

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MP100-12L

Nominal Voltage(V) 12V

Nominal Capacity

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)	63.33Ah

Weight Approx. 32.5kg(71.5Lbs.)

Internal Resistance (at 1KHz) Approx. 5 mΩ

Maximum Discharge Current for

5 seconds: 1200A

Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.7 to 14.8V
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)

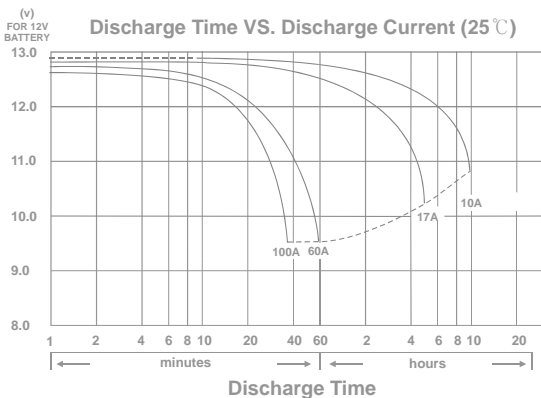
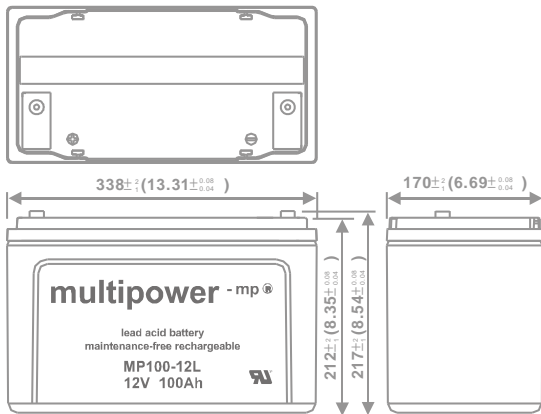
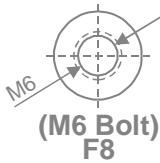
1 month	98%
3 month	94%
6 month	85%

Case Material ABS
(UL94 HB flame retardant case / cover)

Terminal F8

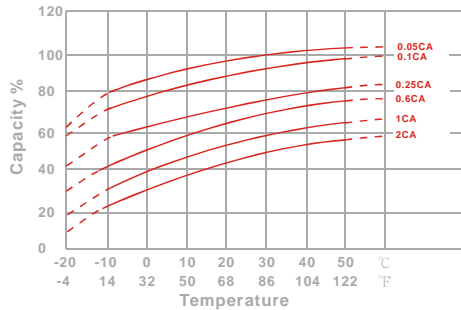
Description of torque value of hard ware for the terminals:

Recommended torque value	M6: 5.39 N·m (55kg·cm)
Maximum allowable torque value	M6: 8.82 N·m (90kg·cm)

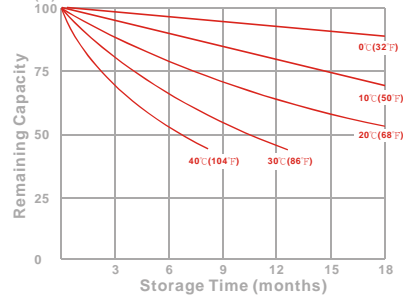


CHARACTERISTIC & PERFORMANCE DATA

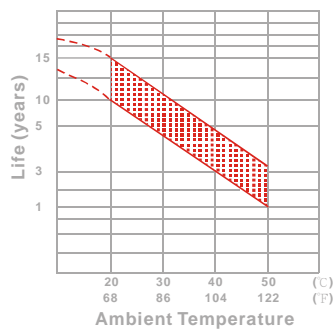
Effect of Temperature on Capacity 25°C(77°F)



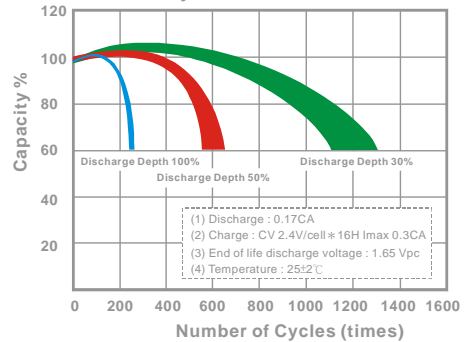
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle 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
5	min	2841	3163	3384	3595	3692	3794	3986
10	min	2064	2258	2417	2569	2634	2708	2839
15	min	1627	1774	1886	1994	2042	2093	2184
30	min	959	1023	1077	1128	1149	1176	1218
60	min	694	721	739	756	763	772	783
120	min	378	397	412	421	427	434	443
180	min	287	303	314	325	329	334	341
240	min	212	225	237	249	253	258	264
300	min	193	202	210	216	218	221	225
600	min	115	122	127	132	134	136	138
1200	min	63.2	65.4	67.1	68.3	68.8	69.4	70.2

- 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
5	min	209	274	312	343	353	365	382
10	min	157	186	207	224	232	241	255
15	min	116	143	162	176	181	187	195
30	min	62.3	74.7	83.1	91.7	93.9	97.3	102
60	min	43.2	51.4	57.1	61.2	62.1	63.6	65.5
120	min	24.1	28.2	31.4	34.5	35.3	36.2	37.4
180	min	20.7	23.1	24.9	26.4	26.9	27.5	28.3
240	min	16.6	18.4	19.7	20.6	20.9	21.3	21.8
300	min	15.3	16.5	17.4	17.9	18.1	18.3	18.6
600	min	10.1	10.4	10.6	10.8	10.9	11.1	11.3
1200	min	5.08	5.25	5.42	5.54	5.59	5.65	5.73

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%)