

## Solar Batteries

### M-Solar Cell Construction Details

#### Positive Plate

The tubular plate construction incorporates lead alloy spines in complete contact with active material, which is retained by an outer gauntlet. This enables the electrolyte to penetrate freely, ensuring a high power output per unit volume.

#### Top up Level Indicator

Two ribs on the separator guard serve both as level indicators, and to strengthen the guard.

#### Negative plate

The negative plate is of a highly porous paste on a lead alloy grid. This complements the positive plate construction, providing a balanced performance and superior life.

#### Separators

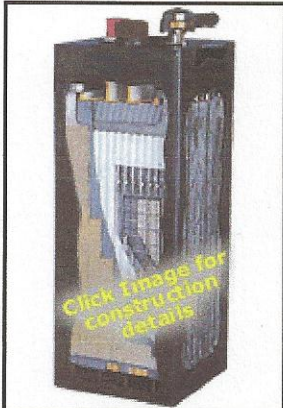
Separators are manufactured from microporous polyethylene and have a generous overlap to reduce the risk of short circuit. They are impervious to acid attack.

#### Mud Trap

Prevents possible shorting between plates due to active material shedding during the life of the cell.

#### Container and Lid

The lid is heat-sealed to the container ensuring an excellent bond. This is vital to mechanical strength and safety.



Current vs Time Curve

Cycle Life vs Depth of Discharge

### M-Solar Perfect Seal® Bolt-On Connector

#### Injection moulded connector head

The bolt-on connector facilitates easy cell replacement. Acid resistant, totally enclosed terminal post, maximum safety. Orifice for voltage readings.

#### Perfect Seal®

A polypropylene pressure bushing seated on a rubber "O" ring, locked in place by a polycarbonate ring. The cell lid is welded to the container, and polypropylene is injection moulded into the post to lid cavity. This design eliminates acid leaks through the post assembly.

#### Stainless steel bolt

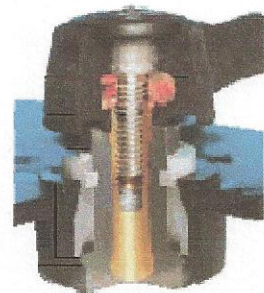
Corrosion resistant.

#### Threaded brass insert

Maximises terminal connector conductivity.

#### Santoprene® Connectors

- Made of thermoplastic rubber
- Acid resistant
- Abrasion resistant
- Fatigue resistant
- Access for easy voltage checking
- More flexible than PVC cable
- Exceptional moulding bond eliminates contamination
- Built in "O" rings
- Easy and simple to connect



[Click Image for Construction Details](#)

### M-Solar Float Level Indicator