

# TC12-160-F

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators 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 Feature

- 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.

## Performance Characteristics

Capacity 77°F(25 °C)	20 hour rate (8.3A、10.5V)	166Ah
	10 hour rate (16A、10.5V)	160Ah
	5 hour rate (28A、10.5V)	140Ah
	1 hour rate (107A、9.6V)	107Ah
Internal Resistance	Full charged Battery77°F(25 °C) : 4.5mΩ	
Capacity affected by Temperature (20 hour rate)	104 ° F(40 °C)	102%
	77 ° F(25 °C)	100%
	32 ° F(10 °C)	85%
	5 ° F(-15 °C)	65%
Self-Discharge 68°F(20 °C)	Capacity after 3 month storage	90%
	Capacity after 6 month storage	80%
	Capacity after 12month storage	60%
Max. discharge current77°F(25 °C) : 1000A(5S)		
Charge (Constant Voltage)	Float : 13.6 ~ 13.8 V/77 ° F(25 °C)	
	Cycle:14.5 ~ 14.9 V/77°F(25 °C) Max. Current : 40A	

## SPECIFICATION

Nominal voltage .....	12V
Number of cell .....	6
Length(mm/inch) .....	551
Width(mm/inch) .....	110
Height(mm/inch) .....	316
Total Height(mm/inch) .....	316
Approx. Weight(kg/lbs) .....	50 Kg

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

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	345	271	175	135	107	46.2	29.4	16.2	8.45
1.65V	325	253	169	131	105	45.1	28.9	16.2	8.40
1.70V	305	232	163	127	103	44.0	28.5	16.1	8.35
1.75V	284	212	156	122	101	43.1	28.0	16.0	8.30
1.80V	263	193	148	117	98.0	42.4	27.5	15.8	8.20

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

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	525	430	295	228	190	117	88.0	57.5
1.65V	505	418	289	225	188	116	87.0	57.0
1.70V	485	405	283	222	186	115	86.1	56.5
1.75V	465	391	277	219	184	114	85.1	55.9
1.80V	440	376	270	215	181	113	84.0	55.2

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



