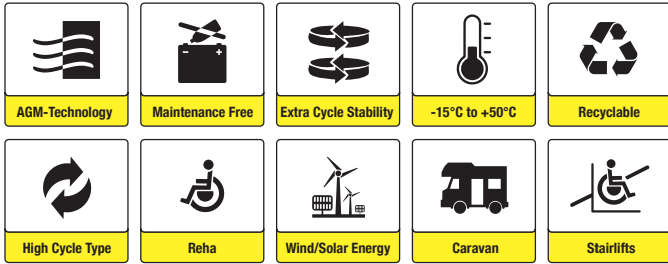




⊕⊖ **sunbattery**®

# HC12-100 M8 (12V100Ah)



## Applications

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys
- Portable apparatus, lights and instruments
- Electric toys
- Portable power
- Wheelchairs
- Medical equipments
- Wind/Solar energy
- Electric boats
- Caravan



## Certificates



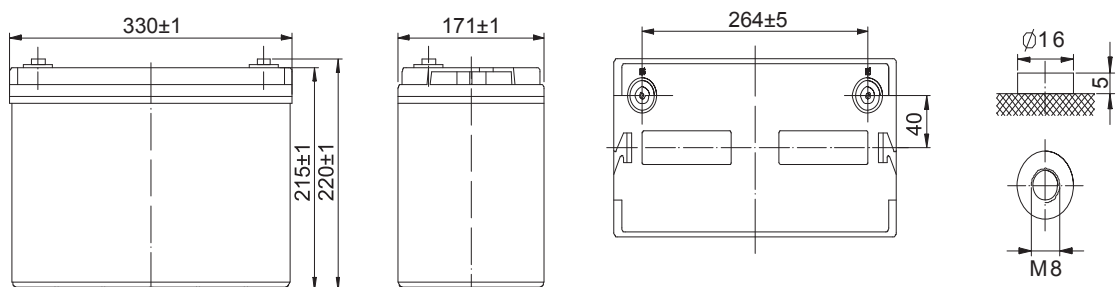
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	108.6Ah (C <sub>20</sub> , 1.75V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 30.0A. Voltage 14.55V +-1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	32kg	<b>Standby Use</b>	Initial Charging Current less than 30.0A. Voltage 13.65V +-1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M8	<b>Capacity affected by Temp.</b>	40°C            103% 25°C            100% 0°C              86%
<b>Container Material</b>	ABS UL94 HB	<b>Self Discharge</b>	HC batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Rated Capacity (25°C)</b>	108.6Ah/5.43A, 20hr, 1.75V/cell 107.0Ah/10.7A, 10hr, 1.75V/cell 87.5Ah/17.5A, 5hr, 1.75V/cell 85.8Ah/28.6A, 3hr, 1.60V/cell 65.7Ah/65.7A, 1hr, 1.60V/cell	<b>Cycle Life</b>	Approx. 650 Cycles at 50% DOD
<b>Max. Discharge Current</b>	900A (5s)		
<b>Internal Resistance</b>	Approx. 5.0mΩ		
<b>Operating Temp. Range</b>	Discharge:        -15~50°C Charge:            0-40°C Storage:           -15~40°C		

## Dimensions

### ■ M8 Terminal

Unit: mm [inches]





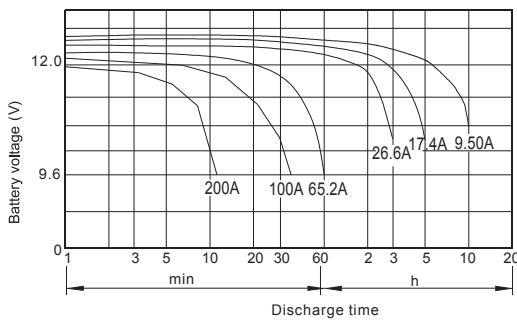
### Constant Current Discharge (Amperes) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	284	257	197	102.3	65.7	28.6	18.7	11.4	5.74
1.65V/cell	367	243	189	97.5	63.8	27.7	18.5	11.3	5.64
1.70V/cell	345	226	179	91.9	61.3	26.6	18.0	10.9	5.55
1.75V/cell	314	209	164	84.7	57.2	25.0	17.5	10.7	5.43
1.80V/cell	276	188	145	74.9	51.5	23.5	16.7	10.6	5.35

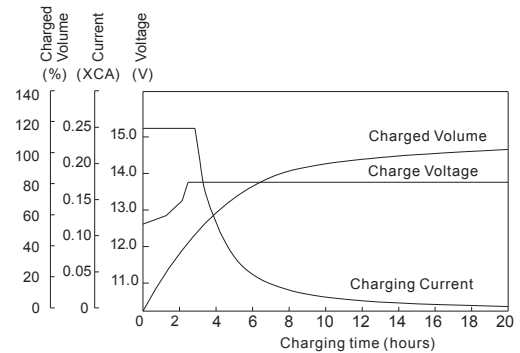
### Constant Power Discharge (Watts/cell) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	664.82	473.50	364.33	203.50	131.00	57.12	37.83	23.32	11.82
1.65V/cell	632.80	451.83	349.18	196.50	129.01	55.83	37.18	23.02	11.62
1.70V/cell	599.62	428.66	332.83	188.50	126.50	54.50	36.50	22.33	11.43
1.75V/cell	564.50	428.66	314.83	180.02	126.17	52.79	35.52	21.51	11.25
1.80V/cell	527.50	426.67	296.00	171.00	120.52	50.83	34.02	20.50	11.08

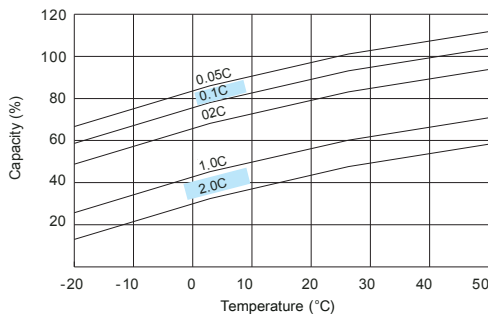
### Discharge Characteristics (25°C)



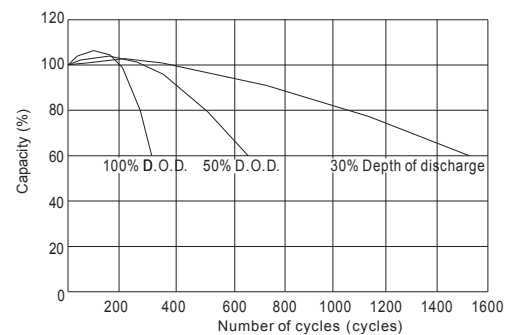
### Float Charging Characteristics (25°C)



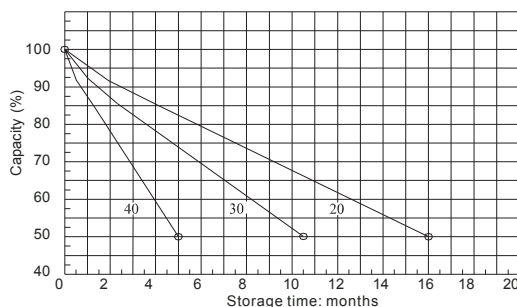
### Temperature Effects in Relation to Battery Capacity



### Cycle Service Life in Relation to Depth of Discharge



### Self Discharge Characteristics



### Temperature Effects on Float Life

