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

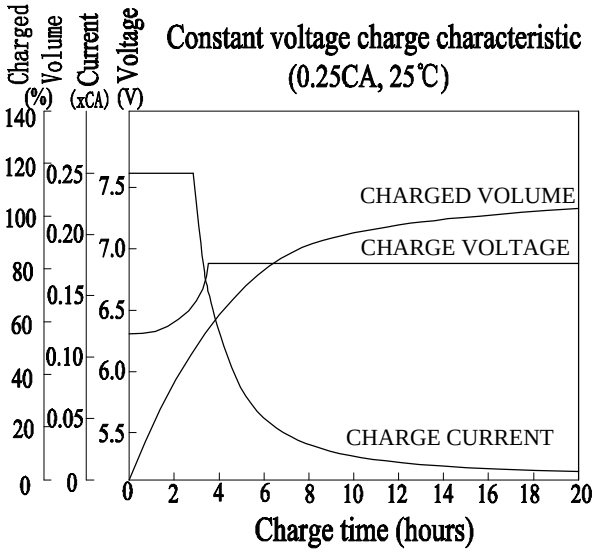
Battery model	3FM200X			
Nominal voltage	6V			
Number of cell	3			
Capacity (25℃)	10hR(20A, 5.4V)	5hR(37.4A, 5.25V)	1hR(138A, 4.80V)	
	200Ah	187Ah	138Ah	
Dimensions	Length	Width	Height	Total Height
	240±2mm	185±1mm	275±2mm	275±2mm
Approx. weight	32.5Kg (71.69 lbs)			
Internal resistance	Full charged at 25℃: 1.4mOhms			
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℃)	1000A (5s)			
Short circuit current	4200A			

Constant current discharge rating-amperes at 25℃(77 ˚F)

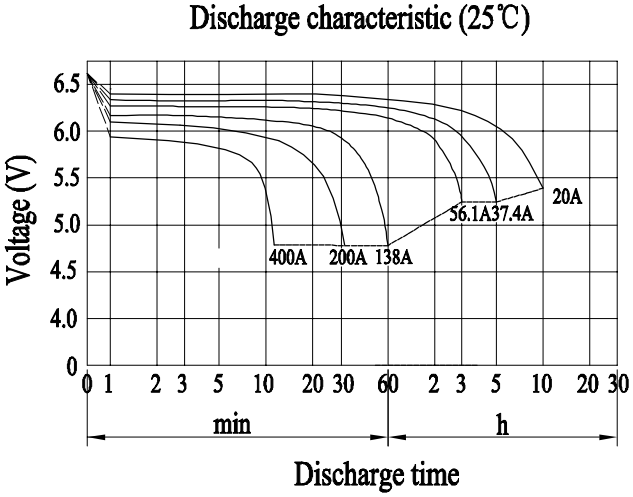
End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	424	350	223	171	138	59.4	39.5	20.6	11
1.65V	398	331	216	166	135	58.4	38.8	20.4	10.9
1.70V	371	312	208	161	132	57.3	38.2	20.2	10.8
1.75V	345	293	200	157	129	56.1	37.4	20	10.75
1.80V	317	274	192	152	126	54.8	36.7	19.7	10.6

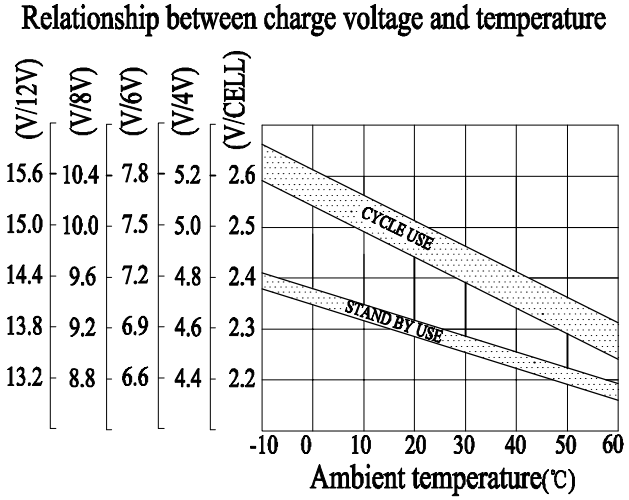
Constant power discharge rating-watts per cell at 25℃(77 ˚F)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	790	655	421	329	260	153	107	71.7	39.8
1.65V	762	634	415	325	258	152	105	71.1	39.7
1.70V	722	605	406	319	256	151	104	70.6	39.6
1.75V	681	580	396	311	254	150	103	70.1	39.4
1.80V	641	554	386	302	252	149	102	69.5	39

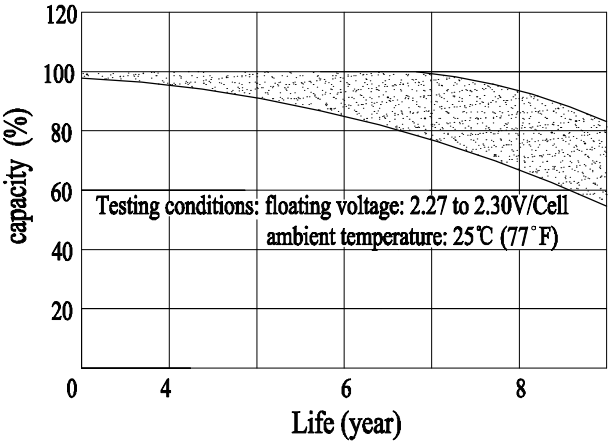


CHARGING METHODS: Constant voltage charging at 25℃
Standby use: No charging current limit is required
Charging voltage: 2.23--2.27VPC
Cyclic use: Maximum charging current: 30% of rated capacity
Charging voltage: 2.30--2.35VPC
Temperature compensation :
stand by -10mV/℃; cyclic use -15mV/℃

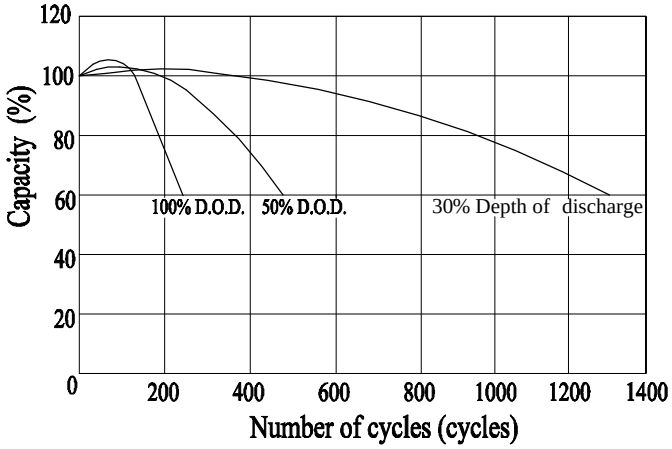




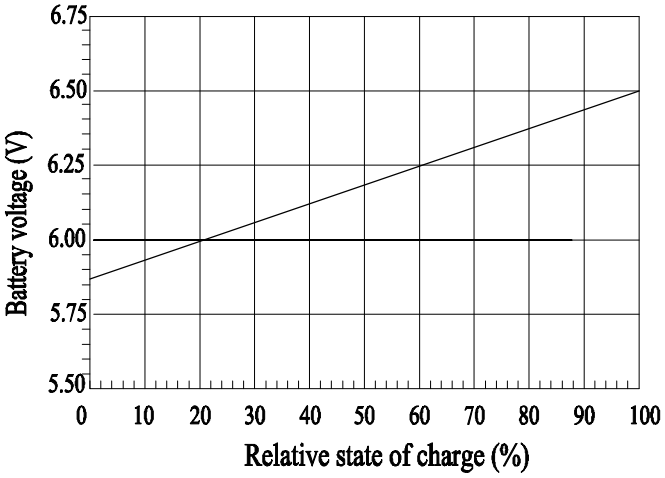
Life characteristics of standby use



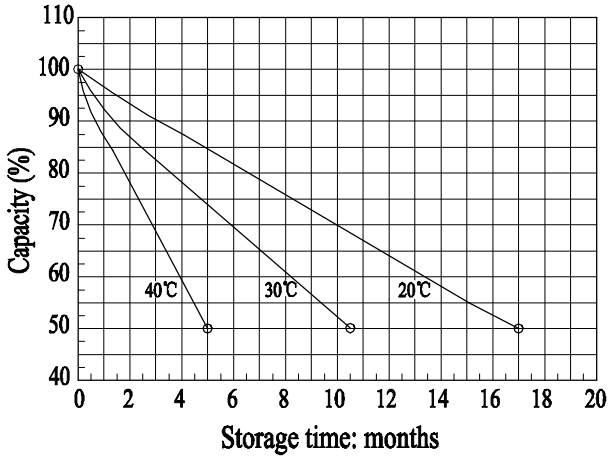
Cycle service life in relation to depth of discharge



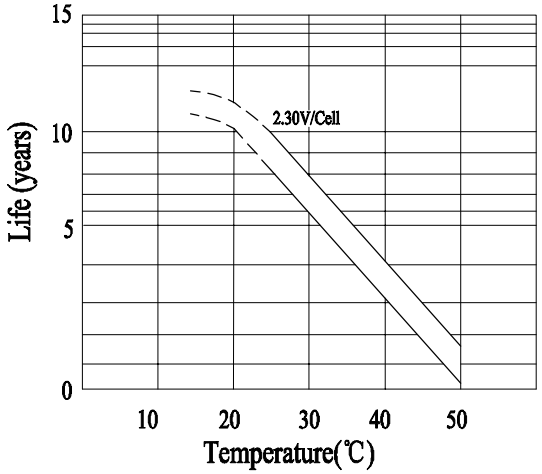
Relationship of OCV and state of charge (25℃)



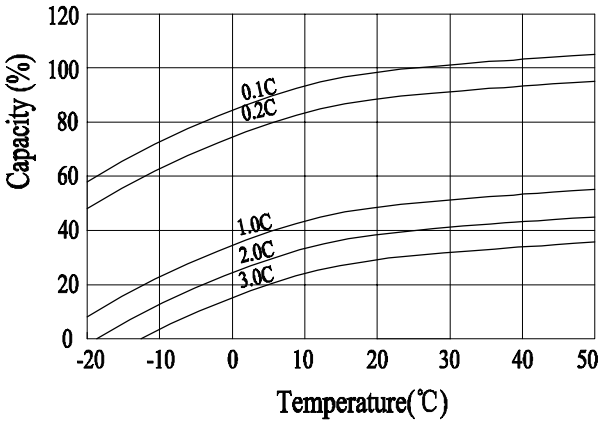
Self-discharge characteristic



Temperature effects on float life



Temperature effects on capacity



Battery and terminal dimensions