

### Overview

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 oneway 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.



### Battery Construction

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

### General Features

- Positive and negative plates in lead-calcium-tin alloy;
- Stable Quality&High Reliability;
- Sealed Construction;
- Long Service Life;
- Maintenance-Free Operation;
- Low Pressure Venting System;
- Low Self Discharge;
- U.L.Component Recognition;
- Six months shelf life at 20°C;
- Design life 10 years

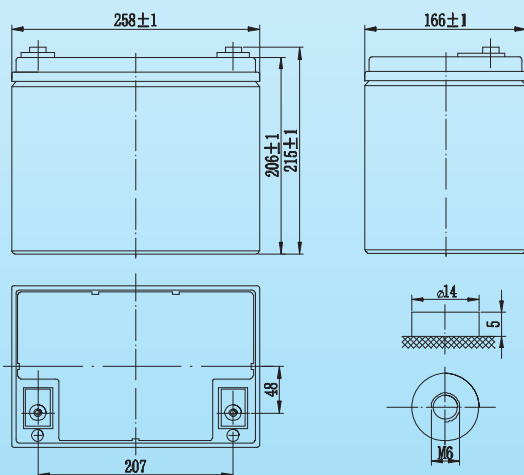
### Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
10 hour rate (6.0A, 10.8V)	60.0Ah
5 hour rate (10.7A, 10.5V)	53.5Ah
1 hour rate (41.0A, 9.6V)	41.0Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤7.0 mOhms
Self-Discharge	
3% of capacity declined per month at 20°C (average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	600A(5s)
Short Circuit Current	1450A
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	18.0A
Temperature compensation	-30mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-20mV/°C

### Dimensions and Weight

Length(mm / inch)	258 / 10.2
Width(mm / inch)	166 / 6.54
Height(mm / inch)	206 / 8.11
Total Height(mm / inch)	215 / 8.46
Approx. Weight(Kg / lbs)	24.0 / 52.9

\* Weight deviation: ± 5%



### Discharge Constant Current (Amperes at 77°F25°C)

End Point Volts/Cell	Time							
	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	149	115	67.0	50.3	41.0	16.7	11.4	6.60
1.65V	143	110	65.0	48.9	39.4	16.3	11.1	6.45
1.70V	133	105	63.0	47.6	39.2	16.3	10.9	6.18
1.75V	123	99.4	60.9	46.2	38.9	16.0	10.7	6.15
1.80V	112	92.0	58.7	44.9	36.6	15.2	10.5	6.00

### Discharge Constant Power (Watts at 77°F25°C)

End Point Volts/Cell	Time							
	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	259	200	122	94.1	77.6	33.0	22.2	12.2
1.65V	248	190	116	92.6	75.8	32.8	22.1	12.1
1.70V	234	187	114	90.7	74.1	32.1	21.7	12.0
1.75V	220	183	112	88.7	72.4	31.4	21.4	11.9
1.80V	205	174	109	87.9	71.0	30.7	20.8	11.7

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



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# 6FM60-X

12V 60Ah(10hr)

