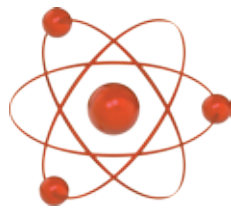


# FUSION

## AGM BATTERIES



## CBC SERIES - Deep Cycle

# CBC12V50AH

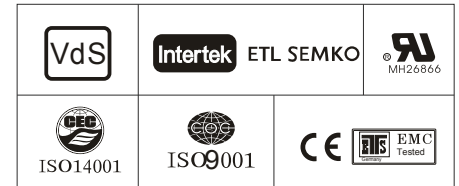
### Specifications

Nominal Voltage	12V	
Nominal Capacity (20HR)	50.0AH	
Dimensions	Length	257+/-3mm
	Width	132+/-2mm
	Container Height	200+/-2mm
	Total Height (with Terminal)	200+/-2mm
Approx Weight	Approx 17.6 kg	
Terminal	T6	
Container Material	ABS	
Rated Capacity	53.6 AH/2.68A	(20hr, 1.80V/cell, 25°C)
	50.0 AH/5.50A	(10hr, 1.80V/cell, 25°C)
	43.9AH/8.77A	(5hr, 1.75V/cell, 25°C)
	39.8 AH/13.3A	(3hr, 1.75V/cell, 25°C)
	32.3 AH/32.3A	(1hr, 1.60V/cell, 25°C)
Max. Discharge Current	600A (5s)	
Internal Resistance	Approx 8.0m Ω	
Operating Temp. Range	Discharge :	-15~50°C
	Charge :	0~40°C
	Storage :	-15~40°C
Nominal Operating Temp. Range	25° +/-3°C	
Cycle Use	Initial Charging current less than 15.0A. Voltage 14.4V~15.0.5 V at 25°C Temp Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C	
Capacity Affected by Temperature	40°C	103%
	25°C	100%
	0°C	86%
Self Discharge	Fusion CBC Series 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.	



### Applications

- ◆ 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.



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

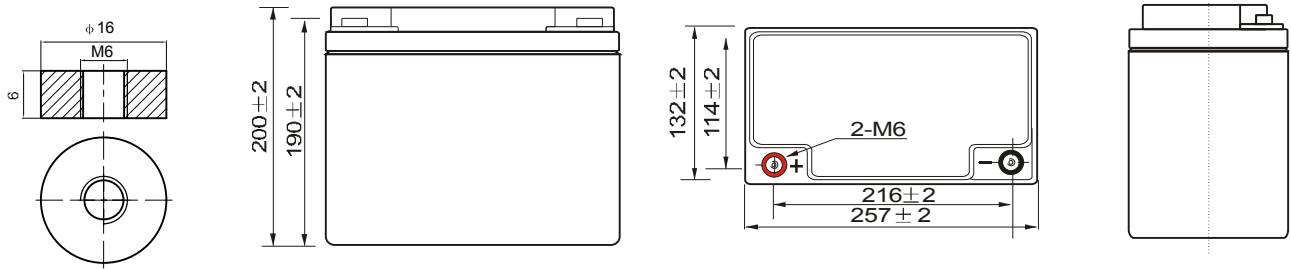
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	73.2	61.6	53.8	38.7	30.8	25.0	15.5	12.1	9.80	7.96	6.95	5.76	4.72	2.66
1.80V/cell	93.5	74.4	63.6	45.7	35.8	28.0	16.9	13.01	10.5	8.55	7.45	6.01	5.00	2.68
1.75V/cell	102.8	81.3	68.4	47.4	37.1	29.3	17.6	13.3	10.7	8.77	7.65	6.11	5.05	2.71
1.70V/cell	112.0	86.8	71.9	49.4	38.6	30.2	18.3	13.6	11.0	8.99	7.81	6.20	5.10	2.76
1.65V/cell	120.9	92.3	76.4	52.1	39.6	31.2	18.8	14.2	11.4	9.20	7.98	6.30	5.21	2.79
1.60V/cell	131.3	98.7	81.4	55.0	41.3	32.3	19.4	14.6	11.7	9.50	8.16	6.36	5.26	2.81

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

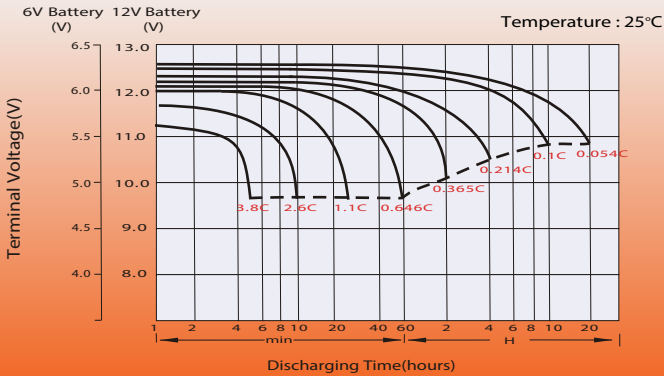
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	136.6	116.1	102.6	74.4	59.5	48.5	30.2	23.6	19.2	15.6	13.7	11.2	9.3	5.31
1.80V/cell	172.2	138.2	119.4	86.8	68.6	54.0	32.8	25.3	20.4	16.7	14.7	11.9	9.9	5.35
1.75V/cell	186.9	149.5	127.4	89.6	70.9	56.2	33.9	25.7	20.8	17.1	15.0	12.1	10.0	5.40
1.70V/cell	200.8	158.5	133.1	92.9	73.5	57.9	35.2	26.3	21.3	17.5	15.3	12.2	10.1	5.49
1.65V/cell	215.2	167.4	140.8	97.6	75.1	59.6	36.0	27.4	22.0	18.0	15.6	12.4	10.3	5.56
1.60V/cell	229.7	176.9	148.4	102.0	77.5	61.2	37.0	28.1	22.6	18.5	15.9	12.5	10.4	5.58

# Dimensions

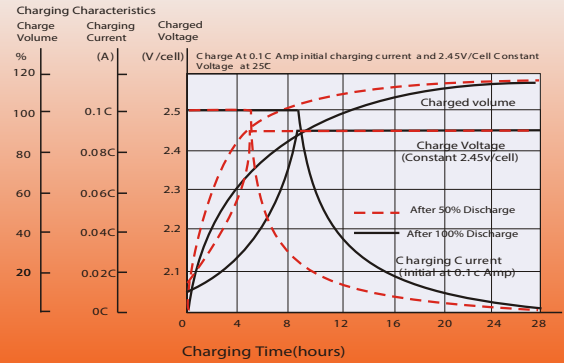
## T6 Terminal



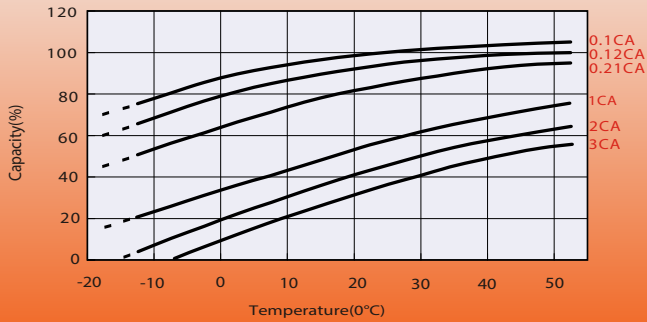
## Discharge Characteristics



## Charging Characteristics (cycle use)

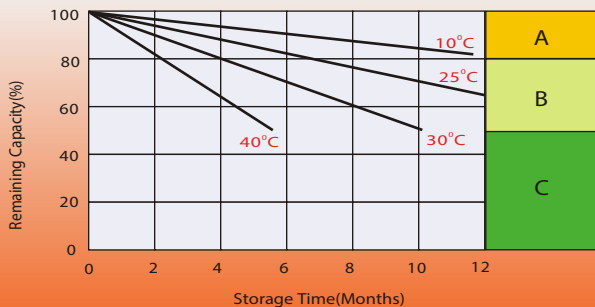
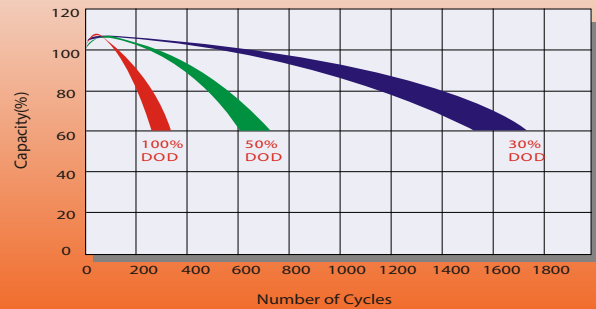


## Temperature Effects in Relation to Battery Capacity



## Cycle Life in Relation to Depth of Discharge

Testing condition  
 Discharging : current 0.17 C A ( FV 1.7 V / cell);  
 Charging : current 0.25 C max , voltage 2.45 V /cell;  
 Charging volume: 125% of discharged capacity.



- A** No supplementary charge required  
 (Carry out supplementary charge before use if 100% capacity is required.)  
 Supplementary charge required before use.  
 Optional charging way as below:
- B** 1.Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.  
 2.Charged for above 20hours at limited current 0.25CA and constant volatge 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.

## Head Office

Unit 30  
 76 Hume Highway  
 LANSVALE NSW 2166  
 Tel: (02) 9755 7851 Fax: (02) 9755 7852  
 www.fusionagmbatteries.com.au

