

VISION Rechargeable Products Sealed Lead Acid Battery

www.vision-batt.com

# **FM Series**

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.

## 6FM12 12V 12Ah

### **GENERAL FEATURES**

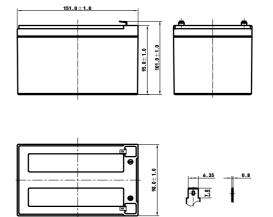
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.

- Computer designed lead, calcium tin alloy grid for deep cycle
- Long service life for cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

(Edition Jan 2014)

Design life 10 years

#### Product



TECHNOLOGY PARAMETER								
Nominal Voltage	12V							
Number of cell	6							
Capacity(25°C)	20hR(0.61A, 10.8V)	10hR(1.20A, 10.8V)	5hR(2.05A, 10.5V	1hR(8.06A, 10.5V)				
Capacity(25°C)	12.2Ah	12.0Ah	10.25Ah	8.06Ah				
Dimensions	Length	Width	Height	Total Heigh				
Dimensions	151±1mm	98±1mm	$95\pm1$ mm	101±1mm				
Approx. Weight	3.67kg (8.10lbs)							
Internal resistance	Full charged at 25°C: ≤19mOhms							
Self discharge	3% of capacity declined permonth at 20°C (average)							
Operating temperature range	Discharge	Ch	narge	Storage				
	-20~60°C	-10	~60°C	-20~60°C				
Max. Discharge current(25°C)	160A(5s)							
Short circuit current	600A							

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		

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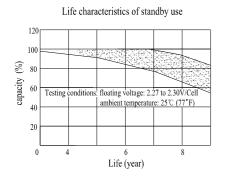
## Discharge Data

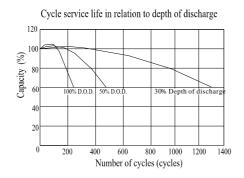
Constant Current Discharge Ratings-amperes at 25°C (77°F)									
End Voltage V/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	45.5	31.1	24.3	13.7	8.06	3.15	2.12	1.24	0.63
1.65V	44.1	30.2	23.8	13.4	7.96	3.12	2.10	1.23	0.63
1.70V	42.6	29.3	23.2	13.1	7.86	3.09	2.07	1.22	0.62
1.75V	41.2	28.4	22.7	12.9	7.77	3.06	2.05	1.21	0.62
1.80V	39.8	27.6	22.1	12.6	7.67	3.03	2.02	1.20	0.61

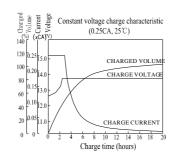
Constant Power Discharge Ratings-watts per cell at 25°C (77°F)									
End Voltage V/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	84.5	57.5	45.8	26.7	20.4	15.9	8.42	6.44	4.16
1.65V	82.4	56.5	45.1	26.3	20.1	15.8	8.33	6.37	4.13
1.70V	80.3	55.5	44.4	25.9	19.9	15.6	8.25	6.31	4.10
1.75V	78.2	54.5	43.7	25.5	19.7	15.5	8.16	6.24	4.07
1.80V	76.0	53.5	43.0	25.1	19.4	15.3	8.08	6.18	4.04

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.







Discharge characteristic (25°C)

