Specifications

KE-430F-0☐

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

BE-438F

	KE-430F-3	KE-430F-5	KE-430F-K	KE-430F-F	BE-438F
Application	Medium materials	Heavy materials	Knitted materials	Foundation	Button attaching
Stitch formation	Single needle lock stitch				
Max. sewing speed	3,200sti/min				2,700sti/min
Sewing area(X-Y)	Max. 40 x 30mm				Max. 6.4 x 6.4mm
Dimensions of buttons that can be sewn	—				Outer diameter of button 8 - 30mm*1
Feed mechanism	Y—θ intermittent feed mechanism(pulse-motor driven mechanism)				
Stitch length	0.05〜12.7mm				0.05〜6.4mm
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	5,000stitches/pattern				
Work clamp lifter	Pulse motor drive system				
Work clamp height / Button clamp height	17mm Max.				13mm Max.
Rotary hook	Shuttle hook(double shuttle hook, optional)				Shuttle hook
Digital tension	Standard equipment				
Thread wiper	Standard equipment				
Thread 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.58kg, Operation panel: Approx 0.4kg				
	Control box:Approx.9kg				
Power supply	Single phase100-120V,200-240V 3-phase200-240V,380-415V, 350VA				

*1 Use the optional button clamp B(S03634-101) for diameters of 20 mm or greater.
*2 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

Product specifications are subject to change for improvement without notice.
Please read instruction manual before using the machine for safety operation.

brother
at your side

KE-430F
Electronic direct drive lock stitch bar tacker

BE-438F
Electronic direct drive lockstitch button sewer

Stable thread tightening and thread trimmer when sewing from foundation to denim. High quality sewing will be realized at various materials. KE-430F gains high productivity as it's the world's fastest cycle time.

- Beautiful sewing and easy to adjust sewing functions
- Stable sewing quality with Digital tension
- Extremely low noise and vibration for operator friendly sewing
- Overwhelmingly superior productivity with the world's fastest cycle time
- High energy saving   ● Easy maintenance
- Clean sewing with semi-dry type
- User-friendly operation panel
- Environment-conscious

Brother Earth
Working with you for a better environment

www.brotherearth.com

Beautiful sewing and easy to adjust sewing functions

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

In addition to recognized the stable 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 arm shaft is stopped can steady the thread end length. Improved nipper decreases thread cast-off and bird nest at the sewing start.
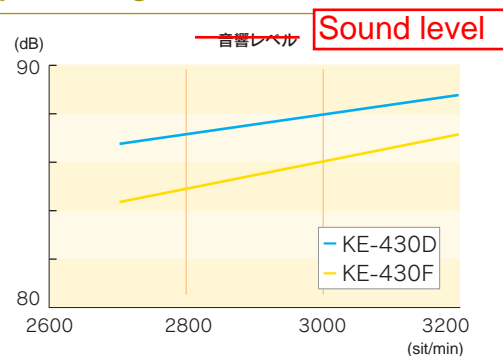
Digital tension as standard equipment

Digital tension is equipped as standard. It keeps tension evenly when operators changing, realizing stable sewing quality. Digital tension is easily adjusted on the operation panel, which is useful for operators who are familiar with screwed-type adjustment. Changing the thread tension can be added on the sewing programs.

デジタルテンション

Extremely low noise and vibration for operator friendly Sewing

Optimal design for arm bed 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.

音量レベル **Sound level**

(dB)
90

80
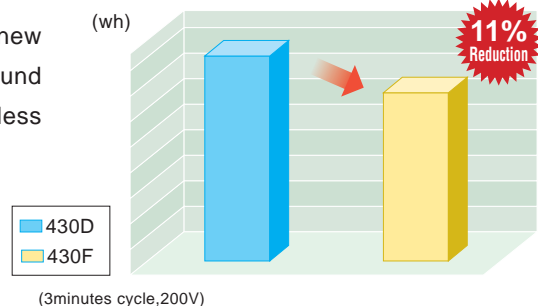2600   2800   3000   3200
(sit/min)

— KE-430D
— KE-430F

Overwhelmingly superior productivity with the World's fastest cycle time

Since a direct drive system is used, KE-430F boasts the World's fastest sewing speed 3,200 sti/min in half rotation hook sewing machines. Since the work clamp lift amount can be set in two steps, it contributes to productivity enhancement.
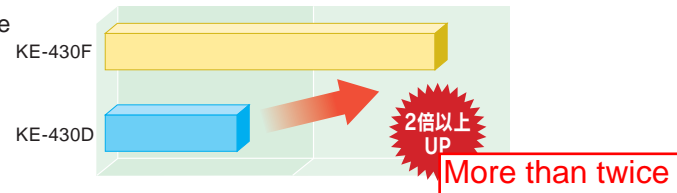
High energy saving

Loss of power transmission is remained by direct drive system. A new motor has been developed and reduces the power consumption around 15% compared to the previous model. It exercises strong sewing with less energy.

(wh)

11% Reduction

☐ 430D
☐ 430F

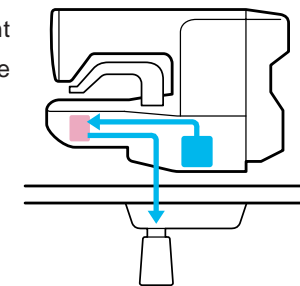(3minutes cycle,200V)

Easy maintenance

The life cycle of the grease has been extended by (the) twice the rate compared to the previous model.

Applying grease at only two locations makes maintenance easier.

KE-430F

KE-430D

2倍以上 UP

More than twice

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 rotary hook, there is no concern of oil staining. The direct drive system, having no belt shavings can keep products clean.

User-friendly operation panel

The operation panel is designed to be user-friendly and to improve the ease of operation.

NEW SD card slot

SD card slot is equipped on the operation panel as standard. Sewing patterns can be added and copied easily.

NEW Easy-setting digital tension

Digital tension is easily set by the dedicated key. You can check the setting every time on the dedicated window.

Production counter

It can count how many sewing products are sewed until 9999999.

Lower thread counter

If you use the bobbin thread counter to set the number of articles which can be sewn with the amount of bobbin thread available, you can stop the bobbin thread running out in the middle of sewing pattern.

Sewing start speed

Nine steps sewing start speed can be selected. It can select suitable speed for sewing materials, contributing to preventing the thread cast-off at sewing start.

Program setting

Sewing patterns, X-scale, Y-scale, sewing speed and upper thread tension can be memorized as user programs. Program No.1-89(BE-438F:No.1-64) have been preset into the sewing machine. Up to 512 kinds of patterns can be added and program No.200-999 can be changed all terms.

*Number of memorized patterns differs according to the number of stitches.

Environment-conscious

Brother has established its original "Brother Green Label" for the products, in conformity with ISO 14021 and JIS Q14021. The KE-430F and BE-438F is certified as an environment-conscious sewing machine according to the "Brother Green Label" standard.

The machines are compliant with the RoHS Directive*1. The use of the restricted substances such as lead, cadmium, hexavalent chromium is absolutely within the regulation values. Brother has been providing all its products in accordance with the RoHS Directive for all market areas (excluding machine tools).

＊The RoHS Directive (the restriction of the use of certain hazardous substances in electrical and electronic equipment) came into effect in the EU in July 2006.

The industry's most efficient energy savings
Reduction of noise at the usage environment
A significant reduction of lubrication oil

Sewing Patterns list (KE-430D)

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.

● For ordinary materials

No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×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 denim

No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×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×Width (mm)	No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×Width (mm)
22		14	7×2	33*2		15	8×2	31*2		28	8×2
75*1		15	7×2	32*2		22	8×2	73*1		29	8×2
9		21	7×2	77*1*2		23	8×2	76*1*2		29	8×2
74*1		22	7×2	7		28	8×2				

* The sewing start and sewing end are in the middle of the pattern.

● Straight bar tacking

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

● Vertical bar tacking

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

● Crescent bar tacking

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

● Crossed tacking

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

● L-pattern tacking

No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×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

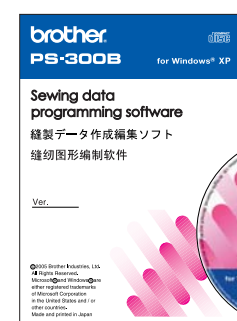| No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×Width (mm)	No.	Sewing pattern	No. of stitches	Length×Width (mm)
56		106	9×9	58		127	9×9	60		114	10×10
57		116	9×9	59		104	10×10	61		124	10×10

● For eyelet buttonhole

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

If you want to sew a pattern other than standard patterns, you can create your original pattern using the PS-3000. Consult with your local Brother sales Office for details.

Peripheral equipment

● Sewing data programming software
PS−300B

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

●Double-pedal foot switch

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

Program list（BE-438F）

The programs shown below have been preset into the sewing machine. Any program is available as long as the needle drops down in the hole of the button.
When sewing programs that do not have crossover stitches, the thread is trimmed after sewing of one side is completed, and then the other side is sewn.
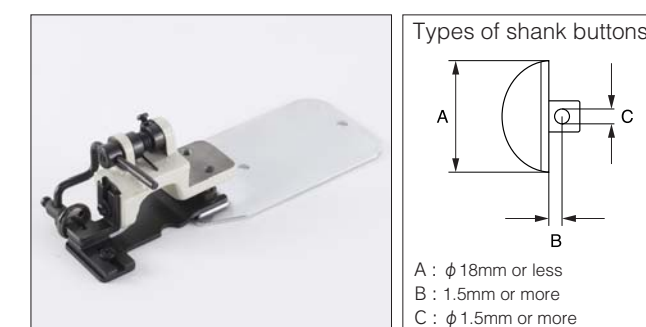
No.	No. of button holes	Sewing pattern	No. of threads	No. of crossover stitches	No. of stitches	Sewing size X × Y (mm)
1	2		6	—	12	3.4×0
54*1			6	—	12	
2			8	—	14	
55*1			8	—	14	
3			10	—	16	
4			12	—	18	
5*2			16	—	22	
6*2			20	—	26	
56*1	3		6	—	11	0×3.4
7*3			6	—	12	
23*3			10	—	16	
8*3			12	—	18	
9*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 Check that the button hole diameter is 2 mm or greater before using the programs.
*2 Do not use the button lifter spring.
*3 When sewing of one side is completed, the button clamp rises and the thread is wipped. 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.
*4 When sewing of one side is completed, the thread will be wipped without the button clamp rising, and then the other side will be sewn.

Options

● Shank device

Types of shank buttons

A : φ18mm or less
B : 1.5mm or more
C : φ1.5mm or more

● Shank button

No.	Sewing pattern	No. of threads	No. of stitches	Sewing size X・Y (mm)
50		6	12	3.4×0
51		8	14	
52		10	16	
53		12	18	

Compatible control program versions are Ver. 6.0.00 and later. If using an earlier version than this, update the version. When sewing this program, use a sewing speed of 1600 rpm or less.