

WP40-12N 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: **480A**

Charging Methods at 25 (77)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient -5.0mv/ /cell

Maximum Charging Current : **12A**

Standby use:

Float Charging Voltage **13.50 to 13.80V**

Coefficient -3.0mv/ /cell

Operating Temperature Range

Charge **-15 (5) to 40 (104)**

Discharge **-15 (5) to 50 (122)**

Storage **-15 (5) to 40 (104)**

Charge Retention (shelf life) at 20 (68)

1 month **92%**

3 month **90%**

6 month **80%**

Case Material **ABS**

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

Terminal **F8**

Description of torque value of hard ware for the terminals:

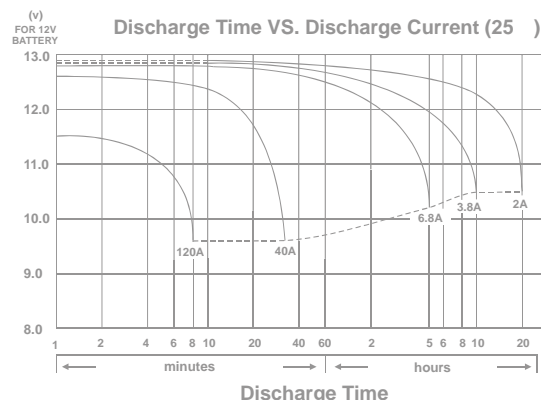
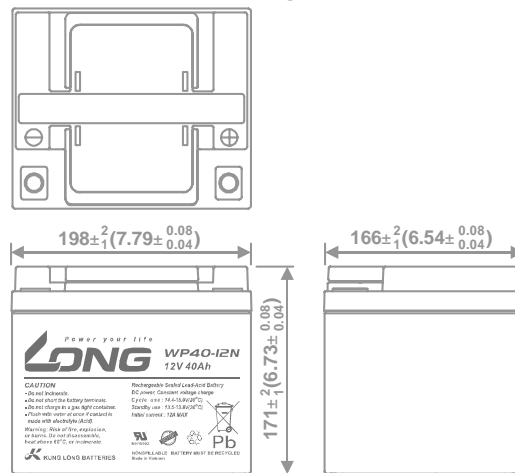
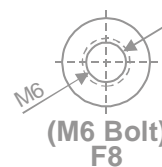
Recommended torque value **M6: 5.39 N-m (55kg-cm)**

Maximum allowable torque value **M6: 8.82 N-m (90kg-cm)**

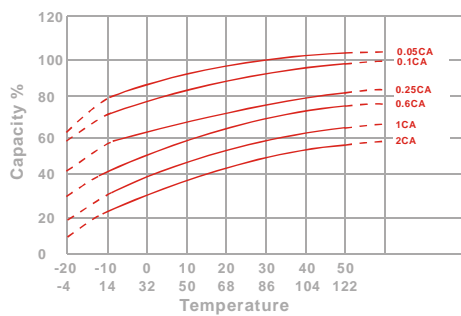


Dimensions

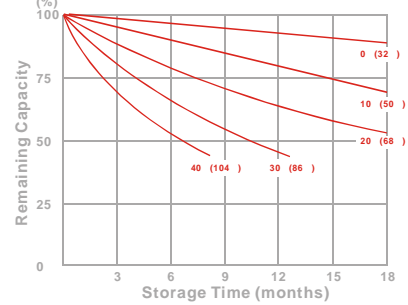
mm(inch)



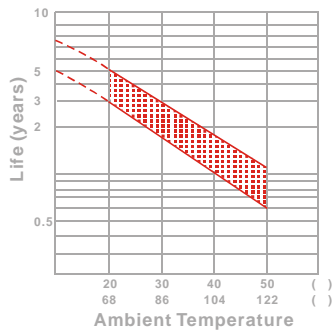
Effect of Temperature on Capacity 25 (77)



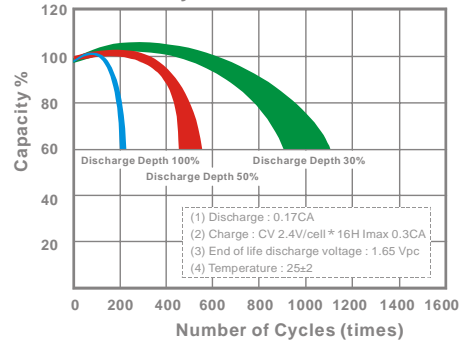
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	1243	1509	1701	1825	1857	1893	1928
10	min	741	914	1038	1117	1136	1160	1183
15	min	617	734	815	867	881	896	918
30	min	354	416	459	487	494	502	510
60	min	263	272	279	284	286	288	291
120	min	155	161	164	167	168	170	172
180	min	113	117	120	122	123	124	126
240	min	89.1	91.6	93.4	95.0	95.5	96.1	97.2
300	min	81.4	83.6	85.2	86.6	87.2	87.8	88.7
600	min	41.6	42.9	44.1	45.3	45.8	46.4	47.2
1200	min	21.3	22.5	23.6	24.5	24.9	25.4	26.1

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	116	140	157	168	171	174	178
10	min	74.1	89.0	99.2	105	107	109	111
15	min	56.5	66.4	73.3	77.8	79.1	80.2	81.4
30	min	30.7	34.9	38.7	40.0	40.9	42.2	42.9
60	min	22.7	23.4	23.8	24.2	24.4	24.6	24.9
120	min	12.6	13.1	13.5	13.8	13.9	14.1	14.3
180	min	9.27	9.62	9.84	10.0	10.1	10.20	10.4
240	min	7.34	7.63	7.88	8.06	8.09	8.13	8.21
300	min	6.43	6.68	6.84	6.98	7.02	7.05	7.13
600	min	3.52	3.70	3.87	3.98	4.02	4.07	4.12
1200	min	1.87	1.95	2.03	2.07	2.09	2.12	2.14

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

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%),10min X < 60min(+8%~-8%), X 60min(+5%~-5%)

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