Odyssey sealed high performance batteries

Revolutionary battery technology from the USA these dry lightweight, high capacity batteries have been developed for use in the space industry.

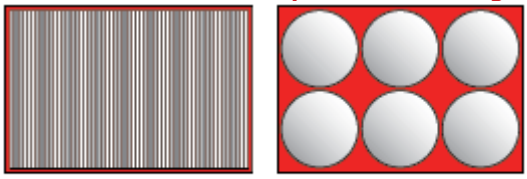
They have the following advantages over the conventional ones:

- Produce two or three times the cranking power
- Totally sealed. Maintenance free
- Can be deep cycled up to 500 times
- Will operate at -40 to +70 centigrade.
- No recharge when stored for a long time
- Quick discharge for effective reliable starting
- Shock resistant and flame retardant
- Tried and tested under extreme conditions.
- Can be installed in any orientation (except inverted)
- Vibration proof (fitted as orig equip to some Harleys!)
- Service life of up to 8 years
- Two year guarantee

Whether for everyday or emergency use, today's vehicles are loaded with more electronics than would have been imaginable just a few years ago. ODYSSEY batteries have been designed to keep up with the changes. Because their plates are made of pure virgin lead (unlike the lead alloy in most batteries), more plates can be packed in. And more plates mean more plate surface area, and much more power — twice the overall power and three times the life of conventional batteries — up to 400 cycles at 80% depth of discharge! ODYSSEY batteries deliver the massive starting power, rapid recovery, and amazing deep cycling capability that today's vehicles demand

Posted full charged ready to go Odyssey are not gel cell batteries. They are an absorbed electrolyte type battery meaning that there is no free acid inside the battery; all of the acid is kept absorbed in the glass mat separators.These separators serve to keep the positive and negative plates apart. The key difference between the gel cell and the absorbed glass mat (AGM) cell lies in the fact that in the AGM cell all of the electrolyte is in the separator, whereas in the gel cell the acid is within the cells in a gel form. In fact, if the Odyssey battery were to split open, there would be no acid spillage.

ODYSSEY batteries vs. spiral wound designs: 15% more plate surface area!



Unused battery space

Like many popular spiral-wound batteries, ODYSSEY batteries employ dry cell AGM technology to contain acid, allowing the battery to be installed even on its side. But the densely packed flat plates in an ODYSSEY battery avoid the "dead space" between cylinders in a "six-pack" design. The result is 15% more plate surface area — and that translates to more power!

Tin Alloy Coated Brass Terminals
Brass terminals coated with a high-quality tin alloy ensure secure, corrosion-free cable connections

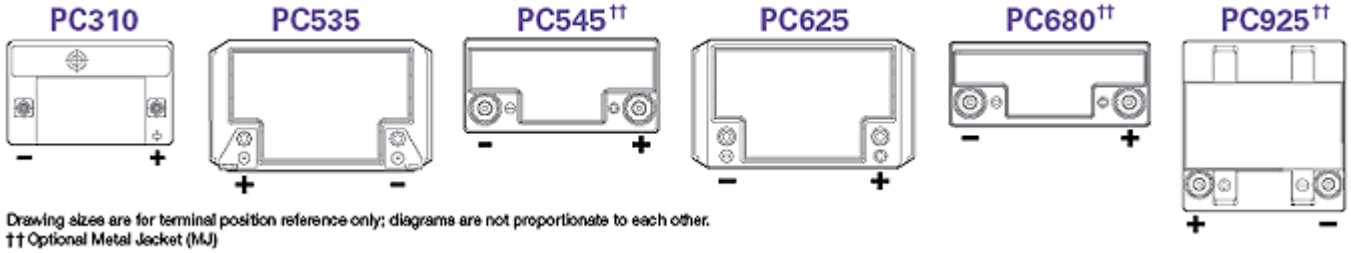
Pure Lead Plates
Constructed from 99.99% pure virgin lead, ODYSSEY battery plates are extremely thin, so more of them can fit into the battery. More lead plates equals more power.

Robust Intercell Connections
Built to stringent specifications, cell connectors are casted to the plates, and bonded to resist vibration and eliminate internal sparking.

Available Metal Case
Selected ODYSSEY batteries are available with metal casing for high heat applications.

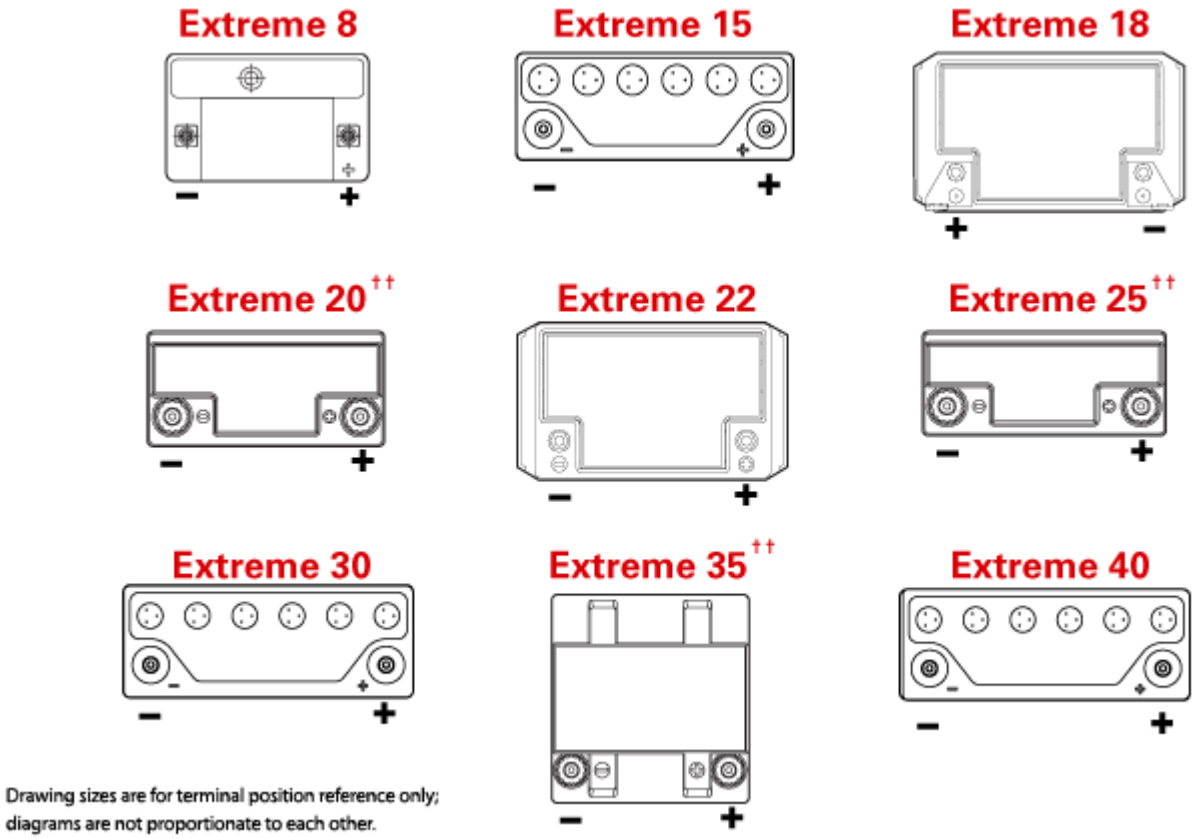
Applications and Specifications

Motorcycle and Powersport:



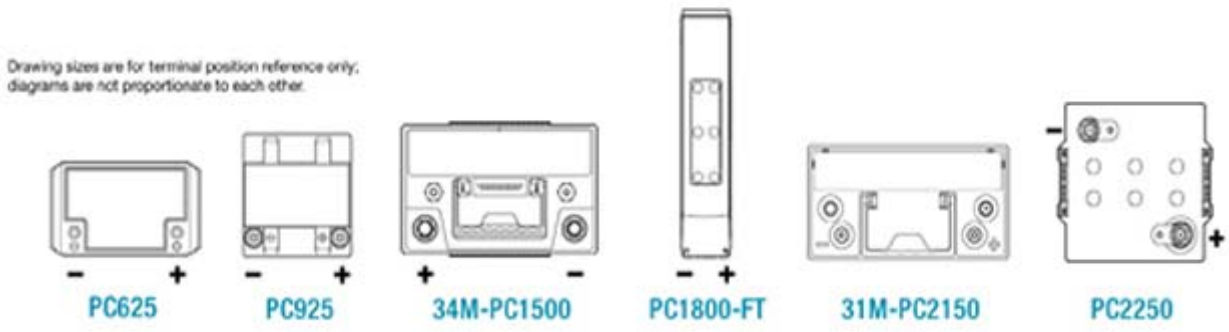
Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.
†† Optional Metal Jacket (MJ)

Extreme Racing:

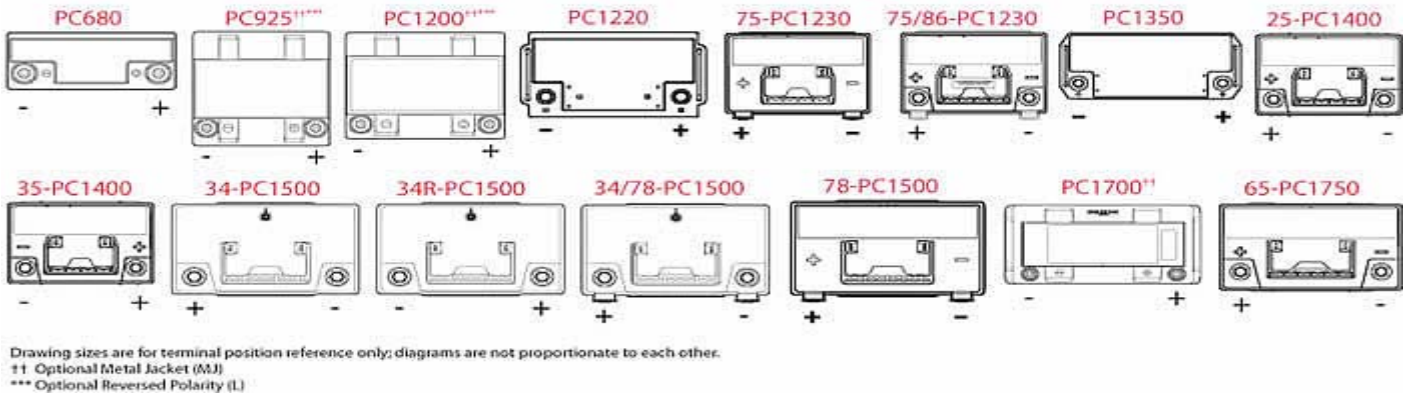


Drawing sizes are for terminal position reference only;
diagrams are not proportionate to each other.
†† Supplied with metal jacket

Marine:

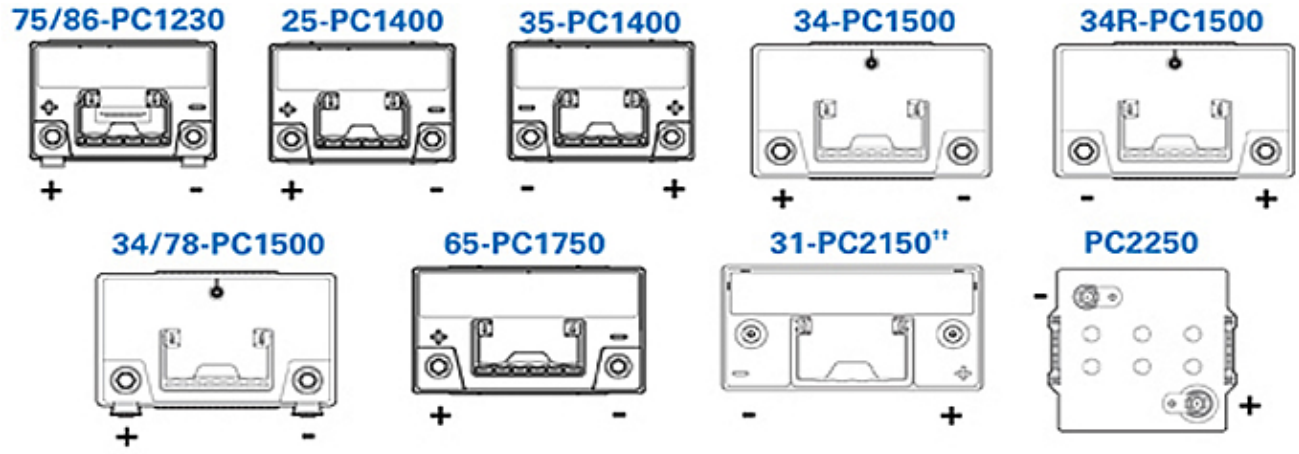


Automotive and Light truck:



Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.
†† Optional Metal Jacket (MJ)
*** Optional Reversed Polarity (L)

Heavy Duty and Commercial:



Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.
†† Optional Metal Jacket (MJ)

Frequently asked questions

What is the CCA rating?

The cold cranking ampere (CCA) rating refers to the number of amperes a battery can deliver for 30 seconds at a temperature of -18°C (0°F) before the voltage drops to 1.20 volts per cell, or 7.20 volts for a 12V battery. A 12V battery that has a rating of 550 CCA means that the battery will provide 550 amps for 30 seconds at -18°C (0°F) before the voltage falls to 7.20V. What is the MCA rating? The marine cranking ampere (MCA) rating refers to the number of amperes a battery can deliver for 30 seconds at a temperature of 0°C (32°F) until the battery voltage drops to 7.20 volts for a 12V battery. A 12V battery that has a MCA rating of 725 MCA means that the battery will give 725 amperes for 30 seconds at 0°C (32°F) before the voltage falls to 7.20V. The MCA is sometimes called the cranking amperes or CA.

What is a HCA rating?

The abbreviation HCA stands for hot cranking amps. It is the same as MCA, CA or CCA, except that the temperature at which the test is conducted is 26.7°C (80°F). What is the PHCA rating? Unlike CCA and MCA the pulse hot cranking amp (PHCA) rating does not have an “official” definition; however, we believe that for true SLI purposes, a 30-second discharge is unrealistic. The PHCA, a short duration (about 3-5 seconds) high rate discharge, is more realistic. Because the discharge is for such a short time, it is more like a pulse.

Are these gel cells?

No, the ODYSSEY is NOT a gel cell. It is an absorbed electrolyte type battery, meaning there is no free acid inside the battery; all the acid is kept absorbed in the glass mat separators. These separators serve to keep the positive and negative plates apart. What is the difference between gel cell and AGM? The key difference between the gel cell and the absorbed glass mat (AGM) is that in the AGM cell all the electrolyte is in the separator, whereas in the gel cell the acid is in the cells in a gel form. If the ODYSSEY battery were to split open, there would be no acid spillage! That is why we call the ODYSSEY a Drycell™ battery

What is the Ah rating?

The ampere-hour (Ah) rating defines the capacity of a battery. A battery rated at 100Ah at the 10-hour rate of discharge will deliver 10A for 10 hours before the terminal voltage drops to a standard value such as 10.02 volts for a 12V battery. The PC1200 battery, rated at 40Ah will deliver 4A for 10 hours. What is reserve capacity rating? The reserve capacity of a battery is the number of minutes it can support a 25-ampere load at 27°C (80°F) before its voltage drops to 10.50 volts for a 12V battery. A 12V battery with a reserve capacity rating of 100 will deliver 25 amps for 100 minutes at 80°F before its voltage drops to 10.5V.

Is the ODYSSEY a dry battery?

Because the ODYSSEY battery has no free acid inside, it is exempted from the requirements of 49 CFR § 173.159 of the US Department of Transportation (USDOT). The battery also enjoys a “nonspillable” classification and falls under the International Air Transport Association (IATA) “unrestricted” air shipment category. These batteries may be shipped completely worry-free. Supporting documentation is available.

What is impedance?

The impedance of a battery is a measure of how easily it can be discharged. The lower the impedance the easier it is to discharge the battery. The impedance of the ODYSSEY battery is considerably less than that of a conventional SLI battery, so its high rate discharge capability is significantly higher than that of a conventional SLI battery.

What is the short-circuit current of these batteries?

As mentioned before, this battery has very low impedance, meaning that the short circuit current is very high. For a PC925 battery, the short circuit current can be as high as 2,500 amperes. Do I ruin the battery if I accidentally drop it? Not necessarily, but it is possible to damage the internal connections sufficiently to damage the battery.

Does mishandling the battery void the warranty?

Our warranty applies only to manufacturing defects and workmanship issues; the policy does not cover damages suffered due to product mishandling.

What is so special about thin plate pure lead technology? Is it a new technology?

The answer lies in the very high purity (99.99%) of our raw lead materials, making our product very special. The technology is not new; the sealed lead recombinant technology was invented and patented by us back in 1973.

Why don't you have to winterize your batteries? What's so special about them?

In general, winterizing refers to a special maintenance procedure conducted on an automotive engine to ensure its reliability during the winter season. The procedure essentially checks the engine's charging system; in addition, the battery is load tested according to a specific method defined by the Battery Council International (BCI). Although ODYSSEY batteries do not specifically require this test to be conducted on them, the final decision whether or not to conduct this test is left to the user's discretion.

Are these Ni-Cd batteries? Why doesn't somebody make these in Ni-Cd? Wouldn't they charge faster as a Ni-Cd?

No, the ODYSSEY is NOT a Ni-Cd battery. It is a valve regulated lead acid (VRLA) battery. In general, Ni-Cd batteries are much more expensive to manufacture and recycle, so they are less cost effective than a lead acid product. A Ni-Cd battery would charge faster than a conventional lead acid battery; however, the ODYSSEY is NOT a conventional battery and its charge characteristics are somewhat similar to nickel cadmium batteries. In fact, with a powerful enough charger, it is possible to bring ODYSSEY batteries to better than 95% state of charge in less than 20 minutes! That is very comparable to the fast charge capabilities of a nickel cadmium product.

Is my battery flat?

To double check it may be worth charging it whilst disconnected from the bike; since some electrical problems on the bike could lead to a constant drain on the battery whilst the ignition is off. (e.g. leaky diodes in the charging circuit). A faster test is to use a multi-meter between say the battery +, and the + cable (disconnected from the battery) and check there's no current flowing with the ignition off. Start with about 5A setting just in case, then work down to about 500mA (fsd).

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