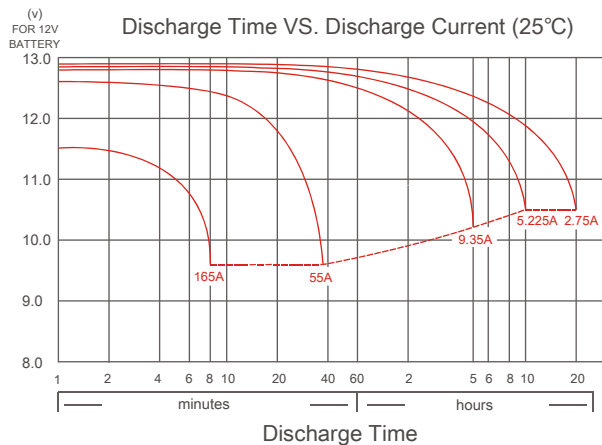
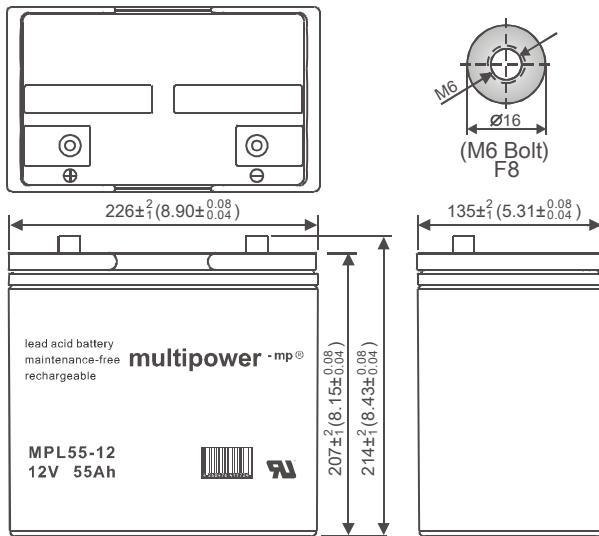


# RECHARGEABLE SEALED LEAD ACID BATTERY

# SPECIFICATION



## MPL55-12

**Nominal Voltage (V)** 12V

### Nominal Capacity

20 hour rate	(2.75A	to	10.50V)	55.00Ah
10 hour rate	(5.225A	to	10.50V)	52.25Ah
5 hour rate	(9.35A	to	10.20V)	46.75Ah
1 C	(55A	to	9.60V)	34.83Ah
3 C	(165A	to	9.60V)	22.00Ah

**Weight Approx.** 17.0kg (37.4lbs.)

**Internal Resistance (at 1KHz) Approx.** 8 mΩ

**Maximum Discharge Current for 5 seconds:** 660A

### Charging Methods at 25°C (77°F)

Maximum Charging Current: 16.5A  
 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 98%  
 3 month 94%  
 6 month 85%

**Case Material** ABS UL94 HB

**Terminal** F8

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

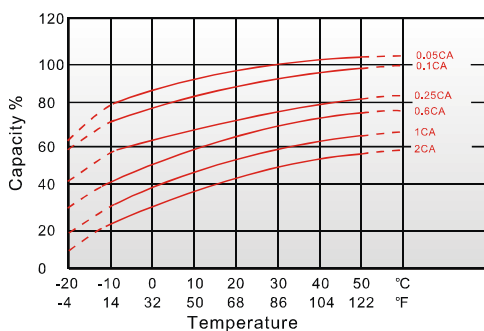
Recommended torque value M6: 7 N-m (71kgf-cm)  
 Maximum allowable torque value M6: 9 N-m (92kgf-cm)

### Design Life

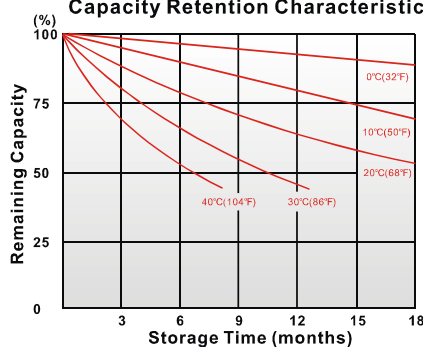
Eurobat (20°C) : 10+ years

## CHARACTERISTIC & PERFORMANCE DATA

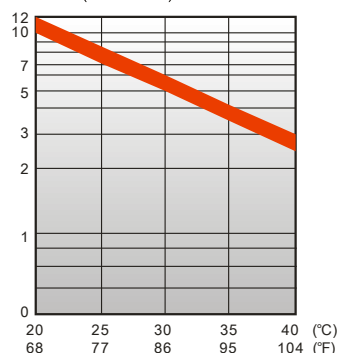
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) 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
5	min	328	381	413	430	434	438	444
10	min	210	244	265	276	278	281	285
15	min	163	187	202	209	211	213	215
30	min	86.9	99.5	107	111	112	113	115
60	min	64.7	67.5	69.3	70.8	71.3	72.0	72.6
120	min	32.5	34.7	36.2	37.2	37.5	37.8	38.3
180	min	26.3	28.2	29.2	29.8	30.0	30.3	30.6
240	min	21.8	23.0	23.7	24.2	24.3	24.5	24.6
300	min	18.3	19.3	20.0	20.3	20.5	20.7	20.9
600	min	10.6	11.1	11.4	11.6	11.6	11.7	11.7
1200	min	5.48	5.78	5.93	6.05	6.08	6.14	6.18

### - 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
5	min	176	204	219	228	231	234	238
10	min	110	127	138	143	145	147	149
15	min	83.5	95.6	103	107	108	109	110
30	min	43.8	50.2	54.1	55.8	56.4	57.0	57.7
60	min	29.4	33.2	34.5	35.4	35.7	36.1	36.5
120	min	16.9	18.4	19.2	19.8	20.0	20.3	20.6
180	min	13.0	13.8	14.3	14.7	14.8	15.0	15.2
240	min	10.9	11.5	11.7	11.9	12.0	12.1	12.2
300	min	9.32	9.74	9.92	10.1	10.2	10.3	10.4
600	min	5.39	5.63	5.65	5.71	5.73	5.76	5.80
1200	min	2.76	2.89	2.96	3.00	3.01	3.03	3.05

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%)