



# DEEP CYCLE/HIGH CYCLIC AGM SERIES

**HDC150-12**

## SPECIFICATION

Nominal Voltage	12V		
Nominal Capacity(10HR)	150.0AH		
Dimensions	Length:	335 ± 3mm (13.19 inches)	
	Width:	172 ± 3mm (6.77 inches)	
	Container Height:	275 ± 3mm (10.83 inches)	
	Total Height:	278 ± 3mm (10.94 inches)	
Approx. Weight	42.4 Kg (93.4lbs) ± 4%		
Terminal	M8 (T11)		
Terminal Material	Copper		
Rated Capacity	160.8 AH/8.04A	(20hr, 1.80V/cell, 25°C/77°F)	
	150.0 AH/15.0A	(10hr, 1.80V/cell, 25°C/77°F)	
	131.6 AH/26.3A	(5hr, 1.75V/cell, 25°C/77°F)	
Max. Discharge Current	1500A (5s)		
Internal Resistance	Approx 3.8mΩ		
Operating Temp. Range	Discharge:	-15~50°C (5~122°F)	
	Charge:	0~40°C (32~104°F)	
	Storage:	-15~40°C (5~104°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)		
Cycle Use	Initial Charging Current less than 45.0A.Voltage		
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C		
Standby Use	No limit on Initial Charging Current Voltage		
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C		
Capacity Affected by Temperature	40°C (104° F) - 103%		0°C ( 32° F ) - 86%
Self-Discharge	SECUK HDC 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.		



## APPLICATION

- + Electric tools
- + Vehicle in place of walking
- + Lawn mowers
- + Golf trolleys and golf cart
- + Portable apparatus, lights and instruments;
- + Electric toys
- + Illumination light
- + Fire alarms
- + Portable power
- + Wheelchairs
- + Medical equipments.

## FEATURES

- + Lead calcium grids for extended life
- + Absorbent glass mat technology
- + Recognized by UL & CE
- + ABS container

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	219.6	184.8	161.5	116.2	92.3	74.9	46.5	36.3	29.4	23.9	20.8	17.0	14.2	7.97
1.80V/cell	280.6	223.3	190.9	137.1	107.3	83.9	50.8	39.0	31.4	25.6	22.3	18.0	15.0	8.04
1.75V/cell	308.3	243.9	205.3	142.3	111.4	87.8	52.7	39.8	32.1	26.3	23.0	18.3	15.2	8.12
1.70V/cell	336.1	260.4	215.8	148.2	115.8	90.5	54.8	40.9	32.9	27.0	23.4	18.6	15.3	8.27
1.65V/cell	362.7	276.9	229.2	156.3	118.7	93.6	56.3	42.6	34.1	27.7	23.9	18.9	15.6	8.37
1.60V/cell	393.8	296.1	244.2	165.0	123.8	96.9	58.2	43.9	35.1	28.6	24.5	19.1	15.8	8.42

## Constant Power Discharge Characteristics (Watt/Cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	409.8	348.4	307.7	223.3	178.5	145.4	90.7	70.9	57.5	46.9	41.1	33.6	28.0	15.9
1.80V/cell	516.6	414.7	358.2	260.3	205.9	161.9	98.3	75.9	61.1	50.2	44.0	35.6	29.7	16.1
1.75V/cell	560.6	448.6	382.2	268.9	212.7	168.7	101.7	77.1	62.4	51.4	45.1	36.2	30.0	16.2
1.70V/cell	602.5	475.4	399.4	278.8	220.6	173.6	105.5	79.0	63.9	52.6	46.0	36.7	30.2	16.5
1.65V/cell	645.6	502.2	422.3	292.8	225.2	178.8	108.1	82.2	65.9	54.0	46.9	37.2	30.8	16.7
1.60V/cell	689.0	530.7	445.2	306.0	232.6	183.7	111.1	84.3	67.7	55.5	47.8	37.5	31.1	16.8

The above characteristics data can be obtained within three charge/discharge cycles.



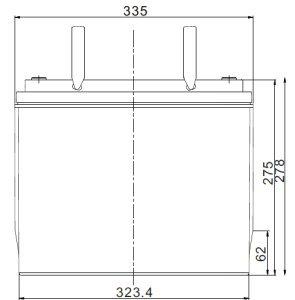
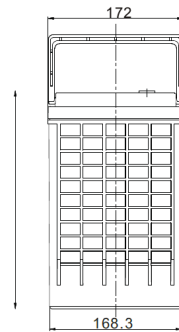
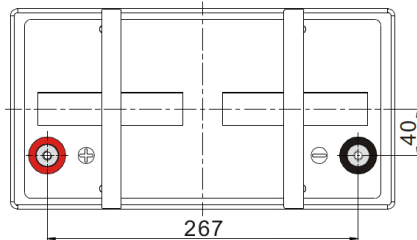
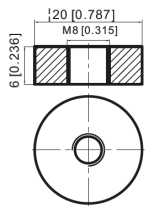
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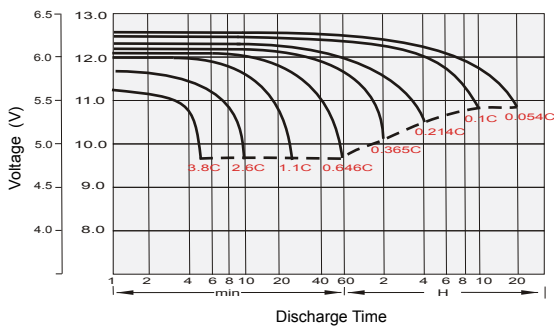
## Dimensions

### T11 Terminal

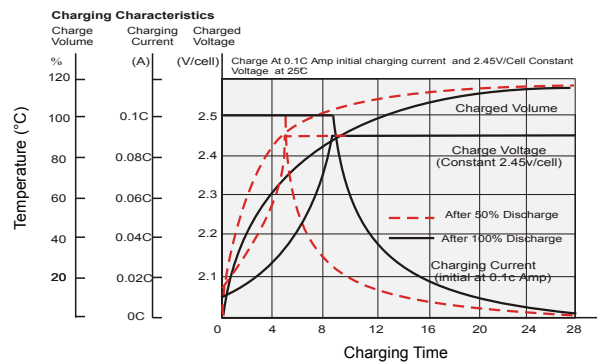
Unit: mm [inches]



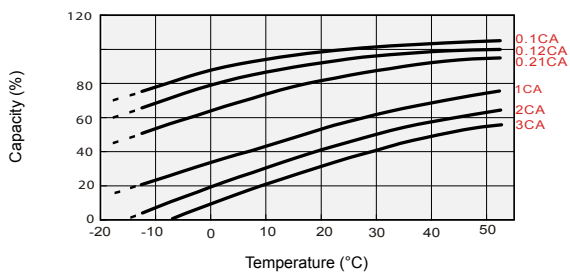
## Discharge Characteristics



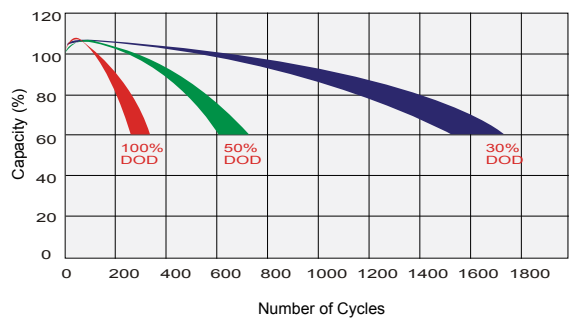
## Charging Characteristics (cycle use)



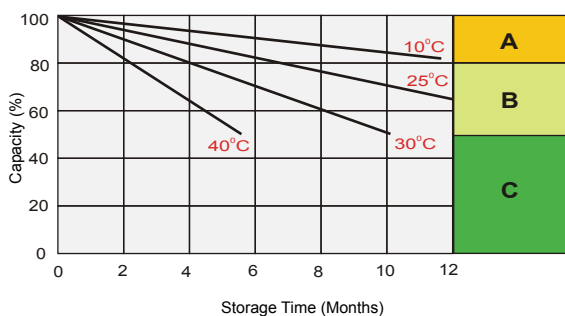
## Temperature Effects in Relation to Battery Capacity



## Cycle Life in Relation to Depth of Discharge



## 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.