

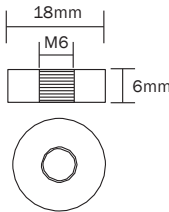
**PG-12V40, 12 Volt 41.6 AH @ 20-hr. rate**  
**PG-12V40 FR 40.0 AH @ 10-hr. rate**

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

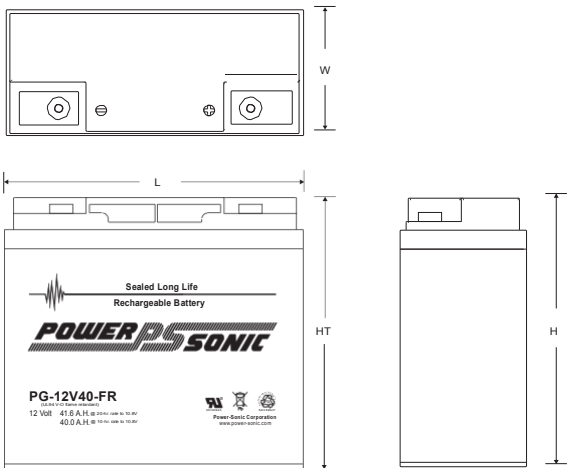


## Terminals (mm)

- T7: Threaded insert w. 6 mm stud fastener



## Physical Dimensions: in (mm)



**L: 10.04 (255) W: 3.82 (97) H: 7.99 (203) HT: 7.99 (203)**

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

## Features

- **Long Service Life** - Thick plate design and efficient gas recombination yield a service life expectancy of up to 10 years in standby mode.
- **Low Internal Resistance** - Superb high-rate discharge characteristics ensure reliable performance in UPS and Telecom applications.
- **Maintenance-Free, Non-Spillable** - Proven VRLA technology guarantees safe operation without maintenance and 'non-restricted article' status for transportation.
- **Handles** - Integral carrying handles.
- **Low Self-Discharge** - Lead-calcium alloy grids and use of high purity lead account for superior shelf-life characteristics permitting storage for extended periods of time.
- **Designed-In Reliability** - Cutting-edge manufacturing and process control combined with meticulous quality assurance procedures guarantee consistent and dependable performance.

## Performance Specifications

**Nominal Voltage** ..... 12 volts (6 cells)

**Nominal Capacity**

20-hr. (2.06A to 10.80 volts) .....	41.6 AH
10-hr. (4.00A to 10.80 volts) .....	40.0 AH
8-hr. (4.69A to 10.50 volts).....	37.5 AH
5-hr. (6.30A to 10.50 volts) .....	31.5 AH
3-hr. (10.4A to 10.50 volts).....	31.2 AH
1-hr. (24.4A to 9.60 volts) .....	24.4 AH

**Approximate Weight** ..... 28.67 lbs. (13.0 kg)

**Energy Density (10-hr. rate)** ..... 1.63 W-h/in<sup>3</sup> (99.41 W-h/l)

**Specific Energy (10-hr. rate)** ..... 17.41 W-h/lb (38.39 W-h/kg)

**Internal Resistance (approx.)** ..... 9.0 milliohms

**Max Short-Duration Discharge Current (10 Sec.)**..... 124.8 amperes

**Shelf Life (% of nominal capacity at 68°F (20°C))**

1 Month .....	97%
3 Months.....	91%
6 Months .....	83%

### Operating Temperature Range

Charge.. ..... -4°F (-20°C) to 122°F (50°C)  
 Discharge..... -40°F (-40°C) to 140°F (60°C)

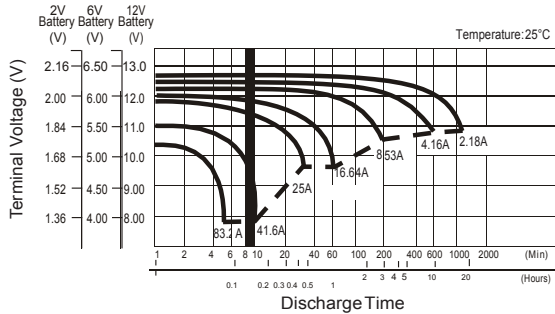
**Case** ..... ABS Plastic (UL94 V-0 flame retardant)

**Power-Sonic Chargers** ..... n/a

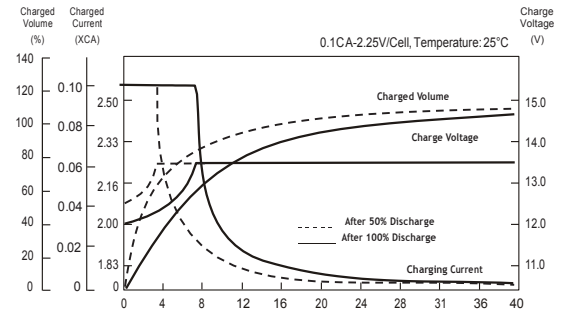
AMPS/WATTS @ 25 °C

FINAL VOLTAGE	10 MIN	15 MIN	30 MIN	45 MIN	1 HR	2 HR	3 HR	5 HR	8 HR	10 HR	20 HR
	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W
1.85	53.8/99.4	45.8/85.4	30.4/58.0	23.0/44.3	18.9/36.4	12.0/23.3	9.5/18.5	6.25/12.3	4.42/8.73	3.78/7.47	2.06/4.08
1.80	68.8/125.5	55.3/101.8	35.9/67.4	26.8/51.1	21.1/40.5	13.1/25.3	10.2/19.8	6.72/13.1	4.69/9.23	4.00/7.90	2.08/4.11
1.75	75.6/135.7	60.4/109.8	37.3/69.4	27.8/52.5	22.1/42.2	13.6/26.1	10.4/20.1	6.88/13.4	4.77/9.36	4.04/7.97	2.10/4.15
1.70	82.4/144.6	64.5/115.6	38.8/71.8	28.9/54.4	22.8/43.4	14.1/27.1	10.7/20.6	7.06/13.7	4.84/9.49	4.08/8.05	2.14/4.23
1.65	88.9/154.6	68.6/122.0	40.9/75.1	29.6/55.3	23.6/44.5	14.5/27.7	11.2/21.4	7.26/17.3	4.91/9.61	4.16/8.20	2.17/4.28
1.60	96.5/164.0	73.3/128.3	43.2/78.8	30.9/57.3	24.4/45.9	15.0/45.9	11.5/22.0	7.50/14.5	4.96/9.69	4.21/8.27	2.18/4.29

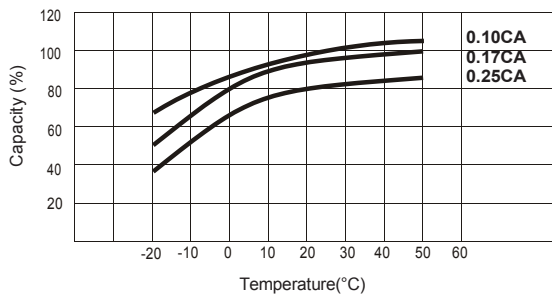
Discharge Characteristics



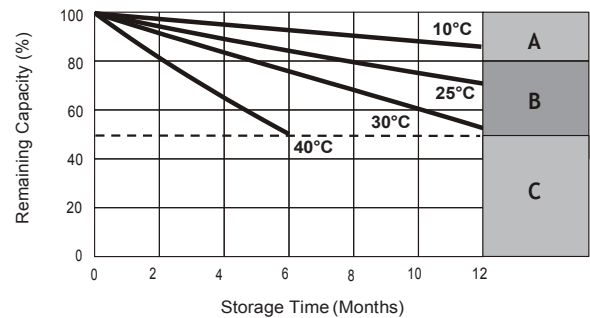
Float Charging Characteristics



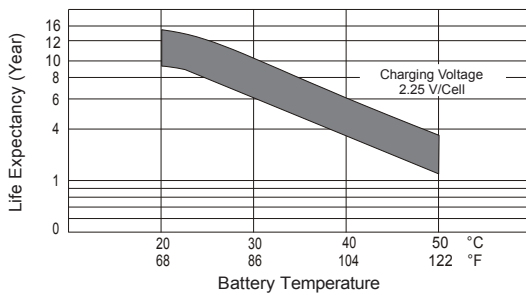
Temperature Effects in Relation to Battery Capacity



Self Discharge Characteristics



Effect of Temperature on Long-Term Float Life



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below: 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell. 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell. 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached

Charging

**Cycle Applications:** Limit initial current to less than 12.5A. Charge until battery voltage (under charge) reaches 14.4 to 15.0 volts at 77 °F (25 °C) (Temperature Coefficient -5V/C). Hold at 14.4 to 15.0 volts until current drops to under 416mA. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

**"Float" or "Stand-By" Service:** Hold battery across constant voltage source of 13.5 to 13.8 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

**Note:** Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

Contact Information



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