CBEV-27-M8

Continental BATTERY SYSTEMS

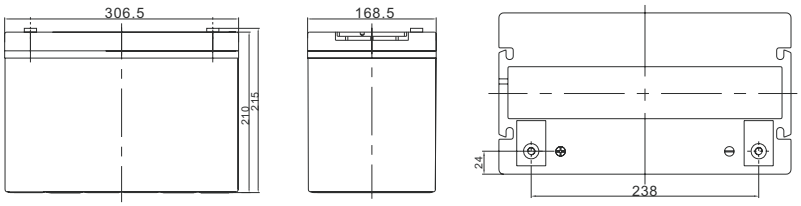
Specification

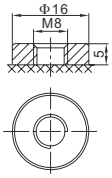
Cells Per Unit	6
Voltage Per Unit	12V
Capacity	100Ah@20hour-rate to 1.75V per cell @25℃
Weight	Approx. 30.0 Kg (Tolerance±5%)
Internal Resistance	≤5.5 mΩ (Full Charge Condition @25℃)
Terminal	Default F12(M8), F15(M6)&L4 Optional
Max. Discharge Current	1000A (5 sec)
Cold Cranking Ampere(CCA)	620A
Maxi. Charging Current	30.0A
Reference Capacity	C_3 75.0Ah C_5 85.0Ah C_{10} 95.0Ah C_{20} 100.0Ah
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	Bright Way Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

EV (Electric Vehicle) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the EV series battery offers reliable performance in high load situations and could provide competitive cycle performance. It is suitable for Electric Vehicle and Golf cart, Floor Machines, Forklifts, Aerial lifts, Robotics, Marine, RV, Mobility and Medical Equipment, and most outdoor application.

ISO 9001 ISO 14001 ISO 45001

DIMENSION





F12 Terminal

Length	306.5±2mm (12.1 inches)
Width	168.5±2mm (6.63 inches)
Height	210±2mm (8.27 inches)
Total Height	215±2mm (8.46 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	241.1	191.0	111.7	61.1	36.2	28.2	22.2	18.9	12.4	10.0	5.21
1.65V	227.9	182.6	107.2	59.0	35.1	27.3	21.6	18.4	12.3	9.90	5.12
1.70V	209.8	171.0	102.5	57.1	33.9	26.6	21.0	17.9	12.1	9.75	5.06
1.75V	192.0	159.1	98.0	55.0	32.7	25.8	20.4	17.4	11.9	9.62	5.00
1.80V	173.8	146.9	93.6	52.9	31.6	25.0	19.9	17.0	11.7	9.50	4.95
1.85V	142.1	121.9	80.6	47.4	28.9	23.1	18.5	15.8	11.0	8.94	4.70

Constant Power Discharge Characteristics : W/Cell(25℃)

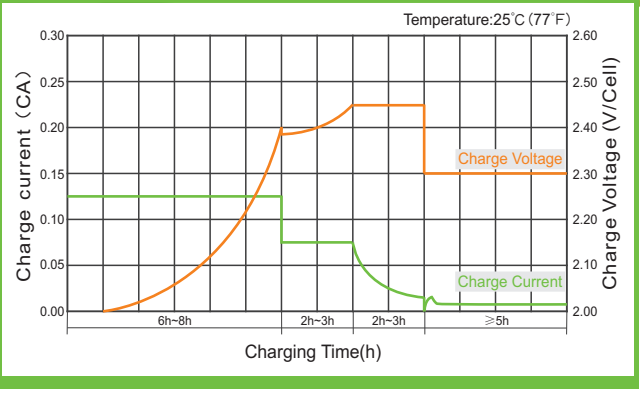
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	409.9	333.8	202.9	114.8	68.7	53.9	42.6	36.4	24.2	19.7	10.3
1.65V	394.8	323.9	196.8	111.5	66.8	52.4	41.6	35.5	24.0	19.5	10.1
1.70V	370.1	307.9	190.0	108.6	65.0	51.2	40.6	34.7	23.7	19.2	10.0
1.75V	344.9	290.7	183.5	105.2	63.0	49.9	39.7	34.0	23.4	19.0	9.88
1.80V	317.7	272.2	177.1	101.8	61.0	48.5	38.7	33.2	23.0	18.8	9.80
1.85V	264.2	229.1	154.1	91.9	56.2	45.1	36.1	31.1	21.7	17.7	9.32

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.
The battery must be fully charged before the capacity test. The C_{20} should reach 95% after the first cycle and 100% after the third cycle.
If F22 terminal is selected and the discharge current is more than 0.25C, the threaded terminal of terminal F22 shall not be used in connection, but the lead pole shall be connected.

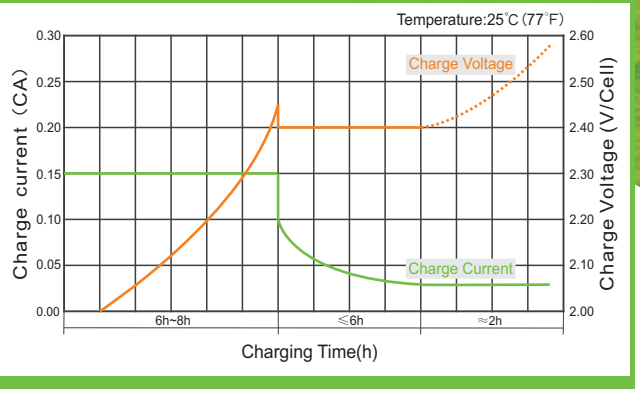
CBEV-27-M8

Continental BATTERY SYSTEMS

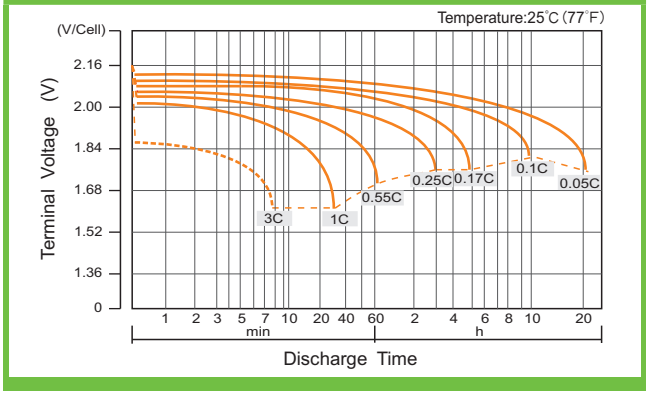
Charge Characteristic Curve for Cycle Use(IIUU)



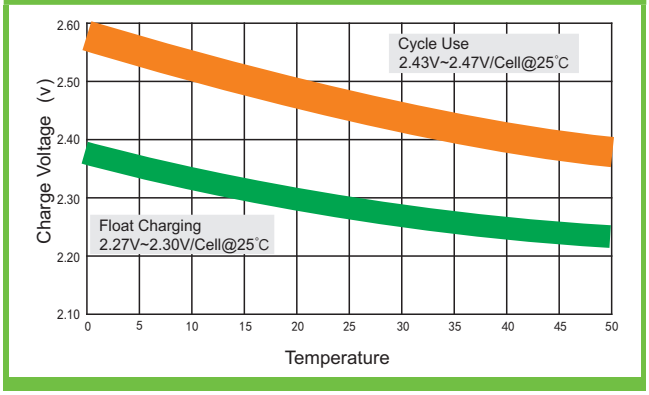
Charge Characteristic Curve For Cycle Use(IUI)



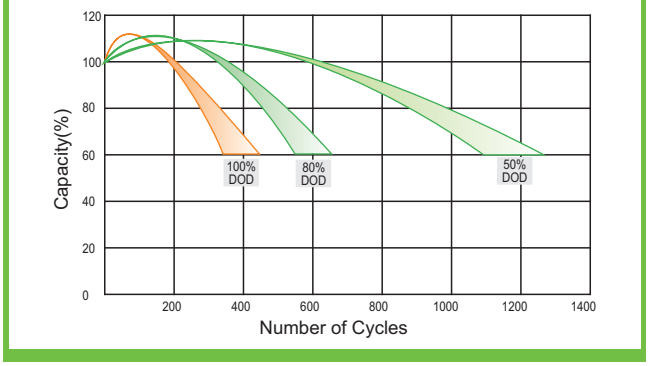
Discharge Characteristics Curve



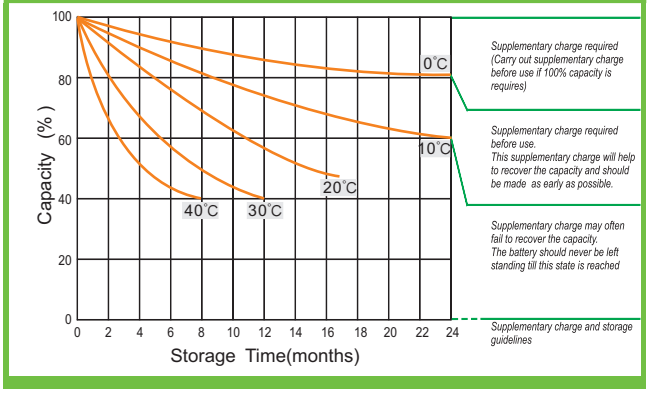
Relationship Between Charging Voltage and Temperature



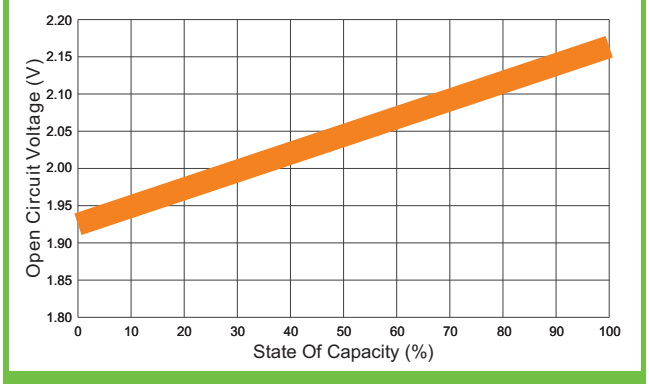
Cycle Life in Relation to Depth of Discharge



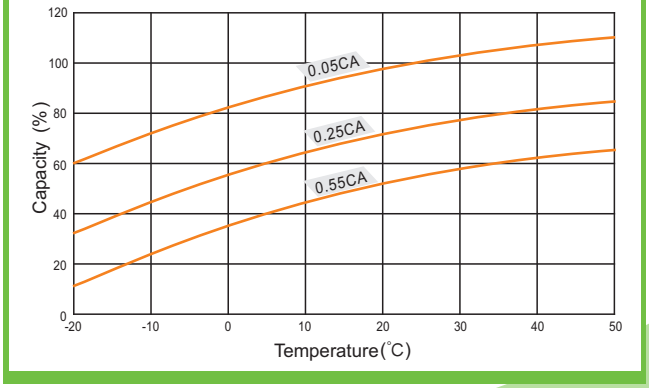
Storage Characteristics



Relationship of OCV And State of Charge(20℃)



Temperature Effects on Capacity



(Note) All above information shall be changed without prior notice, Bright Way reserves the right to explain and update the latest information.

CONTINENTAL BATTERY SYSTEMS

Add: 4919 Woodall Street, Dallas, TX 75247, USA