



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

Physical Characteristics:

Plate Design: High purity lead-tin alloy. Wound cell configuration utilizing proprietary *SPIRALCELL TECHNOLOGY*.[®]

Electrolyte: Sulfuric acid, H₂SO₄.

Case: Polypropylene

Color: Case: Light Gray
Cover: "OPTIMA" Blue

Group Size: BCI: 34

	Standard	Metric
Length:	10"	254 mm
Width:	6.8"	172.2 mm
Height:	7.8"	198.1 mm (height at the top of the terminals)
Minimum Weight:	43.5 lb.	19.73 kg

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

Performance Data:

Open Circuit Voltage (fully charged): 13.2 volts

Internal Resistance (fully charged): .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.)

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These batteries are designed for cyclic applications and for use in vehicles with large accessory loads.

Recommended Charging Information:

Alternator:	13.8 to 15.0 volts
Battery Charger: (Constant Voltage)	13.8 to 15.0 volts, 10 amps maximum; 8-10 hours approximate
Float Charge:	13.2 to 13.8 volts, 1 amp maximum current
Rapid Recharge (Constant Voltage Charger)	
Maximum voltage	15.6 volts
No current limit as long as temperature remains below	125° F
Charge until current drops below	1 amp
Recharge Time:	(example assuming 100% discharge - 10.5 volts)

	D34M	D31M
Current	Approx. time to 90%charge	Approx. time to 90% charge
100 amps	35 minutes	52 minutes
50 amps	75 minutes	112 minutes
25 amps	140 minutes	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 charge.

Cyclic application or series string applications (CV/CC) D34M only:

Constant Voltage with Constant Current finish:

14.7 volts, temperature < 125°F, no current limits. When current falls below 1 amp, finish with 2 amp constant charge for 1 hour.

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

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 failure. 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
EN = European Norm
Engineering Drawing

OPTIMA Batteries
Product Specifications: Model D34M
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