aquavolt

11 Babbage Road
Roseville Chase
NSW 2069 AUSTRALIA
+61 (2) 9417 8455
sales@aquavolt.com.au
www.aquavolt.com.au

Optima Spiral Wound AGM Batteries

Optima Blue Top

Some days, endurance is more important than luck

Optima blue top AGM batteries and AGM deep cycle batteries will keep you on the water longer. Spiral cell design of an Optima marine AGM battery with its tightly wound cells pressed into tubes, make them 15 times more resilient to vibration. Most important when you are pounding through the waves.

Our Optima marine AGM deep cycle batteries make also great start batteries also; they range from 750CCA - 900CCA. Optima marine AGM batteries and Optima marine AGM Deep cycle batteries are Spill proof they can be mounted on their side, have no terminal corrosion and do not gas under charge.

In the off season conventional batteries sulphate in 3-6 months, which is leads to premature failure. An Optima marine AGM battery and Optima Marine AGM Deep cycle batteries have extremely low discharge rates which makes them ideal for boats that are unattended for long periods at a time.

Emergency services such as the Water police and some Naval departments use the Optima AGM batteries for their boats, because reliability and performance is the key.

OPTIMA Blue-Top batteries have superior vibration resistance due to the stability of the tightly wrapped design. . They do not require special charging equipment - boost charge between 13,8 and 15V, absorption until I<1A, float charge 13,2 to 13,8V. Dual terminals SAE plus 8mm s/s stud. Warranty 18 months exchange + 18 months pro-rata

Part Numbers:

140530

Optima 34M 12V 800CCA

140531

Optima D34M 12V 55Ah

140532

Optima D27M 12V 66Ah

140533

Optima D31M 12V 75Ah

Battery Model: 34M
Part Number: 8006-006
Nominal Voltage: 12 volts
NSN: 6140 01 475 9416
Description: High power, sealed lead acid, marine starting battery

Physical Characteristics:

Plate Design: High purity lead-tin alloy. Wound cell configuration utilizing proprietary *SPIRALCELL*® technology.
Electrolyte: Sulfuric acid, H_2SO_4
Case: Polypropylene
Color: Case: Dark Gray
Cover: "OPTIMA" Blue
Group Size: BCI: 34

	Standard	Metric
Length:	10.018"	254.46 mm
Width:	6.829"	173.46 mm
Height:	7.925"	201.30 mm (Height at the top of terminals)
Weight:	38.4 lb	17.4 kg

Terminal Configuration: SAE / BCI automotive and 5/16"-18UNC-2A threaded stainless steel stud.

Performance Data:

Open Circuit Voltage (Fully charged): 12.8 volts
Internal Resistance (Fully charged): .0030 ohms
Capacity: 50 Ah (C/20)
Reserve Capacity: BCI: 100 minutes
(25 amp discharge, 80°F (26.7°C), to 10.5 volts cut-off)

Power:

CCA (BCI 0°F): 800 amps
MCA (BCI 32°F): 1000 amps

Recommended Charging:

The following charging methods are recommended to ensure a long battery life: (Always use a voltage regulated charger with voltage limits set as described below.)

Model: 34M
These batteries are designed for engine starting applications. They are <u>not</u> recommended or warranted for use in deep cycle applications.

Recommended Charging Information:

Alternator:	13.3 to 15.0 volts
Battery Charger (Constant Voltage):	13.8 to 15.0 volts; 10 amps maximum; 6-12 hours approximate
Float Charge:	13.2 to 13.8 volts; 1 amp maximum; (indefinite time at lower voltages)
Rapid Recharge:	Maximum voltage 15.6 volts. No current limit as long as battery
(Constant voltage charger)	temperature remains below 125°F (51.7°C). Charge until current drops below 1 amp.
	All limits must be strictly adhered to.

Recharge Time: (example assuming 100% discharge – 10.5 volts)

Current	Approximate time to 90% charge
100 amps	35 minutes
50 amps	75 minutes
25 amps	140 minutes

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, amperage will taper down as the battery becomes recharged. When amperage drops below 1 amp, the battery will be close to a full state of charge.

(All charge recommendations assume an average room temperature of 77°F (25°C).

Always wear safety glasses when working with batteries.

Always use a voltage regulated battery charger with limits set to the above ratings. Overcharging can cause the safety valves to open and battery gases to escape, causing premature end of life. These gases are flammable! You cannot replace water in sealed batteries that have been overcharged. Any battery that becomes very hot while charging should be disconnected immediately.

Not fully charging a battery can result in poor performance and a reduction in capacity.

Shipping and Transportation Information:

OPTIMA batteries can be shipped by AIR. The battery is nonspillable and is tested according to ICAO Technical Instructions DOC. 9284-AN/905 to meet the requirements of Packing Instructions No. 806 and is classified as non-regulated by IATA Special Provision A-48 and A-67 for UN2800. Terminals must be protected from short circuit.

Manufacturing Location:

Enertec Exports S. de R.L. de C.V.
RFC: EEX020516KU2
Avenida. del Parque No. 2155
Monterrey Technology Park
Cienega de Flores, N.L. 65550
MEXICO
Phone: 52 (81) 81542300
Fax: 52 (81) 81542301

BCI = Battery Council International

Battery Model: D34M
Part Number: 8016-103
Nominal Voltage: 12 volts
NSN: 6140 01 475 9355
Description: High power, dual purpose engine start and deep cycle, sealed lead acid battery

Physical Characteristics:

Plate Design: High purity lead-tin alloy. Wound cell configuration utilizing proprietary SPIRALCELL® technology.
Electrolyte: Sulfuric acid, H_2SO_4
Case: Polypropylene
Color: Case: Light Gray
Cover: "OPTIMA" Blue
Group Size: BCI: 34

	Standard	Metric
Length:	10."	254 mm
Width:	6.875"	174.6 mm
Height:	7.813"	198.4 mm (height at the top of the terminals)
Weight:	43.5 lb.	19.8 kg

Terminal Configuration: SAE / BCI automotive and threaded stainless steel stud 5/16 – 18 UNC.

Performance Data:

Open Circuit Voltage (fully charged): 13.1 volts
Internal Resistance (fully charged): 0.0028 ohms
Capacity: 55 Ah (C/20)
Reserve Capacity: BCI: 120 minutes
(25 amp discharge, 80°F (26.7°C), to 10.5 volts cut-off)

Power:

CCA (BCI 0°F): 750 amps
MCA (BCI 32°F): 870 amps

Recommended Charging:

The following charging methods are recommended to ensure a long battery life: (Always use a voltage regulated charger with voltage limits set as described below.)

Model: D34M
These batteries are designed for starting and deep cycling applications and for use in boats with large accessory loads.

Recommended Charging Information:

Alternator:	13.65 to 15.0 volts
Battery Charger (Constant Voltage):	13.8 to 15.0 volts; 10 amps maximum; 6-12 hours approximate
Float Charge:	13.2 to 13.8 volts; 1 amp maximum (indefinite time at lower voltages)
Rapid Recharge: **(Constant voltage charger)**	Maximum voltage 15.6 volts. No current limit as long as battery temperature remains below 125°F (51.7°C). Charge until current drops below 1 amp.
Cyclic or Series String Applications:	14.7 volts. No current limit as long as battery temperature remains below 125°F (51.7°C). When current falls below 1 amp, finish with 2 amp constant current for 1 hour. **All limits must be strictly adhered to.**

Recharge Time: (example assuming 100% discharge – 10.5 volts)

Current	Approx. time to 90% charge
100 amps	35 minutes
50 amps	75 minutes
25 amps	140 minutes

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, amperage will taper down as the battery becomes recharged. When amperage drops below 1 amp, the battery will be close to a full state charge.

(All charge recommendations assume an average room temperature of 77°F, 25°C)

Always wear safety glasses when working with batteries.

Always use a voltage regulated battery charger with limits set to the above ratings. Overcharging can cause the safety valves to open and battery gases to escape, causing premature end of life. These gases are flammable! You cannot replace water in sealed batteries that have been overcharged. Any battery that becomes very hot while charging should be disconnected immediately.

Not fully charging a battery can result in poor performance and a reduction in capacity.

Shipping and Transportation Information:

OPTIMA batteries can be shipped by AIR. The battery is nonspillable and is tested according to ICAO Technical Instructions DOC. 9284-AN/905 to meet the requirements of Packing Instructions No. 806 and is classified as non-regulated by IATA Special Provision A-48 and A-67 for UN2800. Terminals must be protected from short circuit.

Manufacturing Location:

OPTIMA Batteries
17500 East 22nd Avenue
Aurora, CO 80011
United States of America
Phone: 303-340-7400
Fax: 303-340-7474

BCI = Battery Council International

Battery Model: D27M
Part Number: 8027-127
Nominal Voltage: 12 volts
NSN: Number applied for, product currently available
Description: High power, dual purpose engine start and deep cycle, sealed lead acid battery

Physical Characteristics:

Plate Design:	High purity lead-tin alloy. Wound cell configuration utilizing proprietary *SPIRALCELL*® technology.
Electrolyte:	Sulfuric acid, H_2SO_4
Case:	Polypropylene
Color:	Case: Light Gray Cover: "OPTIMA" Blue
Group Size:	BCI: 27

	Standard	Metric
Length:	12.160"	308.86 mm
Width:	6.762"	171.75 mm
Height:	8.700"	220.98 mm (Height at the top of terminals)
Weight:	53.8 lb	24.4 kg

Terminal Configuration: SAE / BCI automotive and 5/16"-18UNC-2A threaded stainless steel stud.

Performance Data:

Open Circuit Voltage (Fully charged):	13.1 volts
Internal Resistance (Fully charged):	.0025 ohms
Capacity:	66 Ah (C/20)
Reserve Capacity:	BCI: 140 minutes (25 amp discharge, 80°F (26.7°C), to 10.5 volts cut-off)

Power:

CCA (BCI 0°F):	800 amps
MCA (BCI 32°F):	1000 amps

Recommended Charging:

The following charging methods are recommended to ensure a long battery life: (Always use a voltage regulated charger with voltage limits set as described below.)

Model: D27M
These batteries are designed for starting and deep cycle applications and for use in vehicles with large accessory loads.

Recommended Charging Information:

Alternator:	13.65 to 15.0 volts
Battery Charger (Constant Voltage):	13.8 to 15.0 volts; 10 amps maximum; 6-12 hours approximate
Float Charge:	13.2 to 13.8 volts; 1 amp maximum; (indefinite time at lower voltages)
Rapid Recharge:	Maximum voltage 15.6 volts. No current limit as long as battery
(Constant voltage charger)	temperature remains below 125°F (51.7°C). Charge until current drops below 1 amp.
Cyclic or Series String Applications:	14.7 volts. No current limit as long as battery temperature remains below 125°F (51.7°C). When current falls below 1 amp, finish with 3 amp constant current for 1 hour. **All limits must be strictly adhered to.**

Recharge Time: (example assuming 100% discharge – 10.5 volts)

Current	Approximate time to 90% charge
100 amps	45 minutes
50 amps	98 minutes
25 amps	185 minutes

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, amperage will taper down as the battery becomes recharged. When amperage drops below 1 amp, the battery will be close to a full state of charge.

(All charge recommendations assume an average room temperature of 77°F (25°C).

Always wear safety glasses when working with batteries.

Always use a voltage regulated battery charger with limits set to the above ratings. Overcharging can cause the safety valves to open and battery gases to escape, causing premature end of life. These gases are flammable! You cannot replace water in sealed batteries that have been overcharged. Any battery that becomes very hot while charging should be disconnected immediately.

Not fully charging a battery can result in poor performance and a reduction in capacity.

Shipping and Transportation Information:

OPTIMA batteries can be shipped by AIR. The battery is nonspillable and is tested according to ICAO Technical Instructions DOC. 9284-AN/905 to meet the requirements of Packing Instructions No. 806 and is classified as non-regulated by IATA Special Provision A-48 and A-67 for UN2800. Terminals must be protected from short circuit.

Manufacturing Location:

Enertec Exports S. de R.L. de C.V.
RFC: EEX020516KU2
Avenida. del Parque No. 2155
Monterrey Technology Park
Cienega de Flores, N.L. 65550
MEXICO
Phone: 52 (81) 81542300
Fax: 52 (81) 81542301

BCI = Battery Council International

Battery Model: D31M
Part Number: 8052-161
Nominal Voltage: 12 volts
NSN: 6140 01 502 4405
Description: High power, dual purpose engine start and deep cycle, sealed lead acid battery

Physical Characteristics:

Plate Design: High purity lead-tin alloy. Wound cell configuration utilizing proprietary *SPIRALCELL*® technology.
Electrolyte: Sulfuric acid, H_2SO_4
Case: Polypropylene
Color: Case: Light Gray
Cover: "OPTIMA" Blue
Group Size: BCI: 31

	Standard	Metric
Length:	12.774"	324.46 mm
Width:	6.529"	165.84 mm
Height:	9.370"	238.00 mm (Height at the top of terminals)
Weight:	59.8 lb	27.1 kg

Terminal Configuration: SAE / BCI automotive and 5/16"-18UNC-2A threaded stainless steel stud.

Performance Data:

Open Circuit Voltage (Fully charged): 13.1 volts
Internal Resistance (Fully charged): .0025 ohms
Capacity: 75 Ah (C/20)
Reserve Capacity: BCI: 155 minutes
(25 amp discharge, 80°F (26.7°C), to 10.5 volts cut-off)

Power:

CCA (BCI 0°F): 900 amps
MCA (BCI 32°F): 1125 amps

Recommended Charging:

The following charging methods are recommended to ensure a long battery life: (Always use a voltage regulated charger with voltage limits set as described below.)

Model: D31M
These batteries are designed for starting and deep cycle applications and for use in vehicles with large accessory loads.

Recommended Charging Information:

Alternator:	13.65 to 15.0 volts
Battery Charger (Constant Voltage):	13.8 to 15.0 volts; 10 amps maximum; 6-12 hours approximate
Float Charge:	13.2 to 13.8 volts; 1 amp maximum; (indefinite time at lower voltages)
Rapid Recharge:	Maximum voltage 15.6 volts. No current limit as long as battery
(Constant voltage charger)	temperature remains below 125°F (51.7°C). Charge until current drops below 1 amp.
Cyclic or Series String Applications:	14.7 volts. No current limit as long as battery temperature remains below 125°F (51.7°C). When current falls below 1 amp, finish with 3 amp constant current for 1 hour. **All limits must be strictly adhered to.**

Recharge Time: (example assuming 100% discharge – 10.5 volts)

Current	Approximate time to 90% charge
100 amps	52 minutes
50 amps	112 minutes
25 amps	210 minutes

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, amperage will taper down as the battery becomes recharged. When amperage drops below 1 amp, the battery will be close to a full state of charge.

(All charge recommendations assume an average room temperature of 77°F (25°C).

Always wear safety glasses when working with batteries.

Always use a voltage regulated battery charger with limits set to the above ratings. Overcharging can cause the safety valves to open and battery gases to escape, causing premature end of life. These gases are flammable! You cannot replace water in sealed batteries that have been overcharged. Any battery that becomes very hot while charging should be disconnected immediately.

Not fully charging a battery can result in poor performance and a reduction in capacity.

Shipping and Transportation Information:

OPTIMA batteries can be shipped by AIR. The battery is nonspillable and is tested according to ICAO Technical Instructions DOC. 9284-AN/905 to meet the requirements of Packing Instructions No. 806 and is classified as non-regulated by IATA Special Provision A-48 and A-67 for UN2800. Terminals must be protected from short circuit.

Manufacturing Location:

Enertec Exports S. de R.L. de C.V.
RFC: EEX020516KU2
Avenida. del Parque No. 2155
Monterrey Technology Park
Cienega de Flores, N.L. 65550
MEXICO
Phone: 52 (81) 81542300
Fax: 52 (81) 81542301

BCI = Battery Council International