

# LFP1290D (12V90Ah)

## Specifications

Nominal Voltage		12 V
Capacity (25°C)	10HR(10.8V)	90 Ah
	5HR(10.5V)	79Ah
	1HR(9.60V)	56.4Ah
Dimension	Length	306mm±2 (12.05inch)
	Width	169mm±2 (6.65inch)
	Height	211mm±2 (8.31inch)
	Total Height	T5: 233±2mm (9.17inch) T9: 214±2mm (8.43inch)
Approx. Weight		27kg (59.5lbs)±4%
Terminal type		T5/T9
Internal resistance (Fully charged, 25°C)		Approx. 5.5mΩ
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		27A
Terminal material		Copper
Maximum discharge current		800A(5 sec.)
Designed floating life(20°C)		7~10 years

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

## Constant Current Discharge Characteristics (A, 25°C)

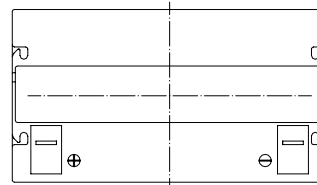
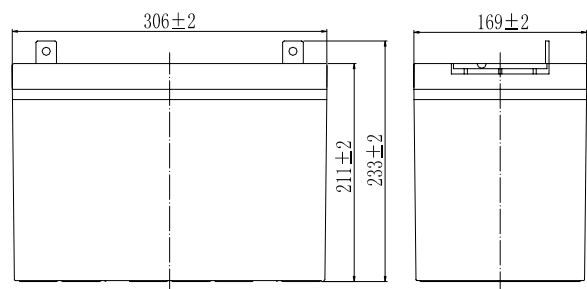
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	193	150	90.9	56.4	32.9	23.0	18.8	16.1	11.0	9.16	4.81
9.90V	187	146	89.1	55.5	32.7	22.8	18.7	16.0	11.0	9.14	4.80
10.2V	179	141	86.4	54.1	32.4	22.7	18.6	15.9	10.9	9.12	4.79
10.5V	172	136	84.3	53.0	31.9	22.5	18.5	15.8	10.8	9.06	4.76
10.8V	162	129	81.2	51.4	31.1	21.8	17.9	15.3	10.5	9.00	4.73

## Constant Power Discharge Characteristics (Watt, 25°C)

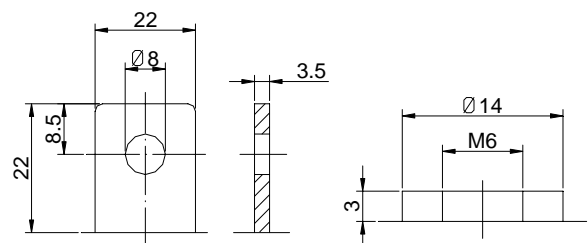
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2082	1647	1020	642	381	270	221	190	131	109	57.7
9.90V	2020	1607	1000	633	379	268	220	189	130	109	57.6
10.2V	1936	1548	969	617	375	266	218	187	129	109	57.4
10.5V	1853	1495	945	605	370	265	217	186	128	108	57.1
10.8V	1749	1416	911	586	360	257	210	181	124	107	56.7

Note: The above characteristics data can be obtained within three charge/discharge cycles.

## Dimensions



## Terminal

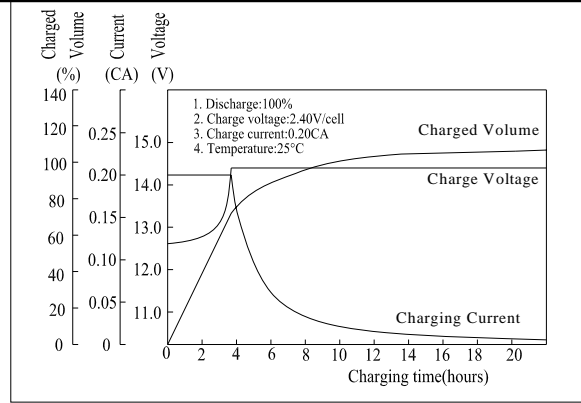
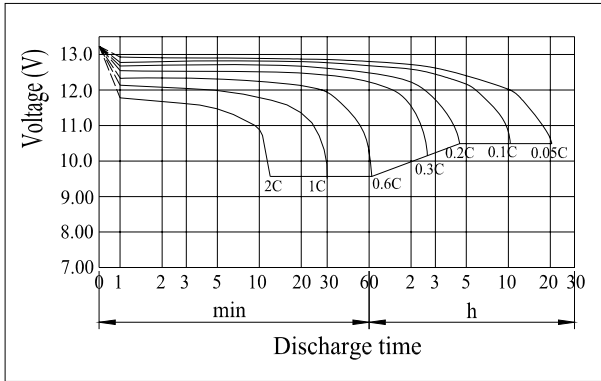


Terminal T5

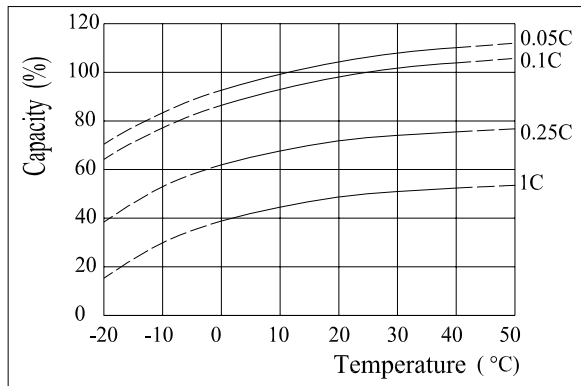
Terminal T9

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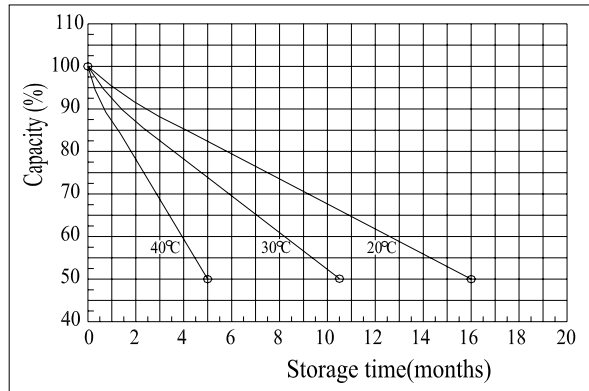
## Discharge Characteristics(25°C)



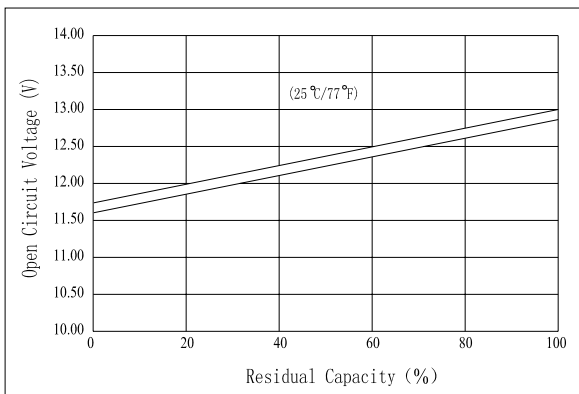
## Effect of Temperature on Capacity



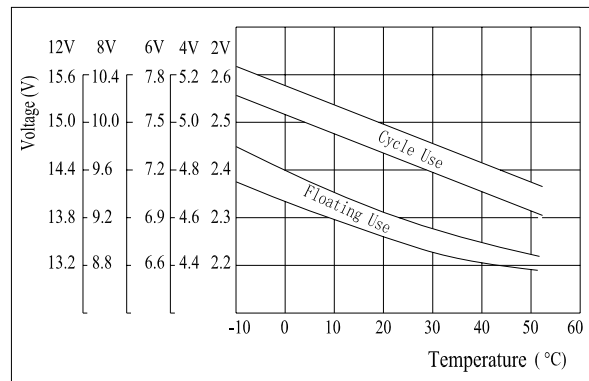
## Self-discharge Characteristics



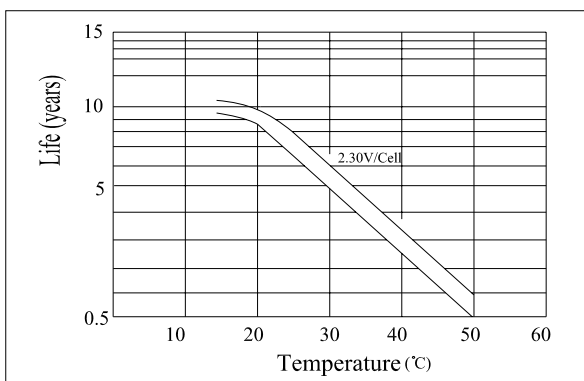
## The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



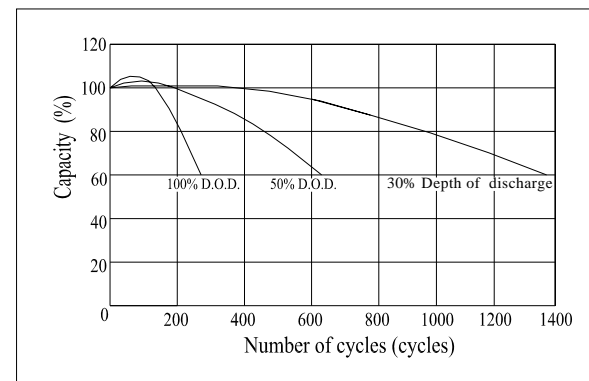
## The Relationship for Charging Voltage and Temperature



## Floating Life on Temperature



## Cycle Life on D.O.D.(25°C)



## Charging Characteristics(25°C)