The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

GENERAL FEATURES

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

CONSTRUCTION

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

TECHNOLOGY PARAMETER

Battery model	CT12-200X			
Nominal voltage	12V			
Number of cell	6			
Capacity (25℃)	10hR(20A, 10.8V)	5hR(35.8A, 10.5V)	1hR(131A, 9.60V)	
	200Ah	179Ah	131Ah	
Dimensions Max.	Length	Width	Height	Total Height
	522±2 mm	238±2 mm	218±2 mm	223±2 mm
Approx. weight	68.8Kg (151.7 lbs)			
Internal resistance	Full charged at 25℃: 2.5mOhms			
Self discharge	3% of capacity declined per month at 20℃ (average)			
Operating temperature range	Discharge	Charge	Storage	
	-20～60℃	-10～60℃	-20～60℃	
Max. discharge current (25℃)	1100A (5s)			
Short circuit current	3000A			

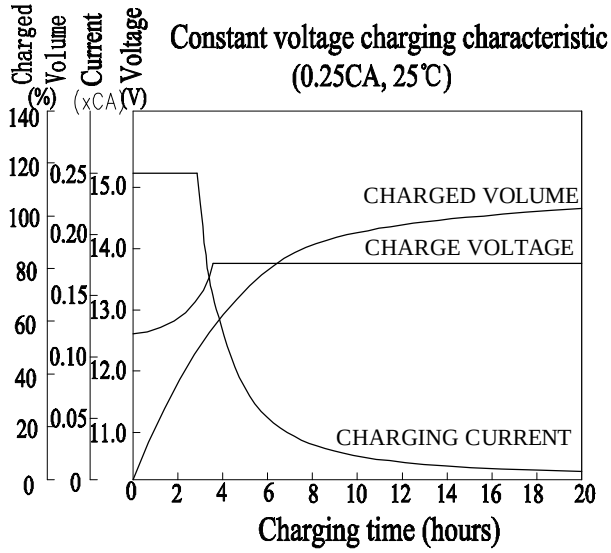
Constant current discharge ratings-amperes at 25℃(77°F)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	395	333	219	162	131	57.2	36.6	20.4
1.65V	372	308	213	159	127	56.7	36.3	20.3
1.70V	350	285	207	156	123	56.3	36.0	20.2
1.75V	332	261	202	154	120	56.0	35.8	20.1
1.80V	316	245	198	152	117	55.8	35.6	20.0

Constant power discharge ratings-watts per cell at 25℃(77°F)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	748	641	428	312	255	114	73.0	40.9
1.65V	708	595	416	308	248	113	72.8	40.8
1.70V	670	553	404	304	241	112	72.6	40.7
1.75V	640	509	394	302	236	111	72.4	40.6
1.80V	614	480	386	300	231	110	72.0	40.5

Constant voltage charging characteristic (0.25CA, 25℃)



CHARGING METHODS: Constant voltage charging at 25℃

Standby use: No charging current limit is required

Charging voltage: 13.6--13.8Volts

Cyclic use: Maximum charging current: 30% of rated capacity

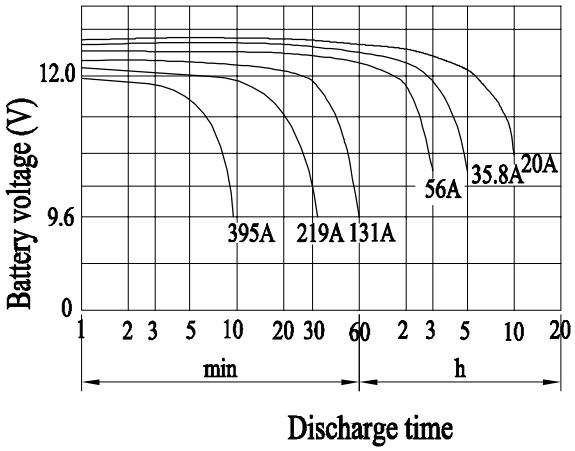
Charging voltage: 14.4--14.7Volts

Temperature compensation:

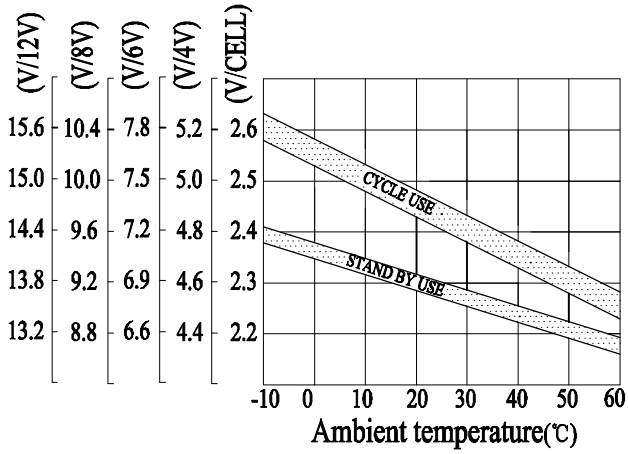
stand by -20mV/℃

cyclic use -30mV/℃.

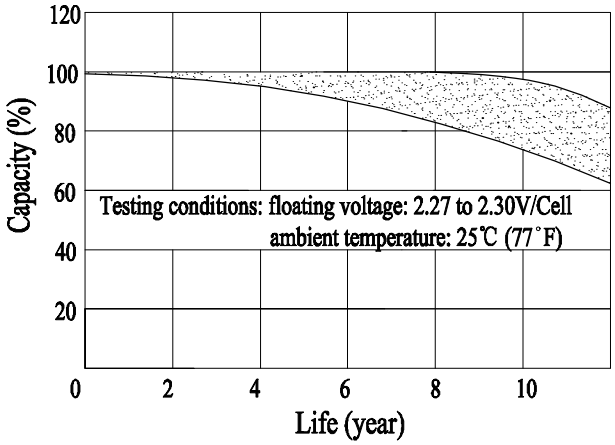
Discharge characteristic (25℃)



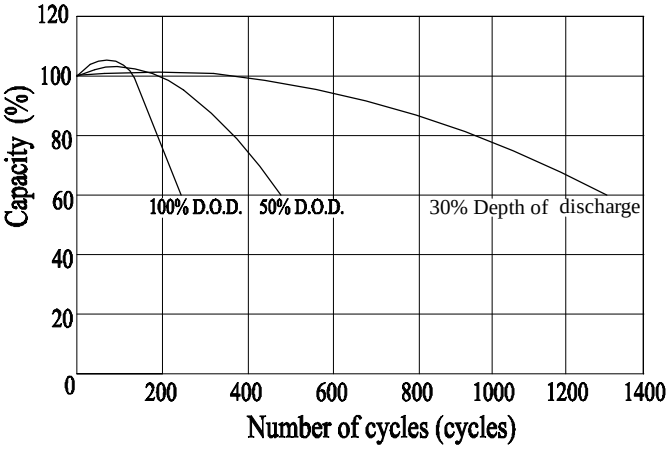
Relationship between charging voltage and temperature



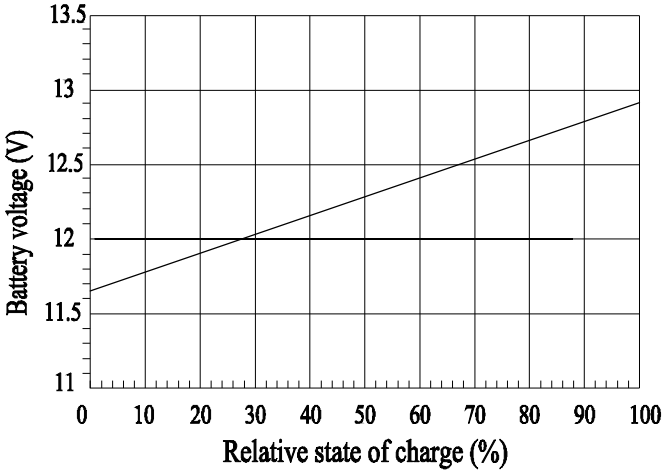
Life characteristics of standby use



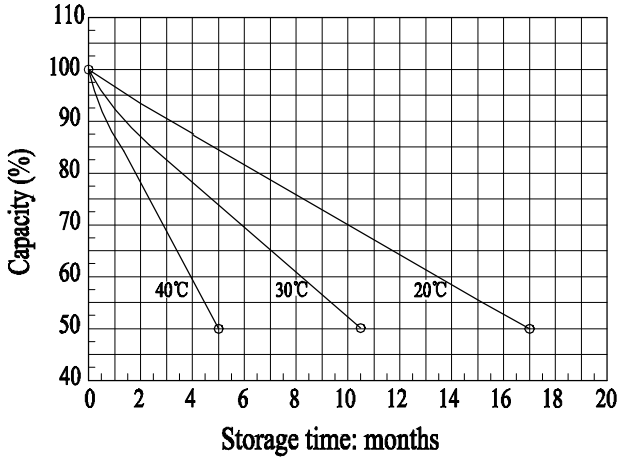
Cycle service life in relation to depth of discharge



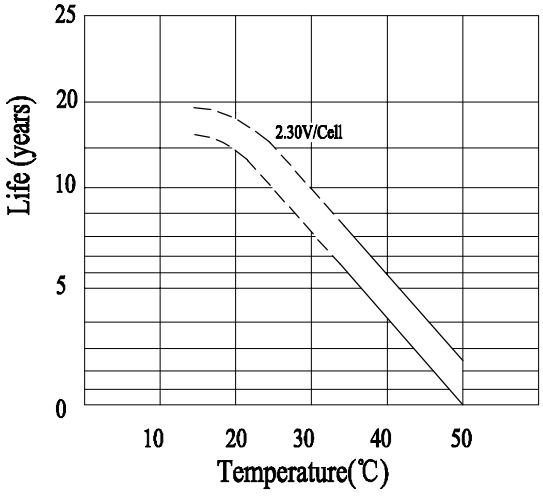
Relationship of OCV and state of charge (25℃)



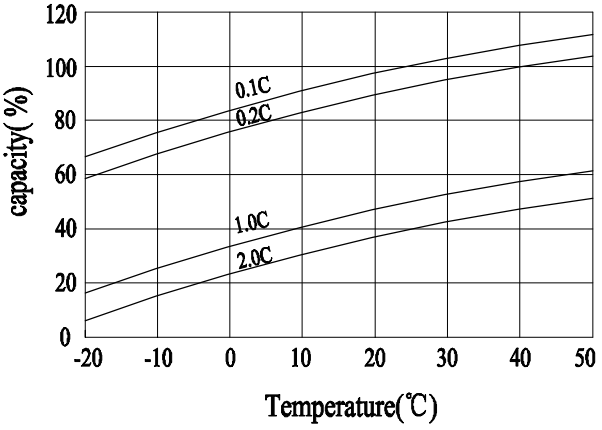
Self-discharge characteristic



Temperature effects on float life



Temperature effects on capacity



Battery and terminal dimensions