

### GEL Series Battery

EXCITON EX GEL series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.

EXCITON EX GEL series Batteries are designed for 12 years life time floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard.

### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.
- \* Power tools
- \* Golf cars and buggies
- \* Marine equipment
- \* Medical equipment
- \* Solar and wind power system

### General Features

- \* Safety Sealing
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Safety and Quality certification
- \* Long Life and low self-discharge design

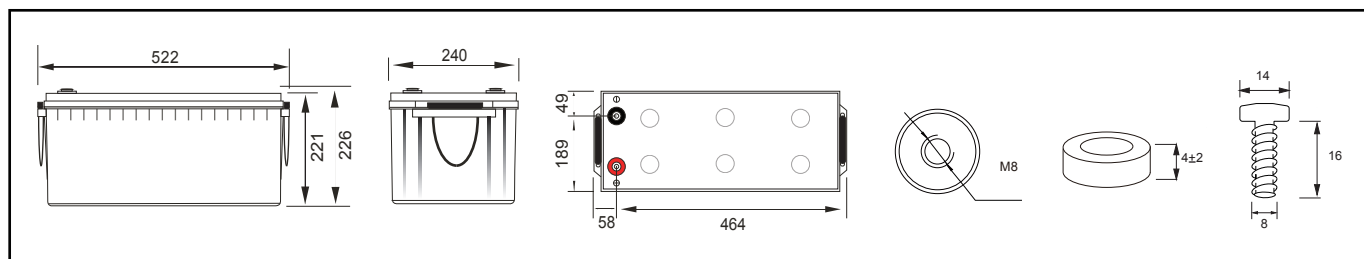
### Construction

- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Silicon dioxide
- \* Separator ..... AGM
- \* Container ..... ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper

### Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		200Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	522mm (20.55 inches)	240mm (9.44 inches)	221mm (8.70 inches)	226mm (8.89 inches)
Approx Weight	56kg(123.46lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(20A, 10.5V)	5 hour rate(36.62A, 10.5V)	3 hour rate(53.21A, 10.8V)	1 hour rate(115A, 9.6V)
	200Ah	183.1Ah	159.63Ah	115Ah
Max. discharge current	1800A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 2.3mΩ			
Capacity affected by Temp.(10 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	14.40-15.00V (Initial charging current less than 60A)		13.60-13.80V	

### Outer dimension (mm)

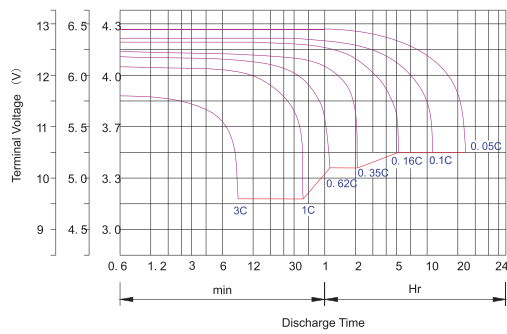


### Terminal Type (mm)

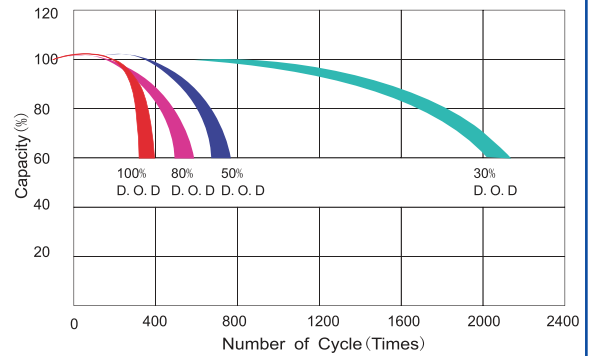
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)										
F.V/time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	346.600	209.800	115.000	84.167	76.171	54.259	37.029	25.484	20.753	11.538
	668.938	417.922	229.425	168.056	152.405	108.563	74.088	50.989	41.523	23.087
1.67V	328.595	205.317	114.167	83.333	75.792	53.974	36.825	25.269	20.430	10.962
	634.683	409.197	227.778	166.433	151.773	108.188	73.813	50.664	40.962	21.978
1.70V	320.492	203.524	113.333	83.250	75.602	53.838	36.816	25.016	20.172	10.669
	619.512	405.636	226.389	166.334	151.457	107.945	73.815	50.182	40.466	21.403
1.75V	306.989	199.938	111.667	82.167	75.128	53.500	36.621	24.946	20.000	10.500
	594.023	398.779	223.611	164.333	150.481	107.321	73.461	50.080	40.150	21.079
1.80V	294.385	195.455	110.833	81.583	74.653	53.215	36.519	24.731	19.677	10.154
	570.518	390.013	222.222	163.575	149.560	106.803	73.293	49.685	39.532	20.399
1.85V	279.081	190.075	109.167	80.667	73.989	52.741	36.315	24.409	19.355	9.808
	541.416	379.553	219.207	162.140	148.295	105.957	72.956	49.086	38.923	19.723

Note: The above data are average values. (Edition 2020-05)

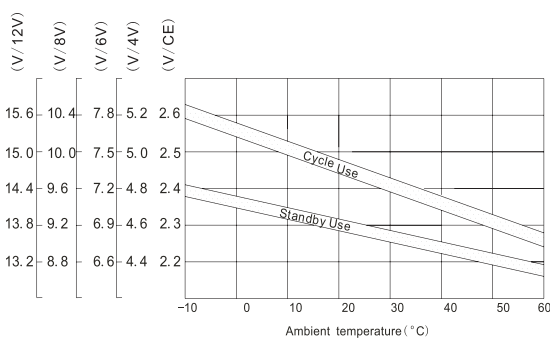
### Discharge characteristic Curve



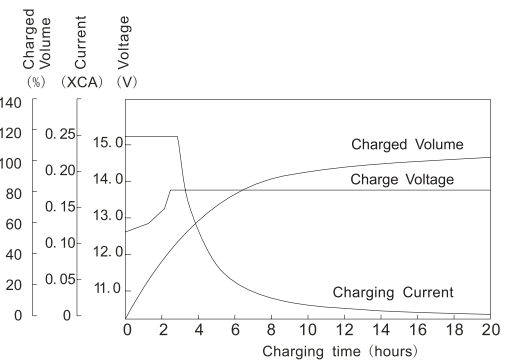
### Cycle service life in relation to depth of discharge



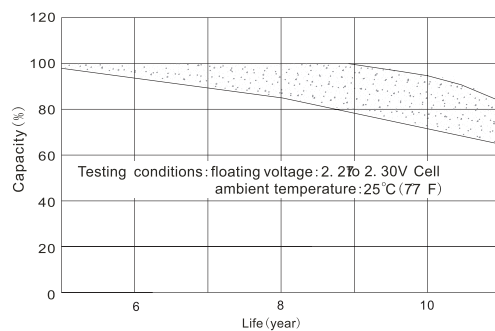
### Relationship between charging voltage and temperature



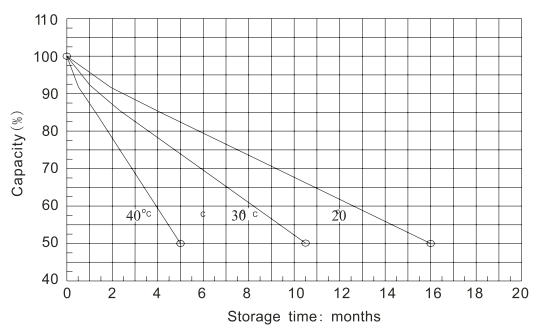
### Constant voltage charging characteristic (0.25CA, at 25°C)



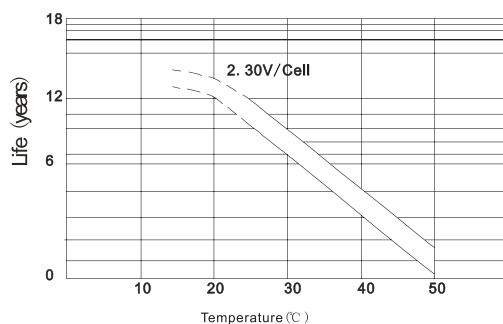
### Life characteristics of standby use



### Self-discharge characteristic



### Temperature effects on float life



### Charge characteristic Curve for standby use

