

WP45-12 12Volt 45Ah

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: **375A**

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 **13.50 to 13.80V**

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**

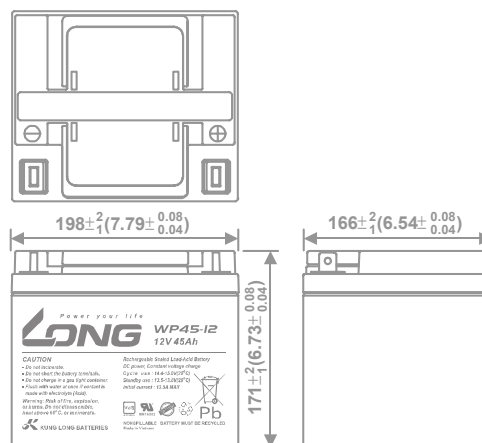
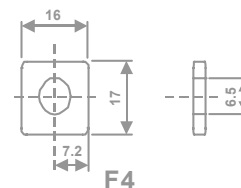
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal **F4**

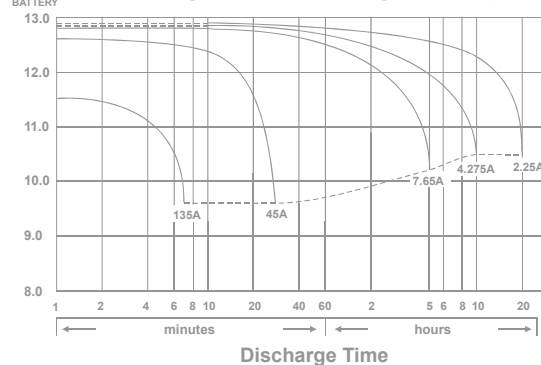


Dimensions

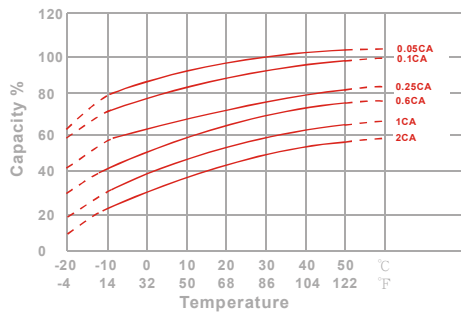
mm(inch)



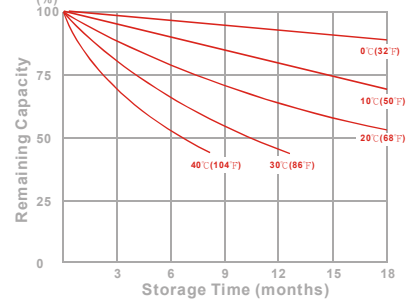
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



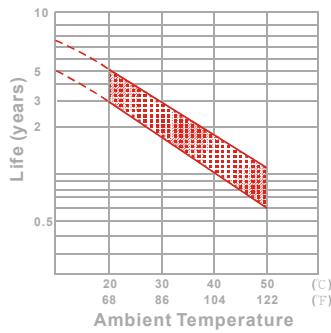
Effect of Temperature on Capacity 25°C(77°F)



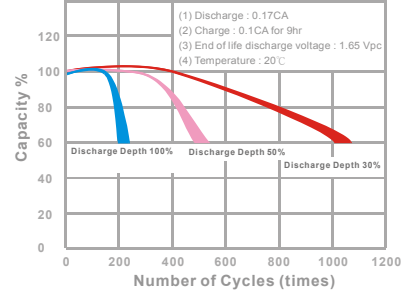
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

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

End Voltage		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	1399	1683	1884	2014	2085	2122
10	min	890	1071	1199	1281	1327	1350
15	min	694	816	901	955	985	1001
30	min	372	438	483	512	528	537
60	min	293	311	321	329	336	338
120	min	154	164	169	174	177	178
180	min	123	131	135	138	141	142
240	min	98.4	104	108	111	113	114
300	min	84.0	89.1	92.2	94.4	96.3	97.1
600	min	49.4	52.4	54.2	55.6	56.6	57.1
1200	min	26.0	27.6	28.6	29.3	29.9	30.1

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

End Voltage		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	127	153	171	183	190	193
10	min	79.5	95.6	107	114	118	121
15	min	60.3	71.0	78.3	83.1	85.6	87.0
30	min	31.7	37.3	41.1	43.6	45.0	45.7
60	min	24.6	26.1	27.0	27.7	28.2	28.4
120	min	12.9	13.7	14.2	14.5	14.8	14.9
180	min	10.3	10.9	11.3	11.5	11.8	11.9
240	min	8.20	8.70	9.00	9.22	9.40	9.48
300	min	6.97	7.40	7.65	7.84	7.99	8.06
600	min	4.10	4.35	4.50	4.61	4.70	4.74
1200	min	2.15	2.28	2.36	2.42	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%)