

Tubular Gel Battery

2 Volt 200 AH @ 10-hr. rate
2 Volt 252.8 AH @ 100-hr. rate

Rechargeable Sealed Lead Acid Battery
Designed for Cyclic, Standby, and Solar Applications



PSOPzV200 2v200AH



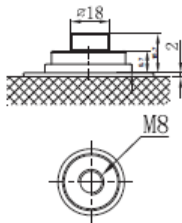
Features

- Tubular plate and Gel electrolyte for increased performance, service life and reliability
- Gel electrolyte and spill proof construction allows safe operation and maintenance free
- Excellent cyclic performance
- Enhanced overcharge endurance
- Excellent recovery from over discharge situations
- Perfect for applications including
 - Solar / Wind energy storage
 - Telecommunications
 - UPS and critical power
 - Railway signaling
 - Utilities
- Rugged impact resistant ABS case
- Certified for transport by air, D.O.T., I.A.T.A., F.A.A. and C.A.B.
- 20 year design life in float applications

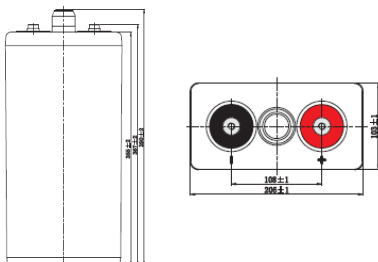
Terminals

(mm)

- T11: Threaded insert
8 mm stud fastener



Physical Dimensions: in (mm)



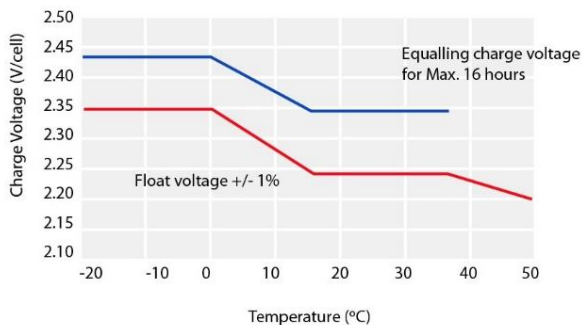
L: 4.06 (103) W: 8.11 (206) H: 14.0 (355) TH: 15.3 (390)

Tolerances are +/- 0.11 in. (+/- 3mm) for all dimensions. All data subject to change without notice.

Performance Specifications

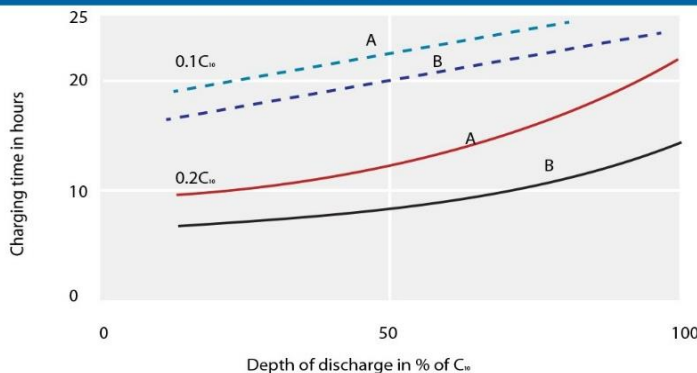
Nominal Voltage	2 volts
Nominal Capacity	
100-hr. (1.8 volts)	252.8AH
20-hr. (1.8 volts)	213.8AH
10-hr. (1.8 volts)	200.0 AH
5-hr. (1.75 volts).....	175.5 AH
3-hr. (1.75 volts).....	155.7 AH
1-hr. (1.60 volts)	114.0 AH
Approximate Weight	39.7 lbs. (18.0 kg)
Internal Resistance (approx.)	1.2 milliohms
Max. Discharge Current (approx.)	1600A (5s)
Shelf Life	<2% per month at 68 °F (20 °C)
Operating Temperature Range	
Charge	32 °F (0 °C) to 104 °F (40 °C)
Discharge	-4 °F (-20 °C) to 131 °F (55 °C)
Case	ABS Plastic

TEMPERATURE EFFECTS IN RELATION TO CHARGE VOLTAGE



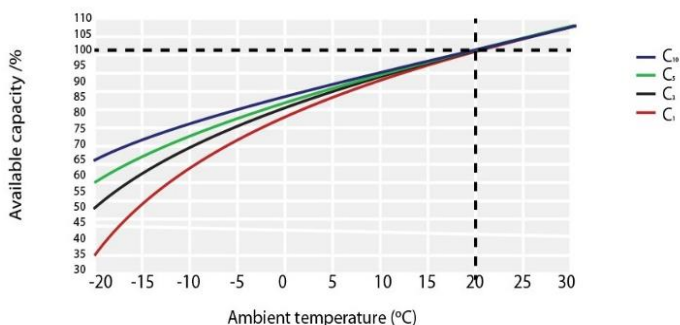
For continuous charging we recommend a voltage of 2.25V
The charging voltage must be compensated to the curve for a continuously different battery ambient temperature

CHARGING CHARACTERISTICS

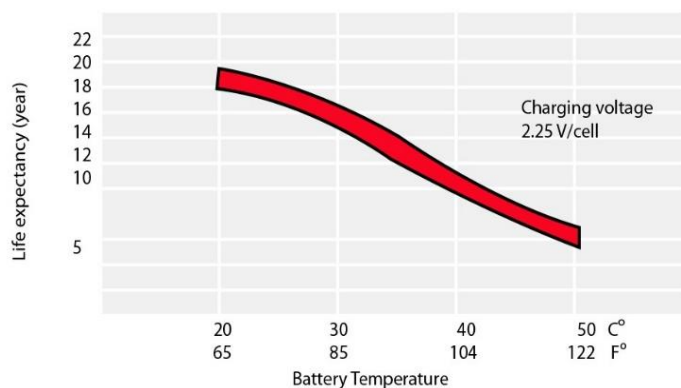


Charge voltage
A - 2.25 V/cell B - 2.40 V/cell
--- State of charge 100% — State of charge 90%

TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY

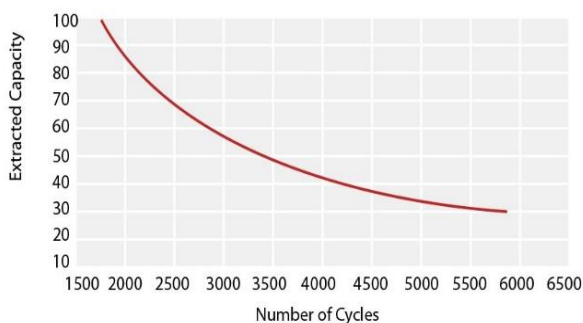


EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



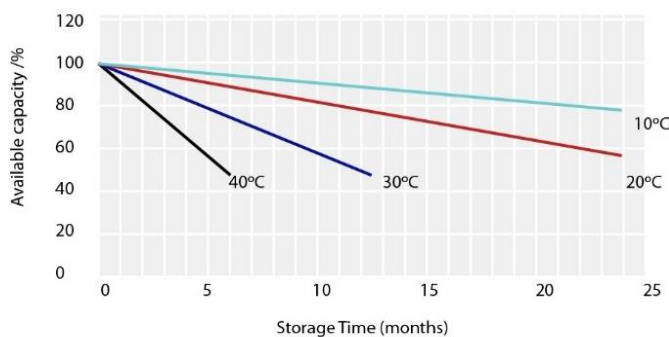
CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE

Acc. to IEC 896 (25°C/77°F)



GENERAL RELATION OF CAPACITY VS STORAGE TIME

Residual average capacity in % of C₁₀₀



Charging

Cycle Applications: Limit initial current to less than 50.0A. Charge until battery Voltage (under charge) reaches 2.40 to 2.50 volts at 77 °F (25 °C). Coefficient -5mV/°C

“Float” or “Stand-By” Service: Hold battery across constant voltage source of 2.25 to 2.3 volts at 77 °F (25 °C) continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition. Coefficient -3mV/°C

Note: Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage at 77 °F (25 °C) (shorter time frame at higher temp) otherwise permanent loss of capacity can occur.

Chargers

Power-Sonic offers a wide range of chargers suitable for batteries up to 100AH. Please refer to the Charger Selection Guide in our specification sheets for “C-Series Switch Mode Chargers” and “Transformer Type A and F Series”. Please contact our Technical department for advice if you have difficulty in locating suitable models.

Further Information

Please refer to our website www.power-sonic.com for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.

Contact Information



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