

WP40-12 12Volt 40Ah

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity

20 hour rate	(2A	to	10.50V)	40Ah
10 hour rate	(3.8A	to	10.50V)	38Ah
5 hour rate	(6.8A	to	10.20V)	34Ah
1 C	(40A	to	9.60V)	22.67Ah
3 C	(120A	to	9.60V)	16Ah

Weight **Approx. 13.1kg(28.82Lbs.)**

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 : **12A**

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**

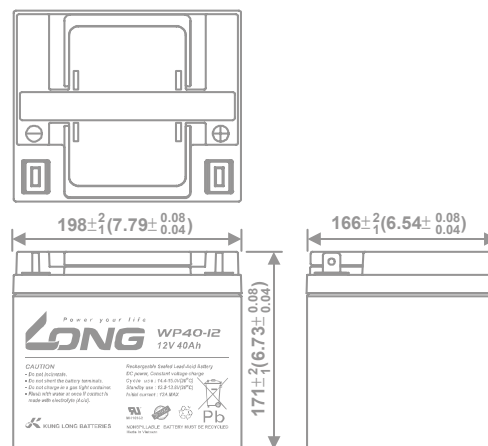
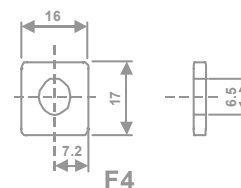
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal **F4**

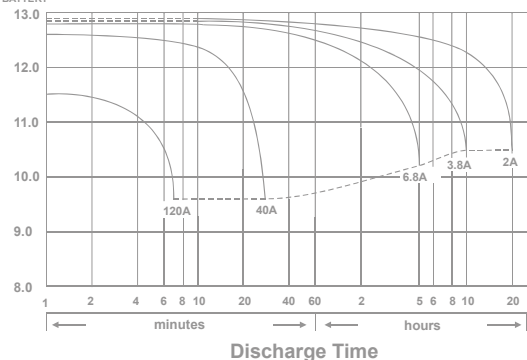


Dimensions

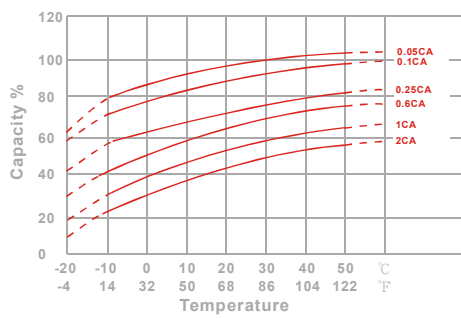
mm(inch)



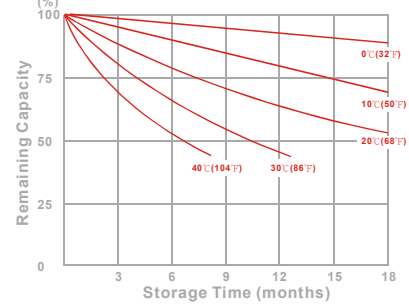
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



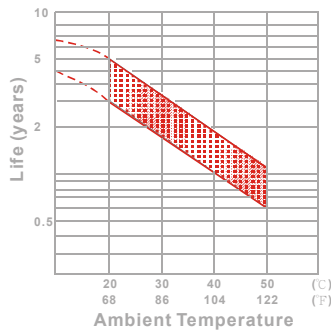
Effect of Temperature on Capacity 25°C(77°F)



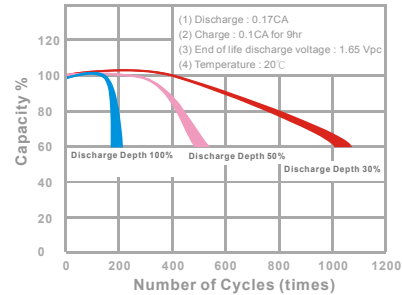
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



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)

End Voltage		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	1333.2	1603.5	1795.3	1919.1	1986.9	2022.2
10	min	855.5	1029.0	1152.1	1231.6	1275.1	1297.8
15	min	663.5	780.5	861.6	913.4	941.9	956.8
30	min	353.7	416.0	459.3	486.9	502.1	510.0
60	min	261.8	270.3	272.5	273.8	277.0	279.1
120	min	138.0	142.5	143.6	144.3	146.0	147.1
180	min	110.0	113.6	114.5	115.0	116.4	117.3
240	min	88.4	91.2	92.0	92.4	93.5	94.2
300	min	75.1	77.6	78.2	78.5	79.5	80.1
600	min	44.4	45.8	46.2	46.4	46.9	47.3
1200	min	26.0	25.0	24.3	23.9	23.8	23.7

- 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	119.03	143.17	160.29	171.35	177.40	180.56
10	min	74.39	89.48	100.18	107.09	110.88	112.85
15	min	56.47	66.43	73.33	77.74	80.17	81.43
30	min	29.72	34.96	38.59	40.92	42.19	42.86
60	min	21.91	22.62	22.80	22.91	23.18	23.36
120	min	11.50	11.88	11.97	12.03	12.17	12.26
180	min	9.13	9.43	9.50	9.55	9.66	9.73
240	min	7.30	7.54	7.60	7.64	7.73	7.79
300	min	6.21	6.41	6.46	6.49	6.57	6.62
600	min	3.65	3.77	3.80	3.82	3.86	3.89
1200	min	2.14	2.06	2.00	1.97	1.96	1.95

061011-1A