

# ODYSSEY<sup>®</sup>

THE EXTREME BATTERY

**Automotive/LTV**

*A guide to the industry's best starting and deep cycle battery*



**Twice the overall power and three times the life of conventional automotive batteries. Up to 400 cycles at 80% depth of discharge!**

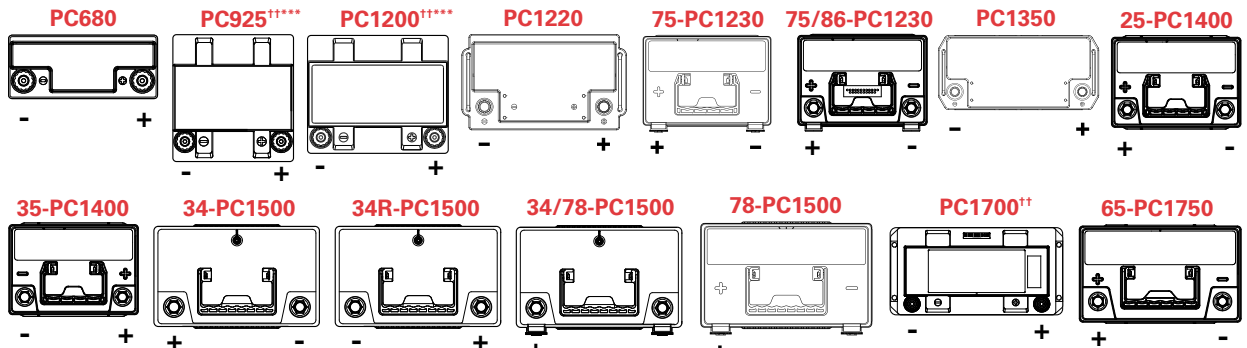


**EnerSys**  
Power/Full Solutions





## Terminal layouts



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

MODEL	Voltage	PHCA** (5 sec)	CCA*	HCA	MCA	Nominal Capacity			Reserve Capacity Minutes	Length inches (mm)	Width inches (mm)	Height inches (mm)	Weight lbs (kg)	Terminal	Torque Specs in-lbs (Nm max)	Internal Resistance (mΩ)	Short Circuit Current
						(20 Hr Rate-Ah)	(10 Hr Rate-Ah)										
PC680	12	680	220	370	300	16	16	24	7.15 (181.5)	3.00 (76.3)	6.65 (167.8)	15.4 (7.0)	M6 Receptacle† or SAE 3/8" Receptacle	50 (5.6)	7	1800A	
PC925	12	925	380	625	500	28	27	52	6.64 (168.6)	7.05 (179.0)	5.04 (128.0)	26.0 (11.8)	M6 Receptacle† or SAE 3/8" Receptacle	60 (6.8)	5	2400A	
PC1200	12	1200	550	860	725	42	40	78	7.87 (199.9)	6.66 (169.1)	6.80 (172.7)	38.2 (17.4)	M6 Receptacle† or SAE 3/8" Receptacle	60 (6.8)	4.5	2600A	
PC1220	12	1220	680	960	860	70	64	135	11.89 (302.0)	6.88 (175.0)	7.48 (190.0)	45.6 (20.7)	DIN Lead Post	N/A	5.7	2200A	
75-PC1230	12	1230	730	1050	815	55	50	100	9.46 (240.3)	6.99 (177.5)	7.22 (183.4)	45.5 (20.6)	SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A	
75/86-PC1230	12	1230	730	1050	815	55	50	100	9.46 (240.3)	6.99 (177.5)	7.92 (201.2)	45.5 (20.6)	TOP SAE SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A	
PC1350	12	1350	770	1080	960	95	88	195	14.84 (377.0)	6.88 (175.0)	7.48 (190.0)	60.4 (27.4)	DIN Lead Post	N/A	4.2	2900A	
25-PC1400	12	1400	820	1150	850	65	55	125	9.46 (240.3)	6.84 (173.7)	8.69 (220.7)	50.0 (22.7)	SAE	70 (7.9)	2.5	3100A	
35-PC1400	12	1400	820	1150	850	65	55	125	9.46 (240.3)	6.84 (173.7)	8.69 (220.7)	50.0 (22.7)	SAE	70 (7.9)	2.5	3100A	
34-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.76 (171.7)	7.82 (198.6)	49.5 (22.4)	SAE	60 (6.8)	2.5	3100A	
34R-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.76 (171.7)	7.82 (198.6)	49.5 (22.4)	SAE	60 (6.8)	2.5	3100A	
34/78-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.99 (177.5)	7.82 (198.6)	49.5 (22.4)	TOP SAE SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A	
78-PC1500	12	1500	880	1250	1050	68	62	135	10.85 (275.6)	6.99 (177.5)	7.12 (180.8)	49.5 (22.4)	SIDE 3/8" Receptacle	60 (6.8)	2.5	3100A	
PC1700††	12	1700	875	1325	1175	68	65	142	13.02 (330.7)	6.62 (168.2)	6.93 (176.0)	60.9 (27.6)	M6 Receptacle† or SAE 3/8" Receptacle	60 (6.8)	3.5	3500A	
65-PC1750	12	1750	930	1350	1070	74	65	135	11.83 (300.5)	7.20 (182.9)	7.43 (188.7)	58.0 (26.3)	SAE	70 (7.9)	2.0	5000A	

\*Cold Start Performance S.A.E J537 JUNE 82 \*\*Pulse Current

† Can be fitted with brass automotive terminal  
PC680 supplied with a metal jacket

Operating temperature range:

-40°C (-40°F) to 80°C (176°F) for PC680, PC925, PC1200 and PC1700 with a metal jacket and all BCI sizes

-40°C (-40°F) to 45°C (113°F) for PC680, PC925, PC1200 and PC1700 without a metal jacket

-40°C (-40°F) to 40°C (104°F) for PC1220 and PC1350

### Constant voltage portable charger parameters:

Standby, per 12V battery 13.5-13.8V no current limit required

Cyclic, per 12V battery (16-hour recharge) 14.4-14.8V no current limit required

Typical deep-cycle life at 25°C/77°F at a 5-hour rate 400 cycles at 80% DOD

Typical service life at 25°C/77°F

Medium to heavy duty usage - 3+ years  
Light duty usage - 5+ years

### **Better warranty**

Limited 3- and 4-year full replacement warranty – not pro rata.

### **Longer service life**

With 3-10 years of service life, ODYSSEY® batteries save consumers time, money, and aggravation.

### **Longer cycle life**

70% longer cycle life compared to conventional deep cycle batteries – up to 400 cycles at 80% depth of discharge – high stable voltage for longer periods of time.

### **Longer shelf life**

Can be stored on open circuit (nothing connected to the terminals) without the need for recharging up to 2 years or down to 12.00V, whichever occurs first.

### **Faster recharge**

The highest recharge efficiency of any sealed lead battery on the market – capable of 100% recharge in 4 - 6 hours.

### **Mounting flexibility**

Non-spillable design – can be mounted on any side in any position except inverted.

### **Vibration resistance**

Design protects against high impact shock and mechanical vibration – a common cause of premature battery failure.

### **Extreme temperature tolerant**

Operating temperatures from -40°C (-40°F) to 80°C (176°F).

### **Totally maintenance free**

No need to add water, ever! Drycell design with resealable venting system.

### **Improved safety**

US Department of Transportation classified as a 'non-spillable' battery. No acid spills, no escaping gases.

## **Built for a range of performance**



### **Everyday Vehicles**

The electronics in today's vehicles require heavy power. The ODYSSEY® battery delivers it while providing reliable starting for up to 3X as long as conventional batteries.

- Luxury and sport sedans
- SUVs and light trucks
- Vans, minivans and taxis



### **Classic & Antique Cars**

Classic and restored cars are often kept in storage for months. With the ODYSSEY battery, they'll start reliably for up to two years (when stored at 25°C (77°F) from a fully charged state).

- Antique vehicles
- Classic trucks
- Replica/kit cars



### **4X4 & Off-Road**

Featuring rugged construction and a non-spillable, dry cell design, ODYSSEY batteries ensure extreme shock and vibration resistance for the toughest off-road applications.

- SUVs
- Light trucks
- Off-road vehicles



### **High Performance Cars**

High-compression, massive horsepower engines demand massive starting power. The superior cranking ODYSSEY battery provides it for much longer than conventional batteries.

- Muscle cars
- Race cars
- Dragsters



### **Modified Vehicles**

From low-riding hydraulics to high-intensity discharge lights, the non-spillable ODYSSEY battery can power any modification, and can be mounted in almost any position.

- Tuner cars
- Low riders
- Audio and video systems

## About EnerSys®

EnerSys® is a global leader in stored energy solutions for automotive, military, and industrial applications. With manufacturing facilities in 17 countries, sales and service locations throughout the world, and over 100 years of battery experience, EnerSys is a powerful partner for automotive service and parts providers.



### EnerSys

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### WARRANTY:

EnerSys Energy Products Inc. ("Manufacturer") warrants its ODYSSEY® batteries (hereafter referred to as "Battery") to be free of defects in material and workmanship for the earlier of (a) the Applicable Warranty Period or (b) within 400 cycles to 80% depth of discharge, whichever occurs first. The Applicable Warranty Period is two (2) years for power sports applications; three (3) years in automotive, marine, commercial, and industrial applications; and four (4) years in the case of the PC1220, 75-PC1230, 75/86-PC1230, PC1350, 25-PC1400, 35-PC1400, 34-PC1500, 34M-PC1500, 34R-PC1500, 34/78-PC1500, 78-PC1500, 65-PC1750, 31-PC2150, 31M-PC2150 and PC2250 batteries, except in APU (auxiliary power unit) applications, then warranty is two (2) years. The Applicable Warranty Period begins from the date of purchase with original receipt, or, if no receipt is available, from Manufacturer's shipping date. Within the Applicable Warranty Period, the Battery will be replaced free of charge if, at the discretion of Manufacturer, adjustment is necessary due to defect in material or workmanship (not merely discharged). Batteries for warranty replacement consideration are to be returned to the original supplying distributor/dealer. If not truly feasible, other ODYSSEY distributors/dealers can be approached but a warranty processing fee may be applied. This warranty may vary from country to country; contact your authorized ODYSSEY battery wholesaler or dealer for the applicable warranty.

### GENERAL PROVISIONS:

Manufacturer has no obligation under the limited warranty set forth above in the event the Battery is damaged or destroyed as a result of one or more of the following:

- Willful abuse or neglect or if the top decorative cover has been removed.
- Natural forces such as wind, lightning, hail; damage due to fire, collision, explosion, vandalism, theft, penetration or opening of the Battery case in any manner.
- Overcharging, undercharging, charging or installing in reverse polarity, improper maintenance, allowing the Battery to be deeply discharged via a parasitic load or mishandling of the Battery such as but not limited to using the terminals for lifting or carrying the Battery. Trickle chargers that do not have a regulated trickle charge voltage between 13.5V and 13.8V (no lower than 13.5V and no higher than 13.8V) will cause early failure of the Battery. Use of such chargers with the Battery will also void the Battery's warranty. For applications where an alternator is present, the alternator must deliver between 14.0V and 14.7V when measured at the battery's terminals. Alternators that do not have a regulated charge between 14.0V and 14.7V (no lower than 14.0V and no higher than 14.7V) will cause early failure of the Battery. Use of such alternators with the Battery will also void the Battery's warranty.
- Failure to properly install the Battery or lack of metal jacket for high temperature or vibration applications.
- Normal deterioration in the electrical qualities or the acceleration of such deterioration due to conditions that accelerate such deterioration.
- If the Battery is used for an application that requires higher cranking power or a greater reserve rating than the Battery is designed to deliver, or the Battery capacity is less than the Battery capacity specified by the vehicle manufacturer, or the Battery is otherwise used in applications for which it was not designed.
- Prolonged storage of vehicles with fuel injection computers, alarms, GPS and other electrical devices that require continuous battery power to support active memories; this power drain must be offset with a maintenance-float charger, periodic charging or disconnecting the battery to prevent the establishment of irreversible crystallized sulphation in the battery plate oxide. Failure to address this destroys battery capacity and voids the warranty, as this is not a warranted defect in materials or workmanship. A battery with an open circuit voltage (OCV) of equal to or less than 10.0V will be deemed as overdischarged and void from warranty due to misuse and/or neglect.
- WARNING - Do NOT use any type of oil, organic solvent, alcohol, detergent, strong acids, strong alkalis, petroleum-based solvent or ammonia solution to clean the jars or covers. These materials may cause permanent damage to the battery jar and cover and will void the warranty.

### To obtain warranty service:

1. Return the Battery to any authorized ODYSSEY battery wholesaler or dealer.
2. If the Battery is determined by Manufacturer, in its sole discretion, to be defective for material or workmanship under terms of this limited warranty, it will be replaced.
3. Manufacturer's acceptance of any items shipped to Manufacturer shall not be deemed an admission that the items so shipped are defective. Any items shipped back to Manufacturer, shall in Manufacturer's sole discretion, become Manufacturer's sole property.

THIS LIMITED WARRANTY IS IN LIEU OF, AND MANUFACTURER DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, STATUTORY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER'S EXCLUSIVE LIABILITY FOR BREACH OF WARRANTY SHALL BE TO REPLACE THE BATTERY WITHIN THE EFFECTIVE WARRANTY PERIOD. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGES OF ANY OTHER KIND, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, SPECIAL OR OTHERWISE. NOR SHALL MANUFACTURER BE LIABLE FOR ANY REMOVAL OR INSTALLATION EXPENSE, OR THE LOSS OF TIME OR PROFITS.

Some countries and/or states do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, which may vary from country to country and/or state to state.