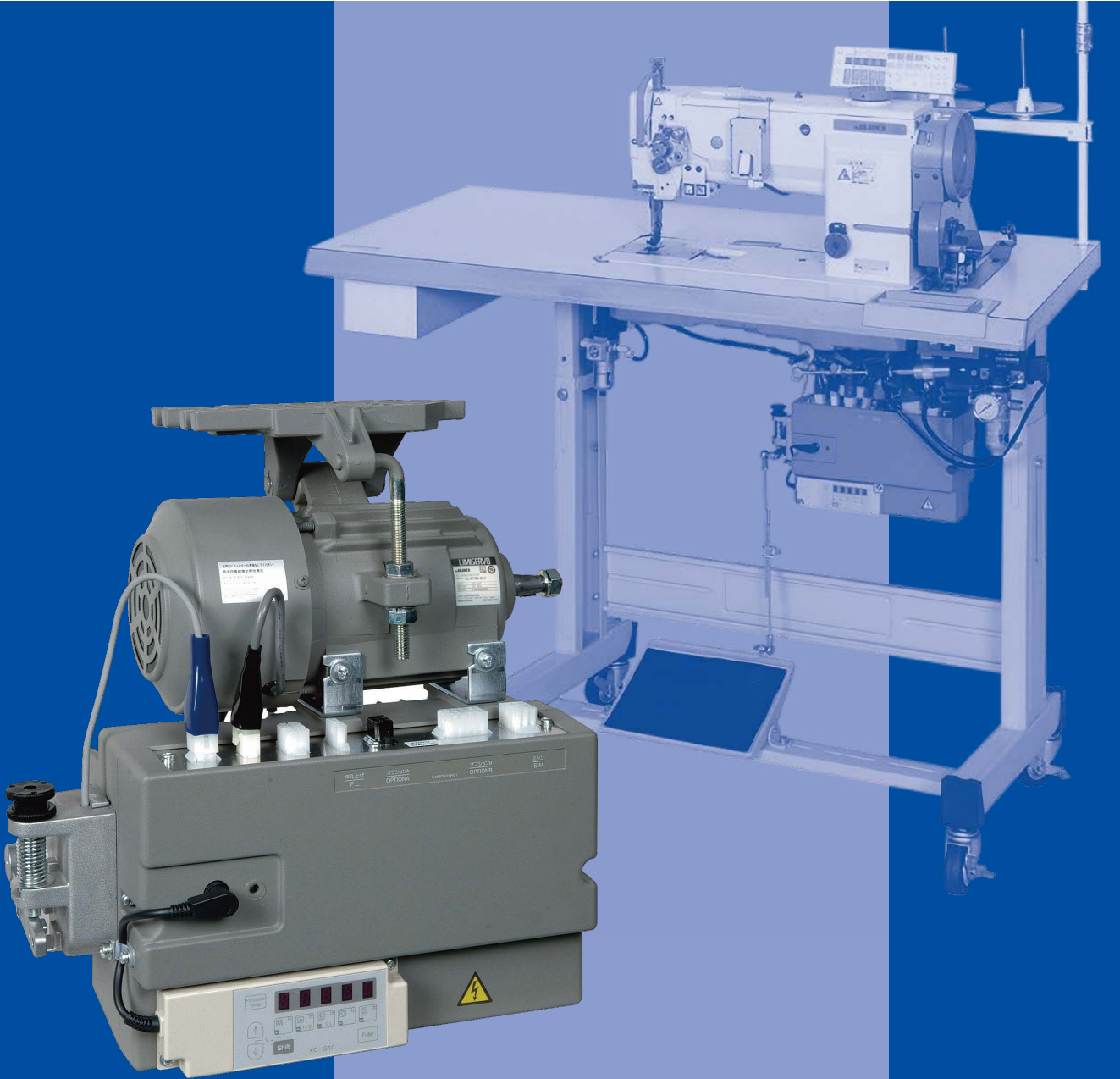# JUKI

LIMISERVO X G Series
Control box, Motor, Panel

Achieving a compact and lightweight motor!
Enhanced step sequence function!

LIMISERVO X
G Series

SPECIFICATIONS

Control box	XC-GMF*-10-05	XC-GMF*-20-05	XC-GMF*-20-07
Motor	XL-G554-10Y	XL-G554-20Y	XL-G754-20Y
Power supply	Single-phase 100-120V	Single-phase, 3-phase 200-240V*¹	
Rated output	550W		750W
Rated speed	3,600 sti/min*²		
Rated torque	1.47N·m (0.15kg·m)		1.96N·m (0.2kg·m)
Speed control range	70 sti/min to 8,999 sti/min*²		
Machine axis	Shipping setting (250sti/min to 4,000sti/min*²)		
Motor axis	50 sti/min to 3,600 sti/min*²		
Detector	XC-KE-01P		
Environment Ambient temperature	5°C to 40°C		
Ambient humidity	30%RH to 95%RH (no condensation)		
Max. altitude	Above sea-level 1,000m		
Mass	Control box: 3.5kg (net), 6.9kg (gross), Motor: 6.9kg (net), 9.1kg (gross)		
Packaging style	Carton box < L: 490mm × W: 402mm × H: 227mm > (When motor and control box are packaged as set)		

*1 Please refer to the instruction manual for details of the connection method.
*2 sti/min is the abbreviation for "stitches per minute"

WHEN YOU PLACE ORDERS

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

Control box

XC-GMF□□□-□□-□□

Destination	Code
for general export	Y
for ce	YCE

Power supply	Code
Single-phase 100-120V	10
Single-phase・3-phase 200-240V	20

Rated output	Code
550W	05
750W	07

● Please refer to the instructions manual for the single-phase connection method coded "20".

Control box / Motor

XL-G□54-□□Y□ XC-GMF□□□-□□-□□

Rated output	Code
550W	5
750W	7

Power supply	Code
Single-phase 100-120V	10
Single-phase・3-phase 200-240V	20

Destination	Code
for general export	Y
for ce	YCE
for PEGASUS	PY

Power supply	Code
Single-phase 100-120V	10
Single-phase・3-phase 200-240V	20

Rated output	Code
550W	05
750W	07

● Please refer to the instructions manual for the single-phase connection method coded "20".

● Please refer to the instructions manual for the single-phase connection method coded "20".

Panel

■ XC-G10□-CE-ZA

Installation layout	Code
Bottom	S
Top	L

■ XC-G500Y-CE-ZA

Destination	Code
for export	Y

Auto presser foot lifter unit
LE-FA-ZA

Variable speed pedal
XC-CVS-3-ZA

JUKI
https://www.juki.co.jp/en

● 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.

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LIMISERVO X G Series

Compact, lightweight motor with complete range of convenient functions!

Realization of Compact, Lightweight Motor

Motor size reduced by approximately 60% when compared with previous motor (XL-554). Motor weight reduced by approximately 1.7kg.
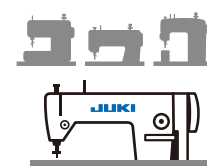
Control Box / Motor

The LIMISERVO X G Series includes auto thread trimming, presser foot lifting, fixed-stitch stitching, continuous stitching and backtacking.
When connected to operation panel, there are step sequence, simple sequence and PC communication functions. Equipped with 8 solenoid drive outputs, 2 electromagnetic valve outputs, 1 small-signal output and 14 input terminals including variable voltage input.

Compatibility Settings Table for Adapted Machines

○: Needle positioner function
◎: Thread trim function

Lockstitching	Overlock	Chainstitching	Zigzagstitching	Whipstitching
◎	○	○	○	○

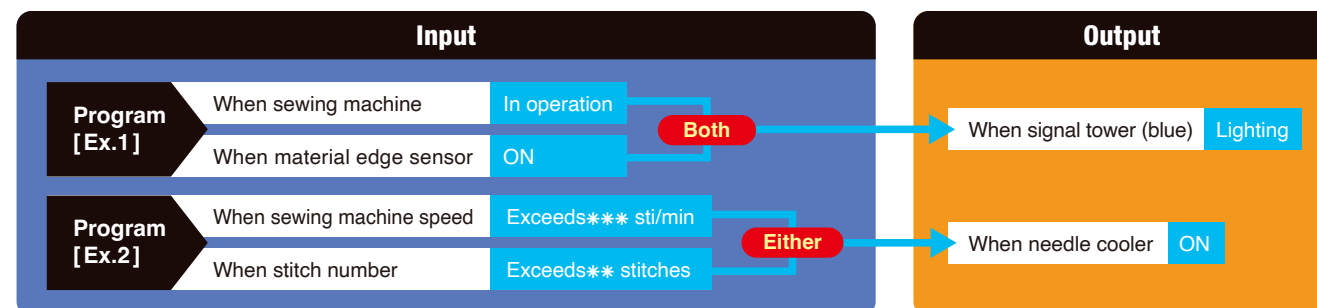### Applicable to sewing machines of other companies

By selecting the sewing machine from the simple mode setting of the control box, it is possible to easily set the thread trimming timing and other sewing machine settings of other companies' sewing machines. You can reduce the time required for adjustments.

Abundant program functions

Step Sequence Function — Condition settings also possible with multiple combining

- This function enables easy programming of the desired input, output and machining operation conditions in sequence with the stitching process.
- Various operations can now be incorporated into the "stitching process", including those performed before and after operation.

Extensive upgrade of existing machine simple sequence mode!

Input				Output	
Program [Ex.1]	When sewing machine	In operation	**Both**	When signal tower (blue)	Lighting
	When material edge sensor	ON			
Program [Ex.2]	When sewing machine speed	Exceeds✱✱✱ sti/min	**Either**	When needle cooler	ON
	When stitch number	Exceeds✱✱ stitches			

Direct Parameter No. Call-up Function

Previously it was necessary to select the respective mode to perform settings when making changes to the parameters, however, by using the XC-G10S (L), XC-G500Y operation panel, it is now possible to call up the required parameter in a single operation. It is also possible to call up parameters for each mode.

[Ex.] Checking parameter "RU." call-up No."36" from list.

Name	Function	No.
RU.	Reverse run needle lifting after thread trimming	**0036**
R8.	RU reverse run angle	0037

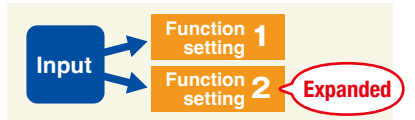No. Selection → Single Operation Call-up

User-Friendly Functions — Computer Interface Standard Equipment

- Settings data control including batch writing, reading and saving of settings can be performed using the setup software. (XCG_SET)
- Step sequence creation, editing, etc. can be performed using the dedicated step sequence software. (XCG_STEP)

Full Functionality — Inherits the LIMISERVO X F Series!

- The settings data save function has been expanded to enable saving of settings data from 1 model to 2 models.
- A parameter change difference display has been added. (A flashing dot [.] displays at the changed parameter.)
- 2 types of function setting can now be performed with a single input.

Input → Function setting 1 / Function setting 2 (Expanded)

Interchangeability

You can use it as is
- Detector: XC-KE-01P (K14MXCKE01P0)
- Auto presser foot lifter unit: LE-FA
- Variable speed pedal: XC-CVS-3

It is available with an optional attachment bracket
- Motor: XL-554

Options

Operation Panel	XC-G10S (L)-CE (control box attachment type) / XC-G500Y-CE	Impossible to use it together
Auto presser foot lifter unit	LE-FA: Air type (shared 30V / 24V use)	
Variable speed pedal	XC-CVS-3: 3-speed pedal, standing machine	
Lever unit (separated type)	XC-GL-1-SET: K14M72300101 (1-step kick-back use [installation plate, extension cable set]) XC-GL-2-SET: K14M72300102 (2-step kick-back use [installation plate, extension cable set])	
Extension cables	1.0m motor cable (200V): M97318099 1.0m encoder cable: K14M71725402	
Installation metal fittings	New motor and old control box: K14M72354001 Old motor and new control box: K14M72354101	

* The operation panel, auto presser foot lifter unit and variable speed pedal are products, not parts.

XC-G10 type panel
The existing operation panel can be attached to and removed from the XC-G10 Series operation panel.

XC-G500 type panel
Significant enhancements have been made to the operability of the XC-G500-Y Series operation panel over existing functionality (XC-E500-Y), and the settings data memory has been doubled.

Auto presser foot lifter unit LE-FA
Variable speed pedal XC-CVS-3
Lever unit (separated type) XC-GL-2

Operation panel Compatibility

The current — G Series Control box

XC-G10S (L)-CE operation panel (No settings backup function)
XC-G500Y-CE operation panel (settings backup capacity: 2 machines)
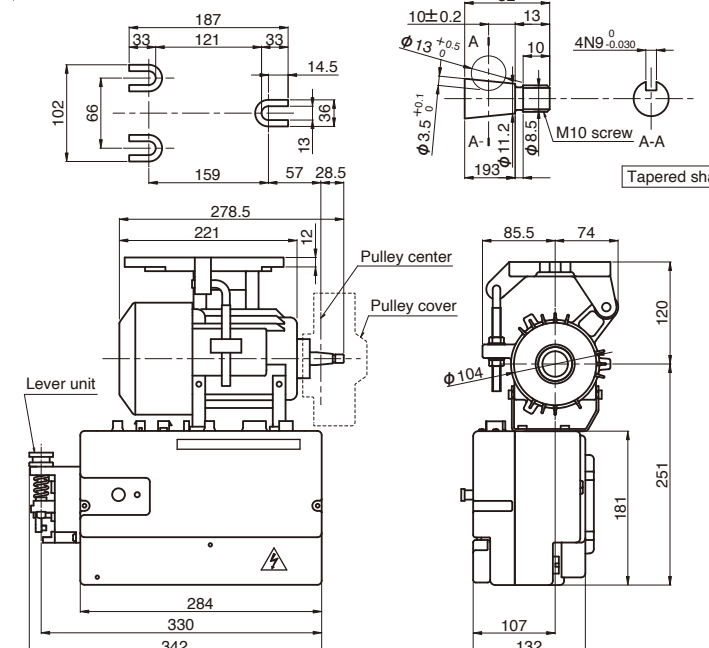The old type: XC-E500-Y operation panel (settings backup capacity: 1 machines)

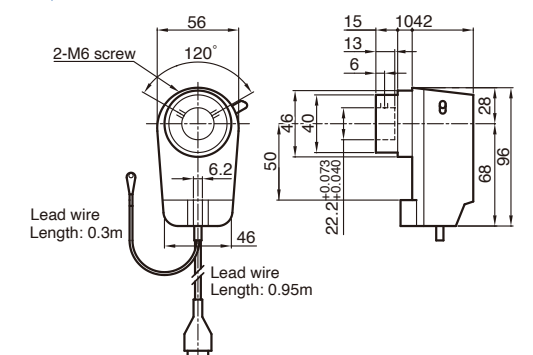The old type — E, F Series Control box

Note* — *Note: There are restrictions on the settings backup function.

Dimensions
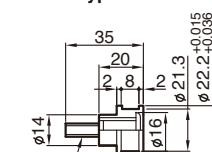
▼ Control Box / Motor

▼ Position Detector XC-KE-01P

▼ Adaptor for position detector attachment
Screw-in type

SM11/32 threads 28 (Brother, Mitsubishi Series)
SM5/16 threads 24 (Juki, Toyota, Singer Series)