



# EVX 12400

## 12V 40.0Ah

EVX 12400 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.



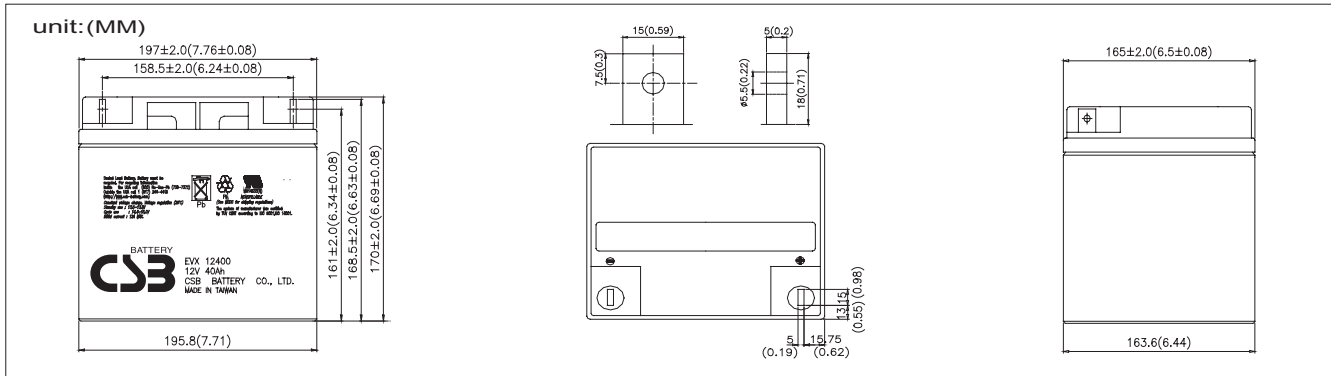
### Specification

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	40Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
<b>Weight</b>	Approx. 15.2kg(33.5 lbs)
<b>Maximum Discharge Current</b>	400A(5sec)
<b>Internal Resistance</b>	Approx. 8mΩ
<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>	12.0A
<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>	Bolt & Nut
<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)

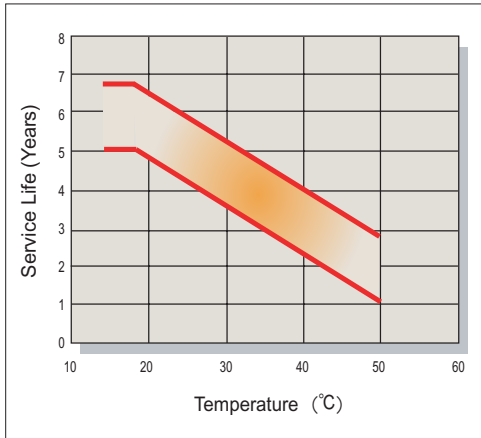
F.V/Time	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	38.1	22.9	16.8	14.2	9.75	7.83	6.49	4.16	3.43	1.86
1.67V	36.5	22.0	16.1	13.5	9.34	7.52	6.24	3.99	3.29	1.78
1.70V	35.8	21.7	15.8	13.3	9.17	7.38	6.13	3.91	3.23	1.74
1.75V	34.8	21.0	15.3	12.9	8.88	7.18	5.96	3.79	3.13	1.69
1.80V	33.7	20.3	14.8	12.5	8.58	6.97	5.79	3.67	3.03	1.63
1.85V	32.6	19.5	14.4	12.1	8.29	6.77	5.62	3.55	2.93	1.58

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

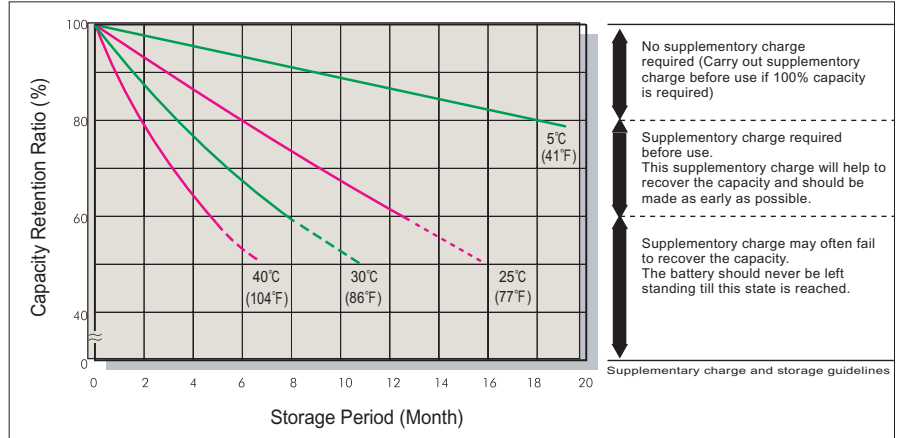
F.V/Time	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	457	275	201	170	117	93.9	77.9	49.9	41.1	22.3
1.67V	438	265	193	162	112	90.1	74.8	47.8	39.5	21.3
1.70V	430	260	189	159	110	88.5	73.5	46.9	38.8	20.9
1.75V	417	252	184	155	107	86.1	71.5	45.5	37.6	20.3
1.80V	404	243	178	150	103	83.6	69.5	44.0	36.4	19.6
1.85V	391	235	173	146	99.5	81.2	67.5	42.6	35.2	19.0

● All mentioned values are average values.

### Trickle (or Float) Service Life



### Capacity Retention Characteristic



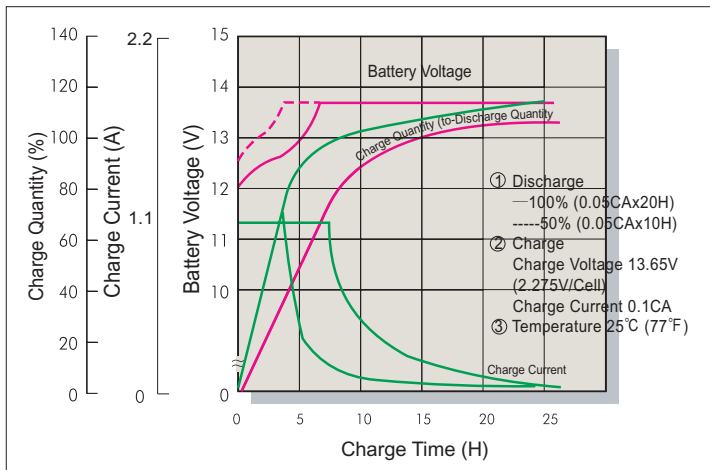
No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)

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

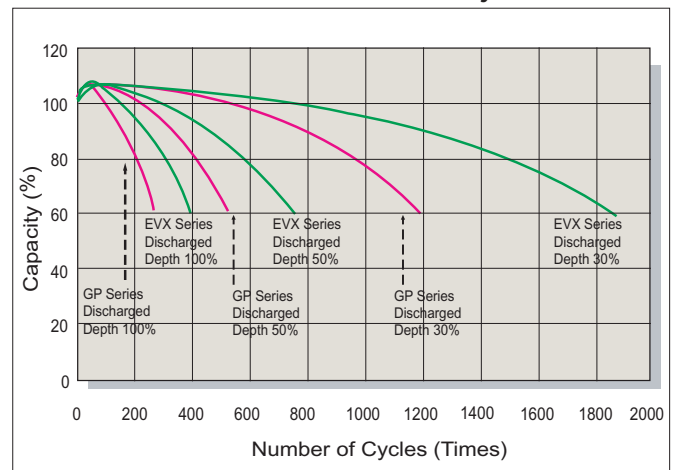
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached.

Supplementary charge and storage guidelines

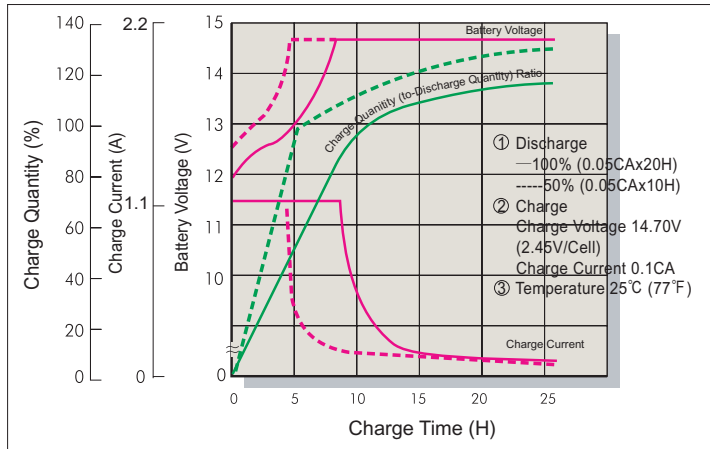
### Battery Voltage and Charge Time for Standby Use



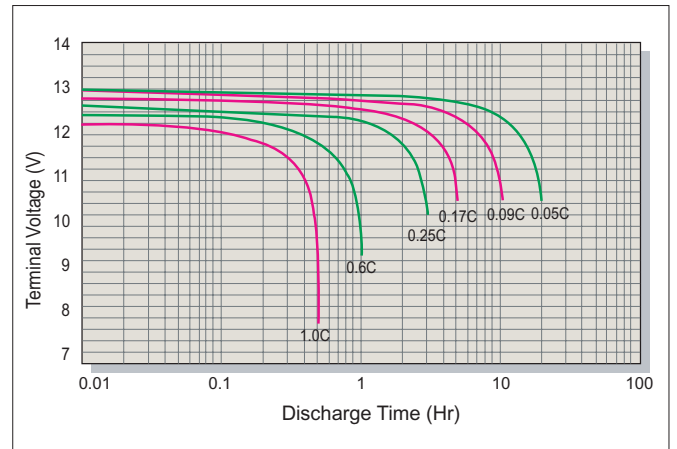
### GP & EVX Series Cycle Service Life



### 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