

TC12-100-SF

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	Copper	Fiberglass	Sulfuric acid

General Features

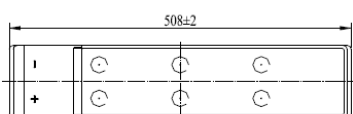
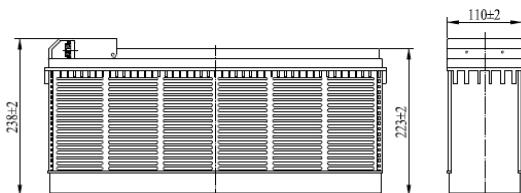
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed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

Performance Characteristics

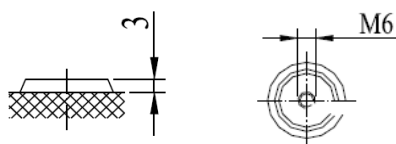
Battery model	SM12V100Ah-SF			
Nominal voltage	12V			
Number of cell	6			
Capacity (20°C)	10hR(10 A, 10.8V)	5hR(17.2A, 10.5V)		1hR(63.5A, 9.60V)
	100Ah	86.0Ah		63.5Ah
Dimensions Max.	Length	Width	Height	Total Height
	508±2 mm	110±2 mm	231±2 mm	231±2 mm
Approx. weight	32 Kg			
Internal resistance	Full charged at 20°C: 6.3mOhms			
Self discharge	3% of capacity declined per month at 20°C (average)			
Operating temperature range	Discharge	Charge	Storage	
	-20~60°C	-10~60°C	-20~60°C	
Max. discharge current (20°C)	900A (5s)			
Short circuit current	1700A			

SPECIFICATION

Nominal voltage	.....	12V
Number of cell	.....	6
Length(mm/inch)	.....	508/20.0
Width(mm/inch)	.....	110/4.33
Height(mm/inch)	.....	223/8.78
Total Height(mm/inch)	.....	238/9.37
Approx. Weight(kg/lbs)	.....	32 Kg



Terminal



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

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	218	176	110	78.8	63.5	27.8	18.5	10.1
1.65V	201	165	106	76.4	61.5	27.1	18.1	10.1
1.70V	185	154	102	73.9	59.5	26.4	17.8	10.0
1.75V	169	143	97	71.6	57.5	25.7	17.2	10.0
1.80V	153	132	93	68	55.1	24.6	16.8	10.0

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

End Point Volts/Cell	10mi n	15mi n	30mi n	45mi n	1h	2h	3h	5h
1.60V	380	319	206	150	121	70.1	52.3	36.5
1.65V	358	303	199	144	117	68.1	51.2	36.1
1.70V	337	286	195	140	115	66.4	50.1	35.8
1.75V	316	270	182	134	110	63.1	49.1	35.5
1.80V	294	254	170	128	103	62.3	47.8	34.6

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

