensions of buttons that can be Sewn	-				Outer diameter of buttons*[1]
Stitch length	0.05〜12.7mm				0.05〜6.4mm
Feed mechanism	Y-θ intermittent feed mechanism(pulse-motor driven mechanism)				
No. of stitches	Variable(Refer to "Program List" for details on the number of stitches for sewing patterns that are already preset.)				
Max. No. of stitches	5,000 stitches/pattern				
Work clamp lifter	Pulse motor drive system				
Work clamp height / Button clamp height	Max. 17mm				Max. 13mm
Rotary hook	Shuttle hook(double size shuttle hook, optional)				
Digital tension	Standard equipment				
Thread wiper	Standard equipment				
Thead trimmer	Standard equipment				
Thread nipper	-3,-K,-F:Standard equipment				
Data storage method	Flash memory(Any sewing pattern can be added using SD card)				
External data storage method	SD card*[2]				
No. of cycle programs	30 cycle(50 programs for each cycle)				
No. of stored data	89 sewing patterns are set already			64 sewing pattern are set already	
	(Up to 512 patterns can be added. Total number of stitches of stored data which can be added is within 500,000.*[3])				
Motor	AC servo motor 550W(Direct Drive)				
Weight	Machine head: Approx. 57kg, Operation panel: Approx.0.4kg Control box: Approx. 9kg				
Power supply	Single-phase 110V/220V/230V 3-phase 220V/380V/400V 400VA				

*1 Use the optional button clamp B(S03634-101) for diameters of 20 mm or greater.
*2 Available incapacities up to 2GB. No guarantees of operation can be given for any media.
*3 The number of sewing patterns and the number of stitches that can be recorded will vary depending on the number of stitches in each sewing pattern.

RoHS Compliant

KE-430FX and BE-438FX are compliant with the RoHS Directive(the restriction of the use of certain hazardous substances in electrical and electronic equipment) which came into effect in the EU in July 2006.

Brother has established voluntary environmental standards for products and created the "Brother Green Label". KE-430FX and BE-438FX are certified as an environment-conscious sewing machine according to the "Brother Green Label" standard.

Brother Earth

Working with you for a better environment
www.brotherearth.com

Please read instruction manual before using the machine for safety operation.
-Product specifications are subject to change for improvement without notice.
-Photographs are for illustration purpose. They may not represent actual operating conditions and may display optional parts.

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brother

Quality & Speed

Quality & Speed

Stable thread tightening and thread trimmer when sewing from foundation to denim applications.
High quality sewing will be realized for various materials.

1 Beautiful Sewing with Operator-friendly Environment

Ideal thread take-up for each material, light and heavy

In addition to the recognized stability of thread tightening for heavy materials, new best suitable thread take-up is added, which can be used from light materials to medium materials. It greatly improves sewing quality for light materials.
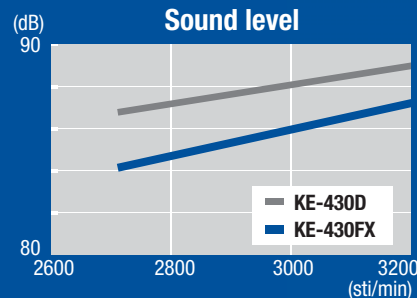
Less thread cast-off and bird nest at the sewing start

Newly added thread trimming function which cut threads after the upper shaft is stopped can steady the thread end length. Improved nipper decreases thread cast-off and bird nesting at the sewing start.

Extremely low noise and vibration for operator-friendly Sewing

Optimal design for casting and rotational mechanism by computer analysis, optimal control for direct drive motor and feeding motor reduced sewing noise and vibration greatly. It helps reduce stress and fatigue of operators and supply operator-friendly environment.

Sound level

(dB)

90

80

2600 2800 3000 3200 (sti/min)

- KE-430D
- KE-430FX

2 Overwhelmingly superior productivity with the world's top-class cycle time

Since a direct drive system is used, the KE-430FX boasts the world's top-class sewing speed 3,200 sti/min in shuttle hook sewing machines. Since the work clamp lift amount can be set in two steps, it contributes to enhanced productivity.

3 Digital tension as standard equipment

Digital Tension is equipped as standard so you can adjust the tension appropriately for the material being sewn. No more relying on individual feel, changing the thread tension can be added onto the sewing programs.

Digital tension

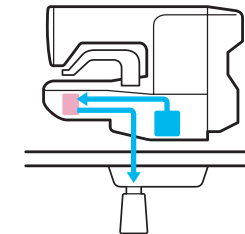## 4 User-friendly Operation Panel

The operation panel is designed to be user-friendly and to improve the ease of operation. Sewing patterns, sewing speed and upper thread tension can be memorized as user programs. Other useful functions such as production counter and lower thread counter are available.

SD card slot
Sewing patterns can be added and copied easily.

5 Clean Sewing with Semi-dry Type

All bar tacker and button attaching models are semi-dry type. They supply constant clean oil only to the shuttle hook, there is no concern of oil staining from needle bar area. The direct drive system, having no belt shavings can keep products clean.

6 Quick Change Device for Easy Work Clamp Change

The work clamp can be easily replaced by loosening the bolt and moving the work clamp arm levers.

7 Easy Maintenance
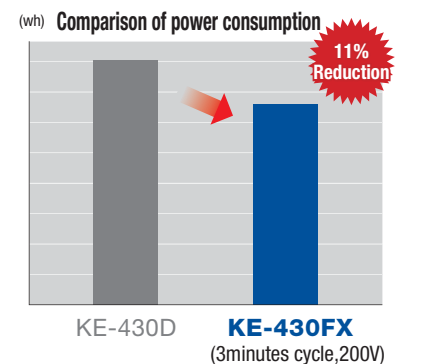
The KE-430FX provides an easy maintenance, thanks to its long life cycle of the grease.

8 High Energy Saving

New Brother-developed motor realizes high energy saving with direct drive system which minimizes loss of power transmission. The KE-430FX exercises strong sewing with less energy.

(wh) Comparison of power consumption

11% Reduction

KE-430D

KE-430FX
(3minutes cycle,200V)

Sewing Patterns List (KE-430FX)

The sewing patterns shown below have been preset into the sewing machine and can be selected according to specifications. (Any sewing pattern is available as long as it is within the work clamp and feed plate in size.)
Use the work clamp and feed plate that match the respective sewing pattern selected.

（KE-430FX）

For medium materials

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
8		21	7×2	5		29	10×2	64*1		30	16×2
68*1		22	7×2	67*1		30	10×2	4		31	16×2
20		28	7×2	13		35	10×2	66*1		32	16×2
71*1		29	7×2	69*1		36	10×2	1		42	16×2
21		35	7×2	15		42	10×2	65*1		43	16×2
72*1		36	7×2	70*1		43	10×2	89		90	24×3

For heavy materials

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
6		30	16×3	3		35	20×3	17		42	24×3
80*1		31	16×3	63		35	20×3	83*1		43	24×3
14		35	16×3	79*1		36	20×3	18		56	24×3
81*1		36	16×3	2		42	20×3	84*1		57	24×3
16		43	16×3	62		42	20×3	19		64	24×3
82*1		44	16×3	78*1		43	20×3	85*1		65	24×3

For knitted materials and foundation garments

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
22		14	7×2	33*2		15	8×2	77*1*2		28	8×2
75*1		15	7×2	32*2		22	8×2	7		29	8×2
9		21	7×2	77*1*2		23	8×2	31*2		29	8×2
74*1		22	7×2	7		28	8×2				

*1 Use with the thread nipper device. *2 The sewing start and sewing end are in the middle pattern

Straight bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)
10		21	10×0.3
11		28	10×0.3
12		28	20×0.3
23		35	25×0.3
24		42	25×0.3
25		45	25×0.3

Vertical zigzag stitching

No.	Sewing pattern	No. of stitches	Length x Width (mm)
44		46	9×15
45		70	9×25

Vertical bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
26		28	3×10	41		36	3×16
27		35	3×10	42		44	3×20
40		32	3×16	43		68	3×24

Vertical straight bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
28		19	0.3×10	46		27	0.3×20
29		21	0.3×10				
30		28	0.3×10	47		44	0.3×25

Crescent bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
34		35	12×7	36		57	7×12	38		53	7×10
35		58	12×7	37		57	7×12	39		53	7×10

Crossed stitching

No.	Sewing pattern	No. of stitches	Length x Width (mm)
48		70	10×10
49		93	9.6×9.6

Crossed tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)
50		84	16×16
51		105	30×26

Sewing Patterns List (BE-438FX)

The sewing patterns shown below have been preset into the sewing machine. Any sewing pattern can be selected as long as the needle will drop into the holes of the buttons.

When sewing patterns that do not have crossover stitches, the thread is trimmed after sewing of one side is completed, and then the other side is sewn.

(KE-430FX)

L-pattern tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
52		60	11.3×11.2	54		78	15.3×15.2
53		60	11.3×11.2	55		78	15.3×15.2

Circular stitching

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
56		106	9×9	58		127	9×9	60		114	10×10
57		116	9×9	59		104	10×10	61		1241	10×10

For eyelet buttonhole

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
86		21	6×2	87		28	6×2	88		35	6×2

If you want to sew a sewing pattern other than standard sewing patterns, you can create your original pattern using the PS-300B. Consult with your local Brother sales office for details.

Peripheral Equipment and Option

• Sewing data programming software PS-300B

With the KE-430FX, sewing can be done using sewing patterns other than preset ones. PS-300B is software for creating sewing patterns on a personal computer.

• Two pedal foot switch

The right and left pedals are provided for separated operation functions. This allows even more precise positioning of materials.
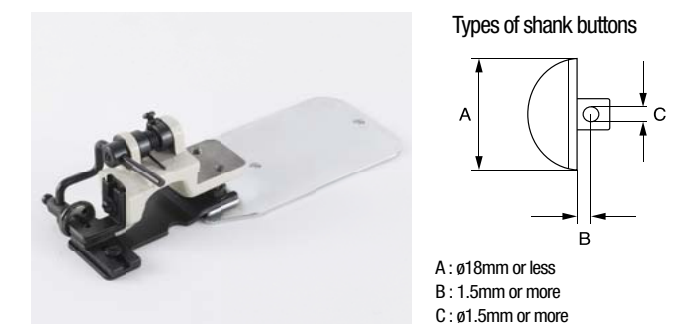

No.	No. of button holes	Sewing pattern	No. of threads	No. of crossover stitches	No. of stitches	Sewing size X × Y(mm)
1	2		6	—	12	3.4×0
54*1			6	—	12	
2			8	—	14	
55*1			8	—	14	
3			10	—	16	
4			12	—	18	
5*2			16	—	22	
6*2			20	—	26	
56*1			6	—	11	0×3.4
7*3			6	—	12	
23*3			10	—	16	
8*3			12	—	18	
9*3	3		5-5-5	—	21	2.6×2.4
24*3			7-7-7	—	27	
25*3			5-5-5	—	21	
26*3			7-7-7	—	27	
57*1	4		6-6	1	18	3.4×3.4
10			6-6	1	19	
58*1			8-8	1	22	
11			8-8	1	23	
12			8-8	3	25	
13			10-10	1	27	
27			12-12	1	31	
14*4			6-6	0	24	
36*5			6-6	0	24	
28*4			8-8	0	28	
37*5			8-8	0	28	
15*4			10-10	0	32	
38*5			10-10	0	32	
29*4			12-12	0	36	
39*5			12-12	0	36	
59*1			6-5	1	17	
16			6-5	1	18	
60*1			8-7	1	21	
17			8-7	1	22	
30			10-9	1	26	
61*1			6-6	1	18	
18			6-6	1	19	
62*1			8-8	1	22	
19			8-8	1	23	
63*1			10-10	1	26	
31			10-10	1	27	
45			12-12	1	31	
20*4			6-6	0	24	
40*5			6-6	0	24	
32*4			8-8	0	28	
41*5			8-8	0	28	
33*4			10-10	0	32	
42*5			10-10	0	32	

No.	No. of button holes	Sewing pattern	No. of threads	No. of crossover stitches	No. of stitches	Sewing size X × Y(mm)
64*1	4		6-6	1	18	3.4×3.4
21*3			6-6	1	19	
34*3			10-10	1	27	
22*3_4			6-6	0	24	2.4×3.4
43*3_5			6-6	0	24	
35*3_4			10-10	0	32	
44*3_5			10-10	0	32	
46			6-7	1	19	3.4×3.4
47			8-9	1	23	
48			10-11	1	27	
49			12-13	1	31	

*1 Use for buttons with small holes.
*2 Check that the diameter or the holes in the buttons is 2mm or greater before using the programs.
*3 Do not use the button lifter spring.
*4 When sewing of one side is completed, the button clamp rises and the thread is trimmed. To finish sewing, press the foot switch until sewing of the other side starts, or press the foot switch again after sewing of the other side is completed.
*5 When sewing of one side is completed, the thread will be trimmed without the button clamp rising, and then the other side will be sewn.

Options

• Shank device(SB1563001)

Types of shank buttons

A : ø18mm or less
B : 1.5mm or more
C : ø1.5mm or more

• Shank button

No.	Sewing pattern	No. of threads	No. of stitches	Length x Width (mm)
50		6	12	3.4×0
51		8	14	
52		10	16	
53		12	18	

When sewing this program, use a sewing speed of **1,600 sti/min or less.**