

multipower - mp®

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPC36-12I

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(1.80A	to	10.50V)	36.00Ah
10 hour rate	(3.42A	to	10.50V)	34.20Ah
5 hour rate	(6.12A	to	10.20V)	30.60Ah
1 C	(36A	to	9.60V)	20.40Ah
3 C	(108A	to	9.60V)	14.40Ah

Weight Approx. 11.0kg (24.2Lbs.)

Internal Resistance (at 1KHz) Approx. 8 mΩ

Maximum Discharge Current for

5 seconds: 540A

Charging Methods at 25°C (77°F)

Cycle use:	
Charging Voltage	14.7 to 14.8V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current:	10.8A
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)

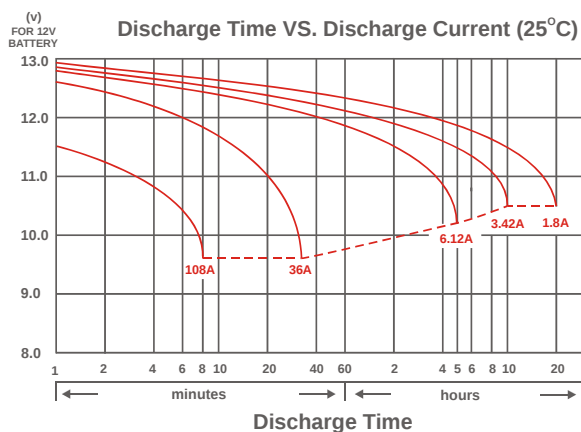
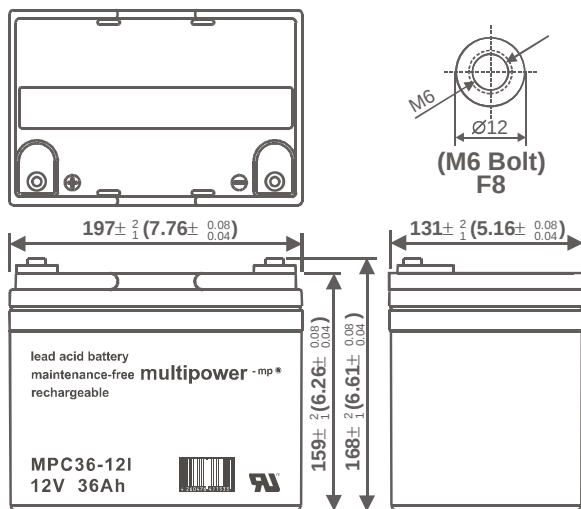
1 month	92%
3 month	90%
6 month	80%

Case Material ABS UL94 HB

Terminal F8

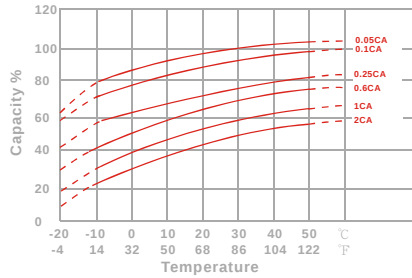
Description of torque value of hard ware for the terminals:

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

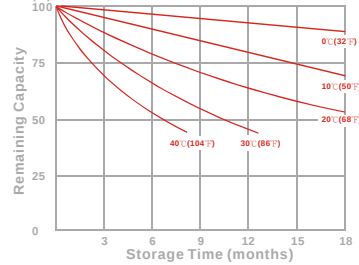


CHARACTERISTIC & PERFORMANCE DATA

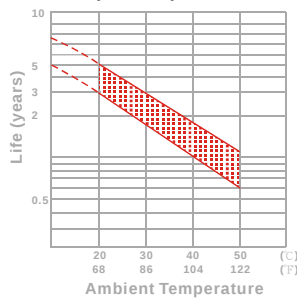
Effect of Temperature on Capacity 25°C(77°F)



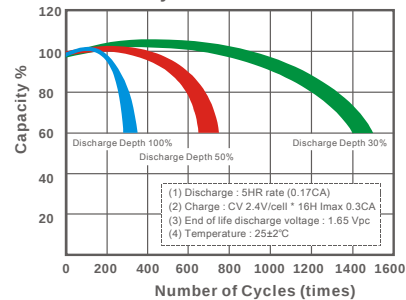
Capacity Retention Characteristic



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								
2	min	240	272	301	311	318	323	327
4	min	206	236	252	265	272	279	282
5	min	195	210	222	233	239	245	250
6	min	180	196	207	217	222	227	230
8	min	156	171	184	195	199	202	205
10	min	140	151	156	160	164	167	170
15	min	119	123	126	129	131	133	135
20	min	98.5	104	106	107	108	109	110
30	min	74.8	76.6	77.5	78.2	78.7	79.0	79.3
45	min	56.2	57.5	58.0	58.3	58.6	58.9	59.1
60	min	42.0	43.2	44.0	44.5	45.0	45.3	45.6
90	min	32.0	32.4	32.7	33.0	33.3	33.5	33.8
120	min	22.0	23.1	23.8	24.2	24.4	24.6	24.8
180	min	14.8	15.4	15.9	16.3	16.6	16.8	17.0
240	min	11.8	12.3	12.6	12.8	12.9	12.9	13.0
300	min	10.4	10.7	11.1	11.3	11.4	11.5	11.6
600	min	5.13	5.41	5.60	5.65	5.68	5.72	5.80
1200	min	3.24	3.33	3.43	3.45	3.49	3.52	3.55

- 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								
2	min	130	152	167	177	187	195	200
4	min	110	128	141	149	154	157	160
5	min	100	112	122	128	135	138	140
6	min	95.5	101	104	106	108	109	110
8	min	90.7	98.3	101	103	105	107	108
10	min	78.5	83.9	88.9	91.7	93.5	95.0	95.5
15	min	57.0	60.2	63.2	66.2	69.2	71.2	72.2
20	min	49.8	52.8	53.4	53.9	54.4	54.9	55.3
30	min	32.8	34.6	36.2	37.8	39.2	40.0	40.5
45	min	26.7	29.2	30.0	30.3	30.6	30.8	31.0
60	min	19.9	20.6	21.0	21.3	21.6	21.9	22.0
90	min	16.0	16.2	16.6	16.8	17.0	17.3	17.3
120	min	11.7	12.2	12.6	12.7	12.7	12.8	12.9
180	min	8.39	8.74	9.01	9.23	9.39	9.51	9.63
240	min	6.79	7.08	7.22	7.31	7.37	7.39	7.41
300	min	5.75	5.99	6.08	6.12	6.14	6.16	6.17
600	min	3.23	3.34	3.43	3.49	3.53	3.55	3.56
1200	min	1.72	1.77	1.80	1.82	1.83	1.84	1.85

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%)