

WP18-12SHR 12Volt 18Ah

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity

20 hour rate	(0.9A to 10.50V)	18Ah
10 hour rate	(1.71A to 10.50V)	17.1Ah
5 hour rate	(3.06A to 10.20V)	15.3Ah
1 C	(18A to 9.60V)	11.4Ah
3 C	(54A to 9.60V)	7.2Ah

Weight **Approx. 5.6kg(12.32Lbs.)**

Internal Resistance (at 1KHz) **Approx. 10.5 mΩ**

Maximum Discharge Current for

5 seconds: **327A**

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient **-5.0mv/°C/cell**

Maximum Charging Current : **5.4A**

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	98%
3 month	94%
6 month	85%

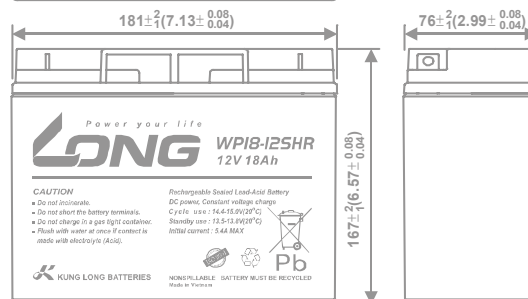
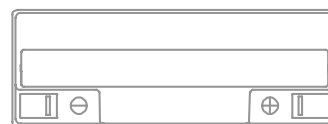
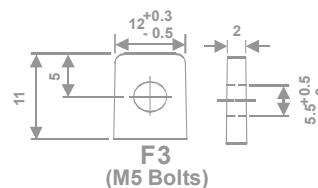
Case Material **ABS**

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

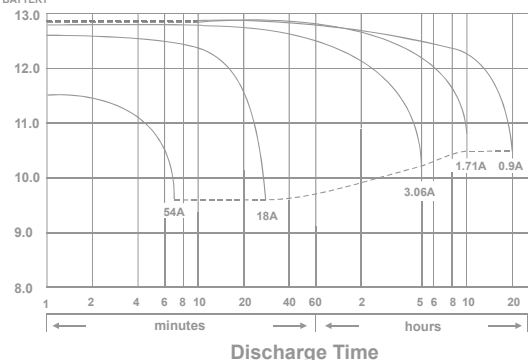
Terminal **F3**

Dimensions

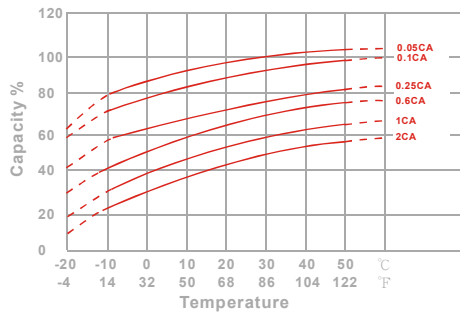
mm(inch)



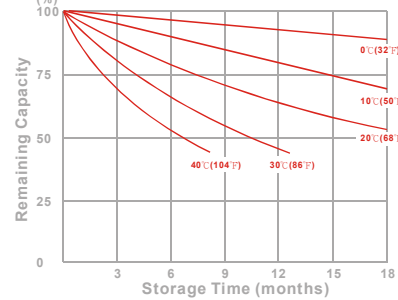
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



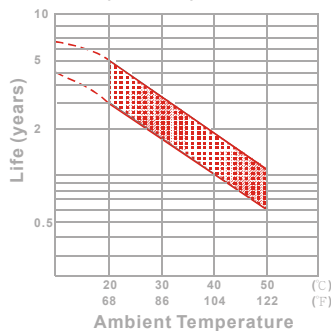
Effect of Temperature on Capacity 25°C(77°F)



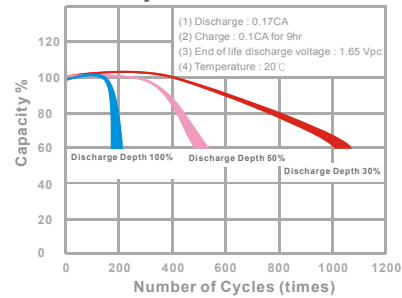
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



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%)

- PERFORMANCE DATA

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

Time	End Voltage	11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
5	min	773.6	828.5	866.9	885.1	893.4	898.0
10	min	496.5	531.7	556.3	568.0	573.3	576.3
15	min	427.1	454.7	473.8	482.9	487.3	489.9
30	min	227.1	241.8	251.9	256.8	259.1	260.5
60	min	134.1	135.5	136.2	136.9	137.6	138.3
120	min	70.7	71.5	71.8	72.2	72.6	72.9
180	min	56.4	56.9	57.2	57.5	57.8	58.1
240	min	45.3	45.7	46.0	46.2	46.5	46.7
300	min	38.5	38.9	39.1	39.3	39.5	39.7
600	min	22.7	23.0	23.1	23.2	23.3	23.4
1200	min	11.9	12.1	12.1	12.2	12.2	12.3

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

Time	End Voltage	11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
5	min	69.08	73.97	77.40	79.02	79.77	80.18
10	min	43.17	46.23	48.38	49.39	49.85	50.11
15	min	36.35	38.70	40.32	41.10	41.47	41.69
30	min	19.08	20.32	21.17	21.58	21.77	21.89
60	min	11.22	11.34	11.40	11.46	11.52	11.58
120	min	5.89	5.95	5.98	6.02	6.05	6.08
180	min	4.68	4.73	4.75	4.77	4.80	4.82
240	min	3.74	3.78	3.80	3.82	3.84	3.86
300	min	3.18	3.21	3.23	3.25	3.26	3.28
600	min	1.87	1.89	1.90	1.91	1.92	1.93
1200	min	0.98	0.99	1.00	1.00	1.01	1.01

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