

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(5A	to	10.50V)	100Ah
10 hour rate	(10A	to	10.80V)	100Ah
5 hour rate	(17A	to	10.20V)	85Ah
1 hour rate	(60A	to	9.60V)	60Ah
1 C	(100A	to	9.60V)	50Ah

Weight

Approx. 30.4kg(66.9 Lbs.)

Internal Resistance (at 1KHz)

Approx. 3.7 mΩ

Maximum Discharge Current for

5 seconds: 600A

Short Circuit Current [A]

2567A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	30A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
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 UL94 HB
Option: Flammability resistance of (UL94 V-0)

Design Life

12 Years.

Terminal

F8



⚡ Dimensions

Length (L) 390±3 (15.35±0.12)

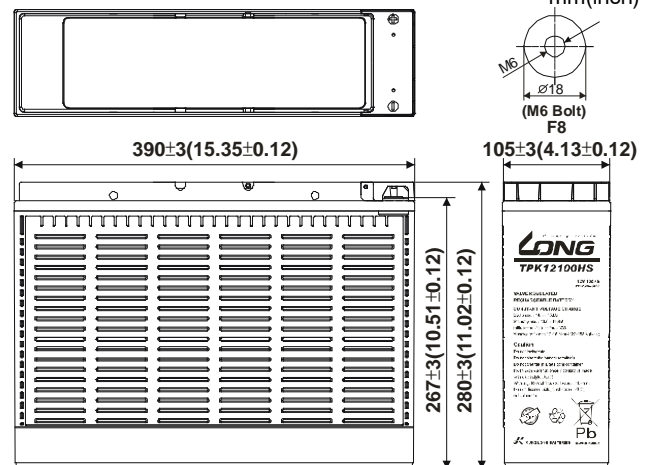
Width (W) 105±3 (4.13±0.12)

Height (H) 280±3 (11.02±0.12)

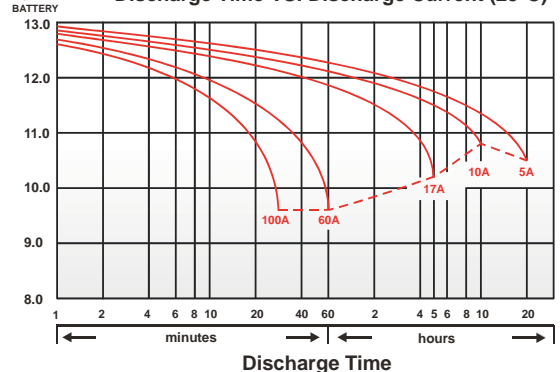
Overall Height (HT) 280±3 (11.02±0.12)

Description of torque value of hard ware for the terminals

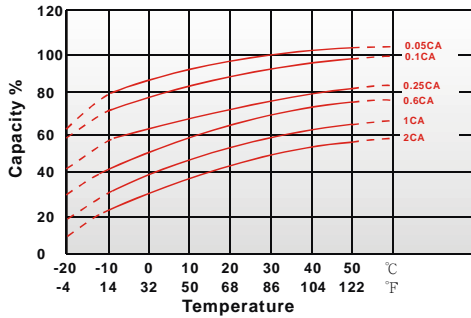
Recommended torque value M6: 7 N-m (71kgf-cm)
Maximum allowable torque value M6: 10 N-m (102kgf-cm)



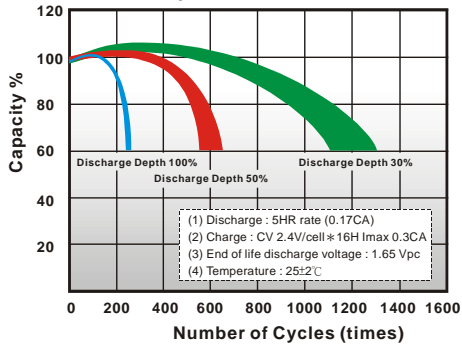
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



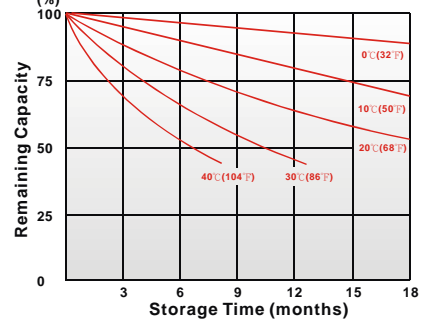
Effect of Temperature on Capacity 25°C(77°F)



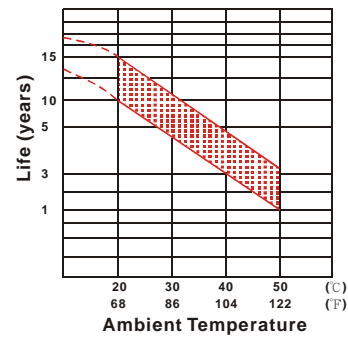
Cycle Service Life



Capacity Retention Characteristic



Trickle (or float) Service Life



- PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	417	464	502	532	551	563	572
10	min	331	369	393	411	423	433	440
15	min	265	294	314	329	338	346	352
20	min	235	255	268	273	277	281	284
30	min	190	203	212	216	220	223	225
60	min	116	120	123	126	128	130	132
90	min	77.5	81.7	84.5	86.2	86.7	87.2	87.4
120	min	58.6	66.6	71.9	73.8	75.2	76.0	76.7
180	min	47.1	49.2	51.1	52.6	53.9	55.0	56.0
240	min	36.4	38.8	41.0	41.8	42.2	42.5	42.8
300	min	27.1	30.0	31.8	32.7	33.5	34.2	34.7
480	min	21.5	22.8	23.5	24.0	24.5	25.0	25.4
600	min	17.7	18.7	19.5	20.0	20.4	20.6	20.7
1200	min	8.78	9.96	10.6	10.8	10.9	11.0	11.1

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	250	265	275	284	290	296	301
10	min	178	197	210	223	236	244	250
15	min	138	160	176	183	188	194	198
20	min	129	145	153	161	169	174	178
30	min	98.5	103	107	110	113	115	116
60	min	52.8	56.8	60.0	60.3	60.5	60.7	60.8
90	min	42.9	43.9	44.8	45.7	46.6	47.4	47.9
120	min	32.9	35.1	36.8	38.0	39.0	39.8	40.5
180	min	24.7	26.0	26.9	27.3	27.7	28.0	28.3
240	min	18.4	19.4	20.0	20.6	21.1	21.6	21.9
300	min	15.9	16.5	17.1	17.5	17.8	18.1	18.4
480	min	10.7	11.5	11.9	12.1	12.2	12.3	12.4
600	min	9.52	10.0	10.2	10.3	10.4	10.5	10.6
1200	min	4.78	5.01	5.12	5.18	5.23	5.28	5.32

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%)

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