



SMCRTRONICS

MH61491

12-100H

12V 100Ah

Valve Regulated Lead Acid Battery / AGM Technology

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

10 hr rate	(10A to 1.8V/cell,25°C (77°F))	100.0AH
5 hr rate	(17A to 1.70V/cell,25°C (77°F))	85AH
1 hr rate	(60A to 1.60V/cell,25°C (77°F))	60AH

Weight Approx. 31.3 kg (68.9lbs)

Internal Resistance Approx. 4mΩ

Maximum Discharge Current 1200A (5sec)

Charging Methods at 25°C (77°F)

Cycle use:

Initial Charging Current less than	30A
Charging Voltage	14.4V~15.0
Coefficient	-30mV/°C

Standby use:

No limit on Initial Charging Current Voltage	
Charging Voltage	13.5V~13.8V
Coefficient	-20.0mV/°C

Operating Temperature Range

Charge	-15~40°C (5~104°F)
Discharge	-15~50°C (5~122°F)
Storage	-15~40°C (5~104°F)
Case Material	ABS UL94 HB
Terminal	F18

Description of torque value of hard ware for the terminals

Recommended torque value	M8: 12 N-m (122kgf-cm)
Maximum allowable torque value	M8: 15 N-m (153kgf-cm)

Self-Discharge

This series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



P# 12-100H 208

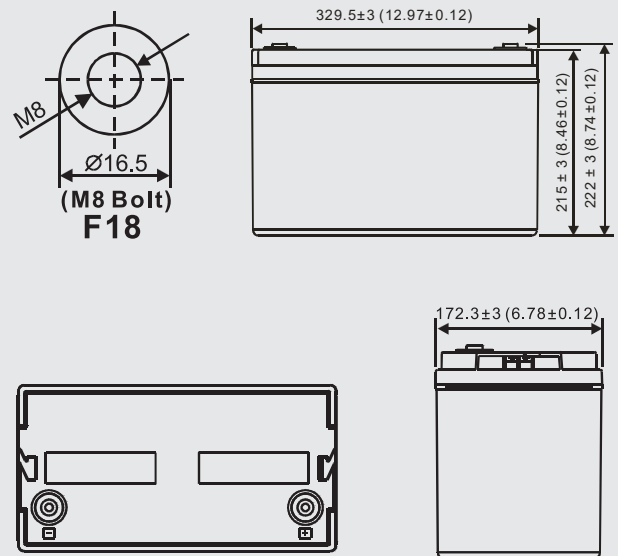
*H: High performance series

For: Backup Power i.e. UPS, ...

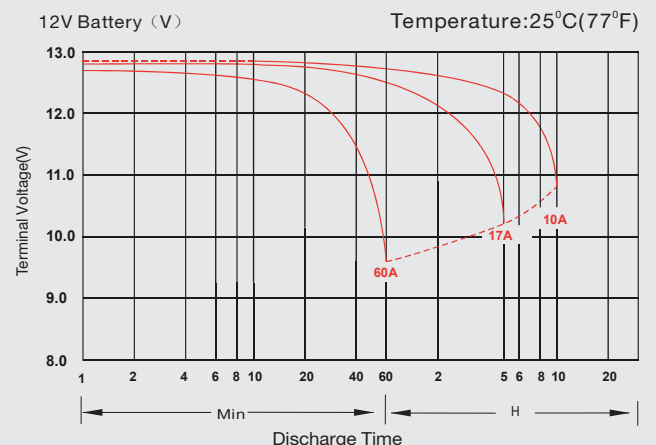
Design life:

10-12 years (Ambient Temperature 20°C)

Dimensions



Discharge Characteristics



Constant Current Discharge (Amperes) at 25 °C (77°F)

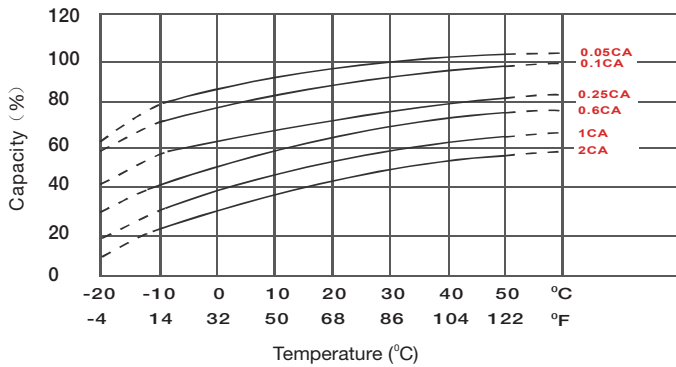
F.V (V/cell)	Time	10min	15min	30min	60min	3h	5h	10h	20h
1.85		176	151	107	59.1	27.3	16.9	9.40	5.05
1.80		199	168	114	64.3	28.1	18.1	10.2	5.16
1.75		221	182	120	68.0	28.6	18.5	10.3	5.22
1.70		238	194	121	70.4	29.5	18.7	10.4	5.43
1.65		249	202	122	71.6	29.7	19.1	10.5	5.49
1.60		263	212	123	73.5	30.1	19.2	10.6	5.54

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

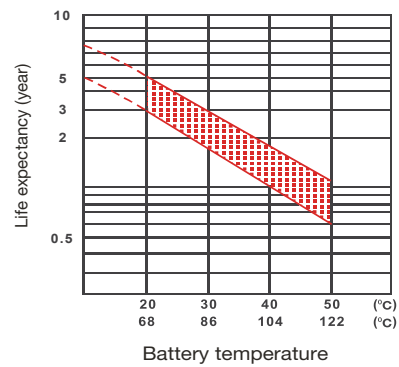
F.V (V/cell)	Time	10min	15min	30min	60min	3h	5h	10h	20h
1.85		342	285	207	123	49.9	33.4	18.8	9.75
1.80		370	315	222	132	53.2	35.5	19.2	9.9
1.75		397	345	230	140	55.2	37.3	19.3	10.1
1.70		414	358	234	141	55.6	37.7	19.7	10.4
1.65		433	373	235	143	56.7	38.0	20.0	10.5
1.60		465	383	238	145	58.2	38.3	20.2	10.6

Specifications subject to change without notice.

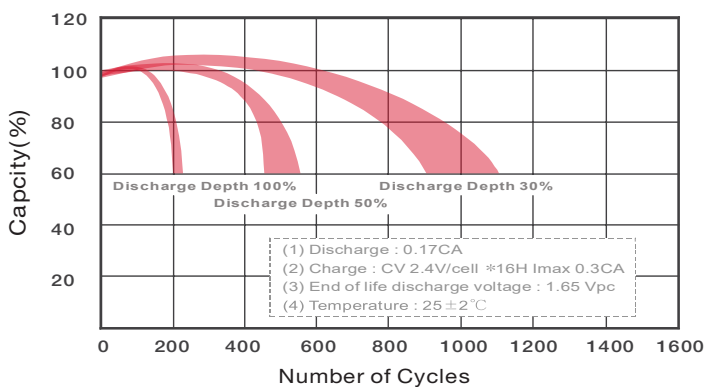
Temperature Effects in Relation to Battery Capacity



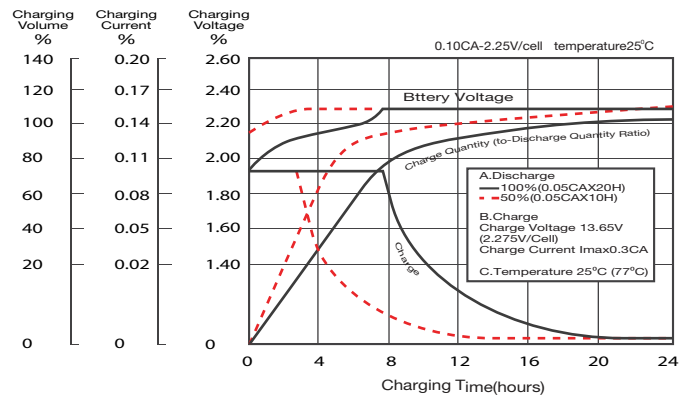
Effect of Temperature on Long Term Float Life



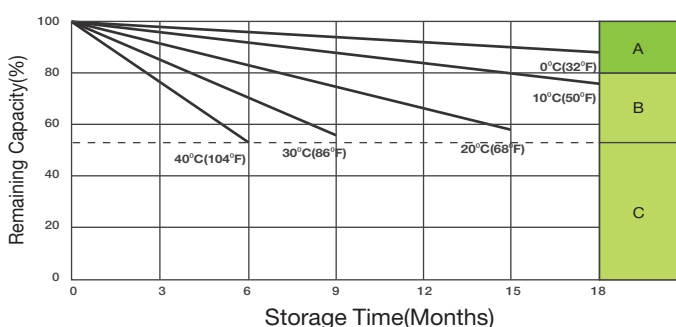
Cycle Life in Relation to Depth of Discharge



Float Charging Characteristics



Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.