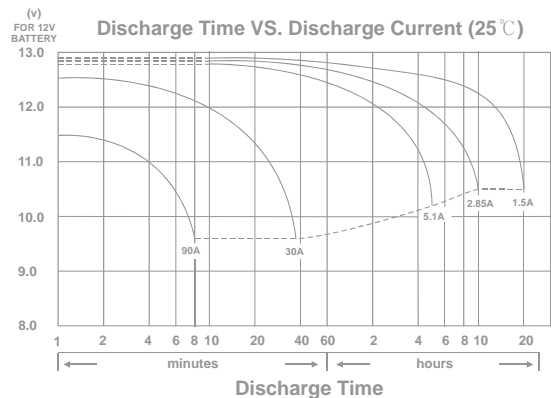
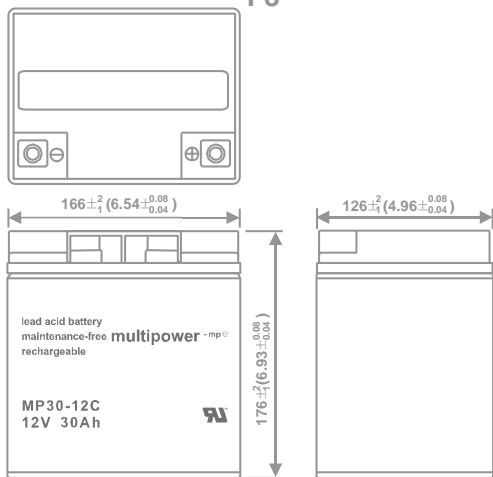
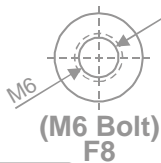


RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MP30-12C

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(1.5A to 10.50V)	30Ah
10 hour rate	(2.85A to 10.50V)	28.5Ah
5 hour rate	(5.1A to 10.20V)	25.5Ah
1 C	(30A to 9.60V)	19Ah
3 C	(90A to 9.60V)	12Ah

Weight Approx. 10.12kg(22.26Lbs.)

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 14.4 to 15.0V
Coefficient -5.0mv/°C/cell
Maximum Charging Current: 9A
Standby use:
Float Charging Voltage 13.50 to 13.80V
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 flame retardant case / cover)

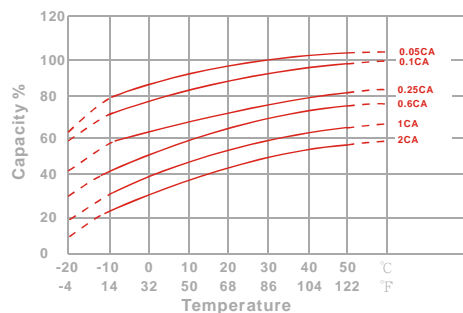
Terminal F8

Description of torque value of hard ware for the terminals:

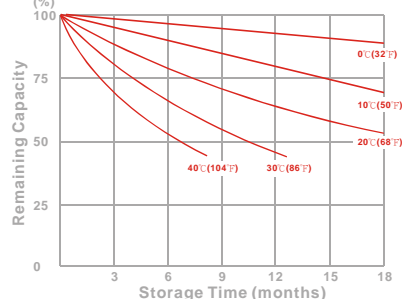
Recommended torque value	M6: 5.39 N-m (55kg-cm)
Maximum allowable torque value	M6: 8.82 N-m (90kg-cm)

CHARACTERISTIC & PERFORMANCE DATA

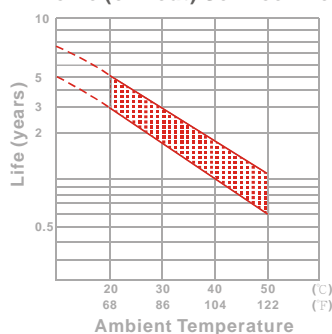
Effect of Temperature on Capacity 25°C(77°F)



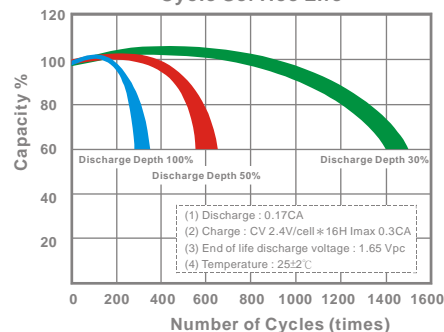
Capacity Retention Characteristic



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
Time								
5	min	826	1042	1164	1232	1255	1276	1305
10	min	633	729	792	838	861	877	901
15	min	555	618	646	673	680	688	699
30	min	343	371	382	391	393	396	400
60	min	206	222	231	237	239	242	245
120	min	122	130	135	139	140	142	144
180	min	92.7	96.3	98.5	100	101	102	103
240	min	76.2	79.5	80.8	81.9	82.4	82.9	83.8
300	min	62.5	65.4	66.5	67.4	67.8	68.3	69.0
600	min	34.8	36.1	37.0	37.8	38.0	38.3	38.7
1200	min	18.8	19.5	20.0	20.3	20.4	20.6	20.8

- 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	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%)