



# MAXON®

BATTERIES

## MEVG-875

### Maxon EV Gel Cell Series



#### SPECIFICATIONS

|                                                  |                             |                                                             |
|--------------------------------------------------|-----------------------------|-------------------------------------------------------------|
| Nominal Voltage                                  | 8V                          |                                                             |
| Design Floating Life@ 25°C                       | 12 Years                    |                                                             |
| Nominal Capacity @ 25° (20 hour rate @ 9.54)     | 190Ah                       |                                                             |
| Capacity @ 25°C                                  | 10 hour rate (18.0A)        | 180Ah                                                       |
|                                                  | 5 hour rate (30.6A)         | 153Ah                                                       |
|                                                  | 3 hour rate (45.0A)         | 135Ah                                                       |
| Internal Resistance                              | Full Charged Battery @ 25°C | ≈2.4mΩ                                                      |
| Ambient Temperature                              | Discharge                   | 20° - 55°                                                   |
|                                                  | Charge                      | 20° - 55°                                                   |
|                                                  | Storage                     | 20° - 55°                                                   |
| Capacity affected by Temperature (10 hour rate ) | 40°C                        | 103%                                                        |
|                                                  | 25°C                        | 100%                                                        |
|                                                  | 0°C                         | 86%                                                         |
|                                                  | -15°C                       | 67%                                                         |
| Self-Discharge @ 25°C per Month                  | 3%                          |                                                             |
| Charge (Constant Voltage) @ 25°C                 | Standby Use                 | Initial Charging Current Less than 36.0A Voltage 9.07-9.20V |
|                                                  | Cycle Use                   | Initial Charging Current Less than 36.0A Voltage 9.4-9.6V   |



|                      |                          |                          |                      |
|----------------------|--------------------------|--------------------------|----------------------|
| <b>8V</b><br>Voltage | <b>190Ah</b><br>Capacity | <b>Gel</b><br>Technology | <b>Deep</b><br>Cycle |
|----------------------|--------------------------|--------------------------|----------------------|

Maxon EV Gel Cell Series provide superior integrity and reliability. The MEVG range are specially designed for frequent high current deep discharge.

They adopt the advance German made Envonik Sio2 GEL technology with high purity raw material, thick plate construction, special grid alloy and paste formula and high temperature curing technology.

This makes Maxon EV Gel Cell batteries an excellent choice for high performance in high load situation and robust industrial applications

#### GENERAL FEATURES

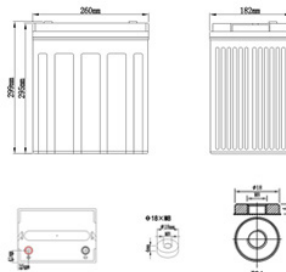
- Vibration resistant design
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Thick Plate design with advance PVC separators
- Lead Aluminium calcium Tin alloy high energy, prevent corrosion

#### DIMENSIONS & WEIGHT

|                   |      |
|-------------------|------|
| Length (mm)       | 260  |
| Width (mm)        | 182  |
| Height (mm)       | 295  |
| Total Height (mm) | 299  |
| Weight (kg)       | 34.1 |

#### APPLICATIONS

- Golf Cart
- Fork Lifts
- Floor Sweepers
- Off Grid Home Solar
- Marine
- Caravan, Camper Van and 4WD



|          |          |                                                |
|----------|----------|------------------------------------------------|
| Marine   | Solar    |                                                |
| Caravans | Mobility | CERTIFIED<br>ISO 9001<br>ISO 14001<br>PRODUCER |

#### COMPLIED STANDARDS

|                 |              |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704    |
| IEC61427        | BS6290 part4 |
| GB/T 19638      | CE/ISO       |

## BATTERY DISCHARGE TABLE

### Discharge Constant Current per Cell (Amperes at 25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h    | 1.5h | 2h   | 3h    | 5h    | 8h    | 10h   | 20h  |
|----------|------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|------|
| 6.40     | 583  | 469   | 346   | 184   | 163   | 117.1 | 91.9 | 77.3 | 50.98 | 33.84 | 23.90 | 19.61 | 9.80 |
| 6.80     | 541  | 431   | 324   | 175   | 157   | 112.3 | 88.6 | 74.2 | 48.39 | 32.34 | 22.74 | 18.78 | 9.65 |
| 7.00     | 504  | 396   | 303   | 168   | 151   | 108.1 | 85.2 | 71.5 | 45.94 | 30.90 | 21.72 | 18.00 | 9.54 |
| 7.20     | 464  | 359   | 282   | 160   | 146   | 103.4 | 81.7 | 68.7 | 43.39 | 29.46 | 20.64 | 17.21 | 9.40 |

### Discharge Constant Power per Cell (Watts at 25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h  | 1.5h | 2h  | 3h  | 5h  | 8h  | 10h | 20h  |
|----------|------|-------|-------|-------|-------|-----|------|-----|-----|-----|-----|-----|------|
| 6.40     | 3963 | 3011  | 2254  | 1525  | 1120  | 966 | 714  | 533 | 396 | 256 | 195 | 157 | 83.9 |
| 6.80     | 3750 | 2866  | 2152  | 1472  | 1085  | 937 | 690  | 514 | 383 | 247 | 189 | 152 | 81.4 |
| 7.00     | 3559 | 2732  | 2057  | 1422  | 1052  | 910 | 666  | 498 | 371 | 240 | 184 | 148 | 79.6 |
| 7.20     | 3354 | 2590  | 1958  | 1372  | 1018  | 881 | 642  | 481 | 358 | 231 | 178 | 144 | 77.1 |

**Note:** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

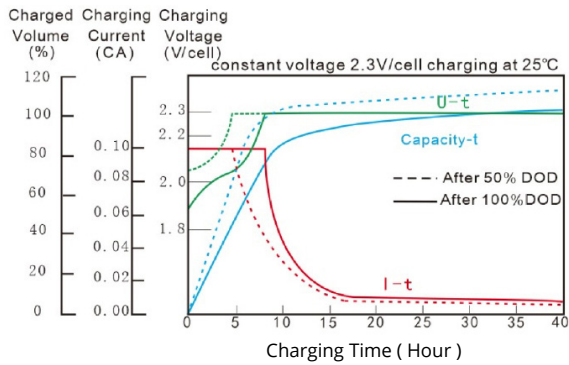
## BENEFITS

- ✓ High performance Gel
- ✓ Designed for deeper discharge
- ✓ Maintenance free , fully sealed
- ✓ Impact & fire-resistant ABS case
- ✓ Up to 2 years warranty
- ✓ Resistant to heavy vibrations
- ✓ Relief valve with flame integrated arrestors
- ✓ Low self-discharge
- ✓ Excellent for energy storage
- ✓ Excellent for Mobility applications
- ✓ Recyclable
- ✓ Green Energy

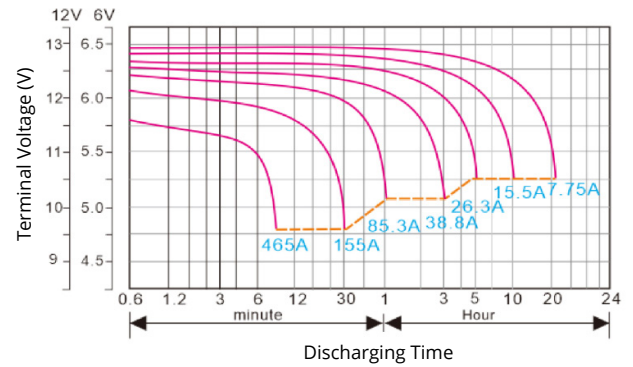


## PERFORMANCE CHARACTERISTICS

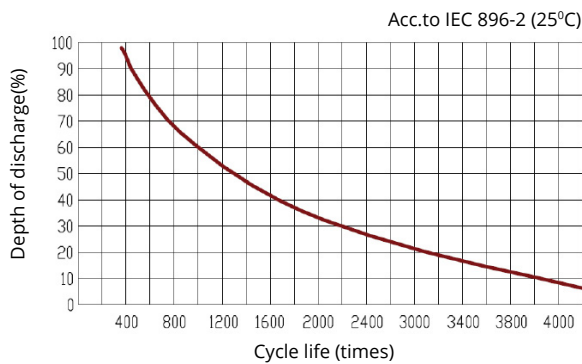
### Charge Characteristics (25°C/77°F)



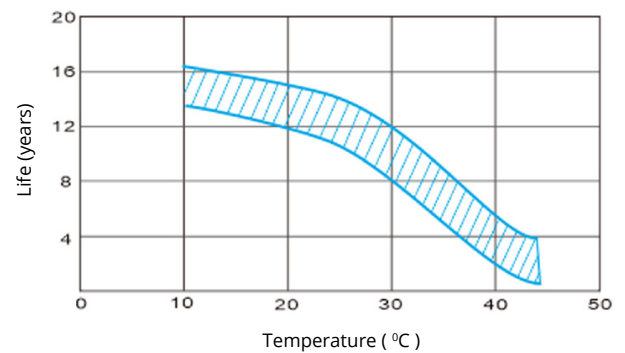
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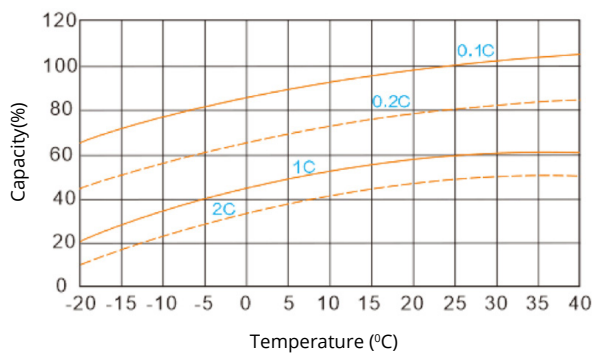
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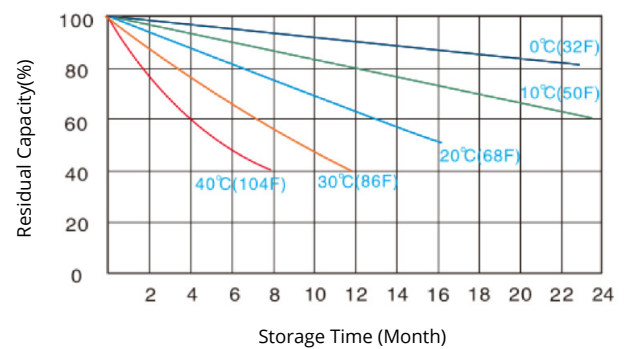
### Temperature vs Float Life



### Capacity Curve At Different Temperature



### Self Discharge Characteristics



## BATTERY CONSTRUCTION

| Component | Positive plate                               | Negative plate                                            | Container & Cover             | Safety valve                         | Terminal                | Separator               | Electrolyte                     | Pillar seal                 |
|-----------|----------------------------------------------|-----------------------------------------------------------|-------------------------------|--------------------------------------|-------------------------|-------------------------|---------------------------------|-----------------------------|
| Features  | Thick high Sn low Ca grid with special paste | Balanced Pb-Ca grid for improved recombination efficiency | Fire resistance ABS (UL94-V0) | Flame Si-Rubber and aging resistance | Female Copper Insert M8 | Advanced PVC separators | Silicon Gel import from Germany | Two layers epoxy resin seal |