

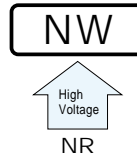
# ALUMINUM ELECTROLYTIC CAPACITORS



## NW series

Screw Terminal Type, High Voltage

- Suited for general inverter.
- Load life of 2000 hours application of ripple current at 85°C
- Available for adapted to the RoHS directive (2002/95/EC).

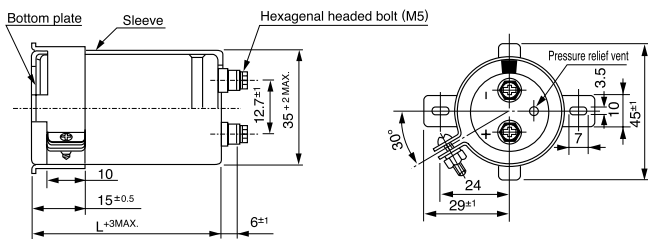


### Specifications

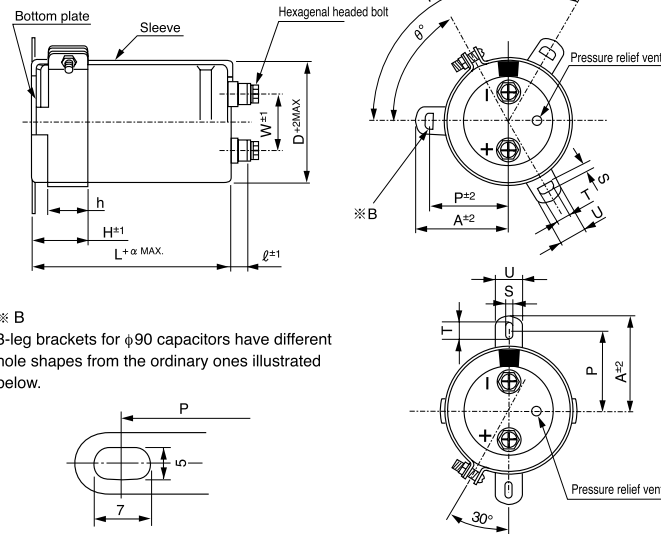
Item	Performance Characteristics		
Category Temperature Range	- 25 ~ +85°C		
Rated Voltage Range	350 ~ 550V		
Rated Capacitance Range	100 ~ 12000μF		
Capacitance Tolerance	±20% (120Hz, 20°C)		
Leakage Current	Less than $3\sqrt{CV}$ (μA) after 5 minutes' application [C:Rated capacitance (μF), V:Voltage (V)]		
tan δ	0.25MAX. (120Hz, 20°C)		
Stability at Low Temperature	Capacitance changing	Rated volt. (V)	350 ~ 450
		C (-25°C) / C (+20°C)	0.7 min. / 0.6 min.
Insulation Resistance	The insulation resistance shall be more than 100MΩ at DC 500V application between terminal and bracket.		
Voltage proof	There is no abnormality during AC 2500V 1 minute's application between terminal and bracket.		
Endurance	After an application of DC voltage (in the range of rated DC voltage even after over-lapping the specified ripple current) for 2000 hours at 85°C, capacitors meet the requirements listed at right.	Capacitance change	Within ±20% of initial value
		tan δ	300% or less of initial specified value
		Leakage current	Initial specified value or less
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the requirements listed at right.	Capacitance change	Within ±20% of initial value
		tan δ	300% or less of initial specified value
		Leakage current	Initial specified value or less
Marking	Printed with white color letter on black sleeve		

### Drawing

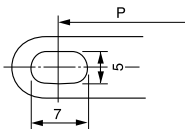
#### φ35 Screw terminal type



#### φ51~90 Screw terminal type

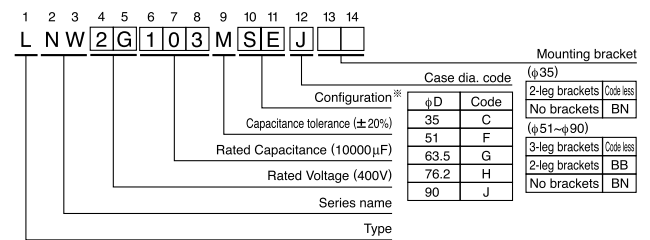


※ B  
3-leg brackets for φ90 capacitors have different hole shapes from the ordinary ones illustrated below.



Note) The terminal bolts and mounting brackets will be delivered

#### Type numbering system (Ex.: 400V 10000μF)



#### ※ Configuration

Cr (III) Plating (RoHS compliant)	Cr (VI) Plating
SE	SM

Resin bushing available upon request.

※ Please contact to us if PVC less products are required.

#### ● Dimension of terminal pitch (W) and length (ℓ) and Nominal dia. of bolt (mm)

φD	W	ℓ	α	Nominal dia. of bolt
51	22.0	6	3	M5
63.5	28.6	6	3	M5
76.2	31.8	6	3	M5
90	31.8	6	3	M5

#### ● Dimension of mounting bracket (mm)

Symbol	Leg shape	3-Leg				2-Leg			
		φD	51	63.5	76.2	90	51	63.5	76.2
P		32.5	38.1	44.5	50.8	33.2	40.5	46.5	53
A		38.5	43	49.2	58.5	40	46.5	53	59
T		7.5	8.0	7.0	8.0	6.0	7.0	6.0	6.0
S		5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5
U		12	14	14	18	14	14	14	14
θ°		60	60	60	60	30	30	30	30
H		20	25	30	35	25	35	35	35
h		15	20	24	25	15	20	20	20

● Dimension table in next page.

# ALUMINUM ELECTROLYTIC CAPACITORS

NW series

## ■ Dimensions

350V (2V)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (Arms)	Leakage Current (mA)	Code
390	35 × 50	2.1	1.10	LNW2V391MSEC
470	35 × 60	2.5	1.21	LNW2V471MSEC
560	35 × 70	2.9	1.32	LNW2V561MSEC
680	35 × 80	3.3	1.46	LNW2V681MSEC
820	35 × 90	3.7	1.60	LNW2V821MSEC
1000	35 × 100	4.3	1.77	LNW2V102MSEC
1200	35 × 120	5.1	1.94	LNW2V122MSEC
1500	51 × 75	5.7	2.17	LNW2V152MSEF
1800	51 × 85	6.6	2.38	LNW2V182MSEF
2200	51 × 95	7.6	2.63	LNW2V222MSEF
2700	51 × 115	9.2	2.92	LNW2V272MSEF
3300	51 × 130	10.8	3.22	LNW2V332MSEF
	63.5 × 95	10.6	3.22	LNW2V332MSEG
3900	63.5 × 115	12.5	3.50	LNW2V392MSEG
4700	63.5 × 130	14.5	3.84	LNW2V472MSEG
	76.2 × 95	14.0	3.84	LNW2V472MSEH
5600	76.2 × 115	16.6	4.20	LNW2V562MSEH
6800	76.2 × 130	17.9	4.64	LNW2V682MSEH
8200	76.2 × 155	19.9	5.00	LNW2V822MSEH
10000	76.2 × 170	22.0	5.00	LNW2V103MSEH
	90 × 130	21.5	5.00	LNW2V103MSEJ
12000	90 × 155	24.8	5.00	LNW2V123MSEJ

400V (2G)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (Arms)	Leakage Current (mA)	Code
330	35 × 50	1.9	1.09	LNW2G331MSEC
390	35 × 60	2.3	1.18	LNW2G391MSEC
470	35 × 70	2.7	1.21	LNW2G471MSEC
560	35 × 80	3.1	1.41	LNW2G561MSEC
680	35 × 90	3.6	1.56	LNW2G681MSEC
820	35 × 100	4.1	1.71	LNW2G821MSEC
1000	35 × 120	5.0	1.89	LNW2G102MSEC
1200	51 × 75	5.5	2.07	LNW2G122MSEF
1500	51 × 85	6.5	2.32	LNW2G152MSEF
1800	51 × 95	7.4	2.54	LNW2G182MSEF
2200	51 × 130	9.4	2.81	LNW2G222MSEF
2700	63.5 × 95	10.2	3.11	LNW2G272MSEG
3300	63.5 × 115	12.1	3.44	LNW2G332MSEG
3900	63.5 × 130	13.7	3.74	LNW2G392MSEG
	76.2 × 95	13.2	3.74	LNW2G392MSEH
4700	76.2 × 115	15.5	4.11	LNW2G472MSEH
5600	76.2 × 130	17.5	4.49	LNW2G562MSEH
6800	76.2 × 155	20.5	4.94	LNW2G682MSEH
8200	76.2 × 170	23.1	5.00	LNW2G822MSEH
	90 × 130	22.6	5.00	LNW2G822MSEJ
10000	90 × 155	26.5	5.00	LNW2G103MSEJ

450V (2W)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (Arms)	Leakage Current (mA)	Code
270	35 × 50	1.8	1.04	LNW2W271MSEC
330	35 × 60	2.1	1.15	LNW2W331MSEC
390	35 × 70	2.4	1.25	LNW2W391MSEC
470	35 × 80	2.9	1.37	LNW2W471MSEC
560	35 × 90	3.3	1.50	LNW2W561MSEC
680	35 × 100	3.9	1.65	LNW2W681MSEC
820	35 × 120	4.6	1.82	LNW2W821MSEC
1000	51 × 75	5.0	2.01	LNW2W102MSEF
1200	51 × 95	6.1	2.20	LNW2W122MSEF
1500	51 × 115	7.4	2.46	LNW2W152MSEF
1800	51 × 130	8.5	2.70	LNW2W182MSEF
2200	63.5 × 95	9.1	2.98	LNW2W222MSEG
2700	63.5 × 115	10.9	3.30	LNW2W272MSEG
3300	63.5 × 130	12.8	3.65	LNW2W332MSEG
	76.2 × 95	12.4	3.65	LNW2W332MSEH
3900	76.2 × 115	14.4	3.97	LNW2W392MSEH
4700	76.2 × 130	16.3	4.36	LNW2W472MSEH
5600	76.2 × 155	18.9	4.76	LNW2W562MSEH
6800	76.2 × 170	21.4	5.00	LNW2W682MSEH
	90 × 130	20.9	5.00	LNW2W682MSEJ
8200	90 × 155	24.4	5.00	LNW2W822MSEJ

500V (2H)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (Arms)	Leakage Current (mA)	Code
120	35 × 50	0.8	0.73	LNW2H121MSEC
180	35 × 60	1.0	0.90	LNW2H181MSEC
270	35 × 80	1.3	1.10	LNW2H271MSEC
330	35 × 100	1.6	1.21	LNW2H331MSEC
390	35 × 120	1.9	1.32	LNW2H391MSEC
470	51 × 75	2.1	1.45	LNW2H471MSEF
560	51 × 85	2.4	1.58	LNW2H561MSEF
680	51 × 95	2.8	1.74	LNW2H681MSEF
820	51 × 115	3.3	1.92	LNW2H821MSEF
1000	51 × 130	3.9	2.12	LNW2H102MSEF
	63.5 × 95	3.8	2.12	LNW2H102MSEG
1200	63.5 × 95	4.2	2.32	LNW2H122MSEG
1500	63.5 × 115	5.1	2.59	LNW2H152MSEG
	76.2 × 95	5.2	2.59	LNW2H152MSEH
1800	63.5 × 130	5.9	2.84	LNW2H182MSEG
2200	76.2 × 115	6.8	3.14	LNW2H222MSEH
2700	76.2 × 155	8.6	3.48	LNW2H272MSEH
3300	76.2 × 170	9.9	3.85	LNW2H332MSEH
	90 × 130	9.7	3.85	LNW2H332MSEJ
3900	90 × 155	11.4	4.18	LNW2H392MSEJ

Rated Ripple (Arms) at 85°C 120Hz

## NW series

### ■ Dimensions

550V (2L)				
Cap. ( $\mu$ F)	Size $\phi$ D $\times$ L(mm)	Rated ripple (Arms)	Leakage Current (mA)	Code
100	35 $\times$ 50	0.7	0.70	LNW2L101MSEC
120	35 $\times$ 50	0.8	0.77	LNW2L121MSEC
180	35 $\times$ 80	1.1	0.94	LNW2L181MSEC
270	35 $\times$ 100	1.5	1.15	LNW2L271MSEC
330	35 $\times$ 120	1.8	1.27	LNW2L331MSEC
390	51 $\times$ 75	1.9	1.38	LNW2L391MSEF
470	51 $\times$ 85	2.2	1.52	LNW2L471MSEF
560	51 $\times$ 95	2.5	1.66	LNW2L561MSEF
	63.5 $\times$ 95	2.9	1.66	LNW2L561MSEG
680	51 $\times$ 115	3.0	1.83	LNW2L681MSEF
	63.5 $\times$ 115	3.4	1.83	LNW2L681MSEG
820	51 $\times$ 130	3.5	2.01	LNW2L821MSEF
	63.5 $\times$ 130	4.0	2.01	LNW2L821MSEG
1000	63.5 $\times$ 130	4.4	2.22	LNW2L102MSEG
1200	76.2 $\times$ 95	4.6	2.43	LNW2L122MSEH
1500	76.2 $\times$ 115	5.6	2.72	LNW2L152MSEH
1800	76.2 $\times$ 130	6.5	2.98	LNW2L182MSEH
2200	76.2 $\times$ 155	7.8	3.30	LNW2L222MSEH
2700	76.2 $\times$ 170	9.0	3.66	LNW2L272MSEH
	90 $\times$ 130	8.8	3.66	LNW2L272MSEJ
3300	90 $\times$ 155	10.4	4.04	LNW2L332MSEJ

Rated Ripple (Arms) at 85°C 120Hz

### ● Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1k	10k~
Coefficient	0.80	0.82	1.00	1.10	1.35	1.40