

# 6FM55D-X 12V 55Ah(10hr)

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.



## Battery Construction

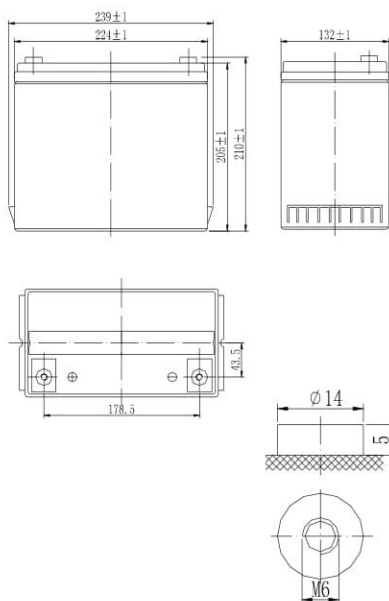
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Pb	Fiberglass	Sulfuric acid

## General Features

- 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.

## Dimensions and Weight

Length(mm / inch).....239 / 9.41  
 Width(mm / inch).....132 / 5.20  
 Height(mm / inch).....205 / 8.07  
 Total Height(mm / inch).....210 / 8.27  
 Approx. Weight(Kg / lbs).....18 / 39.7



## Performance Characteristics

Nominal Voltage ..... 12V  
 Number of cell ..... 6  
 Design Life ..... 10 years  
 Nominal Capacity 77°F(25°C)  
 10 hour rate (5.50A, 10.8V)..... 55.0Ah  
 5 hour rate (9.05A, 10.5V)..... 45.25Ah  
 1 hour rate (34A, 9.6V)..... 34Ah  
 Internal Resistance  
 Fully Charged battery 77°F(25°C) ..... 5.8mOhms  
 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) .....550A(5s)  
 Short Circuit Current .....1400A  
 Charge Methods: Constant Voltage Charge 77°F(25°C)  
 Cycle use ..... 14.4-14.7V  
 Maximum charging current ..... 16.5A  
 Temperature compensation.....-30mV/°C  
 Standby use .....13.6-13.8V  
 Temperature compensation.....-20mV/°C

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

End Point Volts/cell	5min	10min	15min	30min	1h	3h	5h	10h	20h	100h
1.60V	181	133	103	61.1	36.2	15.2	10.2	5.69	2.94	0.66
1.65V	170	128	98.4	59.3	35.3	14.8	9.98	5.66	2.94	0.66
1.70V	160	119	93.5	57.3	34.4	14.5	9.80	5.61	2.94	0.66
1.75V	150	110	88.5	55.5	33.5	14.1	9.63	5.55	2.93	0.66
1.80V	138	103	82.0	53.5	32.7	13.8	9.45	5.50	2.93	0.66

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

End Point Volts/cell	5min	10min	15min	30min	45min	1h	2h	3h	5h	100h
1.60V	328	246	190	115	88.0	71.1	42.7	30.3	19.6	1.33
1.65V	310	232	183	113	86.7	69.5	41.7	29.7	19.4	1.33
1.70V	290	220	174	111	84.9	67.9	40.9	29.0	18.9	1.33
1.75V	269	206	167	109	83.1	66.4	39.8	28.5	18.7	1.33
1.80V	256	191	159	107	80.9	66.4	38.8	27.9	18.6	1.33

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

