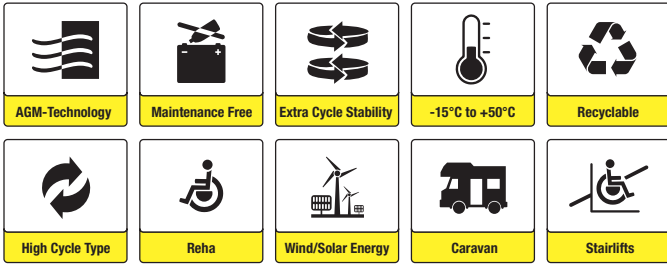




⊕⊖ **sunbattery**<sup>®</sup>

# HC12-80 M6 (12V80Ah)



## 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



Conform to IEC60896-21&22

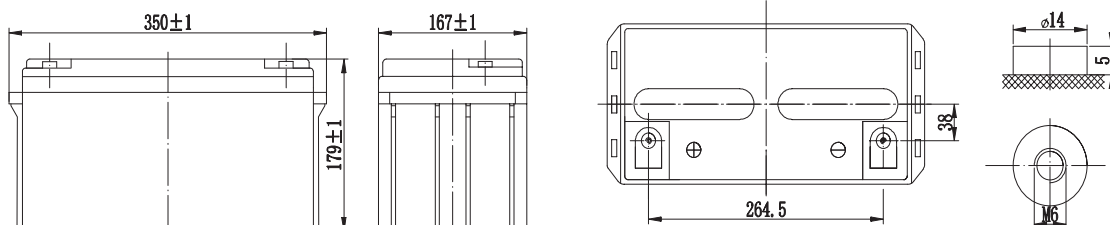
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	85Ah (C <sub>20</sub> , 1.75V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 24.0A. Voltage 14.4V~14.7V at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	22.5kg	<b>Standby Use</b>	Initial Charging Current less than 24.0A. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M6	<b>Capacity affected by Temp.</b>	40°C            103% 25°C            100% 0°C              86%
<b>Container Material</b>	ABS UL94 HB (Optional: V0)	<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>	85.0Ah/4.25A, 20hr, 1.75V/cell 80.0Ah/8.0A, 10hr, 1.80V/cell 70.5Ah/14.1A, 5hr, 1.75V/cell 66.9Ah/22.3A, 3hr, 1.60V/cell 50.8Ah/50.8A, 1hr, 1.60V/cell	<b>Cycle Life</b>	Approx. 650 Cycles at 50% DOD
<b>Max. Discharge Current</b>	750A (5s)		
<b>Internal Resistance</b>	Approx. 5.5mΩ		
<b>Operating Temp. Range</b>	Discharge:        -15~50°C Charge:            0-40°C Storage:           -15~40°C		

## Dimensions

### ■ M6 Terminal

Unit: mm [inches]





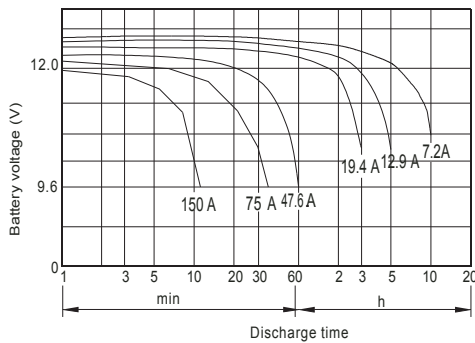
### Constant Current Discharge (Amperes) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	256	195	149	88.1	50.8	22.3	14.7	8.37	4.45
1.65V/cell	241	185	143	85.4	49.9	21.9	14.5	8.28	4.37
1.70V/cell	224	174	138	82.6	49.3	21.5	14.2	8.20	4.30
1.75V/cell	211	165	131	80.0	48.6	21.0	14.1	8.14	4.25
1.80V/cell	197	155	123	77.2	47.8	20.5	13.9	8.0	4.19

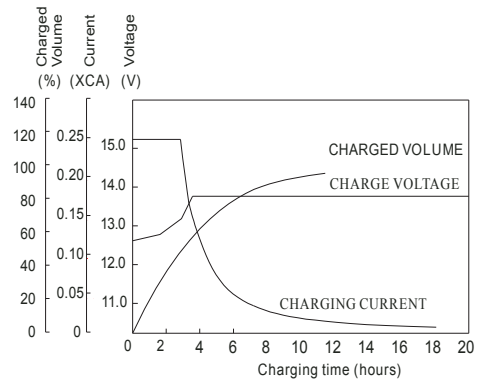
### Constant Power Discharge (Watts/cell) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	446	333	283	161	104	43.0	29.3	18.58	10.27
1.65V/cell	423	321	269	159	102	40.5	28.9	18.50	10.15
1.70V/cell	401	309	255	156	99.5	39.0	28.5	18.42	10.04
1.75V/cell	379	296	240	155	97.5	38.5	28.0	18.18	9.81
1.80V/cell	359	285	225	151	95.5	37.4	27.3	17.52	9.37

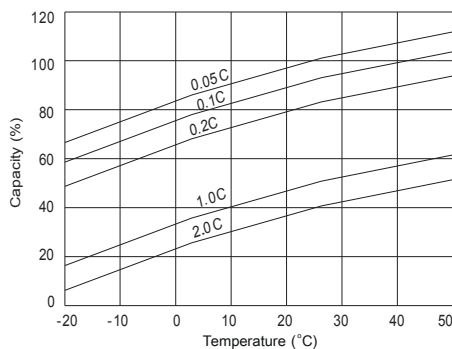
### Discharge Characteristics



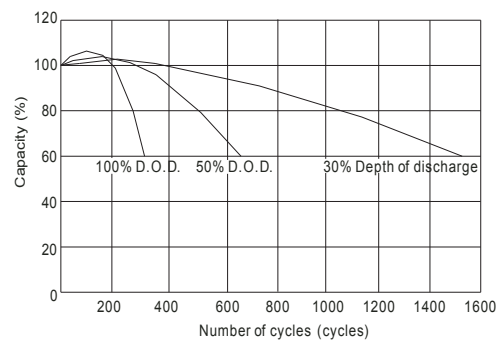
### Float Charging Characteristics



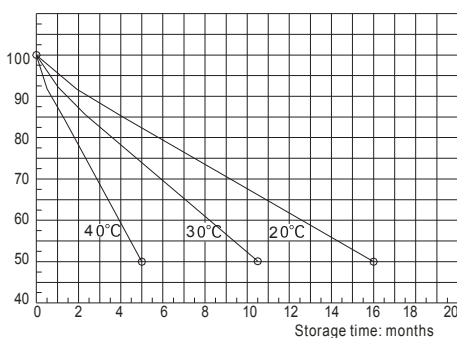
### Temperature Effects in Relation to Battery Capacity



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



### Self Discharge Characteristics



### Temperature Effects on Float Life

