



**Gruber
Power
Services**

Premium High Rate Battery Series

Sealed Lead Acid Battery

12 Volt - 18 Amp Hour

GPS18-12



Features

- Lead alloy with low calcium minimizes gassing and extends life of grid.
- Through unique active material recipes, plates after undergoing curing and tank formation provide outstanding energy density and ensure the quality of the battery.
- Using brass coated lead alloy battery terminals minimizes impedance of connecting cells inside.
- Case made of ABS resin and cells kept under internal pressure protects from outer shock or impact.
- Micro-porous AGM separator completely absorbs and retains electrolyte under the pressured cell design.
- Electrolyte sufficiently serves for electrochemical reactions in battery but never spills.
- Battery cases are sealed in epoxy and cells are covered with vents to avoid cell contamination with the atmosphere and serve for internal oxygen reaction.
- With very little gas evolution, the water loss is minimized and service life is extended. Excess pressure and gas will be released which ensures safety.
- Vent design is certificated by UL.

Applications

- UPS
- Communications
- Lighting
- Security & Alarm
- Medical Equipment
- Remote Monitoring
- Solar Energy Station
- Golf Carts
- Wheelchairs
- Motorcycles
- Scooters
- Riding Mowers
- Snowmobiles
- Water Sports

Transport

- Air transportation complies with IATA/ICAO special provision A67.
- Surface transport classification as non-hazardous material as related to DOT-49CFR173.159.
- Water transport classification as non-hazardous material per IMDG Amendment 27.

Specifications

mm(inch)

Nominal Voltage (V)

12V

Nominal Capacity

20hour rate (0.9A to 10.50V)	18Ah
10hour rate (1.8A to 10.50V)	18Ah
5hour rate (3.06A to 10.20V)	15.3Ah
1C (18A to 9.60V)	8.1Ah
3C (54A to 9.60V)	6.48Ah

Weight

6.283kg(13.82Lbs.)

Internal Resistance (at 1KHz)

10 mΩ

Maximum Discharge Current for 30 seconds :

360A

Maximum Discharge Current for 5 seconds :

720A

Operating Temperature Range

Charge	0°C (32°F) to 40°C (104°F)
Discharge	-15°C (5°F) to 50°C (122°F)
Storage	-15°C (5°F) to 40°C (104°F)

Charge Retention (shelf life) at 20°C (68°F)

1 month	92%
3 month	90%
6 month	80%

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V
Maximum Charging Current: 5.4A

Standby use :

Float Charging Voltage 13.50 to 13.80V

Life expectancy :

Cycle Use:

100% depth of discharge 200 cycles
80% depth of discharge 225 cycles
50% depth of discharge 500 cycles

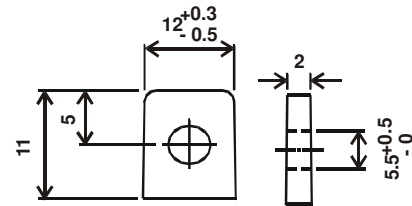
Standby Use: 3~5years

Case Material ABS

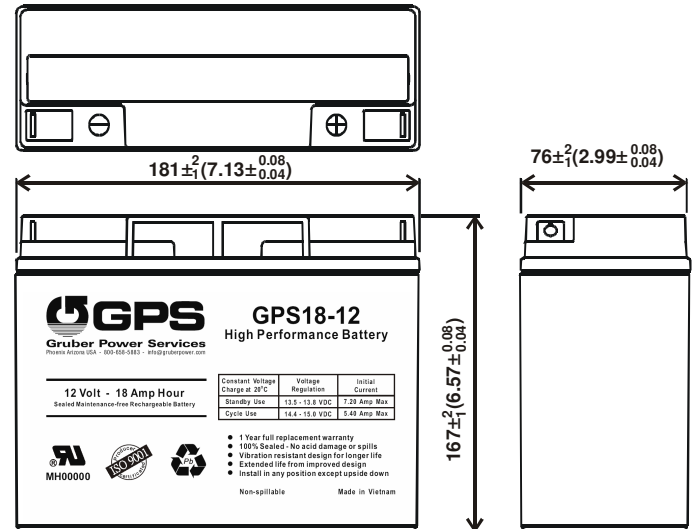
(Option: 94-HB & 94V-0 flame retardant case)

Terminal: F3

UL Listing: MH29055, 94 VO

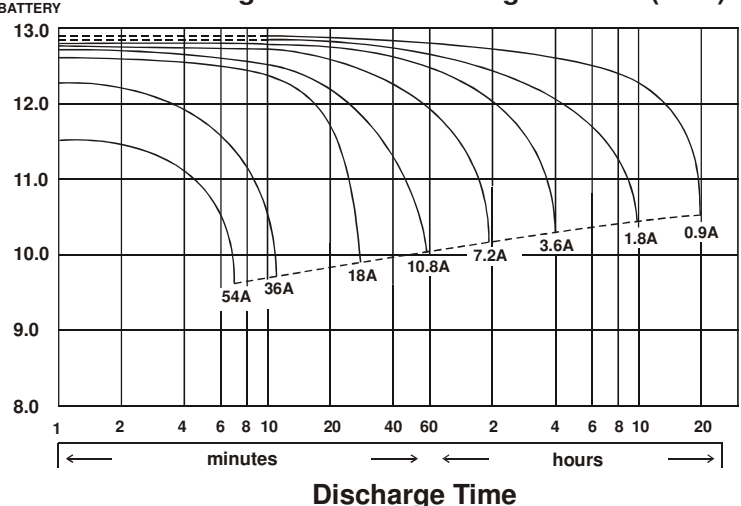


F3
(M5 Bolts)



(V)
FOR 12V
BATTERY

Discharge Time VS. Discharge Current (25°C)



Discharge Time