

# PT120-12

12Volt 120Ah

## Specifications

**Nominal Voltage(V)** 12V

### Nominal Capacity

10 hour rate	(12A to 10.80V)	120Ah
5 hour rate	(20.4A to 10.20V)	110.4Ah
1 hour rate	(72A to 9.60V)	102Ah

**Weight** Approx. 33.5kg(73.8Lbs.)

**Internal Resistance (at 1KHz)** Approx. 4mΩ

**Maximum Discharge Current for 5 seconds:** 1200A

### Charging Methods at 25°C (77°F)

<b>Cycle use:</b>	
Charging Voltage	14.4 to 15.0V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current :	36A
<b>Standby use:</b>	
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)

**Design Life** 12 years

### Charge Retention (shelf life) at 20°C (68°F)

1 month	98%
3 month	94%
6 month	85%

**Case Material** ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

**Terminal** F18

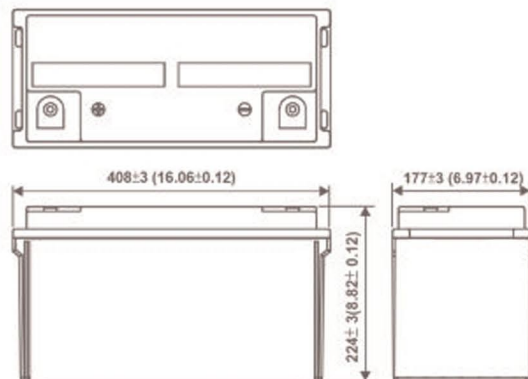
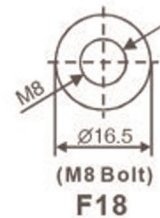
### Description of torque value of hard ware for the terminals:

Recommended torque value	M8: 7 N-m (71kgf-cm)
Maximum allowable torque value	M8: 9 N-m (92kgf-cm)

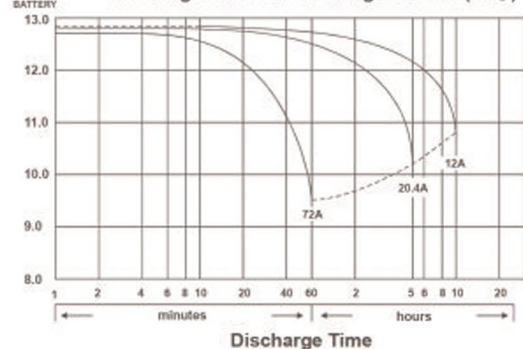


## Dimensions

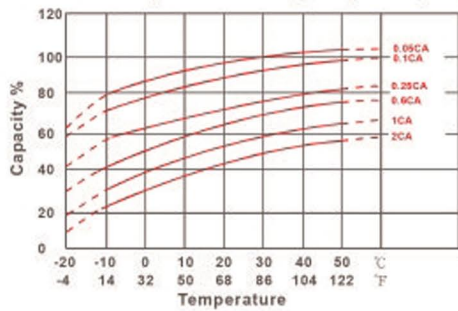
mm(inch)



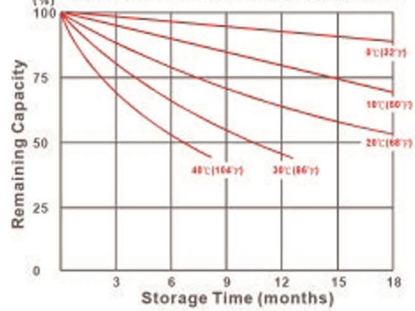
Discharge Time VS. Discharge Current (25°C)



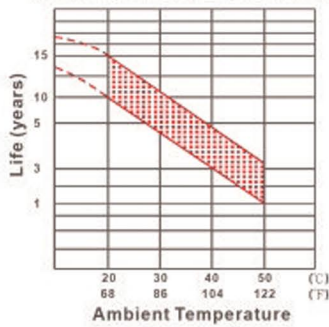
Effect of Temperature on Capacity 25°C (77°F)



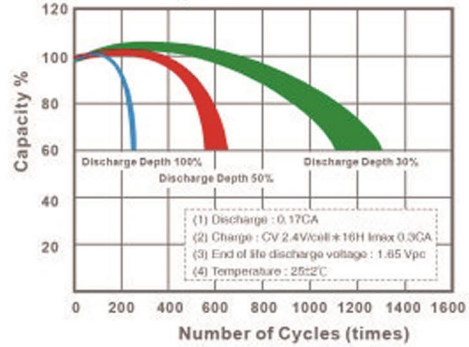
Capacity Retention Characteristic



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		1.80V	1.75V	1.70V	1.65V	1.60V
Time	min					
10	min	358	383	404	426	449
15	min	310	334	346	358	370
30	min	199	206	213	220	227
45	min	150	154	157	171	172
60	min	124	128	131	137	141
90	min	88.6	91.0	93.0	97.0	100
180	min	53.0	54.1	55.0	56.6	59.2
300	min	37.0	37.4	38.3	38.9	39.5
480	min	26.0	26.5	26.8	27.1	27.4
600	min	22.3	22.8	23.0	23.2	23.3

**- Discharge Rates in Amperes to Various End Voltages at 25 C (77 F)**

End Voltage		1.80V	1.75V	1.70V	1.65V	1.60V
Time	min					
10	min	197	210	223	245	250
15	min	167	179	187	195	196
30	min	106	108	112	116	120
45	min	78.9	81.0	83.8	86.1	87.7
60	min	65.4	67.5	69.7	71.1	71.6
90	min	46.8	49.0	50.4	51.3	51.8
180	min	28.1	30.5	31.0	31.5	32.0
300	min	19.3	20.0	20.7	21.0	21.0
480	min	13.6	14.0	14.2	14.5	14.6
600	min	12.0	12.1	12.2	12.3	12.5

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%)