

CBL500-2

2V 500AH

General Purpose Sealed Lead Acid Battery



CBL500-2



Physical Specification

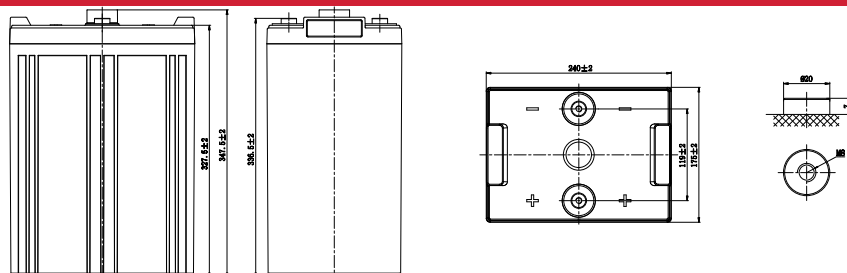
Part Number:	CBL500-2
Length:	240 ± 2 mm (9.45 inches)
Width:	175 ± 2 mm (6.89 inches)
Container Height:	327.5± 2 mm (12.9 inches)
Total Height (with terminal):	347.5± 2 mm (13.7 inches)
Approx Weight:	29.0 Kg (63.9 lbs)

Specifications

	Nominal Voltage	2V	
	(C10 ,1.75V/cell)	500AH	
Terminal Option	M8		
Container Material	Standard Option	ABS	
	Flame Retardant Option (FR)	ABS (UL94:VO)	
Rated Capacity	(20hr,26.2A,1.80V/cell)	524.0 Ah	
	(10hr,50.0A,1.80V/cell)	500.0 Ah	
	(5hr,86.6A,1.75V/cell)	433.0 Ah	
	(3hr,128.7A,1.75V/cell)	386.1 Ah	
	(1hr,311.5A,1.60V/cell)	311.5Ah	
Max Discharge Current (5s)	4000A		
Internal Resistance	Approx. 0.55mΩ		
Discharge Characteristics	Operating Temp. Range	Discharge: -15°C~50°C (5°F~122°F)	
		Charge: 0°C~40°C (32°F~104°F)	
		Storage: -15°C~40°C (5°F~104°F)	
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
	Cycle Use	Initial Charging Current less than 150.0A. Voltage 2.40V~2.50V at 25°C (77°F) Temp. Coefficient -5mV/°C	
	Self Discharge	Initial Charging Current less than 150.0A. Voltage 2.25V~2.30V at 25°C (77°F) Temp. Coefficient -3mV/°C	
	Capacity affected by Temperature	40°C (104°F)	103%
		25°C (77°F)	100%
0°C (32°F)		86%	
Design Floating Life at 20°C	20+ Years		
Self Discharge	Canbat Lead Acid AGM batteries may be stored for up to 6 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2%		

Dimensions

M8 Terminal



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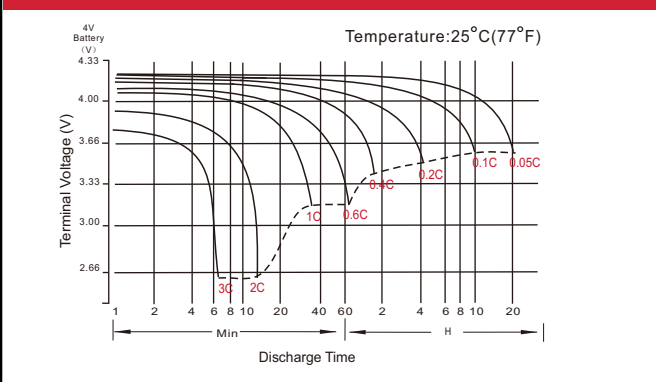
Constant Current Discharge (Amperes) at 25 °C (77 °F)

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	353.4	279.4	244.5	188.0	152.3	115.9	93.2	78.6	68.3	55.5	46.4	24.9
1.80V/cell	399.5	312.4	270.6	205.7	165.7	125.4	100.4	84.7	73.2	59.4	50.0	26.2
1.75V/cell	417.5	325.1	280.6	212.6	170.8	128.7	103.0	86.6	74.7	60.5	50.3	26.6
1.70V/cell	445.9	337.4	290.9	219.8	176.2	132.5	105.6	88.6	76.4	61.6	51.1	26.9
1.67V/cell	476.7	345.0	297.0	223.8	179.2	134.5	107.0	89.7	77.3	62.2	51.5	27.1
1.60V/cell	482.1	362.8	311.5	233.7	186.6	139.4	110.6	92.4	79.4	63.7	52.6	27.6

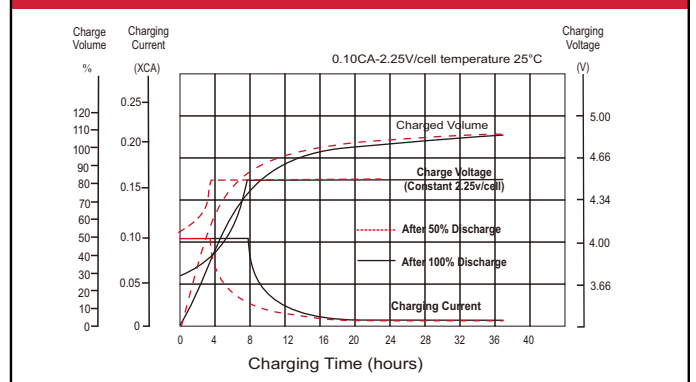
Constant Power Discharge (Watts/cell) at 25 °C (77 °F)

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	683.0	541.7	475.3	366.5	297.6	227.2	183.1	154.8	134.6	109.6	91.8	49.4
1.80V/cell	765.7	601.3	522.5	398.8	322.2	244.8	196.7	166.2	144.0	117.1	97.8	52.1
1.75V/cell	793.5	620.9	537.9	409.6	330.3	250.2	200.9	169.5	146.6	119.0	99.2	52.7
1.70V/cell	839.6	639.4	553.9	421.0	339.0	256.4	205.2	172.8	149.4	120.9	100.6	53.4
1.67V/cell	889.0	650.5	562.7	426.9	343.5	259.5	207.6	174.6	150.9	122.0	101.3	53.7
1.60V/cell	891.4	676.9	584.6	442.3	355.2	267.5	213.4	179.2	154.5	124.5	103.2	54.6

Discharge Characteristics



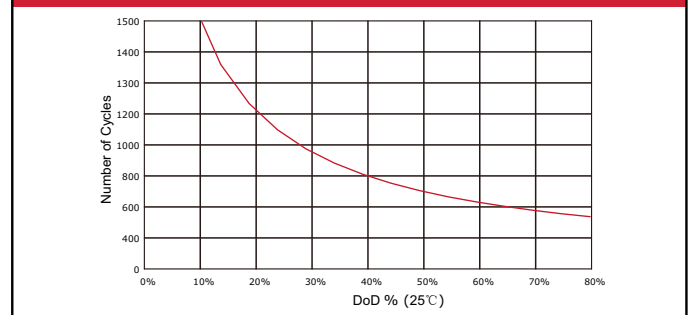
Float Charging Characteristics



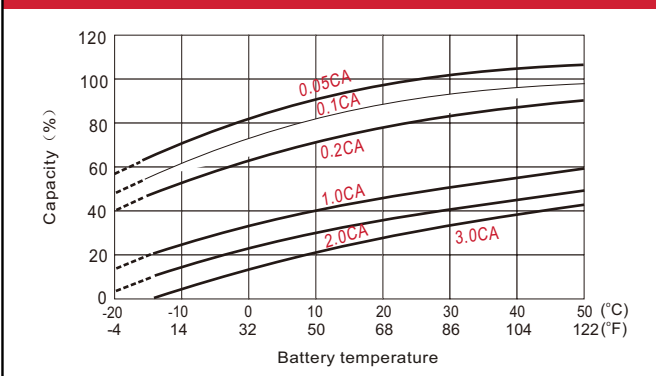
Valve-Regulated Sealed Lead Acid Batteries

Sealed lead acid batteries are engineered to provide reliable power in a compact design. They are spill-proof and require zero maintenance, as adding water is never necessary. The acid in the battery is suspended in a glass mat separator, which makes the cells leak-proof during normal battery operation. Our batteries are proudly designed in Canada with quality and performance in mind, offering one of the highest cycle life among other sealed lead acid battery brands. Canbat AGM batteries are manufactured with pure lead to ensure a low self-discharge rate of less than 2%, meaning stored batteries are only required a recharge once every six months. The series also features an outer container made from ABS material.

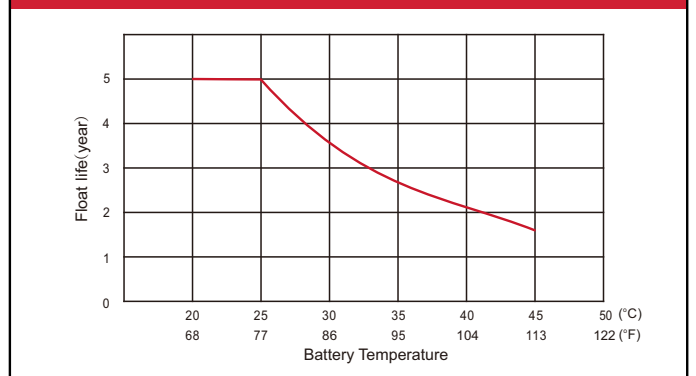
Cycle Life Relation o Depth of Discharge



Temperature Effects in Relation to Battery Capacity



Float Service Life



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