



# EVX 12200

## 12V 20.0Ah

EVX 12200 is designed specially for electric vehicles, such as electric golf cart, electric wheelchair, mower, dust collector...etc. It has high cycling life, high efficiency and long service life.



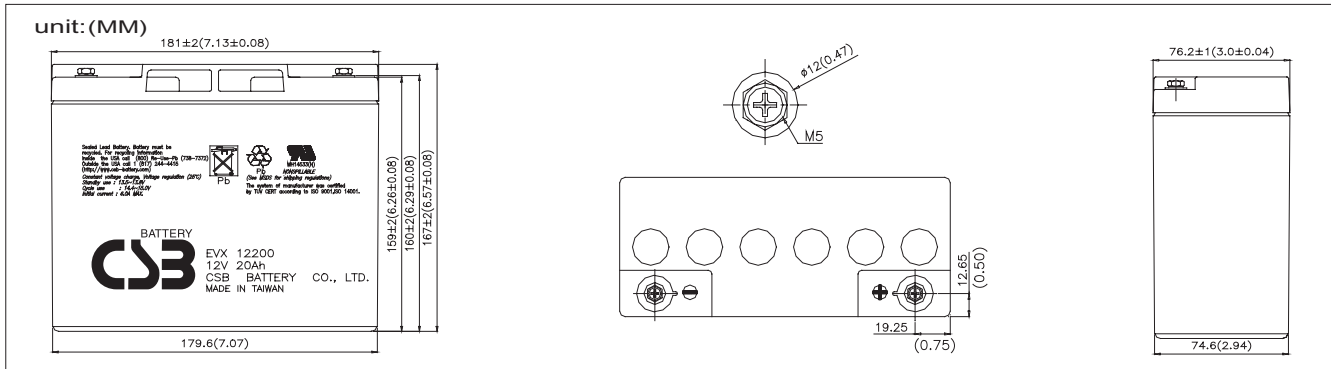
### Specification

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	20Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
<b>Weight</b>	Approx. 6.70kg(14.77 lbs)
<b>Maximum Discharge Current</b>	230A(5sec)
<b>Internal Resistance</b>	Approx. 13mΩ
<b>Operating Temperature Range</b>	Discharge: -20°C~50°C (-4°F~122°F) Charge: 0°C~40°C (32°F~104°F) Storage: -20°C~40°C (-4°F~104°F)
<b>Nominal Operating Temperature Range</b>	25°C±3°C (77°F±5°F)
<b>Float Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
<b>Recommended Maximum Charging Current Limit</b>	6.0A
<b>Equalization and Cycle Service</b>	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
<b>Self Discharge</b>	CSB Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
<b>Terminal</b>	Thread Insert & Bolt
<b>Container Material</b>	-ABS (UL94-HB)*Flammability resistance of UL94-V2 can be available upon request.



CSB-manufactured batteries are UL-recognized components under UL924 and UL1989. CSB is also certified by ISO 9001 and ISO 14001.

### Dimensions



### Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

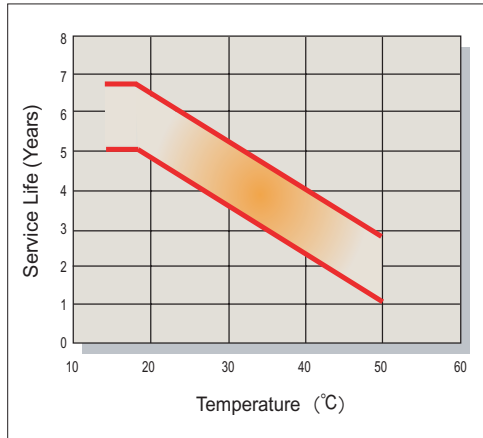
F.V/Time	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	20.6	12.5	9.25	7.78	5.28	4.19	3.45	2.30	1.89	1.03
1.67V	19.9	12.2	8.96	7.54	5.13	4.08	3.35	2.23	1.83	1.00
1.70V	19.7	12.1	8.83	7.43	5.07	4.03	3.31	2.20	1.81	0.980
1.75V	18.9	11.6	8.50	7.16	4.88	3.86	3.17	2.12	1.75	0.940
1.80V	18.2	11.1	8.17	6.88	4.68	3.69	3.03	2.03	1.68	0.900
1.85V	17.4	10.6	7.84	6.61	4.49	3.52	2.89	1.95	1.62	0.860

### Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

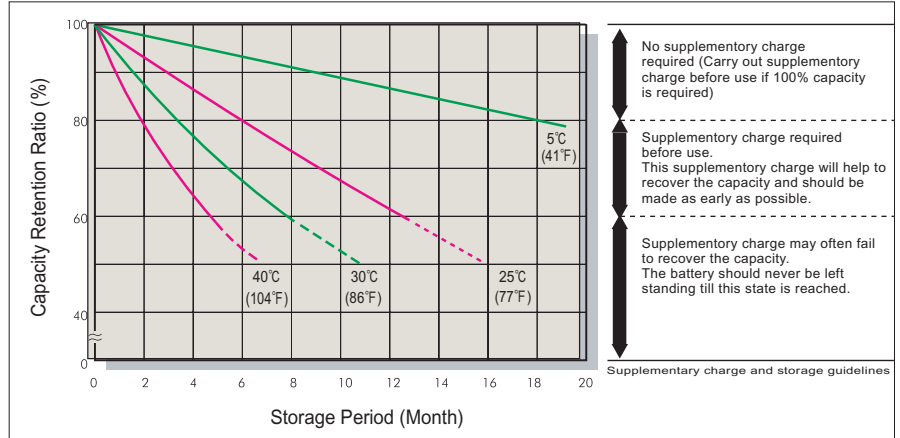
F.V/Time	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	247	150	111	93.4	63.4	50.3	41.4	27.6	22.7	12.3
1.67V	239	147	108	90.4	61.6	48.9	40.2	26.8	22.0	11.9
1.70V	236	145	106	89.1	60.8	48.3	39.7	26.4	21.7	11.7
1.75V	227	139	102	85.8	58.5	46.3	38.0	25.4	20.9	11.3
1.80V	218	133	98.0	82.5	56.1	44.3	36.3	24.3	20.1	10.8
1.85V	209	127	94.0	79.2	53.8	42.3	34.6	23.3	19.3	10.4

• All mentioned values are average values.

### Trickle (or Float) Service Life



### Capacity Retention Characteristic



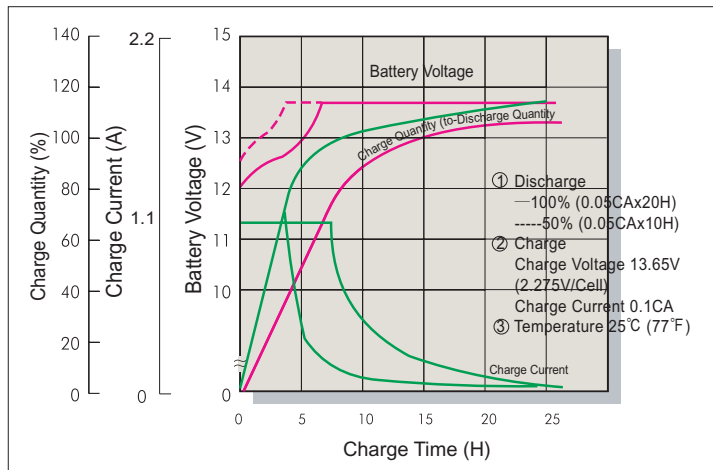
No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

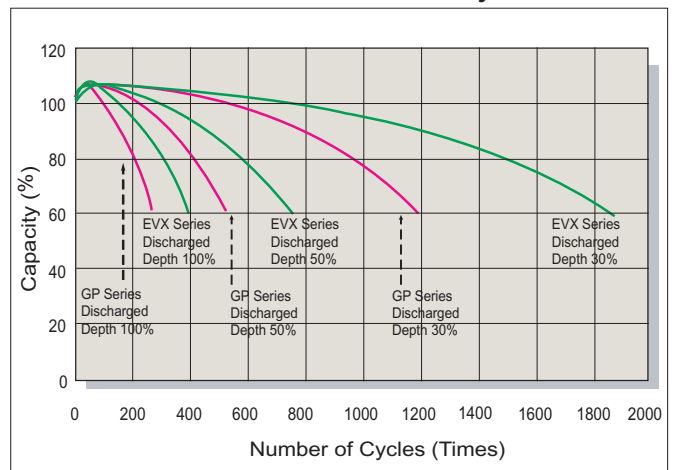
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached.

Supplementary charge and storage guidelines

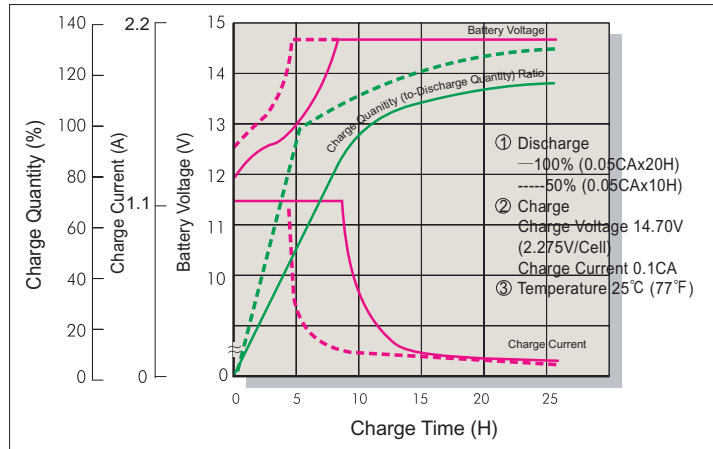
### Battery Voltage and Charge Time for Standby Use



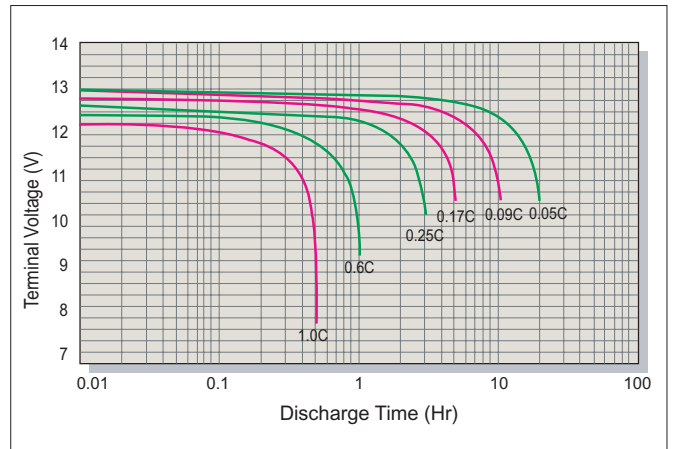
### GP & EVX Series Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time (25°C/77°F)



### Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.3C
Standby	25°C (77°F)	2.275	2.25~2.30	

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.55	1.30
Discharge Current (A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C