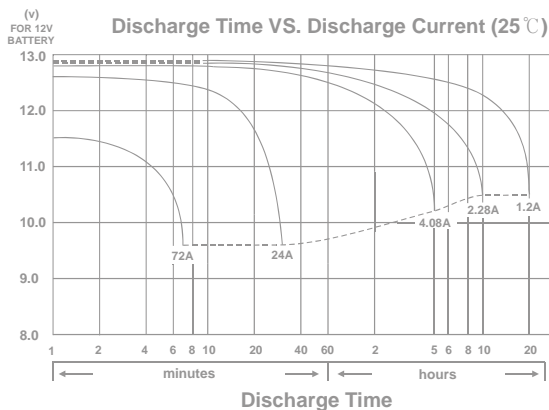
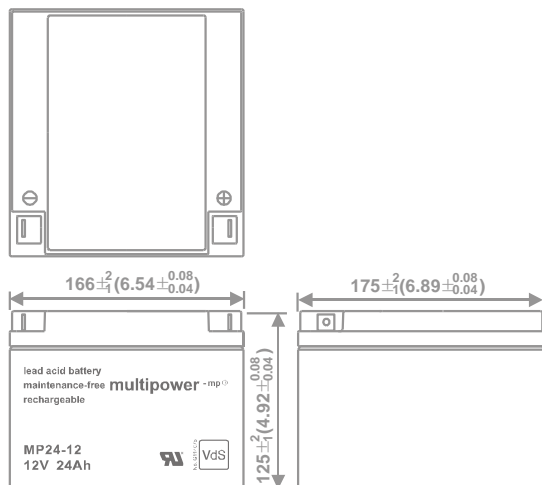
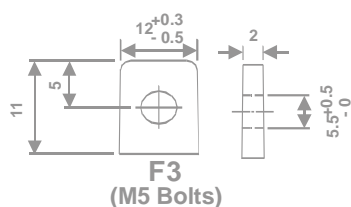


RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MP24-12

Nominal Voltage (V) 12V

Nominal Capacity

20 hour rate	(1.2A to 10.50V)	24.00Ah
10 hour rate	(2.28A to 10.50V)	22.80Ah
5 hour rate	(4.08A to 10.20V)	20.40Ah
1 C	(24A to 9.60V)	12.80Ah
3 C	(72A to 9.60V)	8.40Ah

Weight Approx. 8.0kg (17.6lbs)

Internal Resistance (at 1KHz) Approx. 11 mΩ

Maximum Discharge Current for

5 seconds: 360A

Charging Methods at 25°C (77°F)

Cycle use:	
Charging Voltage	14.70V to 14.80V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current:	7.2A
Standby use:	
Float Charging Voltage	13.50V 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)

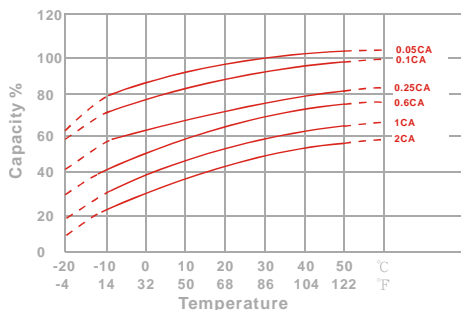
1 month	92%
3 month	90%
6 month	80%

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

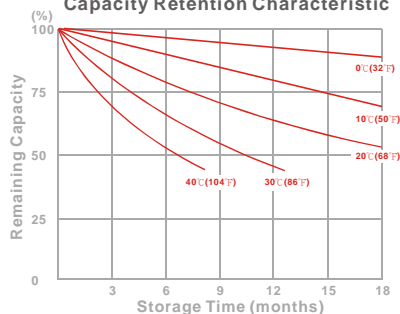
Terminal F3

CHARACTERISTIC & PERFORMANCE DATA

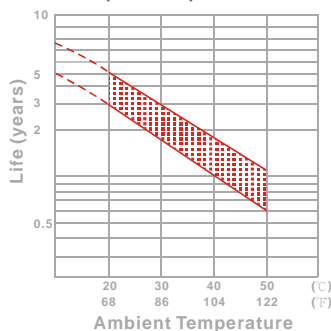
Effect of Temperature on Capacity 25°C (77°F)



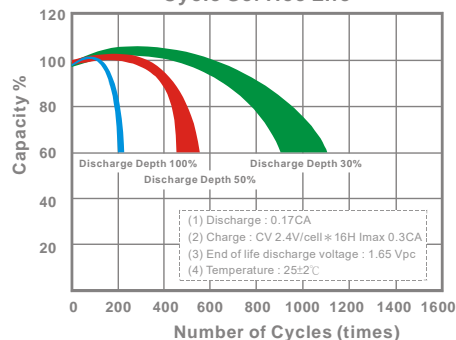
Capacity Retention Characteristic



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	686	772	853	928	956	991	1062
10	min	529	598	635	667	685	702	730
15	min	421	459	485	506	520	529	548
30	min	246	267	279	288	293	297	302
60	min	162	171	176	180	181	183	185
120	min	87.6	92.5	95.4	97.0	98.2	99.1	100
180	min	73.3	75.9	77.2	78.3	78.6	79.0	79.5
240	min	58.9	61.1	62.2	63.1	63.3	63.6	63.9
300	min	50.8	52.2	52.9	53.6	53.8	54.1	54.3
600	min	29.6	30.7	31.3	31.8	31.9	32.1	32.3
1200	min	15.2	15.7	16.1	16.4	16.5	16.6	16.7

- 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	70.2	82.3	90.7	96.1	98.3	101	105
10	min	45.8	50.4	54.6	58.8	60.5	62.4	65.6
15	min	37.9	41.1	43.7	46.2	47.3	48.2	49.8
30	min	20.8	23.2	24.7	25.6	26.2	26.9	27.7
60	min	14.5	15.0	15.3	15.5	15.6	15.7	15.8
120	min	7.65	7.96	8.08	8.19	8.22	8.26	8.31
180	min	6.21	6.41	6.50	6.53	6.55	6.58	6.62
240	min	4.97	5.07	5.14	5.20	5.22	5.25	5.28
300	min	4.22	4.35	4.40	4.44	4.45	4.47	4.49
600	min	2.48	2.56	2.60	2.61	2.62	2.63	2.64
1200	min	1.29	1.33	1.35	1.36	1.37	1.38	1.39

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%)