

# LARGE SIZES ALUMINUM ELECTROLYTIC CAPACITORS



## RP Series

● 85°C 2,000 ~ 20,000Hrs assured.

- Non-solvent proof.
- High ripple capability.
- Long life
- RoHS compliant.
- Halogen-free capacitors are also available.

RP Series



## SPECIFICATIONS

Item	Characteristics	
Rated Voltage Range	10 ~ 100 V <sub>DC</sub>	160 ~ 450 V <sub>DC</sub>
Operating Temperature Range	-40 ~ +85°C	-25 ~ +85°C
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 <sub>DC</sub> ) (at 20°C, 5minutes)	
Dissipation Factor ( tan δ )	Tan δ shall not exceed the values shown in the RATINGS. (at 20°C, 120Hz)	
Temperature Characteristics (Capacitance change ratio)	C(-40°C)/C(20°C) ≥ 0.6 (at 120Hz)	C(-25°C)/C(20°C) ≥ 0.7 (at 120Hz)
Insulation Withstanding Voltage	When a voltage of 2,000V <sub>AC</sub> is applied for one minute between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.	
Load Life	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 2,000~20,000 hours at 85°C. Capacitance change ≤ ±30 % of the initial value tan δ ≤ 300 % 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 at 85°C for 1,000 hours 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 tan δ ≤ 300 % of the initial specified value Leakage current ≤ The initial specified value	
Others	Satisfied characteristics KS C IEC 60384-4	

- Please consult with us about detail specification.

## RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipling Factor

Frequency(Hz)	60	120	300	1k	3k
Factor	0.8	1.0	1.1	1.3	1.4

**DIMENSIONS OF RP Series**

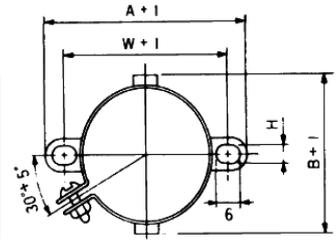
Marking : BALCK SLEEVE, GOLD INK.

<Screw specifications>  
 ØD = Ø35 ~ Ø100

- Plus hexagon-heades screw :
  - Ø35~89 : M5 × 0.8 × 12
  - Ø100 : M8 × 1.25 × 16
- Maximum screw tightening torque
  - Ø35~89 : 3.23N·m(33kg·cm)
  - Ø100 : 6.31N·m(33kg·cm)

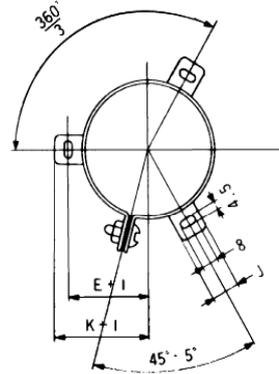
**B type mounting clamp**

ØD	A	B	W	H	F	G
35	58	44	48	3.5	12.7	8.0
50	78	64	68	4.5	22.4	8.0
63.5	90	76	80	4.5	28.0	8.0
76.5	104.5	90	93.5	4.5	31.5	8.0



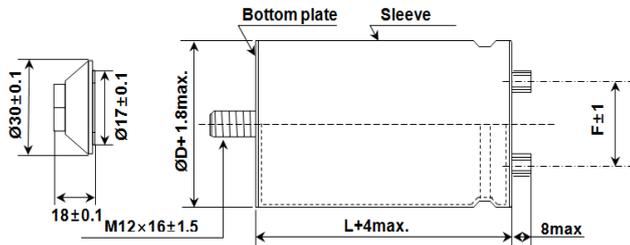
**C type mounting clamp**

ØD	E	K	J	F	G
50	32.5	37.0	14	22.4	8.0
63.5	38.1	43.5	14	28.0	8.0
76.5	44.5	50.0	14	31.5	8.0
89	50.8	56.5	16	31.5	8.0
100	56.5	63.4	18	41.5	11.0



**BD type**

ØD	50	63.5	76.5	89
F	22.4	28.0	31.5	31.5



**RATINGS OF RP Series**

WV(V <sub>DC</sub> )	Cap.(µF)	Capacitance Tolerance	Case size ØD × L(mm)	tan δ	Rated ripple current (Arms/85°C, 120Hz)	Life time (hours)
40	4,700	M	35 × 50	0.35	3.2	20,000
50	10,000	M	35 × 100	0.35	8.1	20,000
315	3,900	M	89 × 160	0.20	20.3	5,000
350	3,300	M	76.5 × 140	0.20	13.4	20,000
400	1,800	M	50 × 120	0.20	7.2	5,000
	2,700	M	63.5 × 100	0.20	9.3	5,000
	3,300	M	63.5 × 110	0.20	10.4	5,000
			63.5 × 120	0.20	11.1	20,000
	4,700	M	76.5 × 120	0.25	14.7	5,000
	6,800	M	76.5 × 135	0.25	14.0	5,000
			76.5 × 160	0.20	20.2	5,000
	12,000	M	89 × 190	0.20	32.1	5,000
	15,000	M	89 × 230	0.20	28.5	20,000
			100 × 230	0.20	30.4	20,000
20,000	M	100 × 250	0.20	36.7	20,000	
450	1,000	M	50 × 140	0.20	6.0	5,000
	3,300	M	63.5 × 130	0.20	11.7	20,000
			76.5 × 130	0.20	15.5	5,000
	4,700	M	76.5 × 155	0.20	16.3	5,000
			76.5 × 160	0.25	19.6	5,000
8,200	M	89 × 155	0.20	23.5	5,000	