



MAXON[®]
BATTERIES

MX12-7.0

Sealed Lead Acid Battery

SPECIFICATIONS

| | | |
|---|-----------------------------|---|
| Nominal Voltage | 12V (6 cells per unit) | |
| Design Floating Life @ 25°C | 5 Years | |
| Nominal Capacity @ 25°C (20 hour rate @ 0.35A, 10.8V) | 7Ah | |
| Capacity @ 25°C | 10 hour rate (0.67A, 10.8V) | 6.7Ah |
| | 5 hour rate (1.25A, 10.5V) | 6.25Ah |
| | 1 hour rate (4.62A, 9.6V) | 4.62Ah |
| Internal Resistance | Full Charged Battery @ 25°C | ≤22mΩ |
| Ambient Temperature | Discharge | -15°C~45°C |
| | Charge | -15°C~45°C |
| | Storage | -15°C~45°C |
| Max.Discharge Current @ 25°C | 42A (5s) | |
| Capacity affected by Temperature (10 hour rate) | 40°C | 105% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-Discharge @ 25°C per Month | 3% | |
| Charge (Constant Voltage) @ 25°C | Standby Use | Initial Charging Current Less than 2.1A Voltage 13.6-13.8V |
| | Cycle Use | Initial Charging Current Less than 2.1A Voltage 14.4 -14.9V |



12V
Voltage

7Ah
Capacity

AGM
Technology

Deep
Cycle

MAXON MX Series sealed maintenance free lead batteries are designed with AGM technology, high performance pure lead plates and sulfuric acid electrolyte to gain extra power output for common power backup system applications widely used in the fields of UPS, Security and Emergency lighting system.

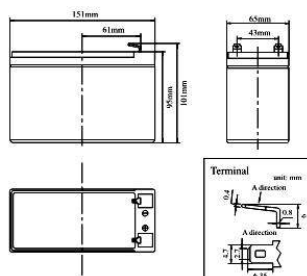
They are sealed and free maintenance whole life, valve regulated type standby AGM battery, also named by VRLA battery, SLA battery, and SMF battery.

GENERAL FEATURES

- Non-spillable construction design
- Long life span 5-8 years in floating condition
- High quality AGM separator: Extend cycle life and prevents micro short circuit
- 99.99% pure lead plates ensure high quality and high reliability.
- Flame-resistance ABS material: Increases the strength of battery container.

DIMENSIONS & WEIGHT

| | |
|-------------------|------|
| Length (mm) | 151 |
| Width (mm) | 65 |
| Height (mm) | 94 |
| Total Height (mm) | 100 |
| Weight (kg) | 2.05 |



APPLICATIONS

- Fire & Security
- UPS systems & Inverter
- Alarm & Portable lights
- Power tools & Toys
- Emergency Power Systems



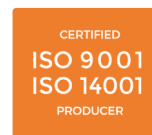
Solar



UPS



Standby



CERTIFIED
ISO 9001
ISO 14001
PRODUCER



nbn
Replacement

COMPLIED STANDARDS

IEC 60896-21/22
IEC61427
GB/T 19638

JIS C8704
BS6290 part4
CE/ISO

BATTERY DISCHARGE TABLE

Constant Current Discharge Data Sheet (Amperes at 25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 1.5h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|
| 10.20V | 26.3 | 17.1 | 13.4 | 6.84 | 4.96 | 4.24 | 3.38 | 2.52 | 1.90 | 1.22 | 0.820 | 0.672 | 0.360 |
| 10.50V | 26.1 | 16.9 | 13.3 | 6.78 | 4.91 | 4.21 | 3.32 | 2.43 | 1.84 | 1.19 | 0.810 | 0.666 | 0.356 |
| 10.80V | 25.8 | 16.7 | 13.1 | 6.71 | 4.86 | 4.18 | 3.26 | 2.33 | 1.78 | 1.17 | 0.800 | 0.659 | 0.351 |

Constant Power Discharge Data Sheet (Watt at 25°C)

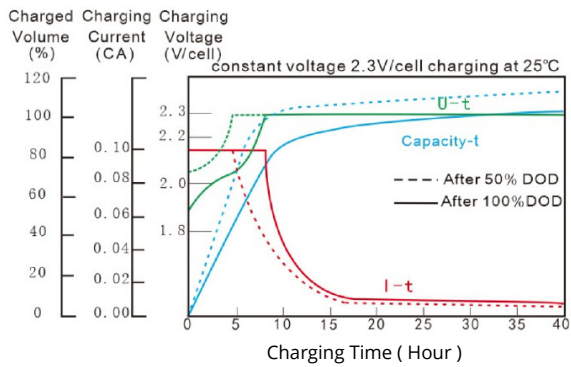
| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 1.5h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 10.20V | 282 | 203.4 | 164.7 | 93.00 | 67.80 | 51.58 | 39.56 | 29.76 | 21.24 | 14.00 | 9.86 | 7.98 | 4.30 |
| 10.50V | 270 | 196.7 | 159.8 | 91.08 | 66.24 | 50.76 | 38.98 | 29.34 | 20.76 | 13.84 | 9.78 | 7.86 | 4.24 |
| 10.80V | 256 | 189.4 | 154.6 | 88.44 | 64.56 | 49.92 | 38.40 | 28.92 | 20.40 | 13.68 | 9.68 | 7.73 | 4.18 |

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.

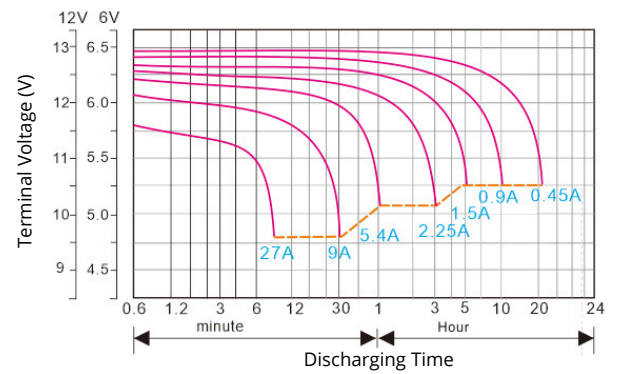


PERFORMANCE CHARACTERISTICS

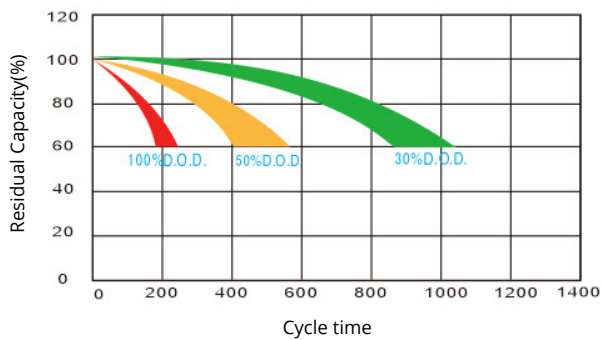
Charge Characteristics (25°C/77°F)



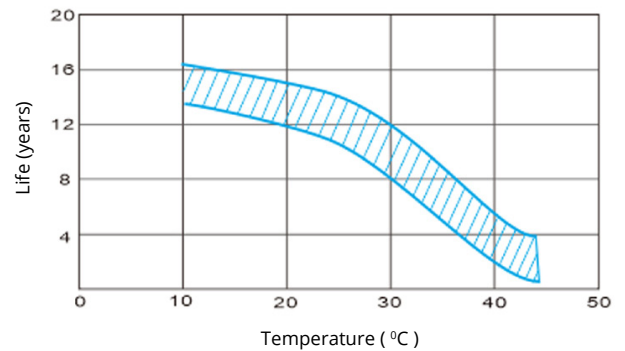
Discharge Characteristic (25°C/77°F)



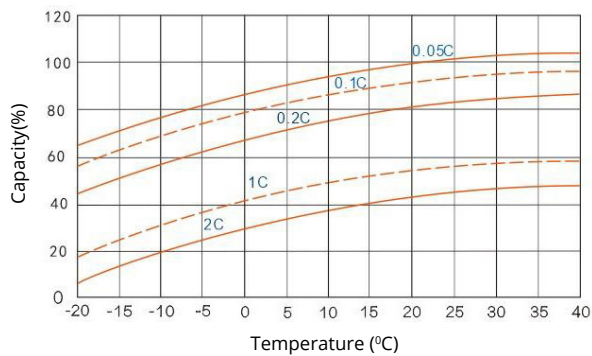
Cycle Life in Relation to Depth of Discharge



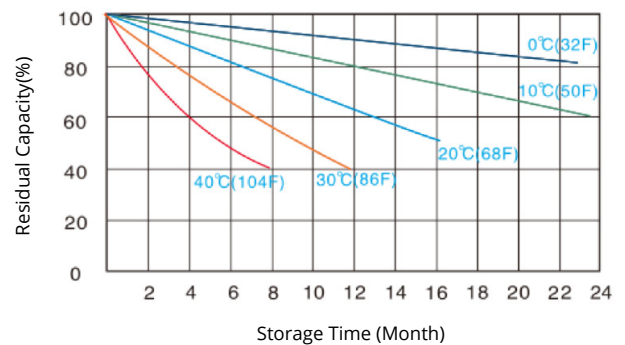
Temperature vs Float Life



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 | ABS (UL94-V0) | Flame Si-Rubber and aging resistance | F1/F2 | Advanced AGM separator for high pressure cell design | Dilute high purity sulfuric acid | Two layers epoxy resin seal |