# ASTERION BATTERY

# CGD Carbon Series

**ASTERION** lead-acid batteries of the **CGD** series are manufactured according to AGM technology (electrolyte absorbed in a fiberglass separator).

As part of the active mass, a carbon addition in the form of graphene is used what makes Delta **CGD** batteries resistant to deep discharges and high temperature stability under adverse operating conditions. This series also features an increased number of charge/ discharge cycles and duration of operation in heavy-duty systems based on renewable energy sources. The batteries are designed to operate both in buffer and cyclic modes. Recommended for use in autonomous power systems, as well as in conjunction with systems based on alternative energy sources.

**Performance & characteristics:**

- Long service life;
- Deep discharge stability;
- Temperature stability of the battery;
- Excellent performance at low and high ambient temperatures;
- Unsurpassed number of charge/ discharge cycles;
- Charge with high currents with minimal loss of capacity;
- A universal solution for any battery life.


**Inert Gas Casting**

**Multicomponent inhibitors**

**Automated weding**

**Termodynamic pressing**

**Electrolytic agents**

**Carbon (graphene), in active mass composition**

**Bulk application of active mass**

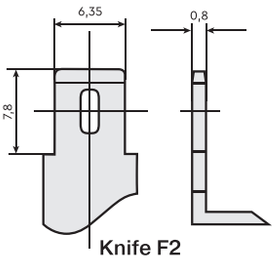
**Advanced assembly technology**

https://www.asterion-batt.com.tr

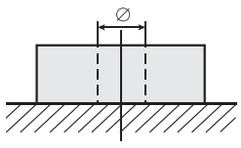
# CGD Carbon Series

| | | |
|---|---|---|
| **Service life** | In buffer mode | 15 years |
| | In cyclic mode | 1800 cycles at 30% discharge depth<br>2600 cycles at 30% discharge depth |
| **Self-discharge** | | Less than 3% per month |
| **Charging method** | DC voltage charging | 25°C |
| | Cyclic mode | 2,25-2,3 V/cell<br>Temperature compensation - 30 mV/cell°C |
| | Buffer mode | 2,25 - 2,4 V/cell<br>Temperature compensation - 20 mV/cell°C |

## Terminal diagrams



Knife F2

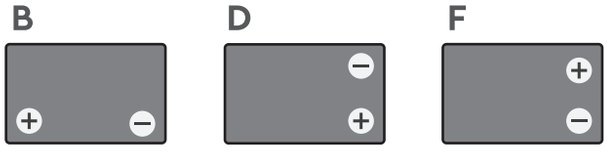


For bolt

## Battery construction

| Component | Positive plate | Negative plate | Container | Cover | Valve | Terminals | Separator | Electrolyte |
|---|---|---|---|---|---|---|---|---|
| Material | Lead dioxide | Lead | ABS | ABS | Rubber | Copper | Fiberglass | Sulfuric acid |

## Housing types




## Standard sizes

| Type | Voltage, V | Capacitance, Ah* | Length (±1), mm | Width (±1), mm | Height max (±1), mm | Weight, kg | Body | Terminal type |
|---|---|---|---|---|---|---|---|---|
| CGD1212 | 12 | 12 | 151 | 98 | 95 | 3,9 | D | Knife F2 |
| CGD1233 | 12 | 33 | 197 | 130 | 163 | 10,3 | B | For M6 bolt |
| CGD1255 | 12 | 55 | 230 | 138 | 205 | 18 | B | For M6 bolt |
| CGD12100 | 12 | 100 | 330 | 173 | 212 | 30 | B | For M8 bolt |
| CGD12200 | 12 | 200 | 522 | 238 | 223 | 62,5 | F | For M8 bolt |

*Capacitance is indicated at the 20-hour discharge.

**Capacitance is indicated at the 10-hour discharge.