NXL(LXV) Series

• 105℃ 2,000~5,000Hrs assured.

Solvent-proof

- Low Impedance.
- For SMPS, IP-Board, Adaptor.
- RoHS compliant.
- Halogen-free capacitors are also available.

KXL → NXL (LXV)

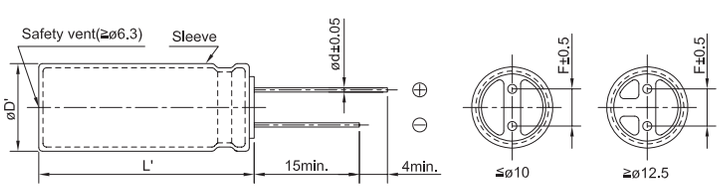
Low Imp. Long Life

SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	6.3 ~ 100 V_{DC}
Operating Temperature Range	-55 ~ +105℃
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I: Max.Leakage current(μA) C: Nominal capacitance (μF) V: Rated voltage (V_{DC}) (at 20℃, 2 minutes)
Dissipation Factor (Tanδ)	Rated Voltage(V_{DC}): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Tanδ(Max.): 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.08 / 0.07 When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20℃, 120Hz)
Temperature Characteristics (Max. Impedance ratio)	Rated voltage(V_{DC}): 6.3 / 10~100 Capacitance change(Max.) : ΔC(-55℃)/C(20℃): 30% Impedance ratio(Max.) : Z(-55℃)/Z(20℃): 4 / 3 (at 120Hz)
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) at 105℃ for the specified period of time. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value ØD: Life Time Ø5, 6.3: 2,000 hours Ø8, 10: 3,000 hours Ø12.5~: 5,000 hours
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value
Others	Satisfied characteristics KS C IEC 60384-4

DIMENSIONS OF NXL(LXV) Series

Unit(mm)



Marking : DARK BROWN SLEEVE, SILVER INK

ØD	5	6.3	8	10	12.5	16	18
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ØD'	ØD+0.5 max.						
L'	L+1.5 max.			L+2.0 max.			

※ Ø10 x 12L, L'≦ L+1.5

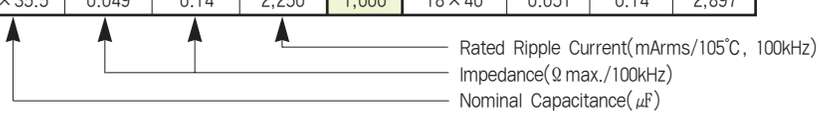
RATINGS OF NXL(LXV) Series

WV (Vdc) / Cap (μF)	6.3				10				16			
	ø D×L(mm)	IMP. 20℃	IMP. -10℃	Ripple	ø D×L(mm)	IMP. 20℃	IMP. -10℃	Ripple	ø D×L(mm)	IMP. 20℃	IMP. -10℃	Ripple
120	5×11	0.72	1.8	165	5×11	0.72	1.8	165	5×11	0.72	1.8	165
220	6.3×11	0.38	0.95	255	6.3×11	0.38	0.95	255	6.3×11	0.38	0.95	255
330	6.3×15	0.27	0.68	330	6.3×15	0.27	0.68	330	6.3×15	0.27	0.68	330
330	8×11.5	0.19	0.48	485	8×11.5	0.19	0.48	485	8×11.5	0.19	0.48	485
470	10×12	0.12	0.30	625	8×11.5	0.27	0.68	330	10×12	0.12	0.30	625
470	10×12.5	0.12	0.30	625					10×12.5	0.12	0.30	625
560	8×15	0.16	0.40	495	8×15	0.16	0.40	495	8×15	0.16	0.40	495
680	10×16	0.084	0.21	825	8×20	0.11	0.28	640	8×20	0.11	0.28	640
820	8×20	0.110	0.28	640	10×16	0.084	0.21	825	10×16	0.084	0.21	825
1,200	10×20	0.062	0.16	1,040	10×20	0.062	0.16	1,040	10×20	0.062	0.16	1,040
1,500	10×25	0.052	0.13	1,260	10×25	0.052	0.13	1,260	10×25	0.052	0.13	1,260
2,200	10×30	0.044	0.11	1,440	10×30	0.044	0.11	1,440	10×30	0.044	0.11	1,440
2,200	12.5×20	0.046	0.12	1,340	12.5×20	0.046	0.12	1,340	12.5×20	0.046	0.12	1,340
2,700	12.5×25	0.034	0.085	1,690	12.5×25	0.034	0.085	1,690	12.5×25	0.034	0.085	1,690
3,900	12.5×30	0.030	0.075	1,950	12.5×30	0.030	0.075	1,950	12.5×30	0.030	0.075	1,950
3,900	16×20	0.039	0.098	1,630	12.5×35	0.027	0.068	2,200	16×20	0.039	0.098	1,630
4,700	12.5×35	0.027	0.068	2,200	16×20	0.039	0.098	1,630	12.5×35	0.027	0.068	2,200
5,600	12.5×42.5	0.024	0.060	2,390	12.5×42.5	0.024	0.060	2,390	16×25	0.029	0.072	2,070
5,600	16×25	0.029	0.072	2,070	16×25	0.029	0.072	2,070	12.5×42.5	0.024	0.060	2,390
5,600	18×20	0.038	0.095	1,750	18×20	0.038	0.095	1,750	18×20	0.038	0.095	1,750
6,800	16×31.5	0.026	0.066	2,350	16×31.5	0.026	0.066	2,350	16×31.5	0.026	0.066	2,350
6,800	18×25	0.029	0.073	2,130	18×25	0.029	0.073	2,130	18×25	0.029	0.073	2,130
8,200	16×35.5	0.023	0.058	2,550	16×35.5	0.023	0.058	2,550	16×35.5	0.023	0.058	2,550
10,000	18×31.5	0.026	0.065	2,410	18×31.5	0.026	0.065	2,410	18×31.5	0.026	0.065	2,410
12,000	18×35.5	0.023	0.058	2,660	18×35.5	0.023	0.058	2,660	18×35.5	0.023	0.058	2,660
15,000	18×40	0.019	0.048	3,010	18×40	0.019	0.048	3,010	18×40	0.019	0.048	3,010

WV (Vdc) / Cap (μF)	25				35				50			
	ø D×L(mm)	IMP. 20℃	IMP. -10℃	Ripple	ø D×L(mm)	IMP. 20℃	IMP. -10℃	Ripple	ø D×L(mm)	IMP. 20℃	IMP. -10℃	Ripple
									4.7	5×11	3.0	9.0	100
									10	5×11	1.40	4.2	124
39	5×11	0.72	1.8	165	27	5×11	0.72	1.8	165	18	5×11	1.10	3.3	130
47	5×11	0.72	1.8	194	47	6.3×11	0.50	1.25	233	22	6.3×11	0.91	2.6	180
82	6.3×11	0.38	0.95	255	56	6.3×11	0.38	0.95	255	39	6.3×11	0.56	1.6	220
100	6.3×11	0.35	0.88	280	68	6.3×11	0.38	0.95	255	47	6.3×11	0.56	1.6	300
120	6.3×15	0.27	0.68	330	82	6.3×15	0.27	0.68	330	56	6.3×15	0.41	1.2	310
120	8×11.5	0.19	0.48	485	82	8×11.5	0.19	0.48	485	56	8×11.5	0.33	0.96	368
180	10×12	0.12	0.30	625	120	10×12	0.12	0.30	625	82	8×15	0.25	0.75	470
180	10×12.5	0.12	0.30	625	120	10×12.5	0.12	0.30	625	82	10×12	0.16	0.40	480
220	8×15	0.16	0.40	495	180	8×15	0.16	0.40	495	82	10×12.5	0.16	0.40	480
330	8×20	0.11	0.28	640	220	8×20	0.11	0.28	640	120	8×20	0.18	0.52	610
330	10×16	0.084	0.21	825	220	10×16	0.084	0.21	825	120	10×16	0.12	0.30	755
470	10×20	0.062	0.16	1,150	330	10×20	0.062	0.16	1,040	180	10×20	0.088	0.22	945
560	10×25	0.052	0.13	1,260	390	10×25	0.052	0.13	1,260	220	10×25	0.068	0.17	1,150
820	10×30	0.044	0.11	1,440	560	10×30	0.044	0.11	1,440	330	10×30	0.059	0.15	1,260
820	12.5×20	0.046	0.12	1,340	560	12.5×20	0.046	0.12	1,340	330	12.5×20	0.059	0.15	1,190
1,000	12.5×25	0.034	0.085	1,690	680	12.5×25	0.034	0.085	1,690	470	12.5×25	0.045	0.11	1,490
1,500	12.5×30	0.030	0.075	1,950	1,000	12.5×25	0.040	0.10	1,690	560	12.5×30	0.039	0.098	1,720
1,500	16×20	0.039	0.098	1,630	1,000	12.5×30	0.030	0.075	1,950	680	12.5×35	0.038	0.096	1,890
1,800	12.5×35	0.027	0.068	2,200	1,200	12.5×35	0.027	0.068	2,200	680	16×20	0.044	0.12	1,420
1,800	16×25	0.029	0.073	2,070	1,200	16×25	0.029	0.073	2,070	820	12.5×42.5	0.029	0.073	2,030
2,200	12.5×42.5	0.024	0.060	2,390	1,500	12.5×42.5	0.024	0.060	2,390	820	16×25	0.034	0.085	1,880
2,200	18×20	0.038	0.095	1,750	1,500	18×20	0.038	0.095	1,750	820	18×20	0.041	0.103	1,520
2,700	16×31.5	0.026	0.066	2,350	1,800	16×31.5	0.026	0.066	2,350	1,000	16×31.5	0.030	0.076	1,250
2,700	18×25	0.029	0.073	2,130	1,800	18×25	0.029	0.073	2,130	1,000	18×25	0.032	0.080	1,930
3,300	16×35.5	0.023	0.058	2,550	2,200	16×35.5	0.023	0.058	2,550	1,200	16×35.5	0.026	0.065	2,320
3,300	18×31.5	0.026	0.065	2,410	2,200	18×31.5	0.026	0.065	2,410	1,500	18×31.5	0.028	0.070	2,200
3,900	18×35.5	0.023	0.058	2,660	2,700	18×35.5	0.023	0.058	2,660	1,800	18×35.5	0.025	0.063	2,400
4,700	18×40	0.019	0.048	3,010	3,300	18×40	0.019	0.048	3,010	2,200	18×40	0.022	0.055	2,610

RATINGS OF NXL(LXV) Series

VDC / μF	63				VDC / μF	100			
	ø D×L(mm)	IMP.		Ripple		ø D×L(mm)	IMP.		Ripple
		20℃	-10℃				20℃	-10℃	
1	5×11	31.5	79.6	53	1	5×11	14.7	39.5	53
1.5	5×11	22.4	56.6	65	1.5	5×11	9.8	26.3	65
2.2	5×11	15.2	38.4	78	2.2	5×11	5.4	14.5	78
3.3	5×11	11.1	28.1	98	3.3	5×11	4.6	12.3	98
4.7	5×11	10.8	27.3	115	4.7	5×11	3.9	10.5	115
6.8	5×11	4.3	10.9	120	6.8	6.3×11	3.2	8.7	128
10	5×11	2.9	7.3	134	10	6.3×11	1.7	4.6	154
15	6.3×11	2.7	6.9	188	15	8×11.5	1.2	3.4	222
22	6.3×11	1.36	3.5	228	22	8×11.5	0.82	2.3	270
33	8×11.5	0.66	1.8	330	33	10×12	0.41	1.1	384
47	10×12	0.58	1.7	327	33	10×12.5	0.41	1.1	384
47	10×12.5	0.58	1.7	327	47	10×16	0.37	1.0	400
68	10×16	0.36	0.88	431	68	10×20	0.27	0.73	470
100	10×20	0.29	0.73	570	100	12.5×20	0.27	0.74	670
150	10×25	0.20	0.51	765	150	12.5×25	0.21	0.57	894
220	12.5×20	0.16	0.41	994	220	16×25	0.17	0.46	1,201
330	12.5×25	0.10	0.26	1,327	330	16×31.5	0.11	0.30	1,471
470	16×31.5	0.091	0.24	1,518	470	16×35.5	0.091	0.25	1,681
680	16×35.5	0.065	0.19	2,060	680	18×40	0.072	0.19	2,122
1,000	16×35.5	0.049	0.14	2,250	1,000	18×40	0.051	0.14	2,897



RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Rated Voltage (VDC)	øD (mm)	Freq.(Hz)				
		120	1k	10k	50k	100k
6.3～10	ø5～ø8	0.65	0.83	0.95	0.97	1.00
	ø10～ø12.5	0.70	0.85	0.96	0.98	1.00
	ø16～ø18	0.85	0.92	0.97	0.99	1.00
16～25	ø5～ø8	0.55	0.76	0.91	0.95	1.00
	ø10～ø12.5	0.65	0.83	0.93	0.96	1.00
	ø16～ø18	0.70	0.87	0.96	0.98	1.00
35～50	ø5～ø8	0.40	0.66	0.85	0.90	1.00
	ø10～ø12.5	0.50	0.73	0.89	0.94	1.00
	ø16～ø18	0.60	0.81	0.94	0.97	1.00
63～100	ø5～ø8	0.20	0.55	0.80	0.88	1.00
	ø10～ø12.5	0.35	0.65	0.85	0.92	1.00
	ø16～ø18	0.50	0.75	0.90	0.95	1.00