

Specifications

Nominal Voltage(V)

12V

Nominal Capacity

20 hour rate	(3.25A	to	10.50V)	65Ah
10 hour rate	(6.175A	to	10.50V)	61.75Ah
5 hour rate	(11.05A	to	10.20V)	55.25Ah
1C	(65A	to	9.60V)	41.17Ah
3C	(195A	to	9.60V)	26Ah

Weight

Approx. 20.9kg(45.98Lbs.)

Internal Resistance (at 1KHz)

Approx. 7 mΩ

Maximum Discharge Current for

5 seconds:780A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	19.5A
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 & Standard

Expected Trickle Design Life: 10-12 years at 20°C according to Eurobat.

Terminal

F8



Dimensions

Length (L) 350±2-1 (13.78±0.08-0.04)

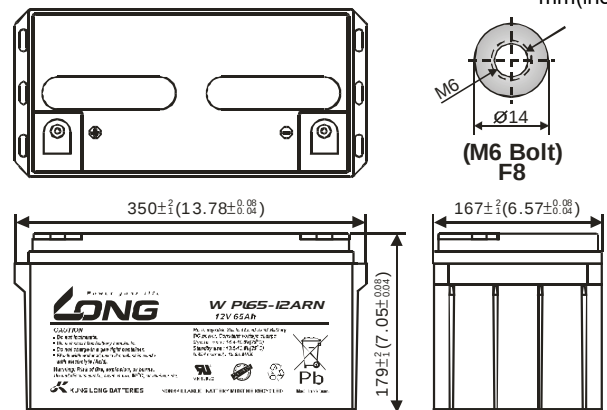
Width (W) 167±2-1 (6.57±0.08-0.04)

Height (H) 179±2-1 (7.05±0.08-0.04)

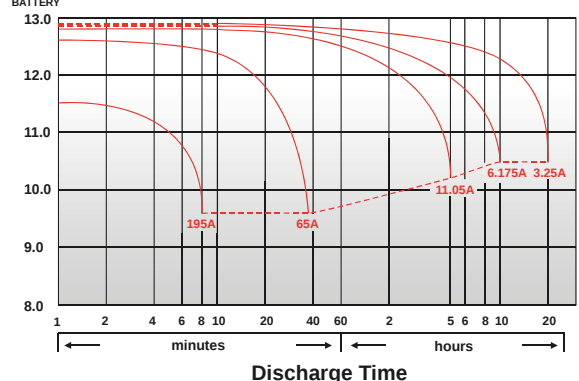
Overall Height (HT) 179±2-1 (7.05±0.08-0.04)

Description of torque value of hard ware for the terminals:

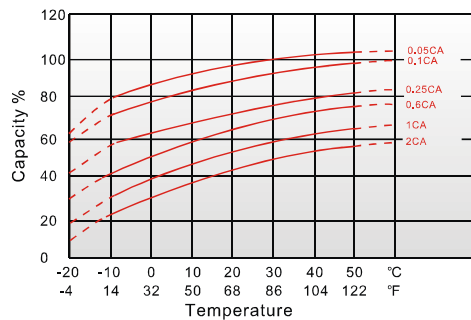
Recommended torque value	M6: 7 N-m (71kgf-cm)
Maximum allowable torque value	M6: 10 N-m(102kgf-cm)
	mm(inch)



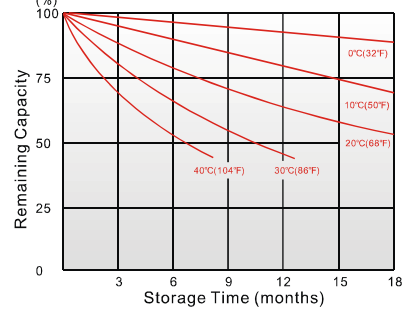
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



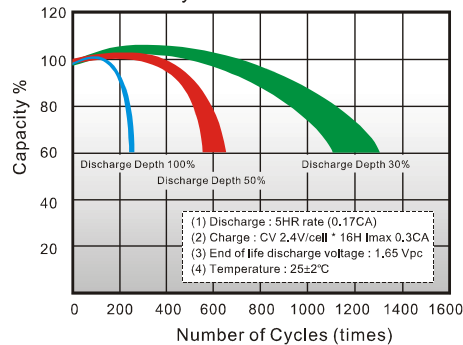
Effect of Temperature on Capacity 25°C(77°F)



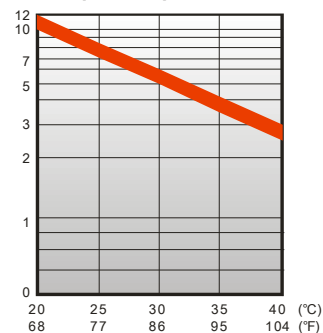
Capacity Retention Characteristic



Cycle Service Life



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	249	275	320	371	380	396	432
10	min	203	230	251	274	282	290	309
15	min	170	190	207	215	218	224	231
20	min	150	158	171	173	180	185	193
30	min	113	124	134	138	141	143	148
60	min	72.5	76.5	82.3	83.7	84.0	84.3	85.0
90	min	58.3	60.2	61.5	62.0	62.3	62.5	62.8
120	min	45.7	48.0	49.0	49.5	49.7	49.8	50.0
180	min	32.4	33.5	34.0	34.3	34.5	34.7	35.0
240	min	26.0	27.2	27.5	27.7	27.8	28.0	28.2
300	min	21.7	22.6	23.1	23.2	23.3	23.4	23.4
480	min	14.9	15.5	15.8	15.9	16.0	16.0	16.0
600	min	12.5	12.9	13.2	13.2	13.3	13.3	13.3
1200	min	6.54	6.76	6.86	6.87	6.89	6.91	6.94

- 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	137	151	177	208	213	224	245
10	min	102	123	135	149	154	158	169
15	min	91.0	100	109	116	119	122	129
20	min	61.4	82.5	89.3	92.5	94.0	96.5	101
30	min	50.7	63.6	68.5	71.5	73.4	74.7	77.2
60	min	36.6	38.5	41.5	42.5	43.0	43.6	44.2
90	min	29.5	31.1	31.8	32.2	32.8	33.0	33.4
120	min	23.1	24.3	24.8	25.0	25.3	25.5	25.8
180	min	16.2	17.0	17.3	17.5	17.7	17.8	18.0
240	min	13.0	13.6	13.8	13.9	14.0	14.1	14.2
300	min	10.8	11.3	11.5	11.6	11.7	11.8	11.9
480	min	7.43	7.73	7.87	7.92	7.94	7.96	7.98
600	min	6.19	6.43	6.54	6.58	6.60	6.61	6.63
1200	min	3.24	3.35	3.40	3.41	3.42	3.43	3.44

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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