

multipower - mp®

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPC100-12I

Nominal Voltage(V) 12V

Nominal Capacity

10 hour rate	(10A	to	10.80V)	100.00Ah
5 hour rate	(17A	to	10.20V)	85.00Ah
1 hour rate	(60A	to	9.60V)	60.00Ah
1 C	(100A	to	9.60V)	63.33Ah

Weight Approx. 31.2kg (68.6Lbs.)

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)

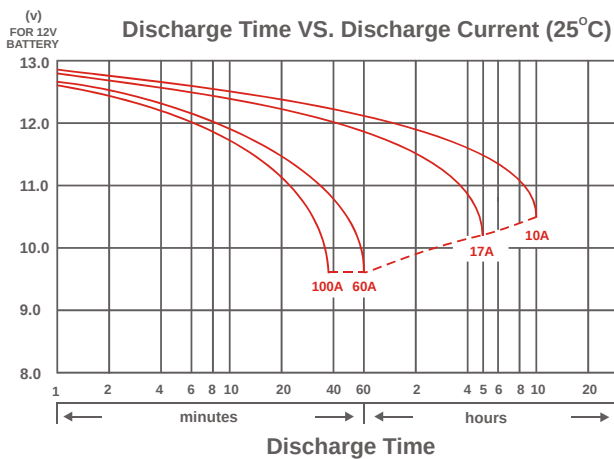
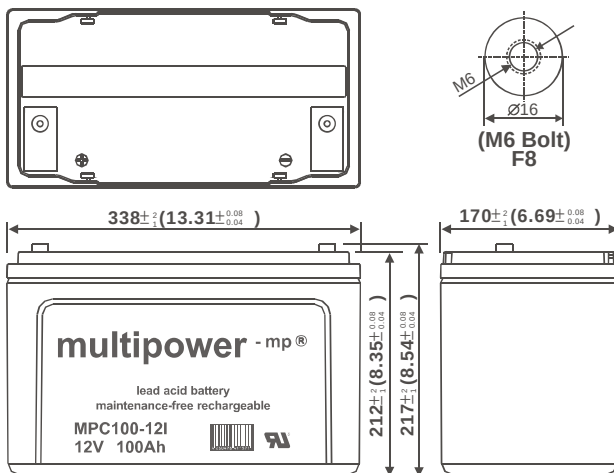
1 month	98%
3 month	94%
6 month	85%

Case Material ABS UL94 HB

Terminal F8

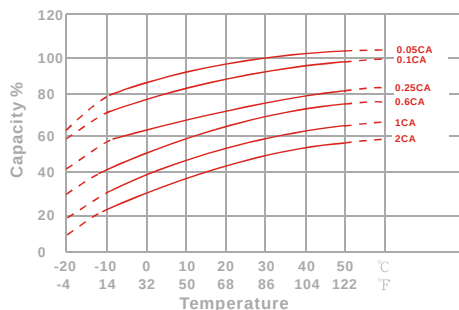
Description of torque value of hard ware for the terminals:

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

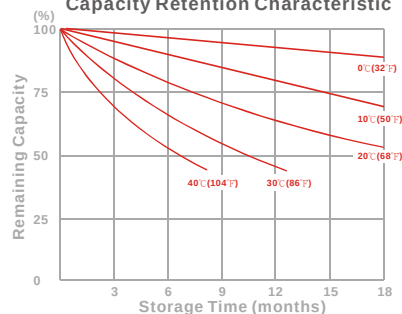


CHARACTERISTIC & PERFORMANCE DATA

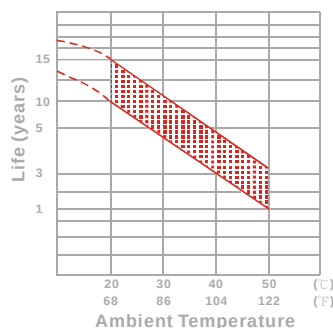
Effect of Temperature on Capacity 25°C(77°F)



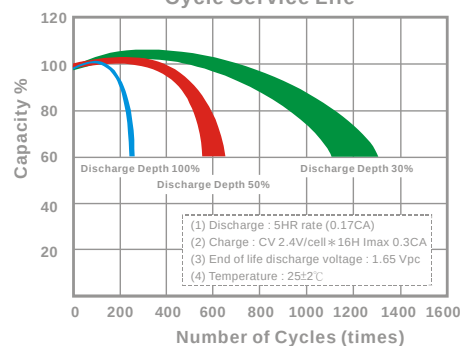
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts per Cell 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								
10	min	393	429	469	498	499	512	515
15	min	336	364	380	400	404	416	419
30	min	208	220	229	238	241	246	248
60	min	142	142	142	143	145	146	147
90	min	92.6	97.4	101	104	105	107	108
120	min	75.8	79.7	82.5	84.2	85.2	86.5	87.3
180	min	56.7	59.7	61.3	62.2	62.8	63.7	64.4
240	min	40.0	42.2	46.7	47.5	48.4	49.3	49.8
300	min	36.5	38.9	40.0	40.8	41.3	42.0	42.3
600	min	19.1	21.1	21.6	22.2	22.6	22.7	22.8
1200	min	11.1	11.4	11.7	11.9	12.1	12.1	12.2

- Discharge Rates in Amperes per Battery 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								
10	min	220	232	245	254	260	270	285
15	min	177	194	214	220	224	232	241
30	min	118	123	126	128	130	131	133
60	min	57.0	60.2	64.0	67.3	69.4	70.2	72.0
90	min	40.0	43.2	45.4	46.3	47.2	48.6	49.8
120	min	27.6	32.1	35.6	39.1	39.9	40.9	42.2
180	min	23.7	26.3	31.0	32.8	33.3	34.0	35.0
240	min	20.2	21.5	22.8	23.2	23.5	24.0	24.5
300	min	16.9	17.4	18.5	19.2	19.7	19.9	20.2
600	min	10.3	11.0	11.0	11.1	11.2	11.2	11.2
1200	min	5.45	5.62	5.70	5.80	5.90	5.90	6.00

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%)