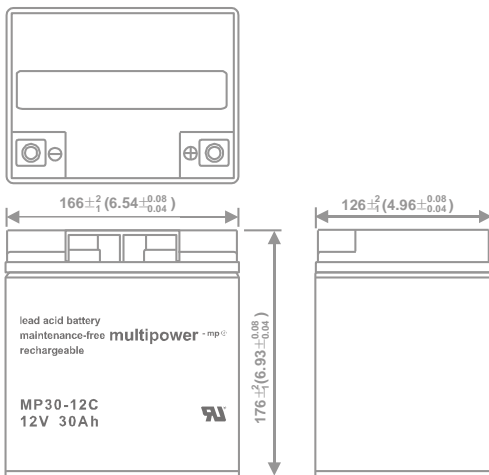
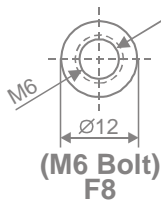


# multipower - mp<sup>®</sup>

## RECHARGEABLE SEALED LEAD ACID BATTERY

## SPECIFICATION



### MP30-12C

Nominal Voltage(V) 12V

#### Nominal Capacity

20 hour rate	(1.5A to 10.50V)	30.00Ah
10 hour rate	(2.85A to 10.50V)	28.50Ah
5 hour rate	(5.1A to 10.20V)	25.50Ah
1 C	(30A to 9.60V)	17.00Ah
3 C	(90A to 9.60V)	12.00Ah

Weight 10.5kg (23.1Lbs.)

Internal Resistance (at 1KHz) Approx. 9 mΩ

Maximum Discharge Current for 5 seconds: 450A

#### Charging Methods at 25°C(77°F)

Cycle use:  
 Charging Voltage 14.7 to 14.8V  
 Coefficient -5.0mV/°C/cell  
 Maximum Charging Current: 9A  
 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)

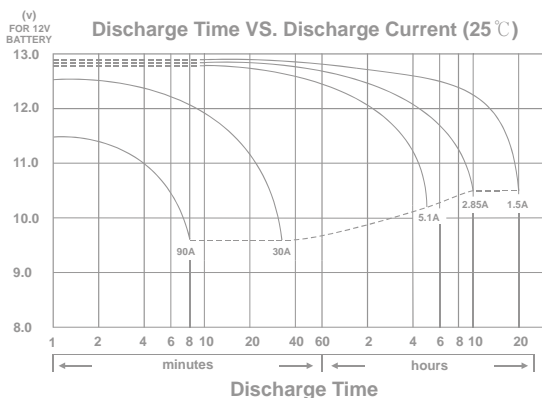
1 month	92%
3 month	90%
6 month	80%

Case Material ABS

Terminal F8

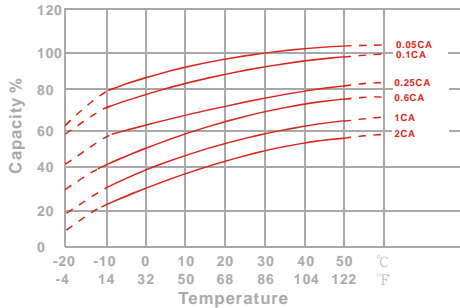
#### Description of torque value of hard ware for the terminals:

Recommended torque value	M6: 5N·m (51kgf·cm)
Maximum allowable torque value	M6: 6N·m (61kgf·cm)

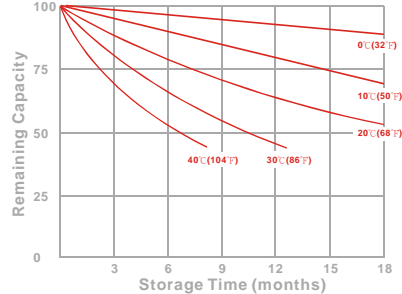


## CHARACTERISTIC & PERFORMANCE DATA

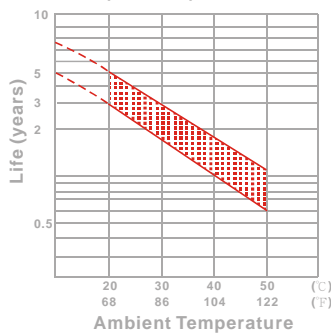
Effect of Temperature on Capacity 25°C (77°F)



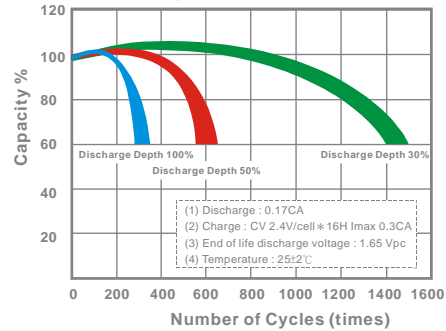
Capacity Retention Characteristic



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								
5	min	138	174	194	205	209	213	217
10	min	105	121	132	140	144	146	150
15	min	92.5	103	108	112	113	115	117
30	min	57.2	61.8	63.7	65.1	65.4	66.0	66.7
60	min	34.4	37.1	38.5	39.5	39.8	40.4	40.9
120	min	20.3	21.7	22.5	23.2	23.3	23.7	24.0
180	min	15.5	16.1	16.4	16.7	16.8	17.0	17.2
240	min	12.7	13.2	13.5	13.7	13.7	13.8	14.0
300	min	10.4	10.9	11.1	11.2	11.3	11.4	11.5
600	min	5.81	6.02	6.17	6.30	6.33	6.39	6.45
1200	min	3.13	3.26	3.33	3.38	3.40	3.44	3.47

### - 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								
5	min	73.8	94.8	108	116	119	122	125
10	min	55.3	64.2	70.4	75.5	77.2	79.4	81.7
15	min	47.6	53.3	56.0	58.5	59.4	60.2	61.4
30	min	29.3	31.8	32.9	33.8	34.1	34.5	35.1
60	min	16.9	18.3	19.2	19.8	20.0	20.2	20.4
120	min	10.4	10.9	11.3	11.6	11.7	11.8	11.9
180	min	7.51	7.83	8.04	8.21	8.28	8.35	8.46
240	min	6.12	6.41	6.54	6.66	6.70	6.74	6.81
300	min	5.09	5.34	5.46	5.55	5.59	5.63	5.68
600	min	2.81	2.92	3.00	3.06	3.08	3.11	3.14
1200	min	1.52	1.57	1.61	1.64	1.65	1.67	1.69

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%)