

FT SERIES-Front Terminal

FT12-180 (12V180AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	180.0AH	
Dimension	Length	560±2mm (22.05 inches)
	Width	126±2mm (4.96 inches)
	Container Height	280±2mm (11.02 inches)
	Total Height (with Terminal)	280±2mm (11.02 inches)
Approx Weight	Approx 54.0 Kg (119.1 lbs)	
Terminal	T13	
Container Material	ABS	
Rated Capacity	180.4 AH/9.02A	(20hr, 1.80V/cell, 25°C/77°F)
	170.0 AH/17.0A	(10hr, 1.80V/cell, 25°C/77°F)
	164.0 AH/20.5A	(8hr, 1.80V/cell, 25°C/77°F)
	155.0 AH/31.0A	(5hr, 1.75V/cell, 25°C/77°F)
	113.5 AH/113.5A	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	1360A (5s)	
Internal Resistance	Approx 2.9mΩ	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	0~40°C (32~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 54.0A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LPF series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ For standard 19 inches or 23 inches power cabinets
- ◆ Network connection equipment of communication system
- ◆ Power system of special network or local area network
- ◆ UPS, standby power supply
- ◆ Power station systems
- ◆ Railway and marine systems



Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	285.2	237.8	204.0	160.0	124.1	100.9	60.2	43.3	34.8	28.8	25.1	19.5	16.3	8.62
1.80V/cell	323.4	265.0	225.8	175.1	133.5	107.7	63.5	46.1	36.6	30.3	26.3	20.5	17.0	9.02
1.75V/cell	354.9	286.8	241.0	184.0	138.6	111.5	64.7	46.8	37.5	31.0	26.7	20.7	17.2	9.15
1.70V/cell	379.6	302.1	250.7	189.4	141.8	113.0	65.6	47.3	37.8	31.2	27.1	21.0	17.4	9.22
1.67V/cell	392.8	309.6	255.9	191.8	142.3	113.5	65.8	47.6	38.0	31.5	27.4	21.3	17.5	9.27
1.60V/cell	412.9	321.4	267.3	196.6	146.1	116.4	66.9	48.5	38.9	32.3	27.9	21.8	17.9	9.32

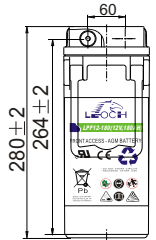
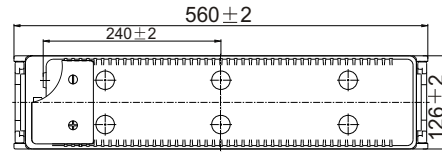
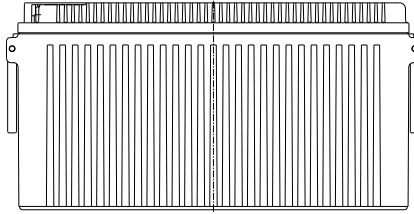
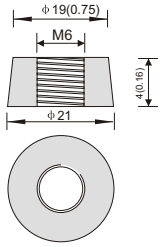
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	532.6	448.4	388.7	308.2	241.0	196.6	118.0	85.3	68.7	57.0	49.7	38.9	32.5	17.3
1.80V/cell	596.8	493.1	424.0	332.1	257.3	208.7	123.7	90.3	71.9	59.7	52.1	40.8	34.0	18.0
1.75V/cell	644.5	527.2	448.1	346.2	264.6	215.2	125.6	91.3	73.5	60.9	52.7	41.2	34.3	18.3
1.70V/cell	674.0	547.6	462.7	354.4	269.7	217.4	127.1	92.1	73.8	61.0	53.2	41.7	34.6	18.4
1.67V/cell	694.8	558.9	470.4	358.1	269.8	217.8	127.3	92.4	74.3	61.6	53.7	42.2	34.9	18.5
1.60V/cell	710.1	568.9	484.5	362.4	273.9	221.2	128.3	93.7	75.4	62.9	54.6	43.0	35.5	18.6

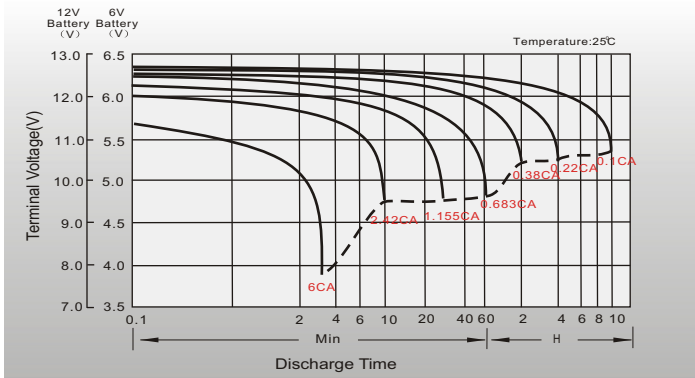
Dimensions

T13 Terminal

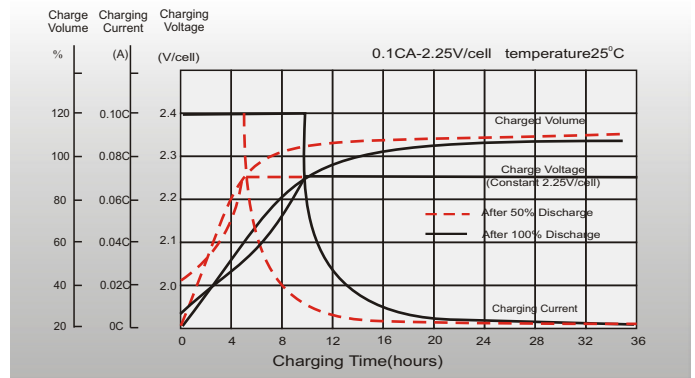
Unit: mm [inches]



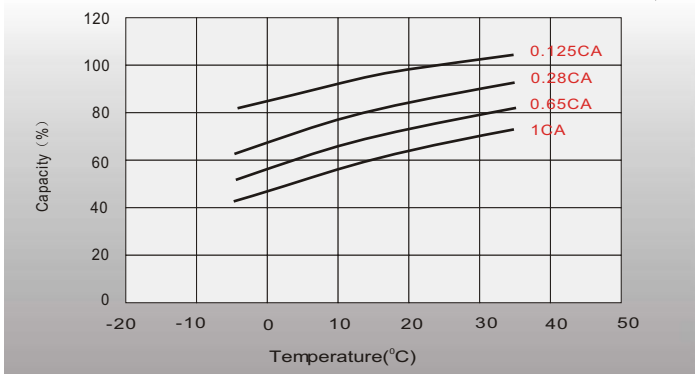
Discharge Characteristics



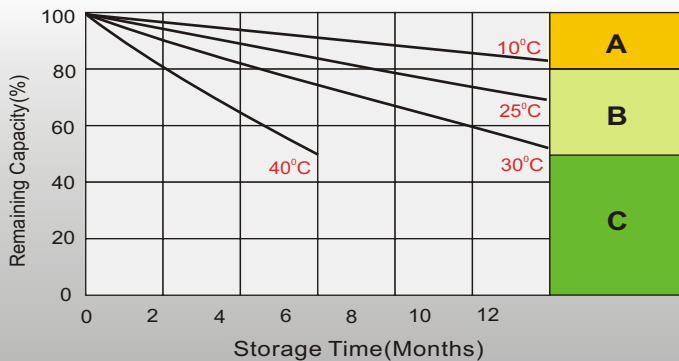
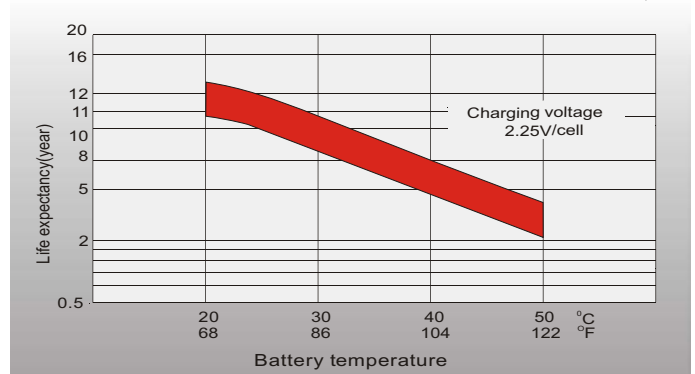
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Sales Office

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