

Mitsubishi Industrial Sewing Machine AC Servo

LIMISERVO X

G Series



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New Mitsubishi LIMISERVO G Series!

Compact, lightweight motor with complete range of convenient functions!

Motor Size and Weight Reduction

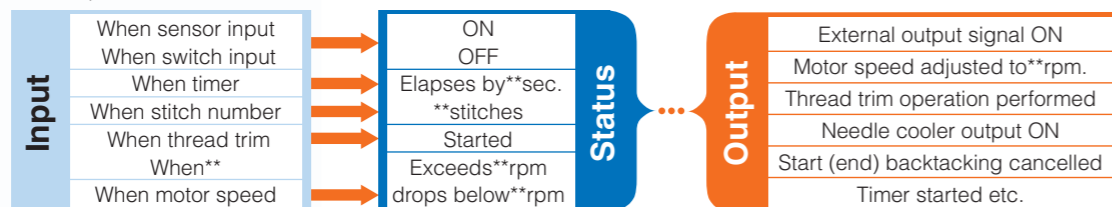
Realization of Compact, Lightweight Motor

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

Enhanced Functionality

Step Sequence Function

- This function enables easy programming of the desired input, output and machining operations in sequence with the stitching process. (Extensive upgrade of existing machine simple sequence mode)
- Various operations can now be incorporated into the "stitching process", including those performed before and after operation.



(Note: Condition settings also possible with multiple combining.)

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 G10 or G500-Y control 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 "AT" call-up No. "33" from list.

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)

Multi-Function, Interchangeability

Full Functionality

- The G Series retains all the operability and multi-functionality of the XC-F Series! The control box uses the same connectors as the XC-F Series, enabling easy connection.
- 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.



Interchangeability

The XC-KE-01P detector, XC-FM-2, XC-FM-3 (LS2-1380only), and LE-FA presser foot lifter units, and XC-CVS-2 variable speed pedal can all be used as is. The XL-554 motor can be used with an optional attachment bracket.

Control Panel

XC-G10 and XC-G500-Y Series control panels are available. The existing operation panel can be attached to and removed from the XC-G10 Series control panel. Significant enhancements have been made to the operability of the XC-G500-Y Series control panel over existing functionality (XC-E500-Y), and the settings data memory has been doubled.

Options

Control panel	XC-G10S (control box attachment type) XC-G10L XC-G500-Y	(Impossible to use it together)
Auto presser foot lifter unit	AA-EF4: Electromagnetic type (24V) XC-FM-3: LS2-1380 only AA-G200-PFL-15: Air type (shared30V / 24Vuse)	
Variable speed pedal	1SP6A4: 3-speed pedal, standing machine	
Lever unit (separated type)	XC-GL-1-SET: 1-step kick-back use (installation plate, extension cable set) XC-GL-2-SET: 2-step kick-back use (installation plate, extension cable set)	
Extension cables	1.0m motor cable (200V): K14M52158002	
	0.6m detector cable: K14M717324830	
	1.0m encoder cable: K14M71725402	
Installation metal fittings	New motor and old control box: K14M72354001	
	Old motor and new control box: K14M72354101	



Motor, Control Box Models

Control Box

Model	Output	Power supply		Functions
		Phase	Voltage	
XC-GMFY-10-05	550W	Single-phase	100 to120V	Full functionality including auto thread trimming, presser foot lifting, fixed-stitch stitching, continuous stitching and backtacking. Equipped with step sequence, simple sequence and computer communication functions (when connected to control panel). Equipped with 8 solenoid drive outputs, 2 electromagnetic valve outputs, 1 small-signal output and 14 input terminals including a variable voltage input.
XC-GMFYCE-20-05 *1	550W	Single-phase	200 to 240V	
XC-GMFY-20-05	550W	Three/single-phase *2	200 to 240V	

Motor

Model	Power supply		Output	Tapered shaft
	Phase	Voltage		
XL-G554-10(Y)	Single-phase	100 to120V	550W	Tapered shaft
XL-G554-20(Y)	Three/single-phase *2	200 to 240V	550W	Tapered shaft

*1: Type [XC-GMFYCE] is CE marking type.

*2: Please refer to the instruction manual for details of the connection method.

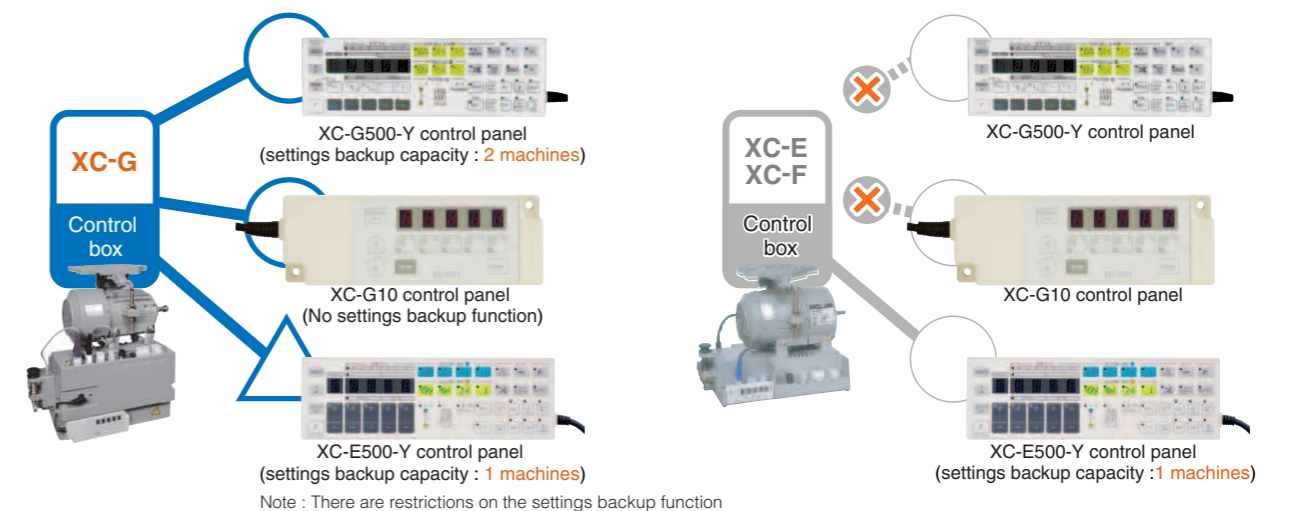
Support for Each Machine

Compatibility Settings Table for Adapted Machines

Function/Model	Adapted Machine	XC-GMFY
	Lock stitching	<input type="radio"/>
Overlock	<input type="radio"/>	<input type="radio"/>
Chain stitching	<input type="radio"/>	<input type="radio"/>
Cross stitching	<input type="radio"/>	<input type="radio"/>
Whipstitching	<input type="radio"/>	<input type="radio"/>

○: Needle positioner function ⊙: Thread trim function

Control Panel Compatibility

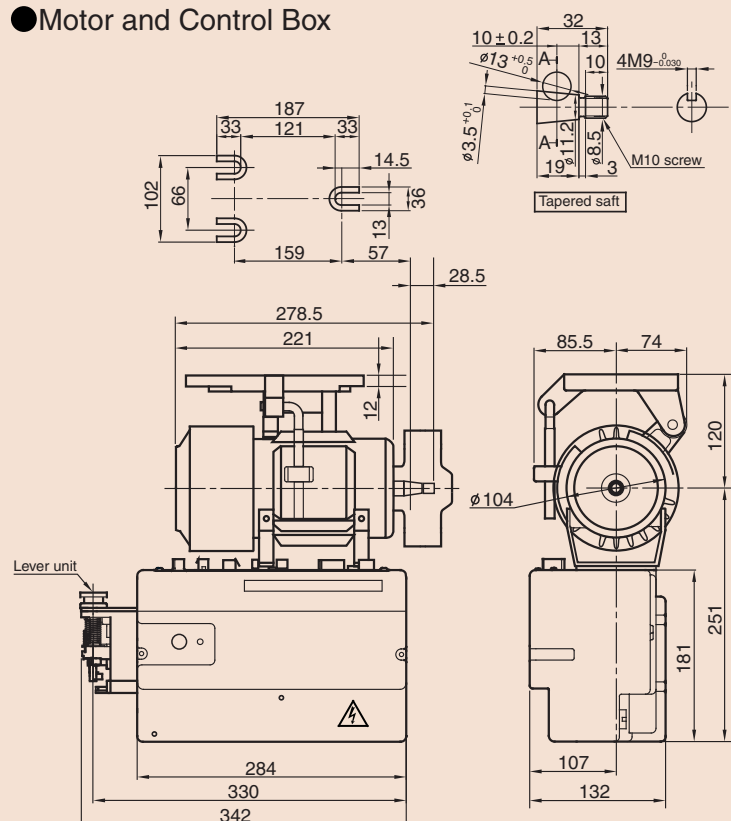


Note: There are restrictions on the settings backup function

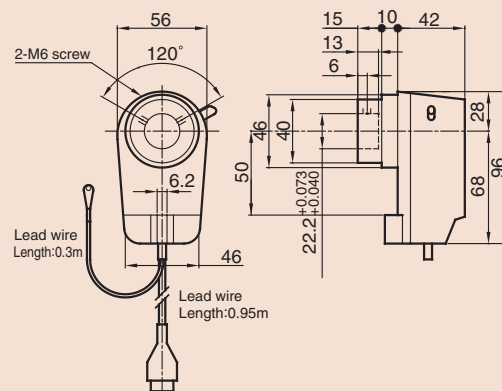
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Dimensions

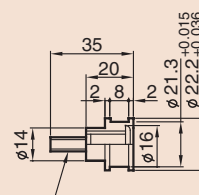
● Motor and Control Box



● Position Detector XC-KE-01P



- Adaptor for position detector attachment
- Screw-in type



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

Specifications

Power supply	100V to 120V	200V to 240V
Motor model	XL-G554-10(Y)	XL-G554-20(Y)
Control box model	XC-GMFY-10-05	XC-GMFY(CE)-20-05
Rated output	550W	
Rated speed	3,600rpm	
Rated torque	1.47N·m (0.15kg·m)	
Speed control range	70rpm to 8,999rpm	
	Machine axis	Shipping setting (250rpm to 4,000rpm)
	Motor axis	50rpm to 3,600rpm
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	Motor : 6.9kg (net), 9.1kg (gross) Control box : 3.5kg (net), 6.9kg (gross)	
Packaging style	L : 490mm x W : 402mm x H : 227mm "Carton box" (When motor and control box are packaged as set)	



Caution for Safety

In order to properly and safely utilize the sewing machine mentioned on this leaflet, before starting the operation, please make sure to read the related instruction manuals and technical instructions.