

# TC12-80-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

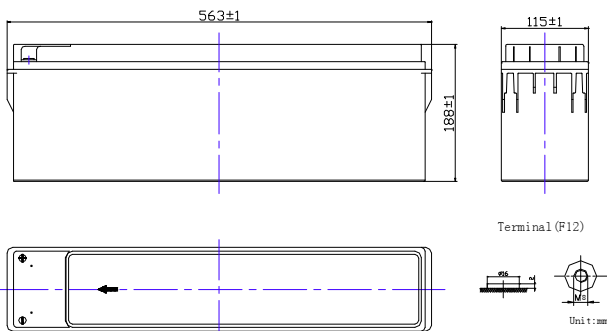
- Absorbent Glass Mat(AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed 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 (4.3A、10.8V)	86Ah
	10 hour rate (8A、10.5V)	80Ah
	5 hour rate (14A、10.5V)	70Ah
	1 hour rate (51A、9.6V)	51Ah
Internal Resistance	Full charged Battery77°F(25°C): 7mΩ	
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): 800A(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: 20A	

## SPECIFICATION

Nominal voltage	.....	12V
Number of cell	.....	6
Length(mm/inch)	.....	563/22.2
Width(mm/inch)	.....	115/4.53
Height(mm/inch)	.....	188/7.40
Total Height(mm/inch)	.....	188/7.40
Approx. Weight (kg/lbs)	.....	25.5/56.2



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

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	172	140	91.0	68.5	52.0	22.8	14.5	8.15	4.35
1.65V	159	132	87.5	66.5	50.8	22.4	14.4	8.10	4.35
1.70V	146	123	84.0	64.5	49.6	22.0	14.3	8.05	4.30
1.75V	133	114	80.5	62.5	48.4	21.6	14.2	8.00	4.30
1.80V	119	104	76.5	60.0	47.2	21.1	14.0	7.90	4.25

Discharge Constant Power (watts at 77° F 25 °C)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	302	255	175	135	108	61.0	44.5	29.2	15.5
1.65V	285	243	168	131	105	60.2	44.1	28.9	15.4
1.70V	267	230	161	127	102	59.4	43.7	28.6	15.3
1.75V	250	217	154	123	98.5	58.6	43.3	28.3	15.2
1.80V	232	203	147	118	95.0	57.6	42.8	27.9	15.0

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

