

LXU Series

- The LXU series has been adapted for high capacity, high ripple, and made compatible with charging and discharging.
- For frequently change of regenerative voltage from AC servo amplifier and inverter control
- Endurance with ripple current : 5,000 hours at 105°C
- The logo mark printed on the sleeve will be changed.
- RoHS2 Compliant

LXU

High Ripple
Made compatible with
charging and discharging
LXA

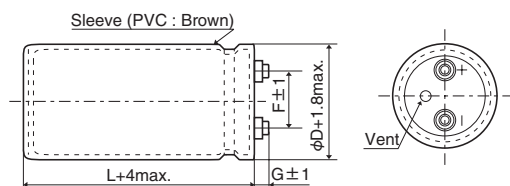


SPECIFICATIONS

Items	Characteristics
Category	
Temperature Range	-40 to +105°C
Rated Voltage Range	400, 450V _{dc}
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)
Dissipation Factor (tan δ)	0.15 max. (at 20°C, 120Hz)
Low Temperature Characteristics	Capacitance change C(-25°C)/C(+20°C) ≥ 0.7 (at 120Hz)
Insulation Resistance	When measured between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V _{dc} , the insulation resistance shall not be less than 100MΩ.
Insulation Withstanding Voltage	When a voltage of 2,000V _{ac} is applied for 1 minute between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.
Charge and Discharge	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to charge and discharge test with the voltage waveform shown below at room temperature (15 to 35°C).
	Capacitance change ≤ ±20% of the initial value
	D.F. (tan δ) ≤ 200% of the initial specified value
	Leakage current ≤ The initial specified value
	Frequency 3Hz
	Number of cycles 50 million times
	Voltage waveform
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 105°C.
	Capacitance change ≤ ±20% of the initial value
	D.F. (tan δ) ≤ 200% of the initial specified value
	Leakage current ≤ The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.
	Capacitance change ≤ ±20% of the initial value
	D.F. (tan δ) ≤ 200% of the initial specified value
	Leakage current ≤ The initial specified value

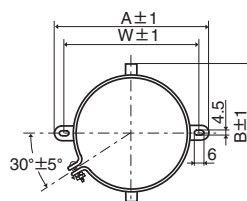
DIMENSIONS (Screw-Mount) [mm]

● Terminal Code : LG



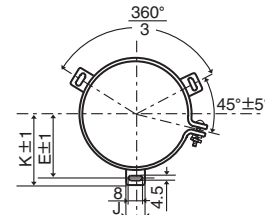
φ63.5, φ76.2 : G=6
φ89 : G=4

● Mounting Clamp Code : B



φD	A	B	W	F
63.5	90.0	76.0	80.0	28.0
76.2	104.5	90.0	93.5	31.5

● Mounting Clamp Code : C



φD	E	K	F	J
63.5	38.1	43.5	28.0	14.0
76.2	44.5	50.0	31.5	14.0
89	50.8	56.5	31.5	16.0

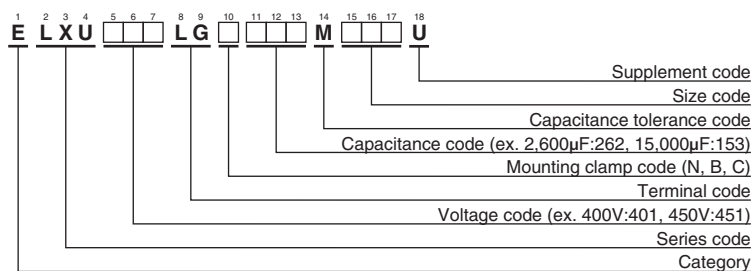
<Screw specifications>

Plus hexagon-headed screw : M5×0.8×10

Maximum screw tightening torque : 3.23Nm

* The screw and the mounting clamp are separately supplied and not attached to the product.

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

◆STANDARD RATINGS

WV (V _{dc})	Cap (µF)	Case size φD×L(mm)	Rated ripple current (Arms/ 105°C, 120Hz)	Effective value of charge and discharge current (Arms/ 3Hz)	Part No.
400	2,900	63.5 × 85	15.7	4.3	ELXU401LGC292MD85U
	3,400	63.5 × 95	17.6	4.8	ELXU401LGC342MD95U
	3,900	63.5 × 105	19.3	5.4	ELXU401LGC392MDA5U
	4,300	76.2 × 85	21.3	6.0	ELXU401LGC432ME85U
	4,400	63.5 × 115	21.0	5.9	ELXU401LGC442MDB5U
	4,900	63.5 × 125	22.6	6.4	ELXU401LGC492MDC5U
	5,000	76.2 × 95	23.6	6.7	ELXU401LGC502ME95U
	5,400	63.5 × 135	24.0	6.9	ELXU401LGC542MDD5U
	5,400	89 × 85	26.0	7.4	ELXU401LGC542MFF5U
	5,700	76.2 × 105	25.7	7.4	ELXU401LGC572MEA5U
	5,900	63.5 × 145	25.3	7.3	ELXU401LGC592MDE5U
	6,300	63.5 × 155	26.4	7.7	ELXU401LGC632MDF5U
	6,400	76.2 × 115	27.6	8.1	ELXU401LGC642MEB5U
	6,400	89 × 95	28.8	8.4	ELXU401LGC642MFF5U
	7,000	63.5 × 170	27.9	8.2	ELXU401LGC702MDH0U
	7,200	76.2 × 125	29.6	8.8	ELXU401LGC722MEC5U
	7,400	89 × 105	31.4	9.3	ELXU401LGC742MFA5U
	7,800	63.5 × 190	29.5	8.8	ELXU401LGC782MDK0U
	7,900	76.2 × 135	31.2	9.4	ELXU401LGC792MED5U
	8,400	89 × 115	33.8	10.2	ELXU401LGC842MFB5U
450	8,600	76.2 × 145	32.8	9.9	ELXU401LGC862MEE5U
	9,300	76.2 × 155	34.1	10.5	ELXU401LGC932MEF5U
	9,400	89 × 125	35.9	11.1	ELXU401LGC942MFC5U
	10,000	76.2 × 170	35.5	11.0	ELXU401LGC103MEH0U
	10,000	89 × 135	37.4	11.6	ELXU401LGC103MFD5U
	11,000	76.2 × 190	37.1	11.7	ELXU401LGC113MEK0U
	11,000	89 × 145	39.2	12.4	ELXU401LGC113MFE5U
	12,000	89 × 155	40.8	13.1	ELXU401LGC123MFF5U
	14,000	89 × 170	43.3	14.3	ELXU401LGC143MFH0U
	15,000	89 × 190	44.7	14.9	ELXU401LGC153MFK0U
	2,600	63.5 × 85	14.7	4.0	ELXU451LGC262MD85U
	3,000	63.5 × 95	16.3	4.5	ELXU451LGC302MD95U
	3,400	63.5 × 105	17.9	5.0	ELXU451LGC342MDA5U
	3,800	76.2 × 85	19.8	5.6	ELXU451LGC382ME85U
	3,900	63.5 × 115	19.6	5.6	ELXU451LGC392MDB5U
	4,300	63.5 × 125	21.0	6.0	ELXU451LGC432MDC5U
	4,400	76.2 × 95	21.9	6.3	ELXU451LGC442ME95U
	4,700	63.5 × 135	22.2	6.4	ELXU451LGC472MDD5U
	4,800	89 × 85	24.3	7.0	ELXU451LGC482MFF5U
	5,100	76.2 × 105	24.1	7.0	ELXU451LGC512MEA5U
	5,200	63.5 × 145	23.6	6.9	ELXU451LGC522MDE5U
	5,500	63.5 × 155	24.5	7.2	ELXU451LGC552MDF5U
	5,700	76.2 × 115	25.9	7.6	ELXU451LGC572MEB5U
	5,700	89 × 95	27.0	8.0	ELXU451LGC572MFF5U
	6,200	63.5 × 170	26.1	7.8	ELXU451LGC622MDH0U
	6,300	76.2 × 125	27.6	8.2	ELXU451LGC632MEC5U
	6,600	89 × 105	29.4	8.8	ELXU451LGC662MFA5U
	6,800	63.5 × 190	27.4	8.2	ELXU451LGC682MDK0U
	7,000	76.2 × 135	29.2	8.8	ELXU451LGC702MED5U
	7,500	89 × 115	31.6	9.6	ELXU451LGC752MFB5U
	7,700	76.2 × 145	30.7	9.3	ELXU451LGC772MEE5U
	8,300	76.2 × 155	32.1	9.9	ELXU451LGC832MEF5U
	8,400	89 × 125	33.7	10.4	ELXU451LGC842MFC5U
	9,200	89 × 135	35.5	11.1	ELXU451LGC922MFD5U
	9,300	76.2 × 170	33.8	10.6	ELXU451LGC932MEH0U
	10,000	76.2 × 190	35.1	11.1	ELXU451LGC103MEK0U
	10,000	89 × 145	37.1	11.8	ELXU451LGC103MFE5U
	11,000	89 × 155	38.7	12.5	ELXU451LGC113MFF5U
	12,000	89 × 170	40.5	13.3	ELXU451LGC123MFH0U
	13,000	89 × 190	41.9	13.9	ELXU451LGC133MFK0U

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
φ 63.5	0.70	1.00	1.40	1.80	2.00
φ 76.2	0.70	1.00	1.30	1.60	1.80
φ 89	0.70	1.00	1.20	1.40	1.50

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.

Also, for the LXU series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For the details, please contact a representative of Nippon Chemi-Con.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.
- We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.
- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

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