

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(2.25A to 10.50V)	45Ah
10 hour rate	(4.275A to 10.50V)	42.75Ah
5 hour rate	(7.65A to 10.20V)	38.25Ah
1 C	(45A to 9.60V)	25.5Ah
3 C	(135A to 9.60V)	18Ah

Weight

Approx. 14.5kg(31.9Lbs.)

Internal Resistance (at 1KHz)

Approx. 7 mΩ

Maximum Discharge Current for

5 seconds: 540A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	13.5A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient -3.0mV/°C/cell	

Operating Temperature Range

Charge	-15°C(5°F)	to	40°C(104°F)
Discharge	-15°C(5°F)	to	50°C(122°F)
Storage	-15°C(5°F)	to	40°C(104°F)

Charge Retention (shelf life) at 20°C(68°F)

1 month	92%
3 month	90%
6 month	80%

Case Material

ABS UL94 HB
Option: Flammability resistance of (UL94 V-0)

Design Life

3-5 Years.

Terminal

F8



⚡ Dimensions

Length (L)

199+3-1 (7.83+0.12-0.04)

Width (W)

166+3-1 (6.54+0.12-0.04)

Height (H)

171+3-1 (6.73+0.12-0.04)

Overall Height (HT)

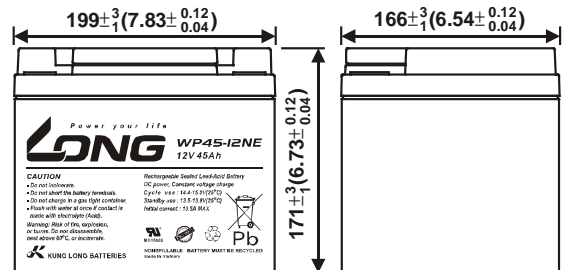
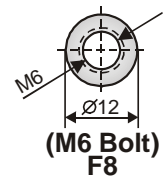
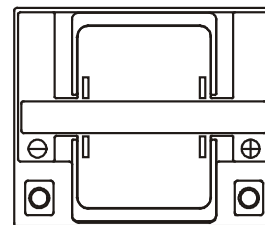
171+3-1 (6.73+0.12-0.04)

Recommended torque value

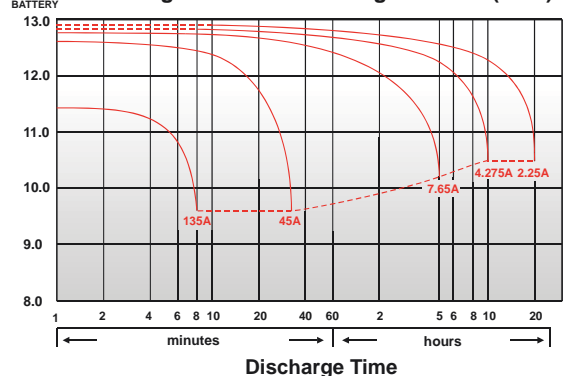
M6: 7 N-m (71kgf-cm)

Maximum allowable torque value

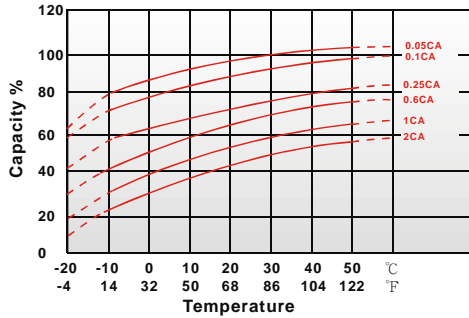
M6: 9 N-m (92kgf-cm)
mm(inch)



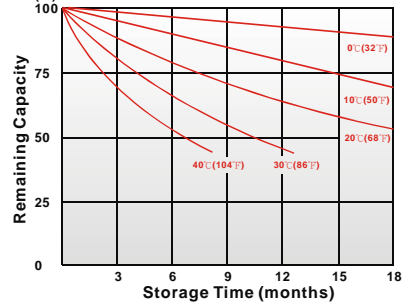
(V) Discharge Time VS. Discharge Current (25°C)



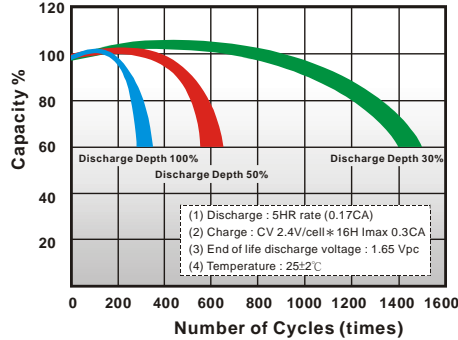
Effect of Temperature on Capacity 25°C(77°F)



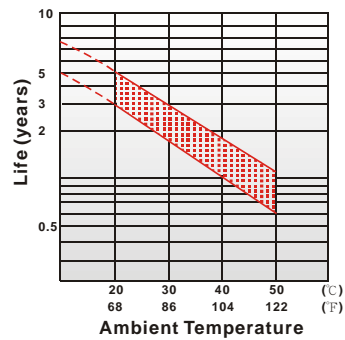
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	226	272	305	326	331	337	343
10	min	144	173	194	207	211	214	218
15	min	112	132	146	154	157	159	162
30	min	60.2	70.8	78.1	82.8	83.9	85.4	86.8
60	min	47.3	50.2	51.9	53.2	53.7	54.3	54.7
120	min	25.7	27.3	28.2	28.9	29.2	29.5	29.7
180	min	20.5	21.8	22.5	23.1	23.2	23.5	23.7
240	min	16.4	17.4	18.0	18.4	18.7	18.8	19.0
300	min	14.0	14.9	15.4	15.7	15.9	16.0	16.2
600	min	8.23	8.74	9.04	9.26	9.35	9.44	9.52
1200	min	4.34	4.61	4.76	4.88	4.93	4.98	5.02

- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	127	153	171	183	186	190	193
10	min	79.5	95.6	107	114	116	118	121
15	min	60.3	71.0	78.3	83.1	84.2	85.6	87.0
30	min	31.7	37.3	41.1	43.6	44.2	45.0	45.7
60	min	24.6	26.1	27.0	27.7	27.9	28.2	28.4
120	min	12.9	13.7	14.2	14.6	14.7	14.8	14.9
180	min	10.3	10.9	11.3	11.5	11.6	11.8	11.9
240	min	8.20	8.70	9.00	9.22	9.31	9.40	9.48
300	min	6.97	7.40	7.65	7.84	7.91	7.99	8.06
600	min	4.10	4.35	4.50	4.61	4.65	4.70	4.74
1200	min	2.15	2.28	2.36	2.42	2.44	2.47	2.49

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+5%~-5%)

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