

## RECHARGEABLE SEALED LEAD ACID BATTERY

## SPECIFICATION



### MPL100-12 (Artikel-Nr. 2010610)

Nominal Voltage (V) 12V

#### Nominal Capacity

10 hour rate	(10A	to	10.80V)	100.00Ah
5 hour rate	(17A	to	10.20V)	85.00Ah
1 hour rate	(60A	to	9.60V)	60.00Ah
1 C	(100A	to	9.60V)	63.33Ah

Weight Approx. 32.5kg (71.5lbs)

Internal Resistance (at 1KHz) Approx. 5 mΩ

#### Maximum Discharge Current for

5 seconds: 1200A

#### Charging Methods at 25°C (77°F)

Maximum Charging Current: 30A

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

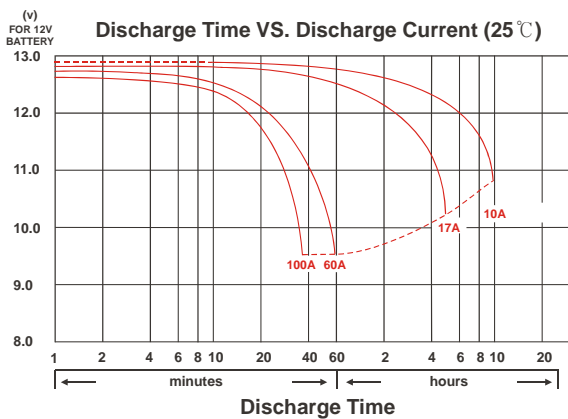
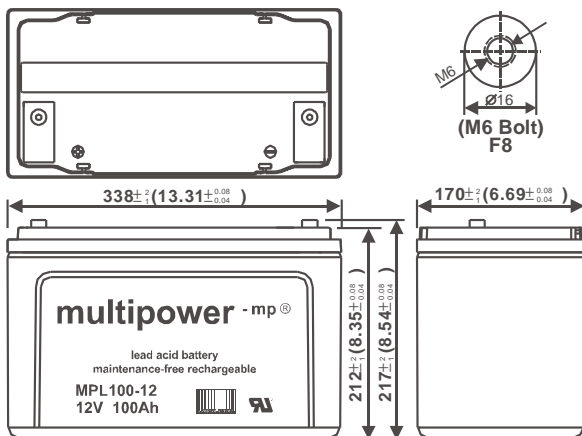
#### Description of torque value of hard ware for the terminals:

Recommended torque value M6: 7 N-m (71kgf-cm)

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

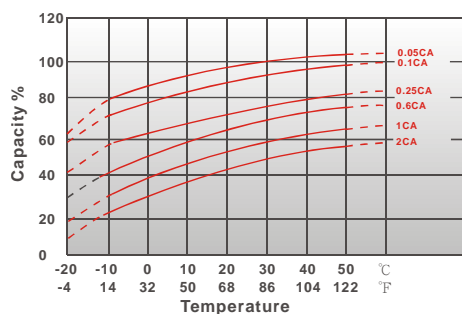
#### Design Life

Eurobat (20°C) : 10+ years

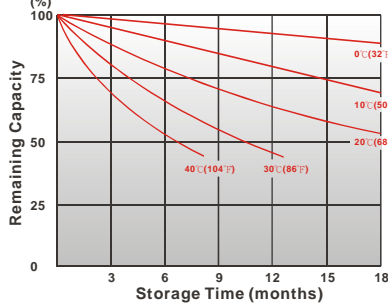


## CHARACTERISTIC & PERFORMANCE DATA

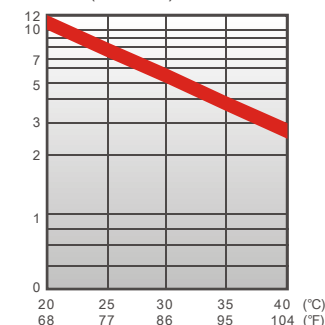
Effect of Temperature on Capacity 25°C(77°F)



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
Time								
5	min	474	527	564	599	615	632	664
10	min	344	376	403	428	439	451	473
15	min	271	296	314	332	340	349	364
30	min	160	171	180	188	192	196	203
60	min	116	120	123	126	127	129	131
120	min	63.0	66.2	68.7	70.2	71.2	72.3	73.8
180	min	47.8	50.5	52.3	54.2	54.8	55.7	56.8
240	min	35.3	37.5	39.5	41.5	42.2	43.0	44.0
300	min	32.2	33.7	35.0	36.0	36.3	36.8	37.5
600	min	19.2	20.3	21.2	22.0	22.3	22.7	23.0
1200	min	10.5	10.9	11.2	11.4	11.5	11.6	11.7

### - 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	209	274	312	343	353	365	382
10	min	157	186	207	224	232	241	255
15	min	116	143	162	176	181	187	195
30	min	62.3	74.7	83.1	91.7	93.9	97.3	102
60	min	43.2	51.4	57.1	61.2	62.1	63.6	65.5
120	min	24.1	28.2	31.4	34.5	35.3	36.2	37.4
180	min	20.7	23.1	24.9	26.4	26.9	27.5	28.3
240	min	16.6	18.4	19.7	20.6	20.9	21.3	21.8
300	min	15.3	16.5	17.4	17.9	18.1	18.3	18.6
600	min	10.1	10.4	10.6	10.8	10.9	11.1	11.3
1200	min	5.08	5.25	5.42	5.54	5.59	5.65	5.73

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%)