



RECHARGEABLE SEALED LEAD ACID BATTERY

Revision 1.2



WP18-12I

Specifications

Nominal Voltage (V) 12V

Nominal Capacity

20hour rate (0.9A	to	10.50V)	18Ah
10hour rate (1.8A	to	10.50V)	17.1Ah
5hour rate (3.06A	to	10.20V)	15.3Ah
1C (18A	to	9.60V)	10.8Ah
3C (54A	to	9.60V)	7.2Ah

Weight Approx.6.306kg(13.87Lbs.)

Internal Resistance (at 1KHz) 10 mΩ

Maximum Discharge Current for 5 seconds : 327A

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%

Charging Methods at 20°C (68°F)

Cycle use:

Charging Voltage 14.4 to 15.0V
Maximum Charging Current : 5.4A

Standby use :

Float Charging Voltage 13.50 to 13.80V

Life expectancy :

Cycle Use :

100% depth of discharge 200 cycles
80% depth of discharge 225 cycles
50% depth of discharge 500 cycles

Standby Use : 3-5years

Case Material

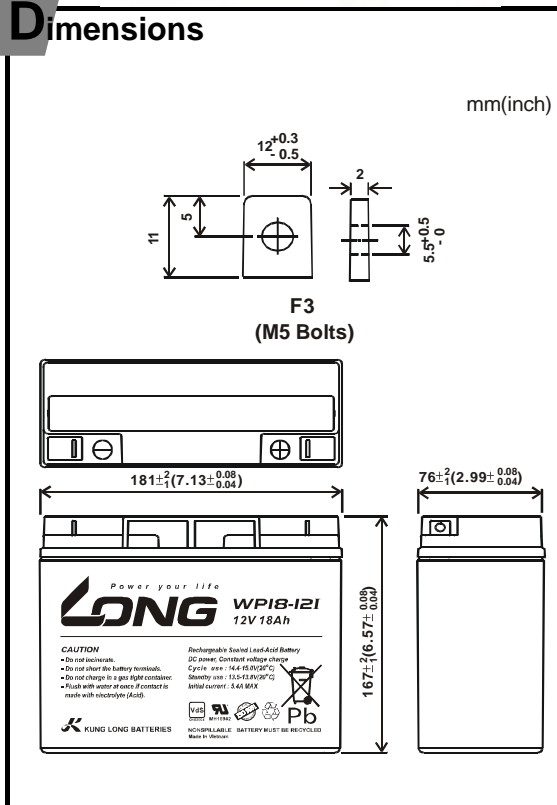
ABS

(Option : 94-HB & 94V-0 flame retardant case)

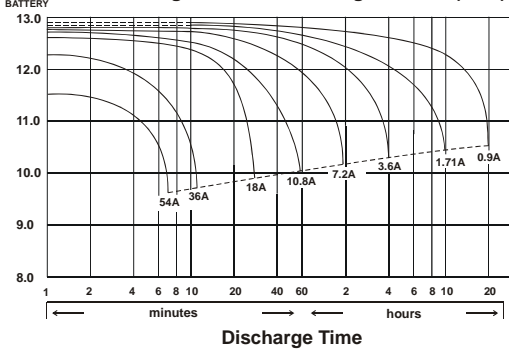
Terminal

F3

Dimensions



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





RECHARGEABLE SEALED LEAD ACID BATTERY

Revision 1.2

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

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

PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C

Time \ End Voltage	11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
5 min	712	733	748	785	799	819
10 min	425	472	503	521	528	538
15 min	333	366	388	401	406	413
30 min	188	204	214	220	222	225
60 min	108	116	120	123	124	125
120 min	75.1	78.8	81.1	82.4	82.8	83.3
180 min	48.0	49.9	51.1	51.7	51.9	52.1
240 min	39.2	40.5	41.3	41.7	41.8	41.9
300 min	34.0	35.0	35.6	35.8	35.9	36.0
600 min	20.3	20.6	20.7	20.8	20.8	20.9
1200 min	10.0	10.1	10.4	10.4	10.5	10.5

Discharge Rates in Amperes to Various End Voltages at 25°C

Time \ End Voltage	11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
5 min	61.9	63.7	65.0	68.2	69.5	71.2
10 min	37.0	41.0	43.7	45.3	45.9	46.8
15 min	29.0	31.9	33.8	34.9	35.3	35.9
30 min	16.4	17.7	18.6	19.1	19.3	19.5
60 min	9.43	10.1	10.4	10.7	10.8	10.9
120 min	6.53	6.85	7.05	7.17	7.20	7.25
180 min	4.17	4.34	4.44	4.50	4.51	4.53
240 min	3.41	3.52	3.59	3.63	3.64	3.65
300 min	2.96	3.04	3.09	3.12	3.12	3.13
600 min	1.77	1.79	1.80	1.81	1.81	1.82
1200 min	0.87	0.88	0.90	0.90	0.91	0.91